



IMPROVING AFRICAN AGRICULTURE SPENDING: BUDGET ANALYSIS OF BURUNDI, GHANA, ZAMBIA, KENYA AND SIERRA LEONE



Mark Curtis
April 2013

CONTENTS

PREFACE	3
IMPROVING BURUNDI'S AGRICULTURE SPENDING	4
GHANA'S AGRICULTURE SPENDING: INCREASING THE FOCUS ON KEY SERVICES AND WOMEN FARMERS	32
SAYING ONE THING, DOING ANOTHER: HOW THE ZAMBIAN GOVERNMENT NEEDS TO IMPROVE AGRICULTURE SPENDING	56
SUPPORTING SMALL FARMERS: THE NEED FOR CHANGE IN KENYA'S AGRICULTURE BUDGET	81
THE AGRICULTURE BUDGET AND POLICY IN SIERRA LEONE : POSITIVE STEPS, REQUIRED REFORMS	103
ANNEX	124

PREFACE

The five country reports in this document analyse government agriculture spending, assessing how well it is focused on the needs of smallholder farmers, especially women, who constitute most farmers in these countries. The reports mainly concentrate on assessing the level and quality of government spending, the extent to which it focuses on providing key services to farmers such as access to inputs, extension and agricultural research and the extent to which sustainable agriculture is being promoted. The reports were commissioned by and written for either ActionAid or Christian Aid in 2011 and 2012. They are based on secondary research, interviews with government officials, donors, academics and NGOs, and fieldwork among individual farmers and farmers groups in select areas of each country.

The reports have several common themes. Typically, the level of agriculture spending is too low, there is insufficient focus on promoting quality key services to small farmers and there is insufficient attention to sustainable agricultural methods. But Africa does not need a 'Green Revolution' so much as a small farmer revolution. There is a need to markedly improve, and in some countries radically transform, agriculture spending and policy to really benefit small farmers and to focus policies on those who do most of the farming – women.

Mark Curtis
www.curtisresearch.org
April 2013



IMPROVING BURUNDI'S PUBLIC AGRICULTURE SPENDING



August 2012

CONTENTS

SUMMARY	3
INTRODUCTION	7
1. BACKGROUND: AGRICULTURE IN BURUNDI	7
2. GOVERNMENT POLICY	8
3. MAINTAINING A HIGH LEVEL OF GOVERNMENT SPENDING ON AGRICULTURE	11
4. ENHANCING THE QUALITY OF SPENDING	14
5. SUPPORTING WOMEN FARMERS	15
6. IMPROVING EXTENSION SERVICES	16
7. PROVIDING AGRICULTURAL CREDIT	18
8. REBUILDING AGRICULTURAL RESEARCH	20
9. INPUT SUBSIDIES	22
RECOMMENDATIONS	25
REFERENCES	29

SUMMARY

This study of Burundi's agriculture budget and policy identifies ways in which the government, supported by donors, can improve the quality of spending in support of smallholder farmers. It focuses on the level of agriculture spending and on key policies such as extension services, rural credit, agricultural research and input subsidies.

We welcome the government's recent increase in the agriculture budget and believe that if such investments are maintained, alongside improvements in the quality of spending, Burundi's smallholders could increase their food security and end the deep hunger from which the country currently suffers. However, such changes will require greater political will on the part of the government and some changes in agricultural policy-making.

Agriculture in Burundi

Burundi's 8 million people have average incomes of just \$140 a year, making the country one of the poorest in the world. Although Burundi has been slowly rebuilding itself over the past decade, poverty and hunger remain deep, with around 62 per cent of the population undernourished. More than 90 per cent of the population lives in 1.5 million smallholder farming households which produce 95 per cent of the country's food. The most important actors are women, who account for 55 per cent of the workforce and do 70 per cent of farm work. Yet women have few rights; under customary law, they are not allowed to own land or livestock.

Burundi's smallholder farmers face a myriad of constraints to increasing their farm production. They cultivate an average of just half a hectare of land, well below what is needed to guarantee good nutrition. Land scarcity and uncertain land tenure arrangements are major barriers to agricultural growth and can be a source of conflict. Other major constraints to smallholder farm production include inadequate extension and research services, poor access to credit, weak producer associations, as well as variable water supply and localised droughts, resulting from climate change. Yet subsistence farming continues, despite increasingly difficult circumstances, because the rural population has few other options – there is little off-farm employment and few adequate markets in which to sell produce. Most food production is consumed by smallholder families themselves; only 20 per cent of harvests reach the market. Per capita crop production in 2007 was less than half the 1993 level.

Despite large constraints, there are considerable opportunities for Burundi's smallholders to increase their farm production and food security. The yields of some crops have been increasing and there are abundant water resources. The government, with donor support, has also developed an impressive range of policy documents to develop the agricultural sector. Yet overall food production in Burundi is not improving much and government targets outlined in its strategy papers are being missed. We suggest some critical policy changes needed to promote broader food security and better support Burundi's smallholder farmers.

Maintaining high spending on agriculture

The government's annual budget allocation to the Ministry of Agriculture and Livestock (MINAGRIE), increased in 2011 to 10.9 per cent of the entire budget, a doubling over the previous year. This makes Burundi one of only a handful of African countries allocating more than 10 per cent of their national budget to agriculture. The government's future spending plans also involve high levels of spending. Key will be to ensure that the government maintains its budgetary and political commitment to agriculture over time so that the benefits will be fully realised. It is also vital that donors provide significant, predictable and stable funding to enable good planning to take place.

Enhancing the quality of spending

The quality of spending is just as important as the amount. The major challenges that need to be addressed relate to the skills and capacity of agriculture officials, the ability of civil society and others to hold the government to account for its policies and the government's commitment to decentralisation. The agricultural sector is hampered by the absence of competent advisors, policy makers and researchers, and planning and coordination capacity is very weak. At the same time, few organisations are well-placed to monitor government policies and hold the government accountable for its commitments. Traditionally, agriculture policy-making has been undertaken in a non-transparent, centralised way, doing little to consult the intended beneficiaries of policies (smallholder farmers). The government's agricultural budget remains strongly centralised in MINAGRIE and the provinces and communes receive no money of their own from the national budget to devote to agriculture.

Supporting women farmers

Although women constitute most farmers in Burundi and do most of the agricultural work, our analysis of the government's agriculture budget can find no mention of support for women farmers in particular. Otherwise, good paper commitments to promote the interests of women are not being implemented in practice. The latest (October 2010) assessment of the government's main growth strategy – the Growth and Poverty Reduction Strategic Framework - does not mention women farmers (except in passing, related to access to land).

If women farmers were more directly supported, Burundi's farm productivity would likely be much greater, people in rural areas would be better off and national food security would improve. Burundi needs to effect a deep change in the social status of women by changing the law to enable them to own farmland, and then actively encourage women to take advantage of it. Women farmers could also be targeted in the input subsidy programme. The establishment of women farmers' organisations could be supported. Women could also be targeted as 'progressive farmers' (ie, farmers who accept and apply the innovations made by the extension services).

Improving extension services

Extension services are vital in providing advice and training to poor farmers to improve food production and household income. The government has recently made efforts to increase the number of extension agents and there are now 2,803 – around 20 per cent of whom are women - mainly recruited since 2006. With 1.5 million farms, each agent therefore covers an average of 535 farms. The government's budget allocation to extension services was Buf 3.3 billion in 2011, which amounts to around 7.6 per cent of the government's contribution to the agriculture budget (excluding the donor contribution).

However, extension services in Burundi are generally of poor quality. They remain too dirigiste (top-down and directive) rather than promoting the participation of farmers and responding to the needs the farmers themselves identify, and they have few funds at local level. There are few linkages between research services and extension, meaning that farmers are not provided with the outcomes of research, extension agents are often poorly motivated and trained, and there is currently little attempt to reach women farmers. More investments and a major focus on improvements across the board are needed.

Providing agricultural credit

Farmers' current lack of access to credit is a major obstacle to developing the sector. The government budget has not financed agricultural credit for many years while private banks have been reluctant to lend to agriculture. The government has recently approved a fund for agricultural micro-credit worth an initial Buf 2 billion, for which it will provide loan guarantees. Such a fund is certainly needed since only around 1 per cent of credit in Burundi goes to agriculture. The key will be to ensure that the fund has sufficient capital to reach large numbers of farmers, including women, and that it is transparently and efficiently managed.

Rebuilding agricultural research

The government has in recent years reactivated agricultural research although the latest assessment of the Growth and Poverty Reduction Strategic Framework states that there has only been a 'slow reestablishment' of research services and that such reconstruction 'must be accelerated'. Government figures show a budget allocation of around Buf 3.7 billion to agricultural research in 2011, which amounts to 8.6 per cent of the government's contribution to the agriculture budget. In 2008, Burundi employed 98 agricultural researchers but only two researchers in the principal agricultural research institute, ISABU, held PhDs.

As agricultural research is rebuilt in Burundi, it is critical that it focuses on the needs of smallholder farmers, especially women farmers, and on sustainable agriculture approaches. Burundi is suffering from high land degradation, accelerating soil fertility losses and low use of improved water management practices. Research needs to focus on ways to increase crop productivity under these circumstances, especially by promoting soil and water conservation management. A core group of qualified researchers is crucial if ISABU is to conduct high-quality research.

Input subsidies

MINAGRIE promotes various input subsidy programmes, notably those to import and distribute livestock to farmers (livestock restoration), to distribute cassava and banana stems to farmers and a fertilizer subsidy. In 2011, these three programmes were allocated Buf 29.7 billion, 69 per cent of the government's contribution to the agriculture budget.

Under the fertilizer subsidy programme, the government currently sets the price at Buf 900 per kg, compared to the market price of Buf 1,400 per kg – thus a 36 per cent subsidy. According to interviews with MINAGRIE staff, farmers access an average of 100 kgs of fertilizer, and around 60,000 farmers receive the subsidised fertilizer – this represents only around 1 in 25 farmers.

These subsidy programmes have provided critical inputs to some farmers and have boosted production of crops such as green bananas, cassava and sweet potatoes. Yet they reach relatively few farmers and suffer from the misappropriation of inputs by some agricultural officials and private distributors. There are also few statistics and analysis of the precise benefits of the programmes – for example on the impacts on productivity. Under the livestock restoration programme, some of the cows imported, although having high milk productivity, are very sensitive to diseases. One way to improve the programmes would be to support the creation and training of cooperatives and farmers' associations which would be in charge of distributing the fertilizer and pesticide inputs.

RECOMMENDATIONS

In order to promote the livelihoods of smallholder farmers, increase farm production and ensure the nation's food security, we call on the government of Burundi to:

- ▶ Maintain its spending on agriculture at a high level, specifically over 10 per cent of the national budget, for a sustained period. Donors must provide adequate and predictable funds.
- ▶ Increase the quality of its agriculture spending by investing more in adequate staff training and capacity building in the agriculture sector, and in the collection and monitoring of agricultural statistics. The government must also ensure that decision-making processes become more transparent and are opened up to participation by farmers and farmers' organisations. Processes should be put in place to enable citizens to hold the government to account for its agriculture policies.
- ▶ Prioritise the support of women farmers by dedicating specific budget lines to them, and better targeting women in extension services and in inputs, credit and other programmes. The government should take greater steps to ensure that women are treated equally under the law, especially on land ownership.
- ▶ Scale up investments – with donor support – in sustainable agriculture, especially the conservation and management of land and water resources, which is critical in a context of high land degradation, accelerating soil fertility losses, limited area under irrigation, and low use of improved water management practices.
- ▶ Improve agricultural extension services deeply and across the board, especially to support women farmers, to promote sustainable agriculture, to provide market information services to farmers and to help farmers diversify their farm production into the most profitable crops. Significant investments in staff training and the quality of extension agents will need to be made. These services must cease being top-down and involve the participation of farmers in the design of programmes, ensuring they are based on real needs.
- ▶ Ensure that its new scheme to help increase farmers access to credit has sufficient capital to reach large numbers of farmers, that it is transparently and efficiently managed and that women farmers are able to access small loans.
- ▶ Continue to rebuild and improve the quality and extent of agricultural research by focusing on women farmers and on sustainable agriculture practices that can increase farm yields, productivity and food security, including soil and water conservation techniques.
- ▶ Ensure that input subsidy programmes reach large numbers of farmers and are managed in a transparent way that reduces corruption. Consideration should be given to the cost-effectiveness of different kinds of input subsidies, especially those that can promote sustainable agriculture such as soil conservation and erosion control, composting, green manuring, biofertilizers and agro-forestry.
- ▶ Support the creation and capacity building of producer and farmers organisations, which so far only exist in the coffee and tea subsectors, and their legitimate role in agricultural budget and policy-making.

INTRODUCTION

This study of Burundi's agriculture budget and policy aims to identify ways in which the government, supported by donors, can improve the quality of its spending in support of smallholder farmers. It focuses on the level of agriculture spending and on key policies such as extension services, rural credit, agricultural research and input subsidies.

We welcome the government's recent increase in the agriculture budget and believe that if such investments are maintained, alongside improvements in the quality of spending, Burundi's smallholders could increase their food security and end the deep hunger from which the country currently suffers. However, such changes will require greater political will on the part of the government and some changes in agricultural policy-making.

1. BACKGROUND: AGRICULTURE IN BURUNDI

Burundi's 8 million people have average incomes of just \$140 a year, making the country one of the poorest in the world. The civil war between 1993 and 2005 killed 300,000 people, forced 1.2 million into refugee camps or exile, reduced life expectancy from 51 to 44 years and doubled the number of people living on less than \$1 a day.¹ Although Burundi has been slowly rebuilding itself over the past decade, poverty and hunger remain deep: around 62 per cent of the population (4.9 million people) is characterised by the UN's Food and Agriculture Organisation as undernourished, compared to 44 per cent in 1990², and only 20 per cent has access to health care³.

Agriculture is the basis of the Burundian economy and the livelihoods of its people. More than 90 percent of the population lives in 1.5 million smallholder farming households which produce 95 per cent of the country's food. The most important actors are women, who account for 55 per cent of the workforce⁴ and do 70 per cent of farm work, as well as gather fuel and carry water, look after children's education and do housework⁵. In the wake of conflict, women now account for a fifth of rural heads of household.⁶ Yet women have few rights; under customary law, they are not allowed to own land or livestock.⁷ Most rural women have no control over farm production factors or household income and have limited access to support services such as extension or credit.⁸

Burundi's smallholder farmers face a myriad of constraints to increasing their farm production. They cultivate an average of just half a hectare of land, well below what is needed to guarantee good nutrition. Land scarcity and uncertain land tenure arrangements are major barriers to agricultural growth and can be a source of conflict. Burundi already has one of the highest population densities in Africa but the population is expected to rise to over 13 million by 2025. According to the government :

'Access to land is becoming increasingly limited, owing to mounting demographic pressure which is gradually reducing the amount of land available per household. This situation has already led to the overexploitation of land, land degradation, and a decline in food production, which have spawned the food insecurity problem seen in recent years, particularly in the northern provinces'.⁹

Yet subsistence farming continues, despite increasingly difficult circumstances, because the rural population has few other options – there is little off-farm employment and few adequate markets in which to sell produce.¹⁰ Most food production is consumed by smallholder families themselves: Only 20 per cent of harvests reach the market due to poor information on prices, inadequate storage infrastructure and processing facilities, and expensive transportation.¹¹ Smallholder farmers achieve low productivity, and yields have changed little over the past 40 years.¹² But given population growth, per capita crop production in 2007 was less than half the 1993 level.¹³

Other major constraints to smallholder farm production include inadequate extension and research services, poor access to credit, weak producer associations, as well as variable water supply and localised

droughts resulting from climate change. The country's geographical location and lack of infrastructure has also resulted in extreme susceptibility to crop disease (such as cassava brown streak and cassava mosaic), animal disease (such as avian influenza) as well as HIV/AIDS.¹⁴ Food price rises have been another major problem – prices of 40 basic commodities sold in Bujumbura's central market jumped by 37 per cent from July 2007 to July 2009, for example. Families spend upward of 70 percent of their income on food.¹⁵

Agriculture contributes 45 per cent of GDP and 91 per cent of exports. Food crops provide the main source of employment and income for smallholders. The leading food crops (ranked by volumes of production) are bananas, roots and tubers, pulses, cereals, vegetables/fruits, and oilseeds. The most important cash crops – cotton, tea and coffee – are the major sources of monetary income. Coffee, grown by around 800,000 households, accounts for over 80 per cent of export revenues. But coffee yields are among the lowest in the region and coffee quality is declining. Producer prices have also remained the lowest in the sub-region over the last four decades.¹⁶ Over half of all smallholders raise livestock, which provide a source of income, food, manure, wealth and social status.¹⁷ But livestock productivity remains low and given pastureland shrinkage and degradation, short-cycle species that take up less space are increasingly preferred.¹⁸

Opportunities for smallholders

Given land scarcity, future growth in food crop production must come from intensification and orientation towards more commercial agriculture, which emphasises the importance of local markets. Indeed, despite large constraints, there are considerable opportunities for Burundi's smallholders to increase their farm production and food security. For one thing, there are some recent successes in increasing yields: The World Bank notes that during 2008-11 yields of irrigated rice have improved from 4 tons/ha to 5 tons/ha and that yields of cassava have improved from 10 tons/ha to 12 tons/ha.¹⁹ Burundi has a favourable climate for agriculture and the potential for improving productivity is very high given that current productivity is so low.²⁰

Although most farmers currently depend on rainfed agriculture, Burundi also possesses abundant water resources and has significant potential in terms of irrigable land, which is as yet underdeveloped. This natural potential, if accompanied by a sustainable return to security, offers good prospects for agricultural development. Also promising is the emergence of farmers' organisations: although these are still incipient, the example of the national confederation of coffee growers' associations – which is beginning to provide services to its members – and the efforts under way in the tea, rice and fishing subsectors, demonstrate the potential role farmers' organisations could play more broadly. The proliferation of microfinance institutions (although currently operating mainly in urban areas) is also a sign of hope as is the government's initiative to promote decentralisation.²¹ Also critical is that the government is now making support for agriculture much more of a priority than in the past.

2. GOVERNMENT POLICY

Burundi has an impressive range of policy documents for the development of the agricultural sector. The Growth and Poverty Reduction Strategic Framework (GPRSF), adopted in 2006, commits the government to promoting agriculture, livestock and fisheries by improving production and stimulating exports of coffee, tea, cotton and non-traditional exports. For food crops, the GPRSF aims to increase yields, especially to:

- ▶ 'improve input supply costs so as to make the use of inputs affordable for the poorest populations
- ▶ identify and implement improved cultivation techniques
- ▶ improve vegetable crop extension
- ▶ encourage the development of food processing, preserving, and marketing technologies
- ▶ upgrade water management capacities
- ▶ promote the widespread use of quality seed.²²

For livestock, key aims are 'rebuilding livestock populations and introducing genetic improvements, particularly by distributing breeding stock'.²³

Following the GPRSF, the government developed a National Agricultural Strategy (*Stratégie Agricole Nationale*) for 2008-15 - which aims to rehabilitate the agricultural sector, move away from subsistence farming and achieve annual growth of 6 per cent or more.²⁴ In addition, the National Plan for Agricultural Investment (*Plan National d'Investissement Agricole*) for 2012-17 is a framework for coordinating investments in the agricultural sector aiming to ensure food security for all, increase household incomes and create jobs. It identifies more than 15 agricultural value chains to be promoted, along with irrigation, and the need to reform and build the capacity of the Ministry of Agriculture and Livestock – MINAGRIE - to enable it to implement the new policies.²⁵ The Burundi National Programme on Food Security 2009-2015 promotes eight sub-programmes: Sustainable management of natural resources; Intensive production of food crops; Diversification of farming systems; Crop protection, processing and marketing; Nutrition; Early Warning and Strategic Reserve Establishment; Support for procurement of inputs, micro-finance, research, extension, and capacity building; and Implementation support. Finally, Burundi also produced in 2007 its National Adaptation Plan of Action to Climate Change (*Plan d'Action National d'Adaptation aux Changements Climatiques*). This highlights small farmers' vulnerability to climate change, notably from land and soil degradation, deforestation, erratic rainfall and rising average temperatures, and outlines a range of government policy priorities to promote adaptation.

Donors play a critical role, funding nearly half of Burundi's national budget and half its agriculture budget in recent years. The largest donor, the World Bank, is providing \$407 million during 2009-12, of which \$43 million is for agriculture.²⁶ Other key donors in the agricultural sector are the International Fund for Agricultural Development (IFAD) and Belgium. But a recent report for the Netherlands Embassy in Burundi notes that 'donor programs are highly fragmented and not well coordinated, apart from geographic division of labour.'²⁷

Static food production

Despite government commitment and good policies on paper, however, overall food production in Burundi is not improving much and government targets outlined in the GPRSF are being missed. For example, the GPRSF had ambitious goals for the agricultural sector, calling for major production increases for rice, wheat, bananas, coffee and tea, among others. It aimed to increase banana production – Burundi's principal crop – from 1.6 million tons in 2005 to 2.3 million tons in 2010.²⁸ Yet, as outlined in the table below, the latest assessment of performance implementing the GPRSF notes that banana production has increased only slightly during 2006-09. The GPRSF also called for an increase coffee production from 30,000 tons in 2006 to 60,000 tons in 2015.²⁹ During 2006-09, however, coffee production has fluctuated wildly.

Table 1: Food production during PRSP period

Food crops (in millions of tons)	2006	2007	2008	2009
Grains	282	290	290	298
Legumes	238	239	221	239
Roots and tubers	1,458	1,518	1,575	1,548
Bananas and plantains	1,663	1,709	1,760	1,806
Income crops (in tons)				
Coffee	29,951	8,210	24,700	6,814
Tea	6,338	6,475	6,728	6,729
Cotton	1,750	2,870	2,887	2,547
Non-traditional crops	-	246	763	727

Source: Republic of Burundi, *Growth and Poverty Reduction Strategy Framework: Performance and Impact Assessment*, October 2010, p.38

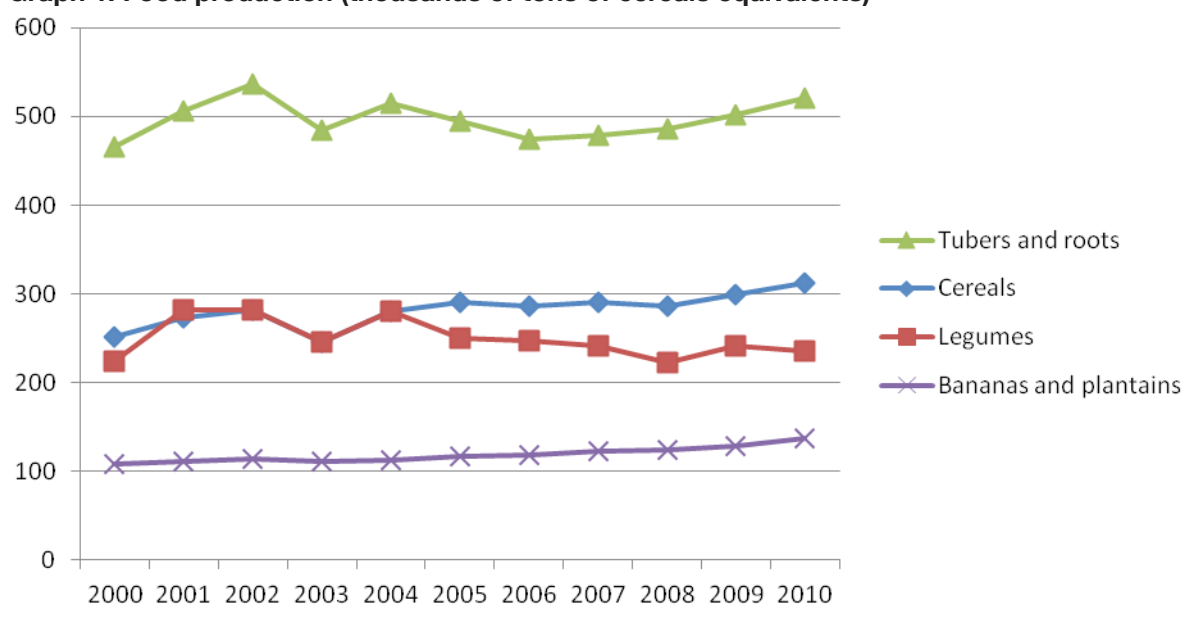
In the livestock sector, however, according to the government's assessment, 'significant progress' has been made; the number of goats has increased by 89 per cent, cattle by 28 per cent, pigs by 16 per cent, and sheep by 10 per cent. The government's principal intervention has been a subsidy programme to distribute animals to the rural population, which has prioritised those most in need and included training and the hiring of community animal health agents.³⁰

Since 2000, other figures show only slight increases in food crop production:

Table 2: Food production (thousands of tons of cereals equivalents)

	2000	2002	2004	2006	2008	2010
Cereals	251	282	280	287	287	312
Leguminous plants	224	282	280	247	222	235
Tubers and root crops	465	536	515	474	486	520
Bananas and plantains	108	114	113	118	125	137
Total	1,048	1,214	1,188	1,126	1,120	1,276

Graph 1: Food production (thousands of tons of cereals equivalents)



Source: HOAPB (Head Office of Agricultural Planning and Breeding). Figures collected by the estimate mission MINAGRIE/FAO, June 2008, June 2009, and estimates for 2010.

The government attributes 'weak agricultural growth' during the GPRSF period since 2006 to: 'lack of security; generally unfavourable weather conditions; slow reestablishment of research and agricultural extension efforts, including the production of seed and the distribution of fertilizers; and finally the [production] decline of the major export crop (coffee).'³¹ By the government's own admission, some of these reasons relate to policy failures. We now turn to suggesting some critical policy changes needed to promote broader food security and better support Burundi's smallholder farmers.

3. MAINTAINING A HIGH LEVEL OF GOVERNMENT SPENDING ON AGRICULTURE

The government's annual budget allocation to the Ministry of Agriculture and Livestock, MINAGRIE, is highlighted in the following table. In 2011, the government massively increased MINAGRIE's budget to 10.9 per cent of the entire budget. Our analysis is that this was largely the result of significant and longstanding pressure from Parliament and civil society, which has made the government realise the importance of agriculture spending.

Table 3: Government agriculture budget (MINAGRIE)

	Agriculture budget (Buf billion)	% from govt	% from donors	Agriculture budget as % of national budget
2004	5.0	76	24	2.4
2005	12.1	31	69	5.1
2006	8.7	51	49	2.4
2007	21.0	30	70	4.9
2008	35.8	44	56	6.4
2009	18.6	91	9	2.5
2010	36.5	49	51	5.0
2011	101.0	43	57	10.9

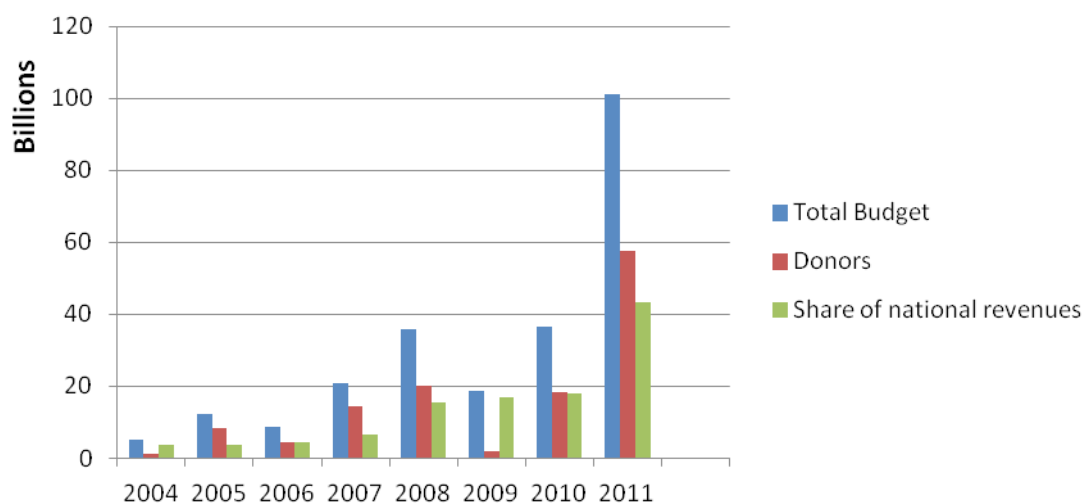
Source: Revenue Court Law laying down the budget of the Republic of Burundi, from 2004 – 2011

Further, in January 2012 it was reported that the government was slightly increasing MINAGRIE's budget to Buf 45.9 billion (\$33.4 million) in 2012, up from Buf 43.2 billion in 2011.³² The government has announced its future spending plans, as part of spending on the National Plan for Agricultural Investment, as follows:

Year	2012	2013	2014	2015	2016	2017
Budget (Buf billion)	45.9	49.7	53.6	57.9	62.6	67.6

Financing of the government's National Plan for Agricultural Investment is now under discussions with donors. The government has announced its projections for its agriculture spending as above, which comes to a total of Buf 337 billion. But the consultants who prepared the NPAI have estimated an agriculture spending need of Buf 865 billion. Thus currently there is a major shortfall in funding.

The following table shows that the reason for MINAGRIE's wildly fluctuating budget – which has been rising and falling in recent years – is that donor funds have been so erratic.

Graph 2: Growth of the budget allocated to MINAGRIE, 2004 – 2011


A certain proportion of the allocation to MINAGRIE is considered 'priority programmes', outlined in the table below. These amounted to Buf 34.2 billion in 2011, with the largest components being agricultural inputs (to provide subsidised fertilizer and pesticides to farmers) and the distribution of seed.

Table 4: Government allocation to priority programmes (Buf)

Program	2009	2010	2011
Restoring the breeding sector	860 million	1.0 billion	10.4 billion
Multiplication and distribution of seed		1.6 billion	9.7 billion
Agricultural inputs (subsidised fertilizer and pesticides)	3.7 billion	4.0 billion	9.6 billion
Agricultural research	635 million	80 million	1.6 billion
Irrigating wide regional zones		3.0 billion	1.4 billion
Hydro-agricultural development of Gihanga III			1.4 billion
Irrigation studies in Bugesera and Kumoso			800 million
Development of terraces (improvements in eroded farmland on steep slopes to become more resistant to rain)		801 million	500 million
Support to associations of coffee farmers	50 million		
Total	5.2 billion	10.5 billion	34.2 billion

In addition to MINAGRIE, three other ministries – those of Environment, Justice and Education – also contribute to agriculture spending. The figures for Environment and Justice are provided below, and reached Buf 815 million in 2011. It is not known precisely how much the Ministry of Education contributes to agriculture since the budget for agricultural instruction is included in the general budgets of salaries and running costs of other schools.

Table 5: Other ministries' spending on agriculture (Buf)

Ministry	Activity	Budget allocation 2009	Budget allocation 2010	Budget allocation 2011
Environment	Planning slopping areas	76 million	76 million	67 million
	Support to planning and management of industrial blocs (ie, woodland plantations made by donor projects that are useful for retaining storm water and restoring soil fertility)	40 million	40 million	
	Swamps planning project	7 million	7 million	
	Property national programme	60 million	60 million	
	Support to the promotion of outlying and agro-forestry plantations	86 million	86 million	86 million
	Management of lands project		20 million	
	Perpetuation of the grounds protection project	60 million	60 million	60 million
Ministry of justice	Allocations to little deeds services	607 million	619 million	602 million
Total		936 million	968 million	815 million

Sources: Revenue Court, Law laying down the budget of the Republic of Burundi, 2004 – 2011

HIPC funding agriculture

A significant amount of the funds from debt relief provided under the Heavily Indebted Poor Countries (HIPC) initiative have financed the country's agriculture spending. In 2011, for example, the government received Buf 69 billion in HIPC funds of which 22.8 billion were allocated to agriculture.

Table 6: HIPC funds 2009–11 (Buf billion)

	2009	%	2010	%	2011	%
TOTAL	41.1	100	98.3	100	69.1	100
General services	2.6	6	0.8	1	0.6	1
Social services	28.8	70	57.9	59	31.6	46
Economic services	9.8	24	39.6	40	36.8	53
Agriculture	5.8	14	10.7	11	22.8	33

Observations

The recent rise in the budget to agriculture is very welcome. In the past Burundian governments attached little importance to agriculture, despite the fact that it provides the livelihood for nearly everyone in the country. A key will be to ensure that the government maintains its budgetary and political commitment to agriculture over time so that the benefits are fully realised. It is also vital that donors step up to the mark and provide significant – and predictable and stable – funding to enable good planning to take place.

4. ENHANCING THE QUALITY OF SPENDING

The quality of spending is just as important as the amount and this is especially true in a situation where the state plays a decisive role in all economic sectors, including agriculture. On the positive side, the official figure is that over 95 per cent of the budget allocation to agriculture is actually disbursed (a large percentage compared to many other African states which often do not spend a third of their budgets). However, the major challenges relate to the skills and capacity of agriculture officials, the ability of civil society and others to hold the government to account for its policies and the government's commitment to decentralisation.

Institutional capacity and accountability

With the destruction during the civil war of almost all education centres and research capacity, the agricultural sector has been seriously hampered by the absence of competent advisors, policy makers, researchers and vocational trainers. Many of those now in place are reported to be demotivated by low salaries.³³ Low pay encourages staff to take on second jobs, further eroding motivation and engendering high turnover. Planning and coordination capacity is very weak in the agriculture sector, and this is compounded by inadequate operating resources at central and local levels.³⁴

At the same time, few organisations are well-placed to monitor government policies and hold the government accountable for its commitments. Producer organisations and farmers associations – such as the recently created Chamber of Agricultural Business Development and the *Confédération des Producteurs Agricoles pour le Développement* (CAPAD) – have little capacity and are generally not recognised by the government as interlocutors in policy development, while there are few platforms that provide for consultation between them and the public authorities.³⁵ Traditionally, agriculture policy-making has been undertaken in a non-transparent, centralised way, doing little to consult the intended beneficiaries of policies (smallholder farmers).

Decentralization of the agricultural budget

Burundi is committed to decentralising policy making according to the National Policy of Decentralization adopted by the government in May 2009. Decentralisation implies a transfer of some of the state's responsibilities, both political and legal, to the local public authorities, in particular to the communes, and a transfer of resources to the communes to enable them to undertake new responsibilities.³⁶ However, the government's agriculture budget remains strongly centralised in MINAGRIE. Despite the fact that MINAGRIE has decentralised structures in all the provinces and communes, the latter receive no money of their own from the national budget to devote to agricultural projects. The entire operational budget is managed by the staff of the Minister of Agriculture, and the only funds that are decentralised are those that pay for salaries of officials in the provinces and communes.

Observations

It is to be hoped that the recent injection of more resources into the agriculture sector will both directly benefit the country's smallholder farmers and also increase the capacity of officials to research, manage and plan agriculture policy better. Major improvements in MINAGRIE's capacity are needed, including the establishment of an effective system of public expenditure management to ensure funds are spent transparently.³⁷ The government also needs to ensure that agriculture spending is targeted at smallholder farmers' real needs - this requires a commitment to engaging in consultations with (and strengthening) farmers organisations, to discover what real needs are, to open up fora for debate and ensure the participation of farmers in drafting policies. Actors in Burundi should all take steps to encourage a policy-making culture that enables the government to be held accountable for results.

On the issue of decentralisation, the communes are nearer the farms than the central government and should play a much stronger role in deciding and allocating the use of resources; the decentralisation policy should be reviewed to ensure that a good part of the agricultural budget is allocated to the communes. Overall, the government must speed up implementation of the national policy of decentralization.

5. SUPPORTING WOMEN FARMERS

As noted above, women constitute most farmers in Burundi and do most of the agricultural work. Yet in our analysis of the government's agriculture budget, the authors of this report can find no mention of support for women farmers in particular.

On paper, the government has a good commitment to promoting the interests of women. The GPRSF states:

*'Women's participation in the development process is considered a key element of all development and poverty reduction projects, and Burundi is no exception in this regard... Women's participation in the country's economic and social development process will take place at all levels. Thus, no strategy will be developed without explicitly addressing gender issues, so as to guarantee the full participation of women in decision making, the choice of priority actions, and, more specifically, their implementation.'*³⁸

This commitment is, however, not being implemented in practice. The latest (October 2010) assessment of the GPRSFS does not mention women farmers (except in passing, related to access to land) and in the section on what results have been achieved for 'gender advancement', no mention of agriculture is made.³⁹

Women in Burundi, despite being the country's primary food producers, are widely discriminated against, notably concerning ownership of land whereby customary law recognises women as having 'use rights' over land but not as heirs. Such social norms are so entrenched that women in rural communities tend to view ownership of material assets, such as land, as being exclusive to men.⁴⁰ Many attempts made in parliament by women to change this situation have failed. Access to services such rural finance, extension and inputs such as fertilizer are lower for women than men, although few statistics are available. Women have more difficulties in accessing extension services than men (often due to the timing and location of meetings which can conflict with housework or childcare) and in accessing inputs (often due to household finances being controlled by men, but also because there is no specific targeting of women in subsidy programmes).

Observations

If women farmers were more directly supported, Burundi's farm productivity would be much greater, people in rural areas would be better off and national food security would be greatly improved. A recent FAO analysis of Africa finds that even if women simply had the same access to inputs like fertilizer and 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.⁴¹ The government needs to recognise that most farmers are women and that some agricultural policies need to be different to reach women than men since the needs of women farmers are often different than men's. For women, the biggest barriers to increasing farm production relate to the time needed to look after families and prepare food. With limited budgetary resources available to the government to spend on agriculture, there is an imperative to identify policy *priorities* that help women farmers the *most*.

Burundi needs to effect a deep change in the social status of women by changing the law to enable them to own farmland, and then actively encourage women to take advantage of it. Women farmers could also be targeted in the input subsidy programme. The establishment of women farmers, organisations could be supported. Women could also be targeted as 'progressive farmers' (ie, farmers who accept and apply the innovations made by the extension services).

6. IMPROVING EXTENSION SERVICES

Extension services are vital in providing advice and training to poor farmers to improve food production and household income. Farmers can improve their productivity by accessing information on the best farming techniques, on new, higher-yielding crop varieties and low input technologies, or on what crops are likely to produce most profit next season. In fact, extension services often make a bigger contribution to reducing poverty and hunger than any other agriculture sector investment. Yet the quality of these services in many countries is poor, as field research by ActionAid, for example, has documented.⁴²

Extension services in Burundi are promoted by head office of the mobilization for self-development and agricultural popularization (HOMSAP) within MINAGRIE. Extension agents are based in each province in Provincial Departments of Agriculture and Breeding (PDABs). The government has recently made efforts to increase the number of extension agents and there are now 2,803 – around 20 per cent of whom are women⁴³ - mainly recruited since 2006. With 1.5 million farms, each agent therefore covers an average of 535 farms. MINAGRIE also has a Head Office of Breeding (HOB) which has at its disposal veterinary technicians and animal health community agents in the provinces and communes; their number is smaller than that of officials in HOMSAP. The government extension service is the only one covering the whole country; some NGOs provide extension services but are limited to their geographical area of operation. Governmental bodies such as COMACO (Company of the Management of Cotton) or BTC (Burundi Tobacco Company) also provide some extension services.

IMPROVING BURUNDI'S PUBLIC AGRICULTURE SPENDING

The government's budget allocation to extension services is provided in the table below. The total is Buf 3.3 billion in 2011, which amounts to around 7.6 per cent of the government's contribution to the agriculture budget (ie, Buf 43.2 billion).

Table 7: Budget allocation to extension services

Service	Year	2009 (Buf million)	2010 (Buf million)	2011 (Buf million)
HOMSAP		43.6	134.7	145.7
Department of Studies and Planning		19.5	26.5	22.7
Department of Leadership and Agricultural Training		14.6	18.4	19.3
PDAB Bubanza		91.9	108.2	108.0
PDAB Bujumbura		220.5	240.8	230.0
PDAB Bururi		256.0	318.0	287.7
PDAB Cankuzo		120.4	129.2	129.2
PDAB Cibitoke		129.5	155.8	154.5
PDAB Gitega		235.9	273.6	252.7
PDAB Karusi		152.0	224.8	152.3
PDAB Kayanza		228.8	270.5	261.9
PDAB Kirundo		215.1	220.6	202.6
PDAB Makamba		192.7	187.4	178.7
PDAB Muramvya		149.1	128.4	118.5
PDAB Muramvya		174.7	219.9	195.8
PDAB Muyinga		151.3	174.6	174.1
PdAB Mwaro		262.6	299.7	267.7
PDAB Ngozi		262.6	210.3	194.7
PDAB Rutana		180.4	210.3	194,7
PDAB Ruyigi		185.4	212.0	187.7
Department of Animal Health		115.0	130.9	128.4
TOTAL		3.4 billion	3.9 billion	3.3 billion

Source : Budgetary Laws 2009, 2010, 2011

In addition to the funds above, the government also allocates further funds for agricultural training in schools and universities, though the amounts are hard to calculate since budgets do not always break down such allocations. For example, the faculty of agronomy at the University of Burundi (FACAGRO) does not have a specific budget line for such training within the overall allowances granted to the university.⁴⁴ The government also finances some higher education scholarships for students of agriculture. Out of a total scholarship fund of Buf 1.0 billion in 2011, around Buf 328 million was for agriculture students.⁴⁵

Burundi has several schools for training agricultural technicians and engineers such as FACAGRO, the private University of Ngozi, the Agricultural High Institute (AHI) and other institutes of agricultural training (IATT, Karusi, Gihanga, Gisozi, Mahwa and Kigamba). Yet such training is often general and often lacks application to field situations. Many graduates find themselves jobless or doing other jobs which have nothing to do with extension.

Extension services in Burundi are generally of poor quality. The government recognised in its first assessment of the GPRSF that extension services are 'insufficient and inadequate'.⁴⁶ It stated, though, that extension services were improving due to recruitment of agricultural monitors in eight provinces. It added:

*'The strengthened agricultural extension effort was tangibly reflected in the assignment of the agronomical monitors in every commune and census district. However, the effectiveness of these agronomical monitors is reduced by the absence of any specific activity program, inadequate supervision of the hierarchy, and the lack of motivation.'*⁴⁷

In the latest (October 2010) assessment of the GPRSF, the government makes no mention of progress in improving extension services, simply stating that 'reconstruction of an effective research and extension system must be accelerated'.⁴⁸

The extension service is widely recognised to suffer from numerous problems, notably that it remains too dirigiste (top-down and directive) rather than promoting the participation of farmers and providing farmers with what they identify they need, and that it has little funds at local level to support farmers. In addition, there are few linkages between research services and extension, meaning that farmers are not provided with the outcomes of research.⁴⁹ Extension agents are often poorly motivated and trained while communications within the service are poor. The most common form of agricultural training – mass meetings – is often inappropriate and not tailored enough on specific farmers needs, especially for women farmers.

Observations

The government is making efforts to improve extension services but there is a long way to go to make them more focused on farmers' real needs, and there is currently very little attempt to reach women farmers. A major focus on improvements across the board is needed. A reorientation of agricultural education towards training to meet national agricultural policy objectives is necessary.

7. PROVIDING AGRICULTURAL CREDIT

Access to credit is often critical for small farmers. Without access to loans at low interest rates, farmers are often unable to invest in future production, expand their farming or take a risk and diversify into producing new crops. Yet in most African countries governments are failing to invest sufficient resources in providing credit to farmers, while private banks are not lending in sufficient quantities; NGