SOCIAL ACCOUNTABILITY – INVESTING WHERE THERE IS POTENTIAL AND GREAT OUTCOMES: A CASE OF EXTENSION SERVICES AND AGRICULTURAL RESOURCE ALLOCATION IN TANZANIA.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANSAF	Agricultural Non-State Actors Forum
ARDS	Agricultural Routine Data System
ASDP	Agricultural Sector Development Programme
CBG	Capacity Building Grant
DADG	District Agricultural Development Grant
DADP	District Agricultural Development Plan
DAICO	District Agricultural Irrigation and Cooperative Officer
D by D	Decentralization by Devolution
DC	District Council
DED	District Executive Director
DFO	District Fisheries Officer
DIDF	District Irrigation Development Fund
DLO	District Livestock Officer
EBG	Extension Block Grant
GDP	Gross Domestic Product
HDI	Human Development Index
IFAD	International Fund for Agricultural Development
LGA	Local Government Authority
M&E	Monitoring and Evaluation
MALF	Ministry of Agriculture Livestock and Fisheries
MITI	Ministry of Industry Trade and Investment
MoFP	Ministry of Finance and Planning
NGO	Non-Governmental Organization
OPRAS	Open Performance Review and Appraisal System
PO-RALG	President's Office Regional Administration and Local Government
RAA	Regional Agricultural Advisor
RAO	Regional Agricultural Officer
RBA	Rapid Budget Analysis
RS	Regional Secretariat
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SMS	Subject Matter Specialist
VEO	Village Extension Officer
WEO	Ward Extension Officer

EXECUTIVE SUMMARY

Background and Objectives

African governments have committed themselves to allocate at least 10 percent of their national budgets to the agricultural sector in order to spur growth of the sector and to contribute to poverty reduction especially of rural communities. In Tanzania, despite the financial investments to the sector, questions remain as to why is the agricultural sector not contributing significantly to the improvement of the livelihoods of the rural population, and how might resources be allocated and utilized so as to make an impact on the performance of the sector. This study was commissioned by the Agriculture Non- State Actors Forum (ANSAF)with the aim of reviewing the national extension services in Tanzania, with a specific focus on resource allocation vis a vis the districts' agricultural potential. The study sought to establish whether or not (human and financial) resource allocation is based on the agricultural potential of the Local Government Authorities (LGAs) and whether it influences the agricultural productivity. Thus the intention was to establish the link between the agricultural potential, resource allocation and agricultural productivity of LGAs.

Methodology

In order to take into account the issue of potential as it relates to resource allocation, three Regions were selected for detailed study. The Regions represent three levels of agricultural potential: Iringa as a high potential Region (high rainfall, one of the "big six" Regions, food basket and located within the SAGCOT corridor); Tanga as a medium potential Region (average rainfall, adequate land, partially in the SAGCOT corridor and high production); and Dodoma as a low potential Region (dry, outside of the SAGCOT corridor and marginal areas). Two districts were selected from each Region, making a total of six districts from three Regions: Kilolo and Iringa Districts in Iringa Region as representing high potential areas, Korogwe and Handeni Districts in Tanga Region representing medium potential areas, and Chamwino and Bahi Districts in Dodoma Region representing low potential areas.

The study involved field visits for Key Informant Interviews and Focus Group Discussions with relevant staff and other stakeholders (including District Commissioner, Councilors, DED, DAICOs, Subject Matter Specialists and project coordinators) in each district. The visits also included discussions with the Regional Agriculture Advisers (RAAs), in the three study Regions and gathering secondary information on financial and human resource allocation trends for each district and region for the last six years, i.e. from 2010/2011 to 2016/2017. In addition visits were made to Dar es Salaam for discussions with the Directors of Policy and Planning Ministry of Agriculture, Livestock and Fisheries (MALF), the Agriculture Sector Development Programme (ASDP) Secretariat), Assistant Director Extension Services and selected Development Partners to seek their views on resource allocation and use. In Dodoma the team consulted with the Director of Sector Coordination

President's Office-Regional Administration and Local Government (PO-RALG) to obtain national data on funding, guidelines/policy issues and staffing levels for all districts. Secondary data were also obtained from various sources such as Budget Speeches, Rapid Budget Analyses, and project reports.

Challenges Encountered

The major challenge that was encountered was the difficulty of getting reliable financial data with different sources providing different figures on budget allocations and disbursements. In the end it was decided to use data from the ASDP Secretariat since the ASDP was providing the bulk of the financing of the sector and was cutting across the whole country which made it possible to compare across Regions. At any rate no source could provide reliable data on the specific contribution by Development Partners or Non-State Actors.

The other challenge was that production data provided by different sources often referred to different years and different levels of detail, and so the team had to make extra effort to ensure that the data were reliable and comparable.

Key Findings

- Nationally, the trend of budget allocation to the agricultural sector has been fluctuating with ups and downs, ranging from a high of 904 billion in 2010/2011 to a low of 275 billion in 2016/2017.
- The proportion of the national budget allocated to agriculture has generally been declining from a high of 7.8% in 2010/2011, after which it has been progressively declining to 4.5% in 2015/2016. At this rate the country will not likely meet the target set by the Maputo Declaration of committing 10% of the national budget to agriculture any time soon.
- After the conclusion of the ASDP I in 2013/2014 funds allocated to support agriculture in the LGAs have been severely limited, as other sources like central government or LGAs' own sources have not been forthcoming, which has seriously affected the delivery of extension services in the respective LGAs.
- Agricultural budget allocation to Regions did not seem to be based on potential, although "the big six" (Ruvuma, Mbeya, Iringa, Rukwa, Morogoro and Kigoma) Regions were among the top ten in terms of total budget allocation for the period 2010/2011 to 2013/2014. Other regions like Kagera, Mara, Shinyanga and Mwanza received more total funding than the big six.
- High potential districts (Iringa and Kilolo) in the study area received more funding than the other districts, with the exception of Chamwino District which was the second highest in total funds received, even though it is considered a low potential district. Generally there does not seem to be any pattern showing the relationship between potential of the district and level of funding.

- Districts did not have information on the extent of financial investments into the agricultural sector by other players such as non-governmental organizations, private sector or development partners. This indicates a lack of coordination or collaboration by the different players supporting the sector in the district. It also makes it difficult to capture and to account for all the resources that are invested in the district.
- Nationally, the agricultural sector is generally understaffed, with the crops sub-sector having only about half (45.4%) of the required staff, and the livestock sub-sector having slightly more than a quarter (28.1%) of the required staff. Generally there is a higher deficit of field-based (Certificate and Diploma holders) staff who are expected to work directly with farmers, compared to district level (mainly Degree holders) staff.
- When the level of socio-economic development of the Region as measured by the Human Development Index (HDI) is considered, there also does not seem to be any association with the level of staff allocation, since all the Regions regardless of their ranking seem to suffer the same level of staff deficit.
- In terms of Extension staff: village ratio, each field extension staff covers a minimum of two villages for crops and a minimum of three villages for livestock regardless of the potential of the district, assuming that those posted at the ward level are also allocated specific villages.
- Agricultural extension staff regularly report using the Agricultural Routine Data System (ARDS) which is an on-line reporting system linked to the MALF. However, it is not clear if field level supervisors of extension staff like VEOs, WEOs or Ward Councilors have any input into the reports that are submitted by the extension staff. Likewise, the ARDS does not provide for feedback to the concerned staff.
- The OPRAS is used for performance monitoring of staff, who are assessed based on agreed work plans, but with the serious challenge of inadequate resources it is difficult to hold extension staff accountable for under-performance.

Recommendations

- The government must endeavor to increase the allocation for the agricultural sector to reach the target of 10% of the national budget for the sector to have any significant impact on reducing the poverty of rural communities.
- LGAs must prioritize agriculture as the engine of growth of their districts, and therefore must be allocated the necessary budget so as to generate more revenue for the district. This must be based on clear district agricultural development strategy to guide and coordinate investment by the government, development partners and non-state actors.
- Given the current shortage of staff and other working facilities, there is need to re-organize the extension services by basing multidisciplinary teams of extension staff at ward level operating from the Ward Resource Center, and being responsible for the whole ward.

