



FERTILE YET FRAGILE

An Assessment of Progress in Implementing Uganda's
Agricultural Development Strategy and Investment Plan (DSIP)
2010/11 - 2014/15

May 2013

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Australian Aid - managed by ActionAid and Food Rights Alliance on behalf of AusAID

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FOREWORD

Uganda's Agriculture is recognised as a key driver of economic growth and poverty reduction because the sector largely employs the poor, especially women. The sector continues to dominate the Ugandan economy and it contributed 22.9% of GDP in 2011 while 65.6% of the working population is still engaged in this sector.

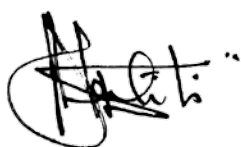
However, despite its centrality, agriculture has not been used to its full potential in Uganda because of anti-agriculture policy biases and underinvestment, often compounded by poor policy implementation, inefficiency in spending and corruption in responsible government agencies. Many Agricultural policies and programs that have been put in place have not yielded much in changing the face of a smallholder farmer because of poor quality programs, failure to implement programs, political interference, and limited funding, among other challenges. As a consequence, 95% of farmers in Uganda continue to rely on rudimentary tools, are dependant of rain fed farming while only 12-15% have access to agricultural extension. The effect has been decline in food production, unsustainable rural-urban migration and limited progress on poverty reduction.

As a commitment to improving the welfare of Ugandans majority of whom are dependent on agriculture and to achieve all-embracing economic growth, the government of Uganda developed the Agricultural Development Strategy and Investment Plan (2012/11-2014/15) to revamp the performance of the sector. This was in line with its commitment to the Maputo protocol of achieving agricultural lead development defined in the NEPAD's Comprehensive Africa Agriculture Development Programme (CAADP).¹ This commitment holds government accountable to live to the principle of agriculture-led growth, the pursuit of a 6% average annual growth rate for the agricultural sector; and, to increase the share of the national budget allocated to the agricultural sector to reach an eventual target of 10%. To make this commitment a reality, CAADP emphasises mutual accountability and the role of the citizens and Civil Societies in holding governments accountable to their commitments. It's within this framework that ActionAid and other CSOs under their umbrella organisation of Food Rights Alliance have taken keen interest to assess the extent to which the DSIP has been implemented. The intention of this early assessment is to inform the policy makers of the gaps in the DSIP for improvement. The findings provide good ground up on which to mobilise the much needed political support and citizen action to ensure that agricultural policies of this nature deliver in practice.

I would like to thank Fredrick Kawooya for the leadership in getting this assessment done. I would also like to acknowledge the contribution and input of other ActionAid colleagues, Irene Kharono, Paul Ojuman, Francis Akorikin, from Uganda and Buba Khan and David Adama from Actionaid International. In the same vain, I thank the AA Uganda Communications Team as well members of the Food Rights Alliance for their valuable input.

Special gratitude goes to various government officials, policy makers, donors, farmers in Kumi, Kapchorwa, and Katakwi who provided information to this study that our Lead Consultant Mark Curtis pulled together into this paper.

Finally we thank Australian Aid for the finances to undertake this study which we trust will be useful to inform discussions and actions to improve agriculture planning, policies and outcomes in Uganda.



Arthur LAROK

Country Director, ActionAid Uganda

SUMMARY

This report assesses the extent to which the government's Agriculture Sector Development Strategy and Investment Plan, 2010/11–2014/15 (DSIP), is being implemented in certain key areas and makes recommendations for improvements. The DSIP, launched in March 2010, is three years old, and is the flagship programme for improving agriculture in Uganda. This research involved a review of the secondary literature, focus group discussions with farmers in one district – Kumi - and interviews with District officials in Kumi, civil servants in the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and selected members of parliament in Kampala.

Background: Agriculture and poverty in Uganda

Around 73 per cent of all households in Uganda and the majority of the poor depend on agriculture for their livelihoods. Uganda has around 3.9 million farming households with small farmers dominating: around 58 per cent of farms in Uganda have less than 1 hectare and that a further 38 per cent have 1-5 hectares; only 4 per cent are large farms, with 5 hectares or more. Yet while most food insecure people live in rural areas where food is produced, over 60 per cent of households are net food buyers (purchasing more food, by value, than they sell).

Farmers face numerous challenges. Around 90 per cent of agricultural production and post-harvest operations rely on hand-held tools, with only 8 per cent using draught animal power and 2 per cent tractors. Only around 17 per cent of farming households are visited by an extension worker and only 9 per cent access credit. Uganda is also increasingly affected by climate change, with prolonged drought and excessive rains now common.

Women are the principal actors in Ugandan farming, constituting 55 per cent of farmers and undertaking 85 per cent of the planting and weeding, 55 per cent of land preparation and 98 per cent of the food processing.

The DSIP

The DSIP is intended to address four broad challenges facing Ugandan agriculture: low production and productivity; low value addition to agricultural produce and limited market access; weak implementation of agricultural laws and policies; and weak public agricultural institutions. It has two overall 'development objectives', which are to increase rural incomes and livelihoods and improve household food and nutrition security.

While the DSIP is generally a positive and welcome analysis and set of goals, the key is clearly in implementation. Poor policy implementation and the lack of involvement of intended beneficiaries has traditionally bedevilled Ugandan policy making.

Implementing the DSIP

The DSIP process has focused renewed attention on agriculture and we believe the government and civil servants are committed to improving agriculture policy. This is signalled in the steps taken to implement the Agricultural Technology and Agribusiness Advisory Services (ATAAS) components of the DSIP which mainly involve supporting the National Agricultural Advisory Services (NAADS) and the National Agricultural Research Office (NARO). This focus on research and extension is a good one given the potential importance of these to small farmers. In addition, investment plans have been developed for 13 commodity value chains and 'commodity platforms' are being formed to take activities forward. In addition, there have been two annual sector reviews in 2011 and 2012 and a 'mid-term' review of the DSIP is planned to be completed in 2013.

Less positive is the lack of progress on the 20 non-ATAAS components of the DSIP, which include promoting value chains in 13 commodities, thematic areas such as seeds, fertilizer

and mechanisation, and institutional reforms. Only in November 2012 did the government produce a 'Proposed Plan' to implement the non-ATAAS areas. Twelve task teams, each with around 20 stakeholders (mainly consisting of officials), have been formed and 20 Framework Implementation Plans (FIPs) have been developed to implement these non-ATAAS components. Yet these FIPs have not yet been made public and do not yet have agreed budgets. A November 2012 government document states that the FIPs will be integrated into the 2013/14 budget (which runs from 1 July 2013 until 30 June 2014), but our understanding is that they will not be incorporated into next year's budget, since their funding levels have still not been agreed.

In all areas of agriculture spending and policy, we believe it is crucial to target and support women farmers in particular. But the DSIP document itself has a relatively weak focus on gender. It recognises the important role of women in agriculture and says that the provision of agricultural services will pay 'special attention' to women but it does not outline programmes to specifically target women farmers. The MAAIF is the primary driver of the DSIP and its annual budget consists of hundreds of budget lines, but these make no mention of women. Given women's importance to farming in Uganda, the failure to support women farmers sufficiently is holding back food production in the country.

We assess progress in implementing seven of the specific commitments in the DSIP.

1. DSIP commitment: Agriculture budget

At the Maputo summit in 2003, African governments, including Uganda's, committed themselves to devote at least 10 per cent of their public expenditure to agriculture, and achieve 6 per cent annual growth in the sector. The DSIP committed the government to increasing agriculture funding over the five years and to get closer to the 10 per cent target. Yet the DSIP has been significantly under-funded since its inception. The Medium Term Expenditure Framework (MTEF) budget allocation in the first year of the DSIP was only 75 per cent of the required amount. The government's most recent MTEF envisages an allocation to agriculture varying from 3.3–6 per cent of the national budget in the six years from 2011-2017: the average allocation to agriculture is just 4.1 per cent, less than half way to the Maputo target.

2. DSIP commitment: Improving Incomes/food security

The overall objectives of the DSIP are to increase rural incomes and food security. This is a hard commitment to measure since there are few formal figures assessing progress since the inception of the DSIP in 2010 and our brief analysis is therefore only tentative. Indeed, the DSIP document itself does not provide a baseline against which progress will be measured. Our interviews with farmers, and ActionAid's experience of working with farmers in several areas of Uganda, is that climate change, in particular, is reducing food production and thus income and food security for a very large number of Ugandans. Small farmer families in Kumi District, most of whom who have incomes of just Shs 350,000 – 500,00 a year, face severe food shortage for six months of the year and survive on one meal a day. Our analysis suggests that there is real urgency in implementing the DSIP's commitment to address climate change.

3. DSIP commitment: Climate change planning

The DSIP committed the government to increasing its capacity to address climate change, especially by identifying climate impacts, improving climate forecasts and strengthening District capacity. Yet our understanding is that very little progress has been made on climate change planning. The government identifies few achievements in this area and, although some climate change-related activities are being implemented in the Sustainable Land Management and Water for Agricultural Production components of the DSIP, the more direct climate change commitments do not appear to be being significantly addressed. At District level, there also appears to be little improvement in climate change planning. In

Kumi District, very little climate information is passed to farmers since the District does not have the capacity to analyse data coming from the Meteorological Department and a local micro weather station.

4. DSIP commitment: Labour saving technologies

The DSIP committed the government to increasing the use of labour-saving technologies including tractors, oxen and ox-ploughs. Our analysis is that some activities are in train to promote mechanisation and procure labour-saving devices in Uganda. But the government's stated achievements and MAAIF's budget allocation to this area - Shs 8.3 billion in 2012/13 – are both small. Our interviews with farmers suggest that the use of labour-saving devices may not be widely increasing. Another concern is that the thrust of the government's mechanisation policy appears to be on tractors, which are extremely expensive and largely unsuitable for small farmers since they are usually suitable for areas of land of around 50 hectares. Interviews with farmers confirm that 'walking tractors' are preferred and more useful, along with simpler, cheaper devices such as machines for planting and harvesting, and grinding mills for processing.

5. DSIP commitment: Extension advisory services

Extension services in Uganda have been subject to huge debate and policy change over many years. The DSIP committed the government to improving extension services by increasing farmers' access to information, knowledge and technology. The DSIP outcome indicators are: number of farmers satisfied with extension/advisory service delivery; percentage of farmers who are farmers' group members. Our aim has not been to evaluate the impact of the extension system – which is too big a task – but to gain limited insights in the constrained time available.

We find that the DSIP has promoted significant investments in the extension service, which are resulting in considerable activities, yet it is difficult to pin down specific, concrete improvements. Overall, there remain significant problems with NAADS and Uganda still does not have a quality, institutionalised service capable of providing advice and support to most small farmers. NAADS continues to suffer from basic problems such as a lack of an adequate number of extension workers and of sufficient operations budgets at local level. Most importantly, access to extension services remains low. According to the MAAIF's November 2012 report, the average extension worker to farmer ratio is 1: 3,189. Previous MAAIF figures were that only around 17 per cent of farming households are visited by extension workers (680,000 out of 3.9 million).

The Joint Agriculture Sector Review of 2011/12 suggests that while some important DSIP aims are being met and that significant activities are taking place in support of the DSIP, some are not. For example, the DSIP calls for forming new farmers groups and strengthening existing ones, and government documents suggest that some action is being taken to do this. But the National Farmers Federation says that no significant number of new groups has been formed and that little activity is taking place to strengthen existing ones. This is also our understanding from research in Kumi District. Moreover, one topline DSIP indicator for improving extension services is the number of farmers satisfied with extension services. Our research among farmers reveals a very mixed picture when it comes to satisfaction.

6. DSIP commitment: Capacity building in MAAIF

The DSIP committed the government to increase the efficiency of the MAAIF and to ensure that MAAIF at its headquarters and in the Districts was sufficiently equipped. The MAAIF states that a new structure has been developed that will improve its functioning and that activities have been conducted to train staff, prepare guidelines for selection of staff to participate in capacity building programmes and to prepare a monitoring and evaluation system for evaluating training.

Yet capacity remains a major problem. The MAAIF notes that out of a total of 683 posts, only 47 per cent are filled and 6 per cent are approved for recruitment, meaning that even after the recruitment is done MAAIF will only be operating with only 53 per cent of the posts approved for implementation of the DSIP. This situation is actually worse than when the DSIP was conceived – the DSIP document states that, then, 67 per cent of MAAIF posts were filled. These posts are not filled because there is insufficient budget to do so. Capacity problems also continue to beset the Districts. In Kumi District, only just over half the established posts are currently filled and the reason for the vacancies is the wage bill: according to the District's Chief Administrative Officer, policy is not to recruit more than 65 per cent of the established posts.

7. DSIP commitment: Sector Working Group

The Sector Working Group is the key body for reviewing and debating the implementation of the DSIP. The DSIP committed the government to ensure that the Sector Working Group coordinates and harmonises the implementation of the DSIP effectively and helps to enhance stakeholder participation. Our analysis is that the Sector Working Group is not working as efficiently as it could or must. One issue is that the body is rather opaque and insufficiently transparent – it does not make its minutes public and produces few reports for public scrutiny. Another problem is that membership of the Group is quite narrow. It consists mainly of MAAIF staff and donors and a representative from the National Farmers Federation, but does not include civil society organisations; indeed, also absent are representatives from other government ministries such as Water, Works and Local Government. None of the 12 task teams set up to implement the non-ATAAS components of the DSIP includes representative from civil society, though some include academics.

The mid-term review of the DSIP, planned for 2013, provides an opportunity to hear about DSIP implementation from all stakeholders and indeed to review DSIP implementation more generally.

Policy recommendations

We recommend that the government:

- Set a timetable to spend 10 per cent of the national budget on agriculture and investigate options for finding extra resources for agriculture, such as those mentioned in this report
- Meet with urgency the DSIP commitments on climate change planning so that small farmers are provided with more advice and support in adapting to climate change
- End financial support for tractors, which mainly benefit larger farmers, and instead increase spending on devices that are optimal for small farmers, including animal traction and processing equipment
- Ensure that all extension worker posts are filled and that advisory services reach larger number of farmers, including women farmers; Separate the input provision programme from advisory services; and meet the other commitments outlined in the DSIP, such as strengthening farmer groups and improving seed multiplication
- Ensure that all established posts are filled at MAAIF HQ and the Districts by allocating sufficient resources to the sector, and meeting the other DSIP commitments
- Enhance the transparency of the Sector Working Group by making its minutes public, and increase stakeholder participation in the SWG by including participants from civil society organisations working with small farmers
- Specifically target and support women farmers in the budget and in all areas of agricultural policy, and ensure that these commitments are monitored

BACKGROUND

Agriculture in Uganda is characterised by low productivity, mainly as a result of poor use of inputs, undeveloped value chains and low public and private investment in the sector. The DSIP, launched in March 2010, is three years old, and is the flagship programme for improving agriculture in Uganda. This report assesses the extent to which the government's Agriculture Sector Development Strategy and Investment Plan, 2010/11–2014/15 (DSIP) is being implemented in certain key areas and makes recommendations for improvements. Our research focuses on the extent to which small-scale farmers, especially women farmers, are benefitting from changes in government policy. The research analyses seven of the areas in the DSIP:

The agriculture budget, Progress in improving rural incomes/food security, Climate change planning, Labour-saving technologies, Extension advisory services, Capacity building in MAAIF, The Joint Sector Working Group and stakeholder participation

Box 1: Methodology

The DSIP is an ambitious document and contains dozens of commitments, and our research does not attempt to review all of them. Rather, we have selected some key policy areas to evaluate, which are among the most important in terms of likely beneficial impacts on small-scale farmers, particularly women. This research involved a review of the secondary literature, focus group discussions with farmers in one district – Kumi - and interviews with District officials in Kumi, civil servants in the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and selected members of parliament in Kampala.

The research was limited to one district due to time and cost constraints; we are conscious that one district does not represent the whole of Uganda, so our research in Kumi is offered as a case study. Discussions were held with four farmers groups in February 2013. In Ongino sub-country, discussions were held with 30 women members of the Irerete 'star circle', held in Oduoka village, and with 27 women and men members of the Aipecitoi 'star circle', held in Kacherede village. In Atatur sub-county, discussions were held with two groups, one of 15 and one of 8 women and men, in Atatur village. The first two groups are supported by ActionAid, the latter two not.

Kumi district, 200 kms northeast of Kampala, has a population of 244,000 people, 85 per cent of whom are farmers, the majority subsistence farmers. They have an average landholding of around three acres and with average incomes of Shs 350,000 – 500,000 a year.¹

CONTEXT:

AGRICULTURE AND POVERTY IN UGANDA

Despite recent impressive economic growth in Uganda, income poverty remains a key development challenge. The 2012 *Poverty Status Report* shows that 8.4 million Ugandans (24 per cent) live below the national poverty line (in 2009/10), a decline from 34 per cent a decade earlier; however, with high population growth, the actual number of poor Ugandans has barely decreased.² The majority of the poor live in rural areas and are farmers with average incomes of around 400,000 (US\$160) a year in 2005/06.³ Indeed, the number of people who are food insecure increased from 12 million in 1992 to 17.7 million in 2007.⁴ The average caloric intake per person per day has improved from 2,066 kcal in 2002/03 to 2,190 kcal in 2005/06, but is still less than the World Health Organisation-recommended level of 2,300 calories per person per day.⁵

Around 73 per cent of all households in Uganda and the majority of the poor depend on agriculture for their livelihoods.⁶ Uganda has around 3.9 million farming households with small farmers dominating: it is estimated that 58 per cent of farms in Uganda have less than 1 hectare and that a further 38 per cent have less than 5 hectares; only 4 per cent are large farms, with 5 hectares or more.⁷ Yet while most food insecure people live in rural areas where food is produced, over 60 per cent of households are net food buyers (purchasing more food, by value, than they sell) and only around 12 per cent are significant net sellers.⁸ Farming is also overwhelmingly focused on primary production; the proportion of Uganda's agricultural commodities and products which is processed is believed to be no more than 5 per cent.⁹

Farmers face numerous challenges. Yields, use of technology and access to services are all low.

- Per capita agricultural production has been declining in recent years¹⁰: the increases in crop production that have resulted result have mainly

done so from expansion of the area under cultivation rather than increased productivity.¹¹

- As regards use of technology, 90 per cent of agriculture production and post-harvest operations rely on hand-held tools, with only 8 per cent using draught animal power and 2 per cent tractors.¹²
- Only around 17 per cent of farming households are visited by an extension worker and only 9 per cent access credit.¹³

Uganda is also increasingly affected by climate change. During 2010/11 poor rainfall and drought contributed to a decline of 16 per cent in cash crop production (such as coffee, tea and cotton), reducing the growth in agricultural output to 0.9 per cent compared to 2.4 per cent in the previous year.¹⁴ In 2011/12, unfavourable weather conditions lead to a loss of planted acreage and a drop in yields. Farmers experienced drought at the time of planting (May – June 2011) and excessive rains from August-October 2011, which resulted in flooding in parts of Busoga, Butaleja, Pallisa, Teso and Bugisu.¹⁵

Women are the principal actors in Ugandan farming. Government figures are that most farmers (55 per cent) are women and that the agricultural sector employs a higher proportion of women (83 per cent) than men (71 per cent).¹⁶ Women-headed households constitute 26 per cent of all households in rural Uganda and women are estimated to do 85 per cent of the planting and weeding, 55 per cent of land preparation and 98 per cent of the food processing. But women are widely discriminated against, notably in access to services and in land holding: a 2005/06 survey showed that men-headed households hold an average of twice the land size held by women-headed households.¹⁷

Despite major challenges, small farmers, and women small farmers, have considerable

potential to eradicate food insecurity and increase their incomes, helping Uganda on a path to sustained development. For example, a recent World Bank analysis contends that ‘smaller farms in Uganda appear to use limited resources more efficiently than larger farms, in contrast to popular beliefs in the country’ and that ‘smaller farmers are more productive and profitable than large farms because of lower supervision costs and higher incentives for family labour’.¹⁸ A recent FAO analysis finds that even if women simply had the *same* access to farm inputs like seed as men, they could increase yields on their farms by 25-30 per cent, which would raise agricultural output in developing countries by between 2.5 and 4 per cent.¹⁹ It is crucial, therefore, to invest in small farms, and especially women farmers.

The DSIP

At the Maputo summit in 2003, African governments, including Uganda’s, committed themselves to devote at least 10 per cent of their public expenditure to agriculture, and achieve 6 per cent annual growth in the sector. The original target date to meet this commitment was 2008, five years from the 2003 declaration. The Ugandan government further committed to ‘work towards fulfilling’ the 10 per cent target in signing the Comprehensive Africa Agricultural Development Programme (CAADP) compact in March 2010.²⁰

The government’s flagship programme for improving agriculture is the Agriculture Sector Development Strategy and Investment Plan, 2010/11–2014/15 (DSIP). The DSIP is intended to address four main challenges facing the agricultural sector in Uganda:

- low production and productivity;
- low value addition to agricultural produce and limited market access;
- weak implementation of agricultural laws and policies; and
- weak public agricultural institutions.

The DSIP has been designed to address these constraints in four investment

programmes:

- increasing agricultural production and productivity;
- increasing access to markets and value addition;
- creating an enabling environment for the private sector in agriculture; and
- strengthening agricultural institutions at the centre and in local governments.²¹

The DSIP says it provides ‘a “roadmap” to guide government, the private sector, farmers organisations, other civil society stakeholders and Development Partners to make public interventions that will help meet the key objectives of growth, food security and poverty reduction in the agricultural sector’. As such, ‘it is a combination of policies and programmes around which stakeholders can build a consensus and then mobilise the resources needed’.²²

The DSIP has two overall ‘development objectives’, which are:

- rural incomes and livelihoods increased; and
- household food and nutrition security improved.²³

The ‘immediate’ objectives of the DSIP are:

- factor productivity (land, labour, capital) in crops, livestock, and fisheries sustainably enhanced;
- markets for primary and secondary agricultural products within Uganda, the region and beyond developed and sustained;
- favourable legal, policy and institutional frameworks that facilitate private sector expansion and increased profitability along the entire value chain developed; and
- MAAIF and Agencies functioning as modern, client-oriented organisations within an innovative, accountable, supportive environment.²⁴

The DSIP aims to increase the incomes of farming households, ensure household food and nutrition security, create on-farm and off-farm employment opportunities, promote value addition of agricultural products and promote domestic and external trade in agricultural products, among other goals. The DSIP entails investing in the core mandate and functions of MAAIF and the sector, the aim being to ensure efficient and effective provision of critical agricultural public goods, services and support.

While the DSIP is generally a positive and welcome analysis and set of goals, the key is clearly in implementation. Poor policy implementation and the lack of involvement of intended beneficiaries, has traditionally bedevilled Ugandan policy making. The government has over the last two decades pursued agricultural development strategies that have largely remained paper commitments, with meagre impact on improving the livelihoods of Ugandans. The Plan for the Modernisation of Agriculture

(PMA), for example, had little impact on the lives of subsistence farmers. A recent CAADP report notes that:

‘While the PMA’s multi-sectoral approach to agricultural development is lauded, the implementation and coordination requirements were too great and many of the targeted programs were not successful’.²⁵

Indeed, the DSIP itself concedes that:

‘Despite government efforts in the PMA, progress was made mainly in two of seven pillars of the PMA - research and agricultural advisory services, while limited progress was achieved in the other five pillars’²⁶ (which were agricultural education, rural finance, agro processing and marketing, sustainable natural resource management and infrastructure).

Three years into implementing the DSIP, what conclusions can be drawn about the effectiveness of this programme?



Photo by ActionAid/Stephen Ojumbo

Aguti Rose from Katakwi has put her energies in Agriculture with little success in improving her economic status due to a number of constraints she faces including access to appropriate post harvest technologies and access to market

INTRODUCTION

The DSIP process has focused renewed attention on agriculture and we believe the government and civil servants are committed to improving agriculture policy and spending. This is signalled in the important steps that have been taken to implement the Agricultural Technology and Agribusiness Advisory Services (ATAAS) areas of the DSIP. Less positively, however, little if any progress has been made in implementing the other areas of the DSIP.

The ATAAS components are technology development, agribusiness advisory services and improving the interface between agricultural research and advisory services (extension), which means a focus on supporting the National Agricultural Advisory Services (NAADS) and the National Agricultural Research Office (NARO). The DSIP is substantially focused on promoting agricultural research and extension, and over 60 per cent of the DSIP budget is allocated to these two areas. This focus on research and extension is a good one, given the potential importance of these to small farmers. According to a CAADP review of the DSIP, produced in September 2010, 'the DSIP comprehensively articulates an agricultural research and extension agenda that could go a long way in transforming agriculture as an engine for economic growth in Uganda if implemented'.²⁷ Even in the ATAAS areas, however, progress has not been fast - the ATAAS project was officially launched in July 2012, over two years after production of the DSIP.²⁸ We raise some other concerns with the implementation of improved extension services below.

Also on the positive side, implementation of work on commodities has begun: investment plans have been developed for 13 commodity value chains and 'commodity platforms' are being formed to take activities forward. In addition, there have been two annual sector reviews done in 2011 and 2012 and a 'mid-term' review of the DSIP is planned to be completed in 2013.

Less positive is the lack of progress on the 20 non-ATAAS components of the DSIP which include promoting value chains in 13 commodities, thematic areas such as seeds, fertilizer, mechanisation and water for agricultural production and institutional reforms and capacity development. Only in November 2012 did the government produce a 'Proposed Plan' to implement the non-ATAAS areas.²⁹ Twelve task teams, each with around 20 stakeholders, have been formed and 20 Framework Implementation Plans have been developed to implement these non-ATAAS components and were subjected to review among stakeholder groups at a conference in September 2012.³⁰ Yet these Framework Implementation Plans have not yet been made public and do not yet have agreed budgets.

Two and half years ago, in September 2010, a CAADP review of the DSIP was already calling on the MAAIF to prepare cost figures for the 20 sub-programmes.³¹ The November 2012 document states that the activities outlined in the Framework Investment Plans will be integrated into the 2013/14 budget³² (which runs from 1 July 2013 until 30 June 2014), but our understanding is that the current Framework Investment Plans will not be incorporated into next year's budget, since their funding levels have still not been agreed. The laxity on the part of the MAAIF in developing costed plans for the non-ATAAS components undermines its intention of rolling out the DSIP, and is worryingly similar to the lack of implementation of the previous Plan for Modernisation for Agriculture.

The lack of progress in these areas means little action at District level. In our interviews with civil servants in Kumi District, one informant told us that NAADS is currently the only area where policies and resources were noticeably changing as a result of the DSIP.³³ Another told us: 'Most of the changes [as a result of the DSIP] are at the centre, they haven't trickled down to the district'.³⁴

Box 2: The importance of the DSIP supporting women farmers

In all areas of agriculture spending and policy, we believe it is crucial to target and support women farmers in particular. But the DSIP document itself has a relatively weak focus on gender. It recognises the important role of women in agriculture and says that the provision of agricultural services will pay 'special attention' to women (and youth)³⁵ but it does not outline programmes to specifically target and support women farmers. The CAADP review of the DSIP noted that some sub-programmes of the DSIP 'do not have strong strategies on how gender issues are to be integrated into the programmes and sub-programmes' and that 'collection and monitoring of gender disaggregated indicators is not specifically addressed in the document'.³⁶

The MAAIF's November 2012 document on implementing non-ATAAS components of the DSIP correctly notes that 'while women may be the main contributors to agricultural production and productivity, they are usually marginalized when it comes to decision making concerning the revenue generated from the sale of agricultural products'. It adds that 'gender issues have been analyzed and addressed in the deliverables of all the FIPs [Framework Investment Plans]. For example, under mechanisation, labour saving technologies will be promoted for both production and value addition. In the dairy programme, women's role has been emphasized and built into the programme'.³⁷ Since the Framework Investment Plans have not been made public, we are unable to assess how strong the focus on women farmers is.

Uganda's agriculture budget is poorly focused on women. The MAAIF's annual budget, which consists of hundreds of budget lines, makes no mention of women. A recent study by the Forum for Women and Democracy (FOWODE) notes that

'There is no conscious effort by sector planners and policy analysts to carry out a gender analysis before formulation of policies, strategic plans and programmes and associated budgets. Lack of gender analysis limits gender responsiveness in setting priorities and budget allocations in the sector'.³⁸

In Kumi, the District Agricultural Officer says the national aim is to ensure that 30 per cent of the beneficiaries of agriculture policy should be women but we are not aware of actual targets or monitoring of this general goal at District or national level.³⁹

One woman MP told us that in her District, although 70 per cent of the farmers are women, men get most of the subsidies and access to extension advice. To ensure women benefit, she argues that a certain percentage of all project money for agriculture should be targeted at women, and that those implementing the project should ensure this happens.⁴⁰

The failure to support women farmers sufficiently is, as noted above, holding back food production in Uganda. Both women and men farmers agree. We asked the 27 farmers interviewed in the Aipecatoi start circle in Ongino sub-county, who have an average of 3-4 acres, the following question: if a woman and a man farmer each had 3 acres of land and had identical tools and inputs, who would produce the most? All the farmers, including the men, said that women would produce more since they focus more on managing the farm and are mainly concerned about feeding their families. Other civil servants we interviewed shared the same view.⁴¹

Many agricultural policies need to be different towards women than men. In one survey in Uganda, for example, male farmers said the biggest barriers to increasing farm production were lack of transport and access to markets and credit. But women mentioned the time needed to look after their families, prepare food and work on their husbands' gardens.⁴² Thus in this case the policy implications for supporting men and women farmers are completely different.

We now focus on assessing progress in implementing seven of the specific commitments in the DSIP.

DSIP commitment on Agriculture budget

Photo by ActionAid/Stephen Ojumbo



Minister of Finance presenting the National Budget

1. DSIP commitment: Agriculture budget

The DSIP committed the government to increasing agriculture funding over the five years and to get closer to the 10 per cent target. A key outcome indicator of the DSIP is the per cent of public spending devoted to agriculture (see box 3)

Box 3: DSIP commitment: Agriculture budget

'The government is committed to increasing funding to agriculture over the next five years'.⁴³

Agriculture's share in national budget 'will rise, closer to the 10 percent level stipulated under CAADP and in the Maputo Declaration'.⁴⁴ 'In the CAADP, Uganda has committed ... to increase the share of the national budget allocated to the agricultural sector to reach an eventual target of 10 percent'.⁴⁵

DSIP Outcome Indicator: 'Public spending on agriculture as a percent of GDP and National budget'.⁴⁶

'As in the past, the DSIP will be operationalised through the MTEF... In the 2010/11, the MTEF for agriculture has been agreed at UGX 342.2 billion with authorisation given for MAAIF to project subsequent years to rise at a further 10 percent per annum.' Table 4.2 of the DSIP shows a budget of Shs 376.4 billion for 2011/12, Shs 414.0 billion for 2012/13 and Shs 455.4 billion for 2013/14.⁴⁷

Our analysis

The DSIP has been significantly under-funded since its inception. In the DSIP document, the budget was presented in two forms: the 'ideal' budget and the budget related to the Medium Term Expenditure Framework (MTEF). The 'ideal budget' totalled Shs 2.7 trillion over five years, and called for an allocation of Shs 457 billion for 2010/11. Yet the MTEF budget allocation in the first year of the DSIP was only Shs 342 billion – 75 per cent of the required amount.⁴⁸

The government's most recent Medium Term Expenditure Framework envisages an allocation to agriculture varying from 3.3–6 per cent of the national budget in the six years from 2011-2017: the average allocation to agriculture is just 4.1 per cent, less than half way to the Maputo target. Plans envisage the agriculture budget actually decreasing from 2012 – 2014 before marginally rising, and then significantly rising only in 2016/17. Also noticeable about the figures in the table below is the fall in funding to the MAAIF and a big rise in funding to NAADS.

Table 1: Government budget to agriculture (Shs billion), including donor funding

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
MAAIF	124	80	62	65	78	92
NAADS	184	184	217	240	288	348
NARO	100	44	66	86	93	100
Others	26	26	30	33	41	361
TOTAL	434	334	375	424	500	901
% of govt budget	4.5	3.4	3.3	3.7	3.8	6.0
'Ideal budget' outlined in the DSIP	515	560	582	617

Source: Ministry of Finance, Planning and Economic Development, *The Background to the Budget, 2012/13 Fiscal Year, June 2012, Table 36*

NB. Figures have been rounded

'Others' include Dairy Development Authority, Uganda Cotton Development Organisation, Uganda Coffee Development Authority and District Agricultural Extension. The high allocation to 'others' in 2016/17 is mainly explained by Shs 234 billion to Uganda Cotton Development Organisation.

In November 2012, the government stated that there was a funding gap for the DSIP of around Shs 150 billion compared to the DSIP ideal budget.⁴⁹ The Joint Agriculture Sector Review of 2011/12, led by the MAAIF and conducted in November 2012, makes clear that the MTEF provision for agriculture produced a 'financing gap for implementing [DSIP] programme activities thereby affecting operational/activity budgets'.⁵⁰ Another problem was the 'late arrival of funds at the sub-country level relative to the growing/agricultural seasons'.⁵¹

District funding

Government figures show that the budget allocations to agriculture by local government and the districts are higher than by the central government, but still fall well below 10 per cent. In 2011/12, for example, local governments (which include sub-countries) allocated an average of 6.4 per cent of their budgets to agriculture while districts allocated 6.8 per cent.⁵² In addition, close to 70 per cent of the spending at local level is recurrent expenditure with only 30 per cent remaining for capital development, which makes it extremely problematic to meet the commitments in the DSIP.

Kumi District, with a population of 244,000 people, has a total budget of Shs 20.7 billion of which Shs 1.4 billion – 6.8 per cent – is allocated to agriculture. Of this, Shs 1.1 billion goes to NAADS and Shs 183 million is spent on salaries.⁵³ Kumi has around 40,000 farm households; thus the allocation to agriculture is around Shs 30,000 (£8) per farming household per year. A civil servant in Kumi District told us that 'the budget is not sufficient if we are really to transform farmers into commercial farmers'.⁵⁴

Box 4: The donor contribution to the agriculture budget

Consistent data on donor funding to agriculture is only available for off-budget aid. In terms of sectoral allocations, the works and transport sector, water and environment and energy have been the largest recipients of donor aid. Off-budget donor funding to agriculture ranges between 2-3 per cent except in FY2010/11. In terms of both budget and off budget support, donors have allocated an average of nearly 6 per cent of their total aid to agriculture. This low percentage implies that agriculture is still not a priority for donors.

Table 2: Sectoral allocation of off-budget donor aid(\$ millions)

SECTOR	FY 09/10		2010/11		2011/12		FY 2012/13 ¹	
	Amount	%	Amount	%	Amount	%	Amount	%
Accountability	64.98	12%	23.52	5%	15.61	9%	38.8	5%
Agriculture	13.24	2%	56.25	12%	5.03	3%	21.7	3%
Education	28.29	5%	21.59	5%	5.25	3%	89.2	10%
Energy and mineral	97.97	18%	25.62	6%	25.81	15%	108.4	13%
Health	164.54	31%	203.3	45%	30.39	18%	56.1	7%
Justice, law & order Sector	0.21	0%	3.38	1%	4.01	2%	0.9	0%
Lands	0.13	0%	0.07	0%	-	0%	-	0%
Legislature	0.23	0%	-	0%	-	0%	-	0%
Security	8.13	2%	6.71	1%	1.7	1%	49	6%
Public administration	3.26	1%	1.88	0%	1.5	1%	-	0%
Public sector & Management	97.14	18%	58.49	13%	20.75	12%	83.6	10%
Social Development	31.74	6%	17.41	4%	20.94	13%	15	2%
Trade, Tourism & Industry	3.79	1%	7.81	2%	7.56	5%	3.9	0%
Water & Transport	19.23	4%	22.74	5%	23.5	14%	68.7	8%
Works and transport	0.91	0%	4.72	1%	5.32	3%	326.4	38%
TOTAL	533.79	100%	453.49	100%	167.37	100%	861.7	100%

Source: MFPED (Background to the Budget FY2010/11 – FY2012/13)

Box 5: Where can the needed resources for agriculture be found?

There are of course, as the government argues, many other critical priorities for the government beyond agriculture. But there are also several options for raising more funds for agriculture:

First, the national budget allocation to Security is more than double that to agriculture for every year from 2011-16. The exception is in 2016/17 when MTEF plans envisage a sharp fall in funding to Security.⁵⁵

Second, the African Development Bank estimates that losses from tax incentives and exemptions provided by the government to companies and individuals are 'at least' 2 per cent of GDP.⁵⁶ This amounts to around Shs 690 billion (US\$ 272 million) in 2009/10⁵⁷ - more than the entire agriculture budget.

Third, losses from corruption are also clearly very large, as the recent Shs 50 billion theft from the Office of the Prime Minister testifies.⁵⁸ Losses are also probably significant within the agriculture sector itself. One MP estimates that perhaps 20 per cent of the agriculture budget goes missing.⁵⁹ Other key informants estimate that perhaps even over half the budget goes missing.⁶⁰ Various media reports have exposed corruption in NAADS and a 2008 Auditor General's report noted that only 37 per cent of the \$107 million spent on NAADS during 2001-06 was useful expenditure.⁶¹

CASE STORY

Gaps in Services

The work of the Department of Agriculture has with time changed. It is not merely introducing crops as it were. Since 1996, it has been prioritized by government to modernize agriculture and orient farmers towards commercialization.

A brief sample of Katakwi respondents shows proof that agriculture could do with some modernization as most farmers are still depending on hoes, slashers, axes and poor seeds to produce food. Consequently, farmers take precautions before taking up new ideas because they are entirely dependent on their produce. Loss is equivalent to death. They are simply being rational in any undertaking.

There is need for improved technology like small tractors, harvesters, and sowers of seeds which is all still done manually.

Extension workers is a rear occurrence where they are most needed as farmers are often hit by crop diseases, disturbed by pests and trapped in fast changing weather patterns.

Most of the farmers in Katakwi expressed a desire for rural credit to enable them buy planting seed, farm tools, and hire labour when needed.

The infrastructure structure in most places of rural Teso are in bad shape in as far as roads are concerned. The way forward is strengthening research, extension and farmer linkages, development of production, marketing

infrastructure, targeting zonal production, improving access and availability of credit in rural areas.

The focus of Uganda's development objectives is rapid improvement of living standards of the population through accelerated economic growth and human resource development combined with social justice. The government has set out a modernization of the economy to achieve a growth of 5-10% on a sustainable basis in the medium and long term. The main strategies for achieving these objectives are: exploiting the high potential for growth in agriculture, industry and tourism.

In the past decade, agriculture expansion and growth has come from the rapid increase in production of food crops for a resurgent domestic and regional market. Increased food production has resulted from expansion of acreage with yields remaining stagnant and in some cases declining. Given the above scenario, future focus should dwell on raising yields by development and adoption of high yielding technology, generation and adoption of appropriate labour saving technology for expansion of acreage and increased diversification of agricultural exports through production of high value commodities. Finally, there is need for the creation of efficient and competitive systems for processing and marketing agricultural products, development of rural financial markets for accessing farmer credit and infrastructural development.

DSIP commitment: Improving Incomes and food security

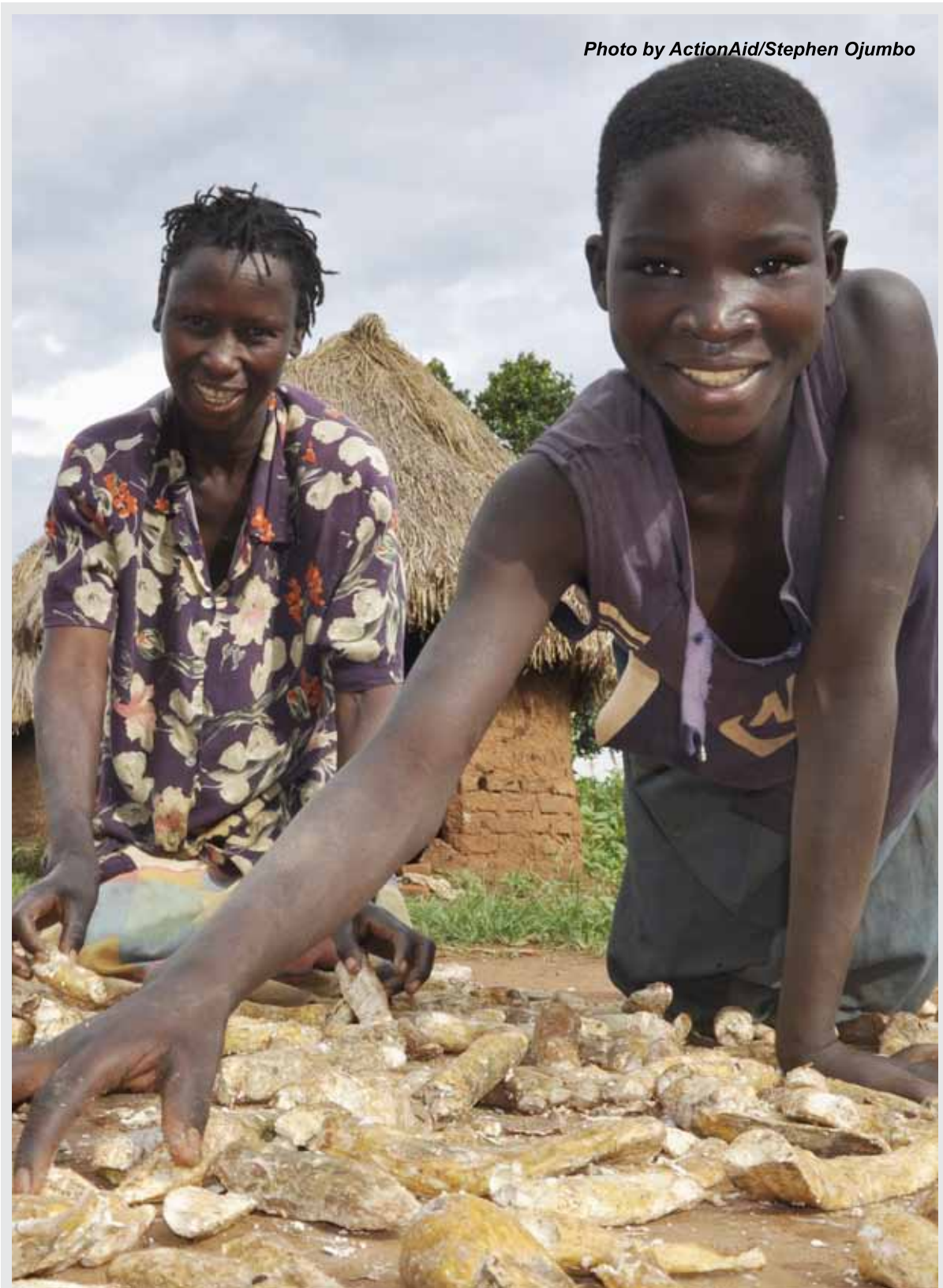


Photo by ActionAid/Stephen Ojumbo

Odeke's family in Kumi drying their only source of energy & income on bare ground.

2. DSIP commitment: Improving Incomes and food security

The overall objectives of the DSIP are to increase rural incomes and food security (see box 6).

Box 6: DSIP commitment: Incomes/food security

'The Development Objectives of the DSIP are:

- (i) rural incomes and livelihoods increased; and*
- (ii) household food and nutrition security improved'* ⁶²

Our analysis

This is a hard commitment to measure since there are few formal figures assessing progress since the inception of the DSIP in 2010. Indeed, the DSIP document itself does not provide a baseline against which progress will be measured. It mentions outcome indicators such as agricultural output, growth in agricultural value-added and per cent of stunting in children, but does not state what the starting figures for these are, nor provide details on how they will be assessed. Neither does it specify whether progress will be measured for women as well as men.⁶³ Our brief analysis of progress is therefore only tentative. It is possible that those farmers benefitting from NAADS advice and input support programmes are seeing increases in their incomes and improvement in nutrition. However, our interviews with farmers, and ActionAid's experience of working with farmers in several areas of Uganda, is that climate change, in particular, is reducing food production and thus income and food and nutrition security for a very large number of Ugandans (see Box 7). Discussions with communities show that this hunger bout generally begins during the month of December and progresses through the first quarter of the following year, gradually subduing in the second quarter. During this period, poor households with limited sources of income would majorly rely on selling their labour, scavenging for wild fruits, burning charcoal, and food exchange as gifts among other means. Communities reported that during this period, food prices will tend to sky rocket due to overwhelming demand for food reducing their purchasing power a condition which perpetuates hunger and

malnutrition.

Our analysis suggests that there is real urgency in implementing the DSIP's commitment to address climate change, as outlined in the section that follows. In addition, we find a big gap between the DSIP approach and the commitments made in the other policies such as the Food and Nutrition Policy (2003). For example the policy commits to establish food reserves in the communities among other interventions that are glaringly lacking in the DSIP. On the other hand, the Food and Nutrition Policy lacks the legal framework to guide its implementation yet the Food and nutrition bill (2009) that would have enabled its operation has been thrown or kept in the bin. Yet the government was fast to pass the Uganda Nutrition Action Plan (2011) which cannot be implemented without the much needed law. This disharmony in Agricultural policies is characteristic of uncoordinated efforts that results in paper tiger programs that do not cause the desired change. In our view, the DSIP needs to realign with the existing policies and programs for policy harmonisation.

Box 7: Farmers' views on food production and climate change

The four groups interviewed in this research all say food production is declining, and a major reason is climate change.

The women farmers organised in the Irerete star circle in Ongino sub-county of Kumi district, who farm an average of two acres, all say that yields for most crops are in decline due to increasingly unpredictable weather. A combination of longer drought followed by heavy rains leading to flooding, which reduces production of staple crops, mean that people are increasingly forced to eat cowpea leaves for food, since these grow earlier and better in erratic weather conditions. They say that three years ago, the maize stores were much fuller than today and that for six months of the year - from January to June – all the families go hungry and drop down to just one meal a day. In the past there was a clear delineation between the dry and rainy seasons; now these often merge and produce more extreme weather.

The 27 farmers interviewed in the Aipecitoi star circle in Ongino sub-county have slightly more land on average – 3-4 acres – but also all say they go hungry for six months a year and are able to eat just once a day. When asked why they are unable to produce more food, the farmers say that the soils are becoming less fertile, drought is becoming more common, and that they lack access to inputs such as improved seed and crop protection equipment. Indeed, these farmers say that the biggest determinant of their food production is now the weather: when it is good, food production rises but when there is drought followed by heavy rain, it falls. Many farmers say that even though they want to use improved seeds, but usually cannot since they are expensive and/or not available, even the improved seeds on the market are not sufficient to grow crops under increasing climate change.

The eight farmers interviewed in our second group discussion in Atatur village in Atatur sub-county all say that their food production and incomes had declined in recent years. Most earned Shs 500-700 a year from selling food but this was less than in recent years both as a result of reduced production and also decreased prices in local markets for some of their produce, such as potatoes, maize and cowpea.

The District Agricultural Officer for Kumi told us that local floods now nearly wipe out whole crops; groundnut production can now fall from eight to one bag per acre and sorghum from 450kg to 50kg per acre.⁶⁴ These problems are replicated elsewhere in the country. The MP for Yumbe District near the border with South Sudan says that climate change is farmers' 'biggest problem'. Farmers there used to have two seasons but now there is only one, making people confused about planting and much more vulnerable, since they receive no climate change information or advice.⁶⁵

CASE STORY

Increasing Population Less food!

Katibu Odeke's family comprises four wives and 31 children. It is evident that many of his children are malnourished. He has to source 20kg of flour and two of beans to feed his family a single meal per day.

"Life is hard. My family hardly affords 2 meals a day." says Odeke. "My wives and children always embark on preparing the land but the rains delay to fall, come too much or fall in small proportions." In addition, he has never heard of NAADS or been visited by an extension worker and because he earns less than 200, 000 shillings

a season, he cannot afford to buy food for his big family. "Consequently, meat has become a luxury in my home since I spend at least 20,000 per day to feed the children. I am even forced, against my wish, to sell cows, goats and sheep to sustain my big family," confides Odeke. "Things have never been this hard. I no longer go by the popular belief that every child is a lucky one." Yet the government policies on agricultural development seem not to take a serious stand on addressing the increasing population.



Photo by ActionAid/Stephen Ojumbo

Katibu Odeke (back row, seated, in blue shirt) and his big family. Every meal is a struggle.

DSIP commitment on Climate change planning

Photo by ActionAid/Stephen Ojumbo



A farmer in Bukwo stranded with her 3 acres of maize that was hit by a prolonged dry spell. She estimates having lost close to 6 million shillings.

3. DSIP commitment: Climate change planning

The DSIP committed the government to increasing its capacity to address climate change, especially by identifying climate impacts, improving climate forecasts, integrating climate-risk strategies into agribusiness strategies and strengthening district capacity. A DSIP indicator was the number of trainings conducted in the districts (see box 8). The DSIP allocated Shs 21.3 billion in support of these objectives for the five years of the DSIP.

The government recognises climate change as a big problem in Uganda. The draft National Climate Change Policy notes that the average temperature in semi-arid climates is rising and that there has been an average temperature increase of 0.28°C per decade in the country between 1960 and 2010. It also notes that rainfall

patterns are changing with floods and landslides on the rise and are increasing in intensity, while droughts are increasing, and now significantly affect water resources, hydroelectricity production and agriculture.⁶⁶ Similarly, a recent budget framework paper states:

‘Due to a number of factors including climate change, there is now so much volatility in precipitation that rainfed agriculture may not be enough to guarantee production from one season to another. Whenever there is drought, which now comes with a higher frequency, production falls dramatically. Uganda does not have preparedness plans for adapting to these climate changes and therefore remains exposed and vulnerable’.⁶⁷

Box 8: DSIP commitment: Climate change planning

The specific objective of this sub-programme is to “develop capacity for decision-making in planning and budgeting processes improved by accurate and up-to date climate information and analysis”. To achieve the objective, activities will be implemented under four components.

Component 3.6.1: Identification of climate impacts, vulnerabilities and coping measures

.... Activities here will include: Review climate information needs and capacity for supply

- Undertake pilot surveys to generate appropriate data; and Construct appropriate infrastructure for the MAAIF mandate.*

Component 3.6.2: Improved climate forecasts

.... Activities here will include: Strengthening capacity to undertake improved weather forecasting; and Construct weather stations to improve data collection (these used to operate on the research stations and on the tea and sugar estates but need rehabilitation).

Component 3.6.3: Integration of climate risk management in agri-business strategies

.... MAAIF will make a preliminary assessment of how climate risks can be considered in the new agricultural strategies and how specific management and investment advice might flow from this.

Component 3.6.4: Strengthening district capacity to integrate climate change issues into planning

The districts will be on the front line of CC and will be the key to a successful agricultural mitigation strategy and its attendant activities. The first step will be finding out how best to engage with the districts and how to assist them develop plans. This is envisaged to involve three areas of activity.

- *Piloting a model as to how to mainstream climate change issues into the agriculture plans of Local Governments. While there is recognition that CC is a threat, there is a big challenge on how this should be addressed in the plans and working practices. The major process will take place through analysis and discussion with LG Production Offices. To ensure that CC issues are captured in the local plans, the LGs must be guided on how to do this. Outputs that will contribute to this outcome include: (i) Training to facilitate Agricultural Production Offices in adapting CC measures to reduce vulnerability; (ii) Production officers equipped and facilitated to incorporate CC issues in the local planning and working practices; and (iii) Awareness created and guidance provided to LG and other local key stakeholders on CC issues. The initial work will be undertaken in two districts.*
- *The model to integrate climate change issues into agricultural services disseminated throughout the two districts. The Districts' Production Office will be the implementing unit in cooperation with NAADS, facilitating collaboration between local farmers and their organisations, as well as other relevant institutions. However, the capacity of the districts to support the farmers is low. What will be needed is (i) Technical assistance to develop a local plan for integrating CC concerns into agricultural services; and (ii) Agricultural officers trained in CC issues.*
- *Enhancing local knowledge and skills on climate change and adaptation mechanisms. Climate change is just beginning to take the attention of politicians, academicians, technocrats, public servants, civil society and the general public. There is however still a shortage of knowledge and skills on what to do. Creating awareness ought to be the starting point if meaningful action is to be taken. This is where the agricultural sector will begin. It is suggested that 40 staff of the Agricultural Production Offices and other departments of Local Governments responsible for planning and implementation be trained in CC. Afterwards, lessons learned from this and the pilots will be used by APD to produce guidelines and training for other districts to implement CC in local annual planning and working procedures.⁶⁸*

DSIP Indicator is: 'Climate change trainings in the districts'.⁶⁹

Our analysis

The DSIP indicator on climate change - the number of trainings conducted in the districts - is by itself extremely weak given all the policy and practice changes that need to be implemented for Uganda to adequately address climate change. Thus although the DSIP itself outlines several key policies needed to address climate change (outlined in Box 8 above), these appear to be not being measured in terms of being indicators of progress.

Moreover, our understanding is that very little progress has been made on climate change planning. Civil servants in Kampala told us that the MAAIF currently has very little capacity to communicate effectively

with farmers or in engaging with the Meteorological Department.⁷⁰ The Joint Agriculture Sector Review of 2011/12, conducted in November 2012, outlined only three 'achievements' related to climate change. These were⁷¹:

- The climate database is fully established; the online system is now available at <http://connectprofiles.com/climate/index.php>
- Conducted participatory surveys to establish farmers' perceptions of climate change; recommendations were made
- Climate data for the West Nile agro-

ecological zone was assembled and trend analysis of rainfall and temperature done

Yet the online database appears to be as yet inactive. Moreover, although some climate change-related activities are being implemented in the Sustainable Land Management and Water for Agricultural Production components of the DSIP, the more direct climate change commitments outlined in the DSIP do not appear to be being significantly addressed.

It is unclear to us how much the government's agriculture budget is actually allocating to climate change adaptation and planning. No mentions of climate change could be found in the MAAIF's annual budget for 2012/13, for example, even though this contains hundreds of budget lines.

Also critical in this regard is the draft National Climate Change Policy (NCCP), which calls for the MAAIF to play a role in promoting adaptation to climate change (see Box 9). The NCCP provides a long list

of agriculture-related strategies, all of which are worthy and important. But many of these goals are additional to those outlined in the DSIP, and even the limited goals in the latter appear to be not being addressed. This raises questions as to whether and how the MAAIF is really going to implement the tasks allocated to it under the NCCP, and how these will be coordinated with other ministries.

Also noteworthy is that the NCCP ascribes leadership for coordinating Uganda's climate change strategy to a new Climate Change Department but that in addition to this, 'three national ministries or authorities will have a specific role to play in national coordination to ensure policy implementation' – these are the Ministry of Finance, the National Planning Authority and the Ministry of Local Government.⁷² Thus the MAAIF is not regarded as one of the key coordination ministries. Given the central role of agriculture and farmers to any successful climate adaptation policies in Uganda, this is potentially concerning.

Box 9: The MAAIF and the National Climate Change Policy⁷³

The NCCP's overall goals for the agriculture sector are:

- To promote climate change adaptation strategies that enhance resilient, productive and sustainable agricultural systems
- To promote value addition and improve food storage and management systems in order to ensure food security at all times, as a factor of resilience

More specific strategies are to:

- Promote and encourage highly adaptive and productive crop varieties and cultivars in drought-prone, flood-prone and rain-fed crop farming systems; Promote and encourage highly adaptive and productive livestock breeds in communities and commercial areas
- Promote and encourage conservation agriculture and ecologically compatible cropping systems
- Promote sustainable management of rangelands and pastures through integrated rangeland management to avoid land degradation and deforestation
- Promote irrigated agriculture by developing irrigation schemes using sustainable and cost-effective water sources and by encouraging more efficient water use by irrigation production systems

- Promote and encourage increased agricultural production and diversification and improved post-harvest handling, storage and value addition in order to improve food security and increase household incomes
- Support community-based adaptation strategies through stretched extension services and improved systems for conveying timely climate information to rural populations to enhance the resilience of agricultural systems to the impacts of climate change
- Develop innovative insurance schemes (low-premium micro-insurance policies) and low-interest credit facilities to insure farmers against crop failure due to droughts, pests, floods and other weather-related events
- Promote and encourage indigenous knowledge, along with research and dissemination of innovations that can enhance climate-smart agriculture and food preservation

At District level, there appears to be little improvement in climate change planning. What information gets to farmers is the result of individual extension workers own initiative rather than support from the agriculture system. In Kumi, for example, the impacts of climate change are increasingly affecting farmers (see Box 7) but although the District

has a disaster management committee, this has a minimal, static budget, and no trainings were said to have taken place. Very little climate information is passed to farmers since the District does not have the capacity to analyse data coming from the Meteorological Department and a local micro weather station.⁷⁴

Living in climate uncertainty, the DSIP could turn round the fate of smallholder farmers

The farmers, mainly women lamented that the seasons were unpredictable now and they usually face unexpected drought spells which destroys their crops and when the rains come, it is usually in excess subjecting them to a trap of hunger. *“We have just started heaping potatoes. we are not even sure whether we shall harvest them because rains have again intensified and floods may again and destroy them. May be the climate has changed we don’t know”* said an elderly Man. Oji Paul, a 34 year old resident of Ongino subcounty, Kumi district. He is one of those who will live to remember the wrath of 2009 drought. He lost all his crops. *“I had one acre of cassava, 1 acre of beans , ½ acre of potatoes, ½ acre of sorghum and ½ acre of soya. I never benefited from any of these crops. Some of them were still young while others were almost ready for harvesting. I had to move away from my village because I had nothing to feed my children. For about one month I went and stayed in the village with my grandmother with my four children, my brothers and wife. At that time we were*

eight members. I come back around 15th September but left my family in the village to start from scratch. Some people come here and verified the situation but up to now we have never got any assistance. This year I have tried to cultivate some crops like maize and sorghum but the rains have been very poor, the soils too have been very poor. My worry is that, the floods might come again which might again destroy my gardens and crops. I would like to request for assistance from anyone In terms of seeds, food, also money to pay for school fees” He lamented.

Truly, the people are trying to adopt. However, as climate change gets real, it is important that an agricultural policy like the DSIP considers financing sustainable methods of water harvesting and storage for water stress regions in Uganda. Cheaply constructed artificial dams would easily offer a ray of hope for smallholder farmers to harness water for food production. This very low cost intervention of water preservation can save the lives of households during spells of drought for some months.

Rehabilitating Infrastructure in Teso; Wouldn't it be worthwhile for the DSIP?

Teso region has continued to increasingly suffer from recurrent food shortages and hunger. Among the major drivers for the vulnerability of the region have been the changes in the climate pattern in the past five years that have intensified and created extremities of the floods and drought incidents to unpredictable patterns and lengths.

Amazingly, a lot of water harvesting infrastructure that was put in place since the 1960s at the dawn of independence - that would cushion the communities from such shocks and have been abandoned. Almost every sub-county in Teso has a water harvesting dam with potential to harvest thousands of volumes of water for both animal and crop production. The only challenge is that these dams have been silted and yet the districts, many of which are newly created, do not have the financial muscle to hire and utilise MAAIF's

Earth moving machines laying idle in Namarere. In a discussion with the district officials in Teso, the leaders expressed disappointment that while they were willing to de-silt these dams, the policy from MAAIF on access to these facilities was prohibitive since each district has to meet the cost hundreds of millions to rehabilitate one dam yet most of the funds they get from the central government are conditional grants that cannot be used to cater for this kind of actions. Annually most of these districts collect less than five hundred million in local taxes and just cannot afford to finance such large investments. However, flagship sector plans for Agriculture development in the country has not considered such areas worth investment. In the end, the communities in Teso continue to suffer from the floods that could be easily turned into a blessing if this water was harnessed.



Photo by ActionAid/Stephen Ojumbo

'Ongole Dam, located in Usuku Sub-county, Katakwi District was constructed in the 60s and can support close to 6500 farmers Katakwi to produce food particularly high value vegetables, provide a source of water for animals, fishing and for domestic usage. It would also help to curb the recurrent floods in the district. But the dam got silted up, the banks broke down and cannot hold water. This is just one case of many dams that have not been attended to in the region limiting potential for food production in the area.'



Drip irrigation scheme for women farmers in Kapchorwa piloted by ActionAid

DSIP commitment on Labour saving technologies

Photo by ActionAid/Stephen Ojumbo



A farmer in Amuru labouring to thresh her millet with hands

4. DSIP commitment: Labour saving technologies

The DSIP committed the government to increase the use of labour-saving technologies and to develop a policy and strategy as well as a mechanisation unit in the MAAIF. The DSIP indicators are growth in the number of oxen and plough used and the number of farmers using tractors. (see box 10)

Box 10: DSIP commitment: Labour saving technologies

'The specific objective of this sub-programme is "Increased use of labour saving technologies including appropriate mechanisation and other farm management related investments."... To achieve the objective, activities will be implemented under eight components [nb. Our research focuses on only 3].

Component 1.6.1: Developing the incentive framework for the acquisition of labour saving technologies

MAAIF will complete the policy and strategy for farm mechanization and agricultural engineering. The expected outcome of this will be clarity around how government facilitates the private sector to meet the demands from farmers and other consumers, at the same time as a sustainable system of manufacture, importation, retailing, and utilization is developed. The strategy will clearly state the different roles of the public and private sectors. This will include issues related to areas of public concern such as consumer protection, the environment, safety and other externalities....

Component 1.6.2: Developing and promoting appropriate technologies including animal traction and mechanisation

Once the strategy is agreed, follow-up actions and activities must be designed. These activities are expected to consist of recommendations on policy adjustment (to correct distortions in the sub-sector); investment plans (to develop manufacturing, commercial companies and farm mechanization); and a further definition of government support actions and activities required for the sub-sector, e.g. piloting certain promising technologies....

Component 1.6.7: Establish an agricultural mechanisation unit in MAAIF

The Mechanisation Unit will provide technical back-up and operational guidance to activities under the Sub-programme. Cabinet has already given approval for this and proposals have been made for the structures and functions. Urgently, and as part of implementation, there is now a need to agree.⁷⁵

DSIP Indicators: 'Growth in number of oxen and ploughs used; Number of farmers using tractors'.⁷⁶

The MAAIF's November 2012 document proposing implementation of the non-ATAAS components of the DSIP notes that the aim is to ensure the provision of 3,500 additional tractors complete with accessories for primary and secondary tillage, 15,000 ox-ploughs with accessories and 'specialized equipment' for postharvest and mechanized value addition of strategic cereals, legumes, root and tuber crops. In 'Year One', the government projects that an extra 116,000 acres will be cultivated, rising to an extra 164,000 acres by Year 5, in total providing 710,000 acres of additional cultivated land over the five-year period.⁷⁷

Our analysis

Some activities are in train to promote mechanisation and procure labour-saving devices in Uganda. But the Joint Agriculture Sector Review of 2011/12, conducted in November 2012, outlined only three ‘achievements’ related to labour-saving technologies and mechanisation. These were⁷⁸:

- A biogas cooking stove appliances has been developed.
- A prototype of efficient animal-drawn planter for selected small and large grain seeded crops has been developed and disseminated to the farmers
- Prototype stainless steel hopper and cutting surfaces for grating and chipping cassava was developed and evaluated.

It should also be noted that under the ATAAS components of the DSIP, some feed mills, milking machines and threshers have been distributed to farmers or local governments, according to the MAAIF.⁷⁹ The MAAIF also notes that in 2012, only 950 ox-ploughs were procured for cotton farmers.⁸⁰ It’s not clear how many accompaniment pairs of oxen, planters and weeders were distributed and what percentage went to women farmers who are bearing the biggest burden of labour in farming. Yet otherwise, the main planks of the DSIP commitments appear to be not being met. The Joint Agriculture Sector Review of 2011/12 makes no other mentions of ox-ploughs, animal traction or tractors.

One key problem is that a relatively small amount of money has been allocated to significantly boost uptake of labour-saving devices. The MAAIF’s 2012/13 budget allocates Shs 8.3 billion to labour-saving technologies, most of which is for capital purchases.⁸¹ This is roughly consistent with the budget allocation for labour saving technologies outlined in the DSIP: which was projected to be Shs 9.1 billion in 2012/13.⁸²

Although DSIP policy is to also procure oxen and ox-ploughs, the thrust of the government’s mechanisation policy appears to be exclusively focused on tractors. Yet these are extremely expensive, largely unsuitable for small farmers - since they are usually suitable for areas of land of around 50 hectares⁸³ - and not appropriate in some types of soil. Small farmers will only tend to benefit from tractors if they jointly hire them to work across several small farmers’ fields but this is often impractical. In the 2012/13 budget, it was announced that the tractor-hire scheme would be implemented and that ideally, every sub-county should have at least three tractors. Five hundred million shillings was set aside to acquire tractors.⁸⁴ But the average cost of a medium-size tractor in Uganda is around Shs 50 million, which compares to around Shs 5 million for a ‘walking tractor’.⁸⁵ The latter, and other labour-saving devices, are regarded as much more useful to the farmers interviewed in this research than tractors (see box 11). The District Agricultural officer told us that ‘walking tractors are more appropriate for farmers locally, especially given the soil type’, and cost Shs 3–5 million in the area.

As the DSIP itself noted:

‘International experience suggests that inappropriate mechanization initiatives (mainly around tractors and heavy machinery) can lead to financial losses, environmental degradation and even lower agricultural production. In this way, mechanization can become a burden on the national budget and the farming community rather than being a productive input.’⁸⁶

Box 11: Farmers' views on labour-saving devices

The women farmers organised in the Irerete star circle in Ongino sub-county of Kumi district, who farm an average of 2 acres each, all use hoes while 13 of 30 say they use ox-ploughs. Access to ox-ploughs has not changed: those owning them all bought several years ago, and they are expensive in the area, costing a minimum of Shs 270,000, which rises to 350,000 when the rains come. Of the 27 farmers interviewed in the Aipecitoi star circle in Ongino sub-county, who have an average of 3-4 acres, 7 use ox-ploughs, but again all except one person bought these several years ago.

The farmers in the Irerete star circle and Aipecitoi star circle have heard of the programme to promote the use of tractors but no tractors are available and they would anyway prefer to use 'walking tractors'. The latter cost around Shs 12 million in the area, compared to around Shs 45 million for large tractors. Large tractors are regarded as expensive, entail maintenance and fuel costs, difficult to use and require specific driving skills. Several of the farmers interviewed in a group discussion in Atatur village of Atatur sub-county, have landholdings of 6 or more acres but still say that ox-ploughs and 'walking tractors' are more useful than tractors and that tractors remain too expensive.

When asked what labour-saving devices would be most useful, the farmers in the Irerete star circle replied by mentioning machines for planting, weeding and harvesting, and grinding mills for processing. Farmers in the Aipecitoi star circle mentioned the usefulness of planters for legumes such as groundnuts, grinding machines for groundnuts and equipment for slicing and drying tubers. Other examples include forage choppers, which can be more efficient than simple machetes, and treadle pumps for drawing water. The need to increase access to simple processing equipment is crucial since, as noted above, only a tiny proportion of agricultural products are processed in Uganda.

CASE STORY

Traditional methods, too much!

A drive around Kapchorwa is evidence that a majority of the population is still dependent on subsistence farming for food. Armed with hand hoes, sickles, pangas and axes they are opening up farm lands. But the ability to produce enough food is being constrained by use of rudimentary farming tools and equipments..

"There are factors that slow down adaptation of mechanization to contain the climate shocks," says an elder John Kiptorich (78). "The age of the household head is a very big issue - older people are too conservative. The other obstacle is poor access to credit by farmers. Most monetary institutions have unfriendly and prohibitive policies. Finally, most farmers lack the reach of extension services and do not have general information," he says.

Kiptorich asserts that the issue of land fragmentation is a big hindrance to production in Kapchorwa. Residents have resorted to inter-cropping coffee with bananas and maize. But the worst hit parts of the population are children and women as men handle and budget the

family income.

There is visibly minimal animal traction when it comes to opening up land. Transporting the harvest to the market is done manually or on donkeys but this is limited by the hilly terrain of the volcanic soils and land fragmentation as a result of population pressure.

The desired interventions include resource mobilization for emergency relief response, mobilizing/training communities and equipping authorities with early warning systems. This is in addition to peace building initiatives, designing and piloting social protection initiatives for the people.

According to the District NAADS coordinator, Francis Alinyo, over 90% of the Kapchorwa populations are still dependent on subsistence farming for food.

"Unfortunately, the food shortages have mostly affected women who are culturally forbidden to own land," says Alinyo.



A woman farmer from Kapchorwa opening up her land with a hand hoe

DSIP commitment on Extension advisory services



Photo by ActionAid/Stephen Ojumbo

A farmer in Masindi demonstrating how to manage Banana Bacterial Wilt Disease on a poor quality crop

5. DSIP commitment: Extension advisory services

Extension services in Uganda have been subject to huge debate and policy change over many years. The DSIP recognised a number of significant challenges and failings with the current extension services, such as inadequate staff numbers and technical capacity, lack of accountability and corruption, the lack of sufficient links to research and technology, and rigid procurement processes.⁸⁷ The DSIP committed the government to improving extension services by increasing farmers' access to information, knowledge and technology. The DSIP outcome indicators are: number of farmers satisfied with extension/advisory service delivery; percentage of farmers who are farmers group members (see box 12).

Our aim has not been to evaluate the impact of the extension system – which is too big a task – but to gain limited insights in the constrained time available.

Box 12: DSIP commitment: Extension advisory services

The specific objective of this sub-programme is “Increased farmer access to relevant information, knowledge and technology through effective, efficient, sustainable and decentralized extension services coupled with increasing private sector involvement in line with government policy”. To achieve the objective, activities will be implemented under four key components.

Component 1.2.1: Improved uptake of new technologies and information

This component will contribute to strengthening interaction with key stakeholders in the agricultural innovation system, most notably the research establishment, but also small-scale producers, agro-processors, financial service providers and other private sector players. Activities will focus on enterprises with prospects for commercialisation (and some selected according to their prospects for improving food security) and progress is expected through three activity areas:

1. En Enhancing the capacity of farmers and farmers' groups to make choices and implement decisions that affect their livelihoods

In Phase 1, farmer institutions were created as the primary means for farmer empowerment. These institutions have proved their effectiveness. New ones will be formed where necessary and old ones will be strengthened and consolidated. Farmers' fora will be empowered and Higher Level Farmer organizations (HLFOs) will be aggregated and organized to undertake diversified functions in the commodity value chain as well as to achieve a greater voice in negotiation.

2. Improving access to new technologies and information This is the core substance of the component and will involve:

- Setting up District Adaptive Research Support Teams (DARST) in each district to build the capacity of both FEWs and farmer institutions and to improve research-extension links with the ZARDIs;*
- Categorising farmers to ensure that as many as possible benefit from the processes aimed at enhancing their use of new technologies and information. The farmers will be categorized according to their progression from subsistence to market orientation, using criteria that take into consideration the asymmetries in power, resources, and capacity;*
- Enhancing the precision of technology needs articulation by increasing farmer involvement at all levels of the process; DSIP Indicators include: ‘Number of farmers satisfied with extension/advisory service delivery; percentage of farmers who are farmers group members’.⁸⁹*

- *Enhancing awareness of available technologies through demonstrations to be conducted among selected farmers in the different farmer categories;*
- *Increasing the availability of new technologies by multiplying supplies of planting material, seeds and breeds, and supporting individuals, organizations and private sector entities to do the same;*
- *Improving technology access by providing limited financing for inputs in an expanded demonstration mode. Farmer categories that show willingness to respond to market demands but are resource-constrained will be linked to credit institutions;*
- *Enhancing access to information through the internet; and*
- *Improving the quality assurance of technologies through liaison with MAAIF, NARO and other regulatory agencies such as UCDA and NAGRC/DB.*

3. Delivering appropriate advisory services and information

The achievements of Phase 1 will be built upon while new initiatives will be taken to address emerging issues. Most notable will be:

- *I Improving the selection of farming enterprises on the basis of situation analyses which will provide information on profitability, potential markets availability of production inputs, infrastructure support; Trying different approaches for the delivery of services. Participatory approaches such as Farmer Field Schools (FFS) will be tried in an action research mode. There will also be a need to experiment with interactive communication such as radio programmes, films, and even mobile technology. It is intended to provide one Front Line Extension Worker (FEW) for each enterprise that has been prioritised at the sub-county level; Increasing the use of service providers from different sources: converted FEWs; research institutions; public/private sector partnerships and Community Based Facilitators (CBFs), the private sector, Community Development Officers (CDOs); and Improving the quality assurance of advisory services through setting standards and ensuring compliance. In restructuring the Production Departments of the Districts, the Terms of Reference of the Subject Matter Specialists (SMSs) will be adjusted to include specific roles and responsibilities in backstopping, quality assurance and technical auditing of FEWs. The SMSs will be backstopped by MAAIF technical officers and by the ZARDI staff.⁸⁸*

Our analysis

The DSIP has resulted in significant and welcome investments in the extension service, which are resulting in considerable activities, yet our research has found it difficult to pin down specific, concrete improvements. Overall, there remain significant problems with NAADS and Uganda still does not have a quality, institutionalised service capable of providing advice and support to most small farmers.

The MAAIF states that it is making key investments in effective research and extension. A November 2012 document states that the sums allocated (it is unclear

for what years) are: \$137.8 million to agricultural research, \$72.4 million to enhancing research partnerships between NARO, NAADS and other stakeholders, \$317.8 million to strengthening NAADS, \$63 million to supporting agribusiness services, \$74.5 million to supporting the NAADS and NARO secretariats.⁹⁰

The Joint Agriculture Sector Review of 2011/12, conducted in November 2012, outlined a number of 'achievements' related to the ATAAS components of the DSIP. These included⁹¹:

- sensitising District stakeholders about implementation of ATAAS in the nine zones,
- establishing Multi-Stakeholders Platforms (MSIPs) and holding platform meetings in the nine Zones
- facilitating the formation of District Adaptive Research Support Teams (DARSTs) in the nine zones.
- Supporting 365,785 'food security farmers' with inputs (an average of 50 per parish)
- Supporting 30,408 'market oriented farmers' with inputs (an average of 4 farmers per parish)
- Supporting 2,696 'commercial farmers' with inputs (an average of 2 farmers per sub-county)

Yet despite these investments and achievements, NAADS still suffers from basic problems—notably the lack of adequate numbers of skilled extension workers and the lack of sufficient operations budgets at local level. Most importantly, access to extension services remains low. According to the MAAIF's November 2012 report, the average extension worker to farmer ratio is 1:3,189. It adds that this ratio is 'miserable'.⁹² Previous MAAIF figures were that around 17 per cent of farming households are visited by extension workers (680,000 out of 3.9 million)⁹³; Some estimates are lower, at around 14 per cent.⁹⁴ In Kumi, the District Agricultural Officer estimates that 10-15 per cent of farmers receive extension advice.⁹⁵ The MP for Yumbe District estimates that 20 per cent receive advice in her District.⁹⁶

Box 13: Farmers' views on extension services

The women farmers organised in the Irerete star circle in Ongino sub-county of Kumi District say that extension workers do not visit their villages, but that the facilitator of the group has access to an extension worker, so she can pass back to the group key points of advice and information. In a group discussion with 30 women, all said they were dissatisfied with the extension service, however, mainly since they needed direct contact with those providing advice. When asked what kind of advice would be most useful, the farmers replied with a list of issues, including: improving production of groundnuts, spacing, planting, pest control, crop rotation, how to diversify away from relying on cassava, how to tackle cassava brown streak disease – all areas on which extension officers could be expected to advise.

The facilitator of the group, who often sees the local extension worker, says that some advice is useful but that there are problems with a lack of transparency in the selection of NAADS beneficiaries: the system prefers better-off farmers and is skewed towards supporting men. Some of the inputs provided under NAADS are also of poor quality, such as goats which fail to produce kids, she says.

Of the 27 farmers interviewed in the Aipecitoi star circle in Ongino sub-county, 9 say they have recently interacted with extension workers of which 5 have had specific training when extension workers visited their village. Advice was given on preparing for planting, growing particular crops and on good harvesting. When asked how many were satisfied with the extension service, 21 said they were and 6 said they were not. Some of those who did not attend training sessions benefitted from advice from those who had.

Of the 15 farmers interviewed in one group discussion in Atutur village of Atutur sub-county, 6 had recently interacted with extension workers. These were mainly farmers with larger landholdings than the average of 4-5 acres: those with 6–11 acres. In the second group discussion in Atutur, with 8 farmers, none said they see an extension worker though they would welcome advice on how to adapt to climate change and how to increase income from food production, on timely planting and on working with early maturing crops.

Views on whether the extension service is improving are mixed. Those farmers lacking access not surprisingly say that the service is not improving. For those farmers who do see extension workers, some say that the regularity of advice is improving, and that when advice is provided it is always useful, but that what is really needed is more extension officers on the ground.

The Joint Agriculture Sector Review of 2011/12 suggests that while some of the most important DSIP aims are being met and that significant activities are taking place in support of the DSIP, some are not. For example:

- The DSIP calls for forming new farmers groups and strengthening existing ones. Government documents and our interviews suggest that some action is being taken to do this. For example, the joint sector review notes that workshops have been held to enhance the capacity of oil crops farmers groups in some districts.⁹⁷ But the National Farmers Federation says that no significant number of new groups has been formed and that little activity is taking place to strengthen existing ones.⁹⁸ This is also our understanding from research in Kumi District.⁹⁹ This is problematic because the good functioning of the extension service at local level, and the implementation of the DSIP more generally, requires well-organised farmers groups.
- The DSIP calls for District Adaptive Research Support Teams to be set up in each District. Our understanding is that such a team has not been established in Kumi and government documents refer to their establishment in zones only, as noted above.
- The DSIP also calls for improvements in seed multiplication.

While government documents note that some seedlings have been distributed under the ATAAS programme (for example, of sunflower, maize and coffee), the lack of access to improved seed is a perennial complaint of farmers, also evidenced in our research.

- Moreover, the topline indicators for improving extension services are the number of farmers satisfied with extension services and the percentage of farmers who are farmers group members. Our research among farmers reveals a very mixed picture when it comes to satisfaction, as noted in box 13. As regards the number of farmers in groups, MAAIF figures from 2011 are that 23 per cent of farmers were members of farmer groups (it does not give disaggregated figures for women and men).¹⁰⁰ It is unclear if this figure has risen.

One ongoing problem with NAADS is its provision of inputs alongside advisory services. As the CAADP review of the DSIP, noted, the lack of separation of these two functions ‘appears to have contributed to a number of problems at both local and national levels (corruption, exacerbation of empowerment and privilege relationships, etc.) while failing to lead to a more substantial and effective and comprehensive approach to stimulating the use of purchased inputs’.¹⁰¹ Some civil servants in MAAIF we spoke to also expressed similar concerns, highlighting the huge amount of administrative time

that the input distribution entailed and the political lobbying for inputs, both of which diverted NAADS away from its core task of providing an advisory service.¹⁰² The CAADP review recommended 'measures to stimulate the development of an expanding and more vibrant, accessible, efficient input

supply system that would be independent of NAADS, while utilizing NAADS to stimulate the demand for inputs', and a decoupling of NAADS from the provision of inputs.¹⁰³ Yet over two years on, this recommendation appears to have fallen on deaf ears.

Box 14: Recent studies of NAADS

Recent studies of NAADS highlight ongoing problems with the service. A recent analysis by Makerere University notes that 'whereas NAADS funding has grown exponentially, agricultural sector growth has on average declined' and concluded that 'there are no significant differences between NAADS and non-NAADS farmers in terms of the area cultivated, output and yield of maize, groundnuts and rice'.¹⁰⁴

'The NAADS programme being implemented is not the one that was originally conceived and enacted into law - the NAADS Act of 2001. The objectives of the NAADS programme that were contained in the NAADS Act have been fundamentally changed. Although the original set of NAADS objectives recognized both food security and improvement of household incomes as the overarching objectives of agriculture, implementation of NAADS has partially focussed only on one – improvement of incomes for selected few households. Under objective two of the NAADS Act of 2001, NAADS interventions were to be limited to empower all farmers to access and utilise contracted agricultural services. This objective was changed not only by the implied introduction of exclusivity but also smuggling in of access to "improved" planting and stocking materials, which has become the major preoccupation of the NAADS programme. Regarding promotion of farmer groups, the NAADS programme has concentrated on developing capacity of farmer groups (beyond the farmer groups themselves), which again has received a big proportion of NAADS funds. The whole focus of the NAADS programme is on "commercialization" of agriculture, which was added as an objective of the NAADS programme much later after Parliament had enacted the NAADS programme into law. Therefore, what NAADS is doing in agriculture is not legally sanctioned.'

The Joint Agriculture Sector Review of 2011/12, conducted in November 2012, recognises one of these challenges, noting: 'Conflicting messages to farmers by various stakeholders about programme implementation modalities (concerning, for instance, co-funding and the revolving scheme of technology packages to farmers); often creating a negative image about the NAADS programme amongst the public'.¹⁰⁵

A 2011 study of NAADS by the International Food Policy Research Institute found that the farmers participating in NAADS groups generally found the training offered very useful or useful. However, it also found that 'direct participation did not have any statistically significant effect on adoption of new crop and livestock enterprises.... except in the case of recommended planting and spacing practices, where it was associated with greater use'. It concluded that it was 'difficult to make definitive conclusions regarding the direct and, particularly, the indirect impact of the NAADS program'.¹⁰⁶

CASE STORY

Farmers express frustration on access to extension services

Aloysius Olupot, 53 is a father of 10 children and a resident of Usuk Sub County in Katakwi district. He cultivates 1 acres of citrus since 2005. He has seen this as his hope and for last 3 years, he has tirelessly worked on his orchard with a hope to earn at least 5 million annually. However, his dreams are getting diminished due poor access to extension as he narrates. 'We need knowledge , but how to get it, is a nightmare' Olupot **tells**. "There are no government extension workers to monitor and help us cope with disease that affect the crops and there are no fertilizers and shortage of planting seeds. Even the trees we got from NAADS died, he says."The last harvest from 137 orange trees was affected by pests and diseases. With a lot of hope, my trees did not deliver to expected yield. The pests attacked the trees at the fruiting stage. Consequently, I lost more that three million shillings. When pests infested my orchard, I reported this to my area sub county extension staff for advice and support, unfortunately I was told the extension staff did not have transport to reach to my field and besides he was overwhelmed with requests from other farmers on the same. The NAADS Extension staff advised me to go to the agro input traders and by for the pesticide in the nearby stockists whose attendant had no knowledge of what specific pesticide would address my problem. At the end, my fruits got affected with no solution. Similar tales of frustration of poor access to extension services continue to expressed by farmers across the district of Katakwi district.



Photo by ActionAid/Stephen Ojumbo

Aloysius Olupot and his wife of Katakwi digging side by side

DSIP commitment on Capacity building in MAAIF



Signpost to MAAIF offices in Entebbe. MAAIF moved into rented premises to cut administration costs but their movement has been questioned.

6. DSIP commitment: Capacity building in MAAIF

Lack of sufficient capacity is one of the biggest challenges that MAAIF faces and is likely to severely hinder implementation of the DSIP commitments. The DSIP committed the government to increase the efficiency of the MAAIF and to ensure that MAAIF at its headquarters and in the Districts was sufficiently equipped (see box 15).

Box 15: DSIP commitment: Capacity building in MAAIF

The specific objective of this sub-programme is “productivity of sector personnel improved.” To achieve the objective, activities will be implemented under three components.

Component 4.3.1: Enhancing capacity and competencies of sector personnel

Very little systematic training has taken place in recent years. Neither has there been much systematic supervision. There have been no programmes to promote career development and without them it is very hard for MAAIF to hold onto talented individuals or to ensure there is replenishment of the professionals who do leave. To address these issues, MAAIF will: Develop a comprehensive sector capacity building programme that will capture not only the skills and knowledge gaps but also career development needs; Identify the institutions in the sector with the most urgent capacity building needs; Identify partners (service providers) to assist with the capacity building; and Implement the capacity building plans including a periodic review of achievement.

Component 4.3.2: MAAIF and agencies tooled and equipped

For some time a major challenge to MAAIF staff has been the poor quality of equipment and the inappropriate tools available. Activities to redress this will include: Make comprehensive inventory of existing sector assets, at the centre including, infrastructure, tools and equipment; Make comprehensive and harmonised assessment of sector requirements, paying special attention to the proposed new institutional structures; Make a systematic plan for re-tooling with clear attention to the financial implications and to MAAIF's plans for procurement and disposal of assets; Implement plan; and Make periodic re-assessments of sector needs.

Component 4.3.3: District offices tooled and equipped

In the same way the districts have suffered from the similarly poor quality equipment and the inappropriate tools available. The activities they need to redress this will be as for component 4.3.2. Make comprehensive inventory of existing sector assets in the districts, including, infrastructure, tools and equipment; Make comprehensive and harmonised assessment of sector requirements in the districts, paying special attention to the proposed new institutional structures; Make a systematic plan for re-tooling with clear attention to the financial implications and to MAAIF's plans for procurement and disposal of assets; Implement plan; and Make periodic re-assessments of sector needs.¹⁰⁷

Our analysis

Some progress has been made in increasing and improving MAAIF capacity and structure although capacity problems remain.

The MAAIF states that ‘A new structure has been developed that will enable MAAIF Headquarters (HQ) to champion the implementation of DSIP. The structure allows MAAIF HQ to undertake its sector-wide functions of (i) policy and programme coordination, harmonization, monitoring and evaluation, (ii) regulation and quality assurance (iii) providing and coordinating technical support and supportive services, (iv) control and management of epidemics and disasters, and (v) promoting national,

regional and international collaboration’.¹⁰⁸ It also states that ‘through ATAAS (NAADS and NARO), MAAIF is in the process of establishing zonal and district cluster sub-structures to enable it to more effectively perform its functions on the ground’.¹⁰⁹ The new MAAIF structure has involved the creation of two directorates with a third in formation.¹¹⁰

The Joint Agriculture Sector Review of 2011/12, conducted in November 2012, outlined a number of activities promoting the improvement of productivity of sector personnel, as required in the DSIP. These included the training of 100 staff, preparation of guidelines for selection of staff to participate in capacity building programmes and the preparation of a monitoring and evaluation system for evaluating training.¹¹¹

Yet capacity remains a major problem. The MAAIF notes that out of a total of 683 posts, only 47 per cent are filled and 6 per cent are approved for recruitment, meaning that even after the recruitment is done MAAIF will only be operating with only 53 per cent of the posts approved for implementation of the DSIP. The Finance and Administration Department has 71 per cent of the posts filled. The filled positions in the Directorates are 56 per cent for Crop Resources, 43 per cent for Support Services, 38 per cent for Fisheries Resources and 32 per cent for Animal Resources.¹¹² This situation is

actually worse than when the DSIP was conceived – the DSIP document states that, then, 67 per cent of MAAIF posts were filled.¹¹³ These posts are not filled because there is insufficient budget to do so.

Capacity problems in the MAAIF also continue to beset the Districts. There is an ‘acute staff shortage’ in local government and one estimate is that 60 per cent of agriculture positions in local government are currently vacant.¹¹⁴ In Kumi District, only just over half the established posts are currently filled and the reason for the vacancies is the wage bill: according to the District’s Chief Administrative Officer, policy is not to recruit more than 65 per cent of the established posts.¹¹⁵ The government is acutely aware of these capacity problems. The Joint Agriculture Sector Review of 2011/12 notes that one challenge is the ‘Inadequate number of sub county NAADS Coordinators and frontline agricultural advisory service providers (AASPs) as well as uncertainty about the future type of extension system; as well as inadequate budget for facilitating their operations’. In addition, there is ‘inadequate capacity of Local Governments’ to meet their co-funding obligations on the NAADS programme.¹¹⁶

The lack of sufficient resources being allocated to agriculture is compounding the problem of lack of sufficient capacity and virtually ensuring that the actual commitments in the DSIP cannot be fully met.

7. DSIP commitment: Sector Working Group

The Sector Working Group is the key body for reviewing and debating the implementation of the DSIP. The DSIP committed the government to ensure that the Sector Working Group coordinated and harmonised the implementation of the DSIP effectively and helped to enhance stakeholder participation. (see box 16)

Box 16: DSIP commitment: Sector Working Group

The Sector Working Group has been convening quarterly in recent years but the intention is to increase the frequency of meetings to at least eight per year. The expectation is that the SWG, inter alia, will undertake the following:

- *Coordinate and harmonize DSIP implementation to ensure that it is in line with the NDP goals and objectives; Ensure DSIP investment programmes are aligned with sector priorities;*
- *Pursue solutions to structural, institutional and other constraints to effective DSIP implementation at central, zonal, and local levels;*
- *Review mechanisms for enhancing stakeholder participation in implementing the DSIP;*
- *Review the Agriculture BFP as a basis on which the annual budget for the sector is compiled;*
- *Provide the main forum for the sector-wide approach to planning and budgeting for the agriculture sector;*
- *Identify, on the basis of sector expenditure and investment plans and the BFP, policy issues for consideration and action by the TPM;*
- *Provide information for the Joint GoU/DP Reviews;*
- *Monitor budget implementation vis-a-vis the aims and objectives set out in the BFP.* ¹¹⁷

Our analysis

The Sector Working Group is not working as efficiently as it could or must. One issue is that the body is rather opaque and insufficiently transparent – it does not make its minutes public and produces few reports for public scrutiny. It is therefore difficult for the public to know of the Group's deliberations and assessment of progress in implementing the DSIP. Another problem is that membership of the Group is quite narrow. The Sector Working Group consists of MAAIF staff and donors and a representative from the National Farmers Federation, but does not include civil society organisations; indeed, also absent are representatives from other government ministries such as Water, Works and Local Government. The Sector Working Group

is also overwhelmingly male – only around 5 out of 41 members were female in early 2013. The government made significant attempts to ensure that civil society organisations were actively consulted and involved in the DSIP design process. But civil society organisations are now largely absent from official processes to monitor and assess the implementation of the DSIP. Similarly, none of the 12 task teams set up to implement the non-ATAAS components of the DSIP include representative from civil society, though some include academics.¹¹⁸

Civil servants we interviewed in Kampala recognise that the Sector Working Group is not working efficiently and that CSOs are not involved; they say that MAAIF hopes to include CSOs in future, but it remains

unclear when.¹¹⁹

The CAADP review of the DSIP, produced in September 2010, noted: ‘The Sector Working Group (SWG) forum should serve as a platform for the mutual accountability across all stakeholders including the development partners. Effort should be made to strengthen participation of Uganda’s vibrant civil society, farmer organizations as well as the private sector’.

¹²⁰ Indeed, the review concluded: ‘Since Uganda has vibrant civil society and farmer organizations, they should participate

in the SWG’.¹²¹ Over two years on, this recommendation has still not been acted on.

The mid-term review of the DSIP, planned for 2013, provides an opportunity to hear about DSIP implementation from all stakeholders. It remains to be seen whether the mid-term review of the DSIP will consult effectively with civil society organisations. It is not yet clear what the process is for conducting the review, which consultancy firm will lead it and who will be involved.¹²²

POLICY RECOMMENDATIONS

We recommend that the government:

Agriculture budget

- Set a timetable to spending 10 per cent of the national budget on agriculture
- Investigate the options for finding extra resources for agriculture, such as those mentioned in this report

Climate change planning

- Meet with urgency the DSIP commitments on climate change planning so that small farmers are provided with more advice and support in adapting to climate change

Labour-saving technologies

- End financial support for tractors, which mainly benefit larger farmers, and increase spending on devices that are optimal for small farmers, including animal traction and processing equipment. Set targets for a large number of farmers to be reached.

Extension services

- Ensure that all extension worker posts are filled and that advisory services reach larger number of farmers, including women farmers

- Separate the input provision programme from advisory services
- Meet the other commitments outlined in the DSIP, such as on strengthening farmer groups and improving seed multiplication

MAAIF capacity building

- Ensure that all established posts are filled at HQ and the Districts by allocating sufficient resources to the sector, and meeting the other DSIP commitments

Sector Working Group

- Enhance the transparency of the SWG by making its minutes public
- Increase stakeholders participation in the SWG by including participants from civil society organisations working with farmers

Women farmers

- Specifically target and support women farmers in the budget and in all areas of agricultural policy, and ensure that commitments are monitored. There is a particular need to focus policies on extension services, labour-saving technologies and climate change planning on women farmers.

Annex - Summary of the DSIP objectives¹²³

DSIP Summary Matrix

The Vision	A Competitive, Profitable and Sustainable Agricultural Sector			
Development Objectives	<ul style="list-style-type: none"> • Rural incomes and livelihoods increased • Household food and nutrition security improved 			
Immediate Objectives	<ul style="list-style-type: none"> • Factor productivity (land, labour, capital) in crops, livestock, and fisheries sustainably enhanced. • Markets for primary and secondary agricultural products within Uganda, the region and beyond developed and sustained • Favourable legal, policy and institutional frameworks that facilitate private sector expansion and increased profitability along the entire value chain developed • MAAIF and Agencies functioning as a modern, client-oriented organisation within an innovative, accountable, support environment 			
Programme 1: Production and Productivity	Programme 2: Markets and Value Addition	Programme 3: The Enabling Environment	Programme 4: Institutional Strengthening	
<i>Sub-Programme Objectives</i>				
<p>1.1 Enhanced contribution of agricultural research to sustainable agricultural productivity, competitiveness, economic growth, food security and poverty eradication.</p> <p>1.2 Increased farmer access to relevant information, knowledge and technology through effective, efficient, sustainable and decentralized extension service coupled with increasing private sector involvement in line with government policy.</p> <p>1.3 Reduced losses through improved control of pests, vectors and diseases.</p> <p>1.4 Enhanced productivity of land through sustainable use and management of soil and water resources.</p> <p>1.5 Water resources developed for agriculture on the basis of sustainable irrigation, water for livestock and aquaculture.</p> <p>1.6 Increased use of labour saving technologies including appropriate mechanisation and other farm management related investments.</p> <p>1.7 The war-affected population of Northern Uganda engage in productive and profitable agricultural and agri-business activities to ensure food security and increase household income.</p> <p>1.8 Accelerated production of selected strategic enterprises on the basis of specialization and agro-zoning.</p>	<p>2.1 Improved capacity for regulation and enforcement especially in safety standards and quality assurance across crops, livestock and fisheries.</p> <p>2.2 Farmers have improved access to high quality inputs, planting and stocking materials.</p> <p>2.3 Increased participation of the private sector in value addition activities and investment.</p> <p>2.4 Expanded network of rural market infrastructure including appropriate structures to improve post harvest losses.</p> <p>2.5 The capacity of existing farmers' organizations built up in management, entrepreneurship, and group dynamics so they can engage in value-chain activities especially collective marketing.</p>	<p>3.1 Clear and predictable policy framework established and functioning.</p> <p>3.2 Planning and policy responsibilities are undertaken in an efficient manner leading to improved formulation of policies, strategies, programmes and projects, more cost-effective interventions and increased efficiency of public expenditure.</p> <p>3.3 Improved public education and communication around key agriculture and natural resource issues.</p> <p>3.4 Public coordination responsibilities are undertaken in a coherent manner leading to improved management of sector policies and programmes.</p> <p>3.5 Functioning Agricultural Statistics service providing timely and appropriate information to sector stakeholders.</p> <p>3.6 Capacity for decision-making in planning and budgeting processes improved by accurate and up-to date climate information and analysis.</p>	<p>4.1 MAAIF and related agencies, strengthened, appropriately configured and equipped.</p> <p>4.2 MAAIF HQ relocated to Kampala.</p> <p>4.3 Productivity of sector personnel improved.</p>	

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