- Likewise, extension staff must design more innovative ways of working given the resource constraints facing them, including more use of the Ward Agricultural Resource Centers, mobile phones, para-professionals and others.
- There is a need to develop a system of staff professional development including regular staff retreats to reflect on their work, short-term in-house training and long-term training where possible so that staff can catch up with developments in the agricultural sector and in the field of extension.

1. INTRODUCTION

1.1 Background

The agricultural sector continues to be the most important economic activity for the majority of Tanzanians, and any improvement in their livelihoods is intimately linked to improvement of the performance of the sector. However, improving the performance of agriculture is hampered by many factors, chief being inadequate resources allocated to the sector. Despite the Maputo Declaration of 2003 and the Malabo Declaration of 2014 by African Heads of State committing governments to allocate at least 10% of their national budgets to the agriculture sector, only a handful of African countries have reached that target. These are Burkina Faso, Cape Verde, Chad, Ethiopia, Mali, Malawi, and Niger. In Tanzania while the budget allocated to the agricultural sector has been increasing in nominal terms, the proportion of the national budget allocated for agriculture has hovered around 4% over the years. Questions remain as to why is the agricultural sector not contributing significantly to the improvement of the livelihoods of the rural population, and how might resources be allocated and utilised so as to make an impact on the performance of the sector. This study was commissioned by the Agriculture Non-State Actors Forum (ANSAF) with the aim of reviewing the national extension services in Tanzania, with a specific focus on resource allocation vis a vis the districts' agricultural potential. The study sought to establish whether or not (human and financial) resource allocation is based on the agricultural potential of the Local Government Authorities (LGAs) and whether it influences the agricultural productivity. Thus the intention was to establish the link between the agricultural potential, resource allocation and agricultural productivity of LGAs. To answer this broad question, the study endeavoured to answer the following specific questions:

- Does the government consider agricultural potential when allocating financial resources to LGAs?
- Who do extension officers at village and ward level report to – are they accountable to ward councillors or District Agriculture, Irrigation and Cooperative Officers (DAICOs) or District Executive Director (DED)? Do seniors

review the performance of the extension staff; and do communities understand the kind and quality of services expected from the staff?
- What could be the optimal resource (extension and financial) allocation based on agricultural potential regional wise?

1.2 Methodological approach

Due to the large size of the country, limited time and financial resources three Regions were selected according to their agricultural potential (land, rainfall, food situation, agro-ecological classification under the sector programme and existing investments). The Regions represent three levels of agricultural potential: the high potential (high rainfall, one of the "big six" Regions, food basket and located within the SAGCOT corridor); medium potential (average rainfall, adequate land, partially in the SAGCOT corridor and high production); and low potential (dry, outside of the SAGCOT corridor and marginal areas). Two districts were selected from each Region, making a total of six districts from three Regions: Kilolo and Iringa Districts in Iringa Region as representing high potential areas, Korogwe and Handeni Districts in Tanga Region representing medium potential areas, and Chamwino and Bahi Districts in Dodoma Region representing low potential areas.

The study involved field visits for Key Informant Interviews and Focus Group Discussions with relevant staff and other stakeholders (including District Commissioner, DED, DAICOs, Subject Matter Specialists and project coordinators) in each district. The visits also included discussions with the Regional Agriculture Advisers (RAAs), in the three study Regions and gathering secondary information on financial and human resource allocation trends for each district and region for the last six years, i.e. from 2010/2011 to 2016/2017. Secondary data were also obtained from various sources such as Budget Speeches, Rapid Budget Analyses, and project reports.

In addition visits were made to Dar es Salaam for discussions with the Directors of Policy and Planning Ministry of Agriculture, Livestock and Fisheries (MALF), the Agriculture Sector Development Programme (ASDP) Secretariat, Assistant Director Extension Services and selected Development Partners to seek their views on resource allocation and use. In Dodoma the team consulted with the Director of Sector Coordination President's Office-Regional Administration and Local Government (PO-RALG) to obtain national data on funding, guidelines/policy issues and staffing levels for all districts.

1.3 Challenges Encountered

- The biggest challenge that was encountered is the difficulty of obtaining reliable financial data. The assumption was that financial data would be readily available from relevant district offices but in actual fact data obtained from the different LGAs were highly inconsistent mainly because they were using different systems of data capture, with some districts having been able to capture data not only from the government budget but also from off-budget sources including donor funded and Non-State Actors implemented projects, while other districts do not have a system to capture such data. As a result we sought similar data from the ASDP Secretariat and from PO-RALG for triangulation purposes. These sources also proved inconsistent. As a result it was decided to use data from the ASDP Secretariat, the Ministry budget speeches and the RBA only. This meant that resources from other investments into the sector by other actors such as Non-State Actors were not captured, but at least we had a common basis for comparison.
- Despite preparing a template to guide the districts to present similar data still the information provided was fragmented in terms of content, completeness and not being uniform for all LGAs. Likewise, production data provided by different regions and districts often referred to different years making comparison difficult. This reflects a lack of a standardized and uniform way of collecting and archiving financial and personnel information in a way which can make such information easily retrievable when needed.
- Most of the District Profiles that are expected to contain comprehensive information on each district are actually out of date, having been produced several years ago and are therefore in need of updating since they are important publications for planning, decision making and research. In some cases the District Profiles missed some important information, which could not be obtained from other sources.
- At district level only specific individuals or subject matter specialists such as statistician, District Agriculture Development Plans (DADPs) coordinator or the District Extension Officer seemed to have access to the agricultural information and reports; while other staff seemed to have very limited information on what was going on, hence it was often very difficult to collect all the necessary information.

2. FINDINGS

2.1 National trends of resource allocation

Information from the national level especially from the agriculture sector Rapid Budget Analysis (RBA), 2014 and 2015, (RBA are annual budget analysis conducted by the World Bank for all sectors based on actual allocations for feeding into the national policy dialogue) concluded that in accordance with pledges, budget allocations to the agriculture sector have continued to decline significantly. The 2016/2017 approved budget for agriculture was TZS 275 billion. Despite being one of the priority sectors and economic driver for growth and reduction of poverty, the agricultural sector is experiencing inconsistency in resources allocation year after year. Expenditure patterns have been ad hoc, with ups and downs even during increase in national budget estimates.

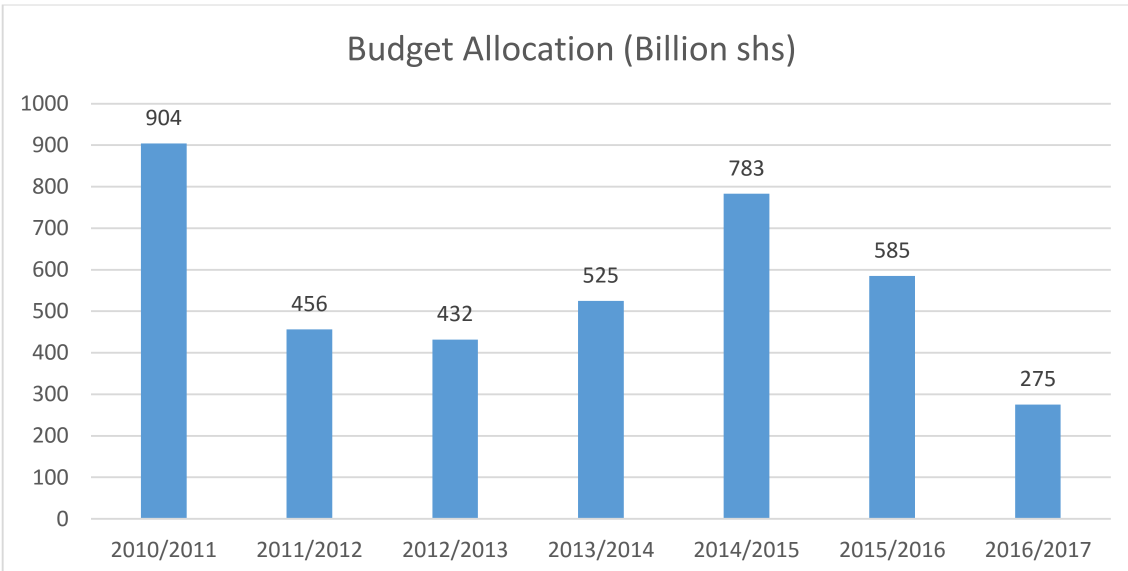

Figure 1: Trend in agriculture sector budget allocations 2010/2011 to 2016/2017
Source, RBA, 2015 and 2016/2017 MALF Budget Speech

Analysis also shows that the share of the Agricultural budget in the national budget has not reached the 10% of the national budget as agreed in the Maputo Declaration. The trend shows that the highest proportion that has ever been reached was 7.8% in 2010/2011, after which it has been progressively declining to 4.5% in 2015/2016 (see Figure 2). At this rate the government is not going to achieve the target of Maputo Declaration any time soon. It should be noted that it is assumed that only by devoting at least 10% of the national budget to agriculture, can the sector grow at 6% per year, which would then have a significant impact on poverty reduction.

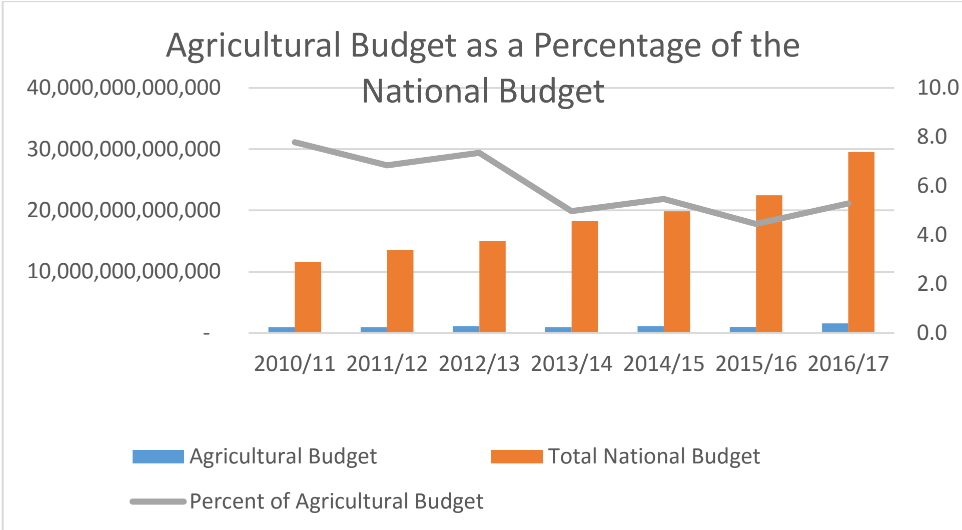

Figure 2: Agricultural Budget as a share of the Total Government Budget
Source: MALF

Traditionally the budget categorization is based on recurrent (mainly Personnel Emoluments) and development (mainly investment) components. It is the development component of the budget that is expected to have a direct impact on the sector's performance. The trend of budget allocation shows that the proportion of the recurrent component is increasing vis a vis the development component (Figure 3). This shows that there are less and less resources going directly to investment into the sector. This is reflected at the field level where while agricultural staff are regularly paid their personnel emoluments, they hardly have any operational budgets to facilitate their work in the office or in the field.

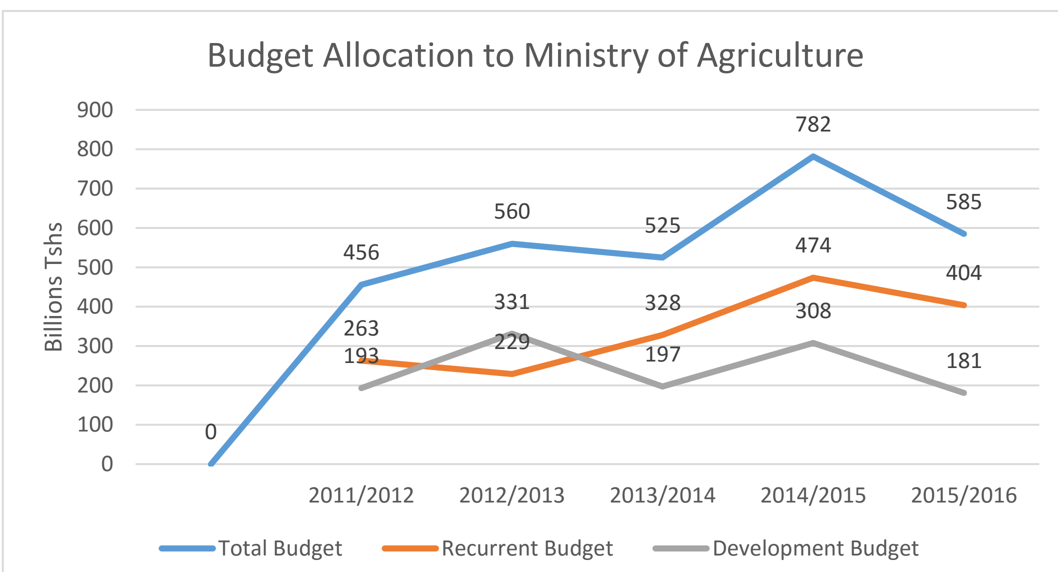

Figure 3: Proportion of recurrent and development components of the Ministry of Agriculture budget

Available data also show that in making regional allocations for the period 2010/2011 to 2013/2014 the Regions which received the largest amounts were Kagera, Mara, Shinyanga and Mwanza in that order, followed by all the "big six" Regions (Mbeya, Iringa, Ruvuma, Morogoro, Kigoma and Rukwa in that order). Thus while it appears that consideration was made for these Regions to receive more financial resources, for the rest of the Regions in the country no pattern seems to emerge with regard to regional budgetary allocations (Appendix C).

2.2 Comparison of agriculture potentials of the study Regions/Districts

In assessing whether or not financial and human resource allocation to extension services considered agricultural potential, three geographical areas with different agricultural potential were selected. These were Iringa, Tanga and Dodoma Regions whose socio-economic characteristics are as shown in Table 1. Based on these various indices, it is clear that Iringa Region has the highest potential, if one considers the measure of Incidence of Poverty, the proportion of the population in severe poverty, the GDP per capita, the total production and productivity of maize (as a measure of food security). Tanga and Dodoma are second and third respectively in terms of potential.

Table 1: Comparison of Iringa, Tanga and Dodoma Regions on various socio-economic indicators

Index	Region		
	Iringa	Tanga	Dodoma
Population (2012)	941,238	2,045,205	2,083,588
Number of villages	358	557	611
Incidence of poverty (%) (2010)	**60.5**	**68.8**	**83.0**
% of population in severe poverty (2010)	**22.4**	**31.7**	**56.8**
GDP per capita (Tshs) (2012)	**1,428,243 (high)**	**1,026,432 (medium)**	**665,180 (low)**
Number involved in crops and livestock farming (2014/15)	324,126	567589	553,786
Land planted (ha) (2014/15 seasons)	336,572	1,230,300	1,164,474
Total irrigated area (ha) (2014/15)	971	11,097	10,152
Maize total production (tones) (2014/15)	**800,532**	**384,639**	**164,803**
Maize yield (tones/ha) (2014/15)	**2.1**	**1.3**	**0.5**
Paddy total production (tones) (2014/15)	76,200	13,322	9,038
Paddy yield (tones/ha) (2014/15)	4.9	2.0	0.7

Source: Regional and district study data

Likewise, comparison of the selected districts shows that taking total production and productivity of maize, Iringa Rural District has the highest potential followed by Kilolo, Korogwe, Handeni, Chamwino and Bahi (Table 2). It is therefore expected that if resource allocation is based on potential then the amount of financial and human resource allocation would be highest for Iringa and lowest for Bahi District.

Table 2: Comparison of the Study Districts on Various Socio-economic Characteristics

District Council	Iringa R	Kilolo	Korogwe	Handeni	Chamwino	Bahi
Arable Land area (ha.)	479,258	418,108	133,397	636,645	482,307	-[a]
Rainfall (mm)	500- 1000	500- 1600	500 – 2000		500 – 800	500- 800
Population (2012)	254,032	218,130	242,038	276,646	330,543	221,645
GDP per capita (Tshs.)	1,031,508	362,841	-	-	602,640	-
Number of villages	133	110	118	91	107	59
Total maize production (tons) (2014/2015)	**343,444**	**122,801**	**33,114.9**	**79,686**	**28,691**	**0**
Maize yield (tons/ha)(2014/2015)	**1.8**	**3.5**	**1.9**	**1.5**	**0.9**	**-**
Total paddy production (tons) (2014/2015)	74,494	1,369	9,503	247	0	20,454.3
Paddy yield (tons/ha) (2014/2015)	3.1	3.5	2.3	0.8	-	4.2

Source: District Socio-economic Profiles

[a] Data not available

2.3 Financial resource allocation to districts

2.3.1 Criteria for budget allocation

There are several sources of funding of the agriculture sector including allocations by the central and local government and project specific sources. These sources include funding of the national Agricultural Sector Development Programme (ASDP) through the treasury to the districts. These funds were allocated through the institutional structures agreed for the implementation of the sector development programme. Information from the ASDP Secretariat revealed that first regions were classified according to the agriculture potential. These include several parameters such as:

- Rainfall index

- Production potential in terms of major crops cultivated in the area in favour of food security and nutrition, export earnings
- Developed market infrastructure in the area for ease of access to markets
- Developed production infrastructure
- Geographical location

Following this classification a criteria was developed by Ministry of Agriculture Livestock and Fisheries (MALF) for budget allocation / construction. Thus overall budget allocation to LGAs was formula based. It was calculated based on number of villages (80%); rainfall index (10%) and population of the respective LGA (10%).

2.3.2 Trends of budget allocation

By using this formula the funds allocated to the various districts under the ASDP project are as shown in Figure 4. It should be noted that during the life of the ASDP funding of agricultural activities was from the ASDP Basket Fund. The project ended in 2013/2014, after which funds had to be from the government and from LGAs own sources.

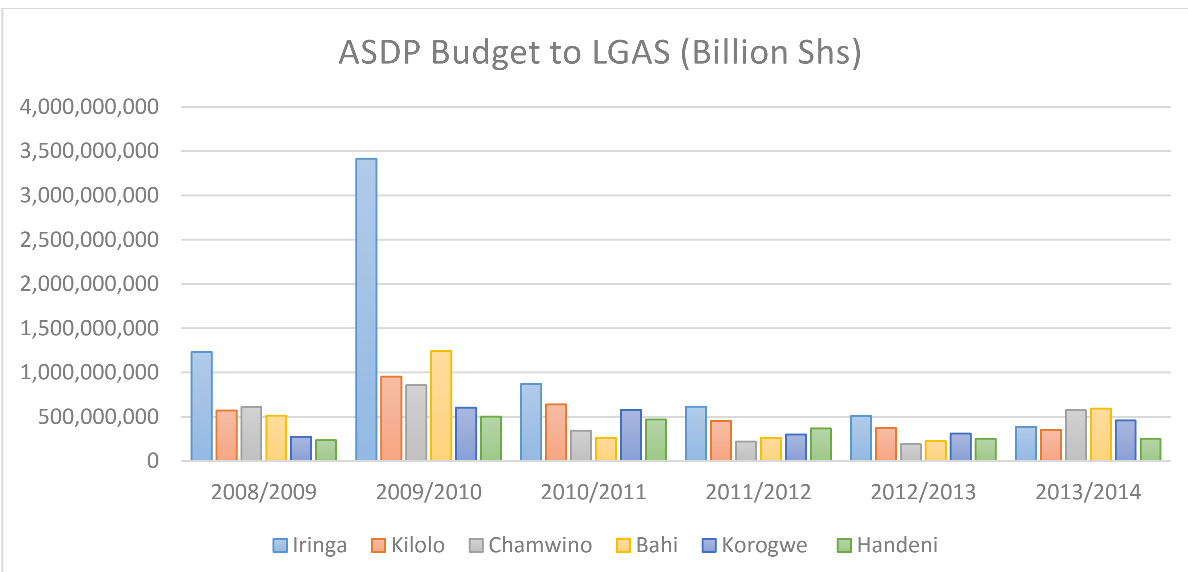

Figure 4: Allocation of ASDP Budget for selected LGAs (Source: ASDP Secretariat)

Figure 4 above shows the allocations for each district agreed at the annual budget discussions with the Agriculture Sector Lead Ministries (MALF, MoFP, MITI, and PO-RALG and local government authorities). These budget allocations were for agriculture development funds under ASDP, which included Basic DADG, EBG, CBG and sometimes the District Irrigation Development Fund (DIDF) for 2008/2009 to 2013/2014 (Appendix B).

Information from all districts visited indicated that disbursed funds were not the same as the district budgets and allocations. The information Table 3 shows clearly that there is no consistency between allocated budgets and actual disbursement to the

LGAs. In some cases disbursements seem to be higher than allocated amounts. This is where there were special programmes that were funded under a different financing stream but the amounts were captured in the District Council's accounts. In the same vein there are likely to be expenditures that were made under specific projects but were not captured in the district accounts, which then show disbursement being lower than reality.

As revealed by the ASDP I Implementation Completion Report, for most Local Government Authorities (LGAs) in the country, no funding was disbursed after 2013/14, i.e. after the conclusion of ASDP I. All districts were required to use carry over funds for remaining activities and no new activities and supervision were funded, except in very few cases where some districts received funding targeted to complete irrigation infrastructure that had stalled. In this scenario the LGAs stated that they depended on own local government sources or specific projects implemented jointly with partners (NGOs and development partners). Data from the districts also indicate that Iringa District being in the Southern Agriculture Growth Corridor received more funding compared to all districts in the study area. Reasons given include its high contribution to the national food basket, availability of many donor projects and prioritised activities under the Southern Agricultural Growth Corridor (SAGCOT) including those under the Big Results now (BRN) and Non state actors. While the data show that high potential districts in the study area received more funding, Chamwino District was an exception in that it received more funding than all the other districts except Iringa, even though it is considered a low potential district. Information obtained was that much of this allocation went into addressing food security interventions and construction of irrigation infrastructure in the District.

Budget allocations and disbursement trends indicate that LGAs received more funding from the initial years of the ASDP programme up to 2012/2013 and overall the data in Figure 4 and Table 3 show that funding consistently decreased year after year. Table 3 shows the total amount disbursed for support of the DADPs in the study districts from 2010/2011 to 2015/2016. Information from the discussions with district agricultural officers show that major and consistent funding ended in 2013/2014. Most of the funding disbursed after this period was mainly for completion of existing irrigation infrastructure and warehousing for selected areas.

Most extension officers expressed concern that they were unable to conduct regular training, monitoring, supervision, or exchange visits by farmers groups. As a result some districts had adopted some innovative ways of working under difficult circumstances, for example, in Handeni District staff have created a Whatsapp group covering all extension staff in the district to facilitate communication of any information, directives or any request for assistance among all extension staff. Iringa District for example has allocated one district-based staff to each ward to act as a "ward patron" (*mlezi wa kata)* who acts as the contact person for each ward to track progress and information from the specific wards. There is also more use of mobile phones by extension staff to communicate with farmers particularly through text messaging, and in a few cases, the use of the Farmer Field School approach to work with few farmer groups to demonstrate to the wider community the use of improved practices. These innovative ways have made it possible for extension staff to reach more farmers with limited resources, and in a way have increased farmers' access to extension services. However, in all these cases extension officers did not show ways on how they are linked to research or to other institutions to improve their agricultural knowledge. This poses a challenge in keeping up with advancements and changes in the sector.

Table 3: Actual Budget Disbursed for Agriculture to selected LGAs

Region/ District	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	Total 2010/2011 – 2015/2016
Iringa							
Iringa	868,891,215	614,165,539	507,646,927	385,373,000	775,287,360	902,000,000	4,053,364,041
Kilolo	640,044,977	452,328,479	373,891,034	350,000,000	0	0	1,816,264,490
Tanga							
Korogwe	579,599,511	367,298,943	310,202,890	177,000,000	35,000,000	0	1,469,101,344
Handeni	467,989,716	298,176,958	251,549,071	251,000,000	0	0	1,268,715,745
Dodoma							
Chamwino	343,697,305	220,297,649	471,053,000	556,307,000	200,000,000	0	1,791,354,954
Bahi	258,365,679	263,561,153	223,446,319	593,000,000	0	0	1,338,373,151

Source: Records of the respective District Agriculture, Irrigation and Cooperatives Officers in study in area

2.3.3 Funding of agriculture from districts' own sources

A second major source of funding to the districts is their own sources. This is normally drawn from the district revenues coming from the crop and livestock produce cess and fisheries levies. In order to guide the budget allocation, the President's Office Regional Administration and Local Government issued Directives for guiding the district councils to allocate budgets from districts own sources. The directive requires districts to collect revenue and allocate to the sector: 20 percent of the crop produce cess; 15 percent of the livestock levies and 15 percent of the fisheries levies. Additionally, a directive is in place for the LGAs to allocate at least 60 percent of all development funds to the agriculture sector. The government is aware therefore of the importance of investing in the agricultural sector as a way of economic empowerment of the Councils and the rural communities generally.

However, despite these directives and the acknowledged importance of the agricultural sector, some of the LGAs visited had allocated only token amounts of funds from own sources to the agricultural sector. For example, while Chamwino District generated Tshs 391,862,520 and Tshs 509,521,100 from the agricultural sector in 2015/2016 and 2016/2017 respectively, it allocated only Tshs 10,900,000 (2.8%) and Tshs 8,000,000 (1.6%) to the sector in 2015/2016 and 2016/2017 respectively. Likewise, Kilolo District generated Tshs 491,127,417 and Tshs 656,650,262 from the agricultural sector in 2015/2016 and 2016/ 2017 respectively, and allocated Tshs 60,000,000 (12.2%) and Tshs 40,000,000 (6.0%) to the sector in 2015/2016 and 2016/2017 respectively. Other study districts could not provide information on any funds allocated to the sector from own sources.

According to the District authorities, the directives are not followed because Councillors prioritise issues that are more pressing such as those in education (laboratories, desks, classrooms, toilets etc.) and health (dispensaries, maternity wards etc.) which are also given more attention by national leaders. Another reason for Councillors not allocating a significant amount of funds to the agricultural sector from own sources was the perception that agriculture has its own programmes and projects that provide funding and that farmers will themselves prioritise and handle the agriculture problems because the sector affects directly their livelihood. This is a rather myopic view given that the agricultural sector is not only a source of livelihood for most of the people in the districts but it is the main source of revenue for the LGAs, and the most impactful in terms of poverty reduction.

Furthermore most districts visited acknowledged partnerships with Development Partners, Non-State Actors and private sector for supporting agricultural activities, however, data on financial allocation provided by the partners other than ASDP was very difficult to obtain. This lack of data on other stakeholders' financial contribution to the sector limited the analysis to only ASDP funds. The situation is the same at the national level where the programme coordinators and the ministry budget officers were unable to provide data required including non-basket funding or off-budget allocation. However, Bill Melinda Gates Foundation (BMGF) which has been providing support of formulation of the ASDP II is finalising a study on donor mapping that could assist to provide comprehensive data. From the above information, in order for the sector to contribute to food security and industrialisation we consider that agriculture sector deserves prioritisation and allocation of adequate funding from the central and local government consistent with sector plans just like the social sectors.

2.4 Human Resource Allocation to LGAs

2.4.1 The National Picture

Nationally, the agricultural sector is generally understaffed, with the crops sub-sector having only about half (45.4%) of the required staff, and the livestock sub-sector having slightly more than a quarter (28.1%) of the required staff (Table 4). Generally there is a higher deficit of field-based (Certificate and Diploma holders) staff who are expected to work directly with farmers, compared to district level (mainly Degree holders) staff. At any rate, the more qualified staff at district level as Subject Matter Specialists (SMSs), are expected to provide specialized technical backup and supervision of field-based staff who are less specialized, although there is no written policy on this. But with the limited ability to provide such support to field staff due to lack of resources, the SMSs are not optimally utilized.

Table 4: Staff Allocation National Aggregate

Category	Qualification	Required	On Post	% on Post
Crops, Irrigation & Cooperatives	First degree and above	2,746	1,530	55.7
	Certificate and Diploma	16,542	7,226	43.7
Total		**19,288**	**8,756**	**45.4**
Livestock & Fisheries	First degree and above	1,936	867	44.8
	Certificate and Diploma	15,000	3,904	26.0
Total		**16,936**	**4,771**	**28.1**

The same pattern can also be observed at the regional and district levels. In the study districts (Table 5) the crops sub-sector on average commands above 50% staffing level, whereas the livestock sub-sector hardly attains a staffing level of 35%. The proportion of female staff varies from one district to another, but the average for all the study districts is 16.5%. Considering that more than 50% of all farmers are women, there is need to increase the proportion of female extension staff in order to increase women's access to extension services and to more effectively address their needs and concerns, given the cultural barriers that often limit contact between women farmers and male extension staff.

When ranked on the basis of availability of technical staff, there does not seem to be any relationship between the regions' or LGAs' potential and allocation of staff. Iringa Region (high potential) has 46.7% of the required staff, Tanga Region (medium potential) has 32.4% of the required staff, while Dodoma Region (low potential) has 41.8% of its staff requirement (Appendix C). It would seem that the number of villages is the main determinant of the number of extension staff in the region, rather than the potential of the region, since Iringa Region has a total of 358 villages, Tanga has 557 villages and Dodoma 611 villages.

When the level of socio-economic development of the Region as measured by the Human Development Index (HDI) is considered, there also does not seem to be any association with the level of staff allocation, since all the Regions regardless of their ranking seem to suffer the same level of staff deficit. For example, when considering the "big six" regions, Morogoro seems to be the best served, with 58.5 percent of staff requirements filled, followed by Iringa (46.7 percent) and Mbeya (40.4 percent), but the others – Rukwa with 33.2 percent, Ruvuma (29.8 percent) and Kigoma (25.6 percent) are very much understaffed. In general, it seems the more remote regions are generally less endowed compared to the more urbanized ones. No wonder therefore Dar es Salaam ranks highest in staff availability (65.7%) while Mtwara (21.5%), Kigoma (25.6%) and Katavi (26.3%) rank the lowest in terms of staff availability (Appendix C).

2.4.2 The District Picture

Similarly, at district level it would be expected that Iringa and Kilolo with the highest potential, should rank higher while Bahi and Chamwino with lowest potential, would rank lowest in terms of staff allocation, but as Table 5 shows, this is not the case. The Table however shows that there is a higher deficit of staff for the Livestock and Fisheries sub-sector when compared to the Crops, Irrigation and Cooperatives sub-sector.

Table 5: Staff Position in the study districts: comparing between sub sectors

District Council	Number of Wards	Number of Villages	Crops, Irrigation & Coops			Livestock & Fisheries		
			Number Required	Number on post	% on post	Number Required	Number on post	% on post
Iringa	28	133	170	92 (10)[1]	54.1	142	50 (0)	35.2
Kilolo	24	110	140	88 (12)	62.8	119	33 (4)	27.7
Korogwe	29	118	96	52 (12)	54.2	195	46 (11)	23.6
Handeni	21	91	86	34 (8)	39.5	87	37 (8)	42.5
Chamwino	36	107	152	91 (28)	59.8	133	46 (0)	34.6
Bahi	22	59	87	54 (15)	62.0	91	32 (0)	35.2

[1] Numbers in bracket indicate the number of female staff.

At district level, there is relatively more shortage of staff with Certificate and Diploma training compared to those with degree training (Table 6). This underscores the importance of expanding mid-level training, i.e. Diploma and Certificate training to bridge the gap, since these are the ones who will be stationed in the field to work directly with farmers.

Table 6: Staffing Position by Qualifications in the study districts

District Council	Specialization	Qualification	Required	On post	% available
Iringa	Crops, Irrigation & Coops)	First degree and higher	28	17	61
		Certificate and Diploma	219	77	35
	Livestock & Fisheries	First degree and higher	10	9	90
		Certificate and Diploma	132	41	31
Kilolo		First degree and higher	19	16	84

	Crops, Irrigation & Coops)	Certificate and Diploma	121	72	59
	Livestock & Fisheries	First degree and higher	9	7	77
		Certificate and Diploma	110	26	24
Korogwe	Crops, Irrigation & Coops)	First degree and higher	39	12	31
		Certificate and Diploma	133	47	35
	Livestock & Fisheries	First degree and higher	41	5	12
		Certificate and Diploma	120	49	41
Handeni	Crops, Irrigation & Coops)	First degree and higher	39	12	31
		Certificate and Diploma	125	41	33
	Livestock & Fisheries	First degree and higher	38	6	16
		Certificate and Diploma	119	38	32
Chamwino	Crops, Irrigation & Coops)	First degree and higher	17	14	82
		Certificate and Diploma	135	77	57
	Livestock & Fisheries	First degree and higher	14	11	78
		Certificate and Diploma	119	35	29
Bahi	Crops, Irrigation & Coops)	First degree and higher	38	19	50
		Certificate and Diploma	49	35	71
	Livestock & Fisheries	First degree and higher	10	10	100
		Certificate and Diploma	81	22	27

2.4.3 Staff: Village Ratio

An attempt was made to determine the extension: farmer ratio, but due to lack of reliable data on number of farmers in each district, it was decided to determine the average number of villages served by one extension staff. The government policy on extension staff allocation is to have at least one staff per village. With separation of Livestock from

Crops, the plan is to also have one livestock and one crops extension staff per village. The actual number of farmers that a particular extension staff serves will therefore depend on the number of villages covered, and the population of each village. Data shows that on average, each crops extension field staff covers at least two villages, while each livestock extension field staff covers at least three villages (Tables 7 and 8). There is no relationship between the staff: village ratio and the potential of the district.

This situation, coupled with the big shortage of working facilities such as transport, office supplies, communication equipment, leads to the low effectiveness of extension services. Furthermore, the current separation of the crops and livestock sub-sectors starting at the national down to the local level means that none of the sub-sectors has enough field staff to cover even half of the villages. This points to the need to have a system whereby one field level extension staff is able to cover both crops and livestock sub-sectors.

Table 7: Agricultural Field Staff: Village Ratio

Region	District Council	Number of wards	Number of Villages	Crops, Irrigation & Coops Staff on Post		Ag. Staff: Village ratio*
				No. of Staff at District level	No. of staff at Ward and Village level	
Iringa	Iringa	28	133	23	71	1:2
	Kilolo	24	110	16	72	1:2
Tanga	Korogwe	29	118	14	45	1:3
	Handeni	21	91	10	34	1:3
Dodoma	Chamwino	36	107	16	75	1:2
	Bahi	22	59	16	38	1:2

*This is assuming that all Ward Extension Officers also serve at least one village each

Table 8: Livestock Field Staff: Village Ratio

Region	District Council	No. of wards	No. of Villages	Livestock & Fisheries Staff on Post		Livestock Staff: Village ratio*
				No. of Staff at District level	No. of staff at Ward and Village level	
Iringa	Iringa	28	133	9	41	1:3
	Kilolo	24	110	0	33	1:4
Tanga	Korogwe	29	118	7	47	1:3
	Handeni	21	91	13	37	1:3
Dodoma	Chamwino	36	107	6	40	1:3
	Bahi	22	59	7	25	1:3

*This assuming the Ward Livestock Extension Officers serve at least one village each

All the districts studied suffer shortage of extension staff, with less than 50 percent of the requirements, although the severity varied from one district to another. It should also be noted that on average, about 25 percent of all staff are based at district level, with the rest being based at Ward and village levels. While there appears to be adequate staff at ward and district levels, the situation is different at village level. Handeni District for example, with 91 villages has only 10 extension staff based at village level, which means that those placed at the ward level also act as village extension officers for all villages in the ward. To make matters worse, after separating livestock from crops, even those placed at ward or village level are only able to deal with either crops or livestock but not both; this increases the deficit of extension staff. It will be important for the government to re-examine its policy of deploying extension field staff to make it more rational, especially considering that placing an extension staff at each village without the necessary support is not likely to be effective in improving farmers' practices. In fact a study on extension services in Tanzania by Teagasc in 2013 (Teagasc is the agricultural research and extension authority in Ireland) and the Extension Workshop Report, 2015 recommended to reform extension services and re-group extension officers at ward level or pool extension agents into multi-disciplinary teams at ward level to work as part of the Ward Resource Centres. This pool of extension staff who would be supported by resources (technical linkage to research, regions and district SMS support, financing and extension packages) would provide advice to farmers more efficiently.

2.5 Allocation of other support services for agricultural staff

The problem of shortage of extension staff is compounded by the lack of working facilities and inadequate budgets. At the district level, there is severe shortage of office space (sometimes up to six staff crowding in one small office), there is no reliable transport (vehicles are pooled under the DED's office as there is no budget to keep them running), and no budget to buy stationery and other office supplies. In Handeni District, the Agriculture Department was allocated only Tshs 1.9 million from the government budget to cover all the working expenses for crops and livestock for the period of July to December, 2016. Inadequate budget allocation to the district Agriculture Department under DAICO and DVO severely limits the ability of the Department staff to monitor and follow up on field activities across the district or for SMSs to provide technical support to field staff.

Likewise, at the ward and village level, staff have very limited working tools and facilities, and have virtually no financial means to carry out their regular activities. These staff lack office facilities, they have no means of transport, they have no extension/information material that they can use to train farmers, and they have to use their own money to buy airtime to communicate with farmers or with their supervisors at the district office. The only time they are facilitated to do their work is when they are attached or collaborating with a donor-funded project that has a budget and facilities to facilitate their work. Under these circumstances it is difficult to expect that the extension staff based at the ward or village level will be able to bring about the expected improvements in the agricultural sector, and so the sector will remain stagnant and will not contribute to the uplifting of the standards of living of the rural population.

Agricultural staff complained of the lack of regular staff training, technical backstopping or any kind of capacity development for their career development. Most staff contacted had not benefitted from any form of on-the-job training since they were employed. The Regional agricultural teams which are supposed to provide technical backup to the District teams are not able to do so due to inadequate funds allocated to the office, lack of transport facilities and inadequate staff. The Regional teams are expected to organize forums for the District Agricultural Officers to meet and exchange experiences and to learn from each other, but this has not happened. Considering how fast the agricultural sector is changing in terms of consumer demands, extension approaches, production techniques, and policies, it means that the agricultural staff have no means of keeping up with the changes and are therefore left very much behind and risking to be irrelevant.

2.6 Accountability in the agricultural extension system

The preparation of Village Agricultural Development Plans to guide extension activities is supposed to follow a participatory process that is detailed in the DADPs Planning Guidelines. The process is expected to involve a team of the District level staff working with a village planning team through the use PRA tools to identify priority areas for intervention. These priorities are then endorsed by a village general meeting involving all the villagers, before being forwarded to the Ward Development Committee whereby all the village plans in the ward are consolidated into Ward Agricultural Development Plans which are ultimately consolidated at District level into the District Agricultural Development Plan (DADP). In reality however, this process is not followed due to the shortage of funds to undertake the participatory village level planning process. Instead, extension staff at the various levels identify what they see as priority needs of their respective villages, which are consolidated at the ward and eventually at the district level. District level prioritization is guided by the budget ceiling that has been set by the central government, priorities that may have been set by the central government, such as ensuring food security, and political considerations (such as the need to reach every political constituency in the district). In this scenario, it is difficult to see how farmers have a voice in the formulation of extension programmes at the village, ward or district level.

While technically the field extension staff are answerable to the DAICO, administratively, they are answerable to the Village or Ward Executive Officer (VEO and WEO) as the case may be. They are therefore obliged to submit their performance reports to the DAICO through the VEO and WEO with copies to the Ward Councilor. Such reports may or may not be discussed at the Ward Development Committee depending on the sensitivity of the issues covered in the report. For example issues related to food security situation, outbreak of pests, supply of inputs, and marketing arrangements tend to receive more attention and will be discussed at the Ward Development Committee, otherwise the reports are usually not discussed by the Committee.

At the same time districts are supposed to report to the Ministry of Agriculture Livestock and Fisheries through the Agricultural Routine Data System (ARDS), which is an online reporting system. The challenge with this system, however, is that field extension staff cannot upload their reports directly since they do not have internet access so they have to submit hard copies to the district office where they are then uploaded manually. Given the limitation of resources at the district offices, it is difficult to verify the accuracy of the reports that are submitted by the field staff before uploading to the system. This is especially so since district staff rarely have the means to visit and do an on-the-spot verification of the field reports that are submitted by their field staff. At the same time, field staff are no longer obliged to travel to the district offices to collect their salaries since they can access salaries using their mobile phones. As a result there are very few opportunities for face-to-face meetings between district and field staff to provide feedback on their reports, to advice or to share experiences with the field staff.

The ARDS is basically an extractive system that is conducted as an administrative formality. It is therefore not very useful to respective districts, or individual staff since it does not offer an opportunity for knowledge sharing and cross-learning among the different actors.

The performance of extension staff is measured through the Open Performance Review and Appraisal System (OPRAS) which uses the agreed annual work plans as the benchmark. However, the reality is that since most districts have hardly any operational budget to implement specific activities (the DADPs exist on paper, but with no funding), it is difficult to hold the extension staff accountable for under-performance.

Since the extension staff are in close proximity and in constant touch with the VEOs and WEOs, these are likely to have more influence on the work of the extension staff compared to the DAICOs who have no close proximity and have only irregular contact with the field staff. Given the fact that academic qualifications of most Village and Ward Executive Officers are below those of extension staff, it becomes problematic for extension staff to be supervised and to be under the direction of these Executive Officers. Furthermore, since these Executive Officers are not under the DAICOs, they cannot be expected to act on behalf of the DAICOs, which reduces significantly the ability of the DAICOs to hold the staff accountable for their performance. Placing the field extension staff under the Village and Ward Executive Officers makes them directly under the District Executive Director (DED) who sometimes feels that he/she can assign them any responsibilities without consulting the DAICO, as it often happens that extension staff are being assigned other duties including acting as VEOs or WEOs or as levy collectors during market or livestock auction days, which conflicts with their expected roles and functions as extension staff.

3. CONCLUSIONS

The study shows that resource allocation to the agricultural sector is inadequate. The trend of budgetary allocation has been rather erratic over the years, and where there has been an increase it is mostly for recurrent (mostly personnel emoluments) rather than for development. Likewise, a serious shortage of extension staff is being experienced in most LGAs, especially at the field level and for the livestock sub-sector.

At any rate, the share of the national budget being allocated to the agricultural sector has been progressively declining, and is not likely to reach the 10% any time soon. This shortage of financial and human resource for the agricultural sector means that we are not going to see any major changes in the performance of the sector unless the government shifts its priorities and introduces major reforms in the deployment of agricultural staff.

Among the criteria considered in allocating financial and human resources to regions and districts, the most significant seems to be the number of villages. Other factors include lobbying by politicians, and ad hoc plans introduced by national leaders. Therefore agricultural potential is less important. In the studied districts there was hardly any correlation between the potential of the district and the amount of financial or human resource allocation.

During the life of ASDP, the sector was consistently allocated development budget, but after 2013/2014 when ASDP funds dried up, there were hardly any development funds going to the sector, which has had a very adverse effect on the performance of extension services. The problem is further compounded by the shortage of field staff, the lack of working tools, and the absence of any capacity building programmes.

The District Councils have not seen the need for allocating adequate funds from own sources to support the agricultural sector in their districts even when it contributes significantly to the Council revenue, and despite the various directives to allocate funds to the sector. The main reason seems to be the many directives issued by the Central Government shifting many responsibilities on to the Councils without providing the necessary resources.

The shortage of extension staff is another major constraint facing the sector. Most Regions have hardly half the number of the required staff. Likewise, the staff distribution does not seem to be linked to the potential of the Regions or Districts. The shortage coupled with the lack of working facilities makes the extension services fail to make any impact on farmers' practices or on the sector in general.

There is a rather confusing situation with regard to the system of accountability of extension staff in the LGAs. While the extension staff are accountable to the DAICO, the DED sees them as part of the district pool of staff from which he/she can draw and assign any duty as he/she sees fit. Given the fact that the DED has to respond to constant pressure from the central government and from the Councilors to implement certain actions, makes it difficult to give due consideration to job descriptions of various Council staff. As a result the centrality of agriculture as the engine of economic growth of the districts, and the importance of extension services in facilitating this process is not recognized by the districts. This is made worse by the communication gap existing between the Ministry of Agriculture Livestock and Fisheries and the District Councils under the D by D system of government.

4. POLICY RECOMMENDATIONS

i. Financial allocation to the agricultural sector

Resource allocation to the development of the agricultural sector has been inadequate and is nowhere near the 10% of the national budget that was agreed upon by African Heads of State in Maputo and further emphasized in Malabo. Furthermore, data show that other than donor funding, there are hardly any resources being directed to the development of the sector by the central government or by the LGAs. Thus in the absence of a sector programme (such as ASDP), the sector has been starved of any funds other than recurrent budgets.

- Therefore, the government, with or without donor funds, must strive to allocate 10 percent of the national budget for the development of agriculture in accordance with the Maputo Declaration. Indeed, without paying enough attention to the agricultural sector the government's plan of industrialization will not succeed because it will need a vibrant agricultural sector to supply the necessary raw materials to the industries.
- It does not seem feasible nor politically tenable to allocate the agricultural budget based purely on agricultural potential. Rather, it is recommended that allocation should be based on need, with the more marginal areas deserving more resources to pull them up (e.g. by investing in irrigation infrastructure, and other similar interventions to increase their resilience).

- Likewise, the LGAs must recognize the importance of agriculture in the improvement of the economic wellbeing of their people, and the need to invest in its modernization, without necessarily waiting for external support. Broad-based agricultural development is likely to contribute significantly to the overall economic growth of the district and of the population at large. Therefore, LGAs must see agriculture as deserving as much attention as other sectors. This points to the need for continued lobbying and advocacy by farmers' organizations and other stakeholders for Councilors to see the importance of allocating the requisite resources from own sources to the agricultural sector.
- Another important step is for each district to develop a realistic strategy to guide public and private sector investment in the agricultural sector, with very clear priorities and targets. With such a strategy funds from different sources can be directed accordingly to those areas of strategic importance for the district, and the support of the various stakeholders, including CSOs and the private sector can be properly coordinated. This will also foster closer collaboration among the various stakeholders supporting the sector, and will facilitate the capturing information on all the human and financial resource inflows into the district and to monitor impact of those resources.

ii. Extension reforms to improve staff effectiveness

Given the severe shortage of extension staff especially at the field level due to the policy of one extension staff per village, the separation of crops and livestock, the slow rate of recruitment, and the tendency to assign other responsibilities to extension staff, there is need for the government to take the following steps:

- Consider the possibility of re-organizing the field extension staff by pooling them into multi-disciplinary teams placed at the ward level, to cover all the villages in the Ward, and where each team can be provided with basic facilities (e.g. office, a motor cycle, computers, internet, extension kits …) so that as a team they can more effectively address farmers' problems, more so than when each staff is working alone at the village level without any support. It will also be easier for both research institutions and district staff to link with ward extension staff to provide technical advice and supervision. With this arrangement, farmers will know where to go when they need advice or when face with problem requiring a solution. Furthermore, with this arrangement, the teams will constitute all the relevant disciplines, i.e. crops, livestock, cooperatives , community development, natural resources etc. working together as a team obviating the need to increase the numbers of extension staff. Using this arrangement, the existing extension staff can be fully utilized and can meet the needs of all farmers in all the regions and districts, regardless of their agricultural potential.

- The WARCs should be made operational and well-resourced with relevant informational materials, internet, training facilities, demo plot, library to support the Ward teams, and to be a source of all necessary information about agriculture for the community.
- The extension services should adopt more innovative ways of working within the existing resource limitations, through for example, encouraging farmers to make more use of the Ward Agricultural Resource Centers, making more use of mobile phones to communicate with farmers and other extension workers, making more use of community radios, training and making use of para-professionals/lead farmers who could be working more directly with other farmers and could act as the link between farmers and extension staff.
- It is necessary to review the line of command so that extension staff are directly answerable to their technical superiors such as DAICO/DLO/DFO instead of being accountable to other administrative officers (VEO, WEO and councilors) in order to streamline the reporting system and strengthen accountability. In addition, the reporting system must be more interactive to allow for feedback and sharing of experiences among all extension staff. This will provide an incentive for the extension staff to strive to do good work which they will be proud to share with colleagues, and will contribute to their continuous professional growth.
- Finally there has to be system of continuous professional development of extension staff through long-term and short-term training (including in-house retreats) on new developments in agriculture and in the field of extension so that they can keep up with such developments and can deal with new challenges that farmers may be facing. In particular, the extension staff need to be trained on innovative and effective ways of communicating with farmers and other stakeholders. This will make them more effective in their work even with limited resources.

iii. General

This study was conducted at a particular time that has seen a recent change of government and a shift in government priorities towards major infrastructure projects, moving the capital to Dodoma, and reducing the government debt all of which have demanded huge capital outlays. This is also a period when the government is negotiating with Development Partners on the funding of the next phase of the ASDP. This means that the situation may change in the near future. It is therefore recommended to continue monitoring of the resource allocation to the agricultural sector, including a survey to assess and determine requirements for the effective performance on extension services in Tanzania. Such a study could focus on specific districts in different agro-ecological zones and could map extension officers and their detailed work plans from village, ward and district level.

APPENDICES

A. **List of People contacted**

Name	Position	Place
Mr. Hassan Juma	Fisheries officer	RS Tanga
Mr. Ayub Salehe	Crops officer	RS Tanga
Eng. Abdallah Jaha	Irrigation engineer	RS Tanga
Ms. Monica Kinala	Head of infrastructure & construction cluster and Acting RAS	RS Tanga
Mr. Benedict Njau	Head of Economic Cluster	RS Tanga
Ms. Mary Misokia	SMS Nutrition	Handeni DC
Mr. Norbert Balama	SMS Crops	Handeni DC
Dr. Neville Mlinga	District Veterinary Officer	Handeni DC
Ms. Beatrice Nanga	SMS Crops	Handeni DC
Mr. Ezekiel Mbilike	SMS Statistics	Handeni DC
Mr. Bakari Mgaza	SMS Crops	Handeni DC
Ms. Rosemary Guge	Ag DAICO	Handeni DC
Mr. Sekiara Kiariro	District Livestock Officer	Handeni DC
Mr. William Makufwe	District Executive Director	Handeni DC
Mr. Godwin Gondwe	District Commissioner	Handeni District
Mr. Kakulu Lugembe	DAICO	Korogwe DC
Mr. Godfrey Muna	DADPs Coordinator	Korogwe DC
Mr. Nelson Masaki	M & E coordinator	Korogwe DC
Mr. Seuri Petro Chui	SMS Statistics	Korogwe DC
Ms. Lucy Nyalu	DAICO	Iringa DC
Mr. Shalimwene	FFS Specialist	Iringa DC

Ndondole		
Mr. Urban Kalimba	District Extension Officer	Iringa DC
Mr. Isdory Karia	District Livestock Officer	Iringa DC
Mr. Tumsifu Charles	SMS horticulture	Kilolo DC
Mr. Totinant Mweresa	SMS Irrigation	Kilolo DC
Mr. Revocatus Rwegoshora	Agric officer	RS Iringa
Ms. Rose Kasole	Agric. Officer	RS Iringa
Mr. Godfrey Mnyamale	DAICO	Chamwino DC
Mr. Mukara Mugini	Ag. Officer	PO RALG – Dodoma
Mr Jovin Barata	DAICO	Bahi DC
Mr. Hamisi Mfuko	SMS Crops	Bahi DC
Eng. Solomon Chapa	SMS Irigation	Bahi DC
Eng. Adam Lau	SMS Irrigation	Bahi DC
Mr. Stephen Gossi	SMS Statistics	Bahi DC
Mr. Bernard Abraham	RAA /RAO	RS Dodoma
Mr David Biswalo	Assistant Director, Budget (MALF)	Dar es Salaam
Mr. Salimu Mwijaka	Planning (MALF), Livestock	Dar es Salaam
Mr. Mohamed Chikawe	Planning Officer (MALF)	Dar es Salaam
Ms. Bezia Ruyengezibwa	Livestock Extension (MALF)	Dar es Salaam
Mr. Shengoto Rogers	Livestock production (MALF)	Dar es Salaam
Mr. Simon Mpaki	ASDP secretariat (MALF)	Dar es Salaam
Ms. Kisa Kajigili	Director extension (MALF)	Dar es Salaam
Dr. Mwatima Juma	Country Programme Officer, IFAD	Dar es Salaam

Appendix B. DADP Budget Breakdown for the study area

Year 2010/2011

Council	Basic DADG	Top Up DADG	Basic A-CBG	Top Up ACBG	Top up EBG	Total
Chamwino	35,859,202	169,341,137	41,623,959	57,720,927	39,152,080	343,697,305
Bahi	35,859,202	120,336,888	41,623,959	36,075,580	24,470,050	258,365,679

Handeni	38,371,131	255,501,657	44,543,257	77,205,330	52,368,342	467,989,716
Korogwe DC	48,127,141	313,091,264	55,862,819	96,835,088	65,683,198	579,599,511

Iringa	52,878,755	576,073,739	61,374,931	106,395,660	72,168,130	868,891,215
Kilolo	38,975,736	424,215,272	45,238,633	78,421,837	53,193,498	640,044,977

Year 2011/2012

Council	Basic DADG	Top Up DADG	Basic A-CBG	Top Up ACBG	Top up EBG	Total
Chamwino	35,859,202	163,550,088	20,888,359	0	0	220,297,649
Bahi	35,859,202	202,001,087	25,700,864			263,561,153
Handeni	38,371,131	231,866,349	27,939,478	0	0	298,176,958
Korogwe	48,127,141	284,128,601	35,043,201			367,298,943
Iringa	52,878,755	522,783,752	38,503,032	0	0	614,165,539
Kilolo	38,975,736	384,973,028	28,379,715	0	0	452,328,479

Year 2012/2013

Council	Basic DADG	Top Up DADG	Basic A-CBG	Top Up ACBG	Top up EBG	Total
Chamwino	35,859,202	129,548,862	27,581,022	0	0	192,989,086
Bahi	35,859,202	160,006,095	27,581,022	0	0	223,446,319
Handeni	38,371,131	183,662,522	29,515,418	0	0	251,549,071
Korogwe	48,127,141	225,059,720	37,016,029	0	0	310,202,890
Iringa	52,878, 755	414,099,689	40,668,484	0	0	507,646,927
Kilolo	38,975,736	304,939,107	29,976,191	0	0	373,891,034

Year 2013/2014

Council	Basic DADG	Top Up DADG	Basic A-CBG	Top Up ACBG	Top up EBG	Total
Chamwino	374, 494,000	0	0	0	0	374, 494,000
Bahi	593,000,000	0	0	0	0	593,000,000
Handeni	251,000,000	0	0	0	0	251,000,000
Korogwe	177,000,000	0	0	0	0	177,000,000
Iringa	385,373,000	0	0	0	0	385,373,000
Kilolo	350,000,000	0	0	0	0	350,000,000

C. Staff Distribution and Budget Allocation per Region

Region	HDI Rank	Number of staff required	Number of staff on post	% staff on post	Rank	Total budget allocation 2010/2011 to 2013/2014	Rank
Arusha	1	1072	571	53.3	3	6,300,490,950	13
Kilimanjaro	2	1571	707	45.0	4	5,740,299,250	14
Dar es Salaam	3	411	270	65.7	1	1,119,747,992	21
Iringa	**4**	**892**	**417**	**46.7**	**5**	**10,977,048,582**	**6**
Ruvuma	5	1737	517	29.8	17	10,677,578,504	7
Mbeya	6	2723	1099	40.4	10	12,066,036,747	5
Tanga	**7**	**2776**	**900**	**32.4**	**15**	**7,806,489,662**	**11**
Manyara	8	1110	425	38.3	12	6,413,214,112	12
Lindi	9	1330	487	36.6	13	5,435,278,082	17
Mara	10	1547	678	43.8	6	14,468,850,172	2
Morogoro	11	1726	870	58.5	2	10,018,723,448	8
Mtwara	12	2170	467	21.5	23	5,704,959,175	15
Mwanza	13	1633	625	38.3	12	12,236,817,231	4
Rukwa	14	1111	369	33.2	14	9,597,864,259	10
Pwani	15	1328	714	53.7	3	4,695,573,438	20
Shinyanga	16	1232	500	40.6	9	14,407,346,778	3
Tabora	17	1921	526	27.4	19	5,286,096,742	18
Kagera	18	1701	675	39.7	11	14,994,618,665	1
Dodoma	**19**	**1606**	**671**	**41.8**	**7**	**5,190,007,116**	**19**
Singida	20	1246	370	29.7	18	5,455,123,598	16
Kigoma	21	1190	305	25.6	22	9,618,266,341	9
Geita	22	1247	329	26.4	20		
Simiyu	23	1181	368	31.2	16		
Njombe	24	1052	436	41.4	8		
Katavi	25	510	134	26.3	21		

Source: PORALG HQ and ASDP Secretariat

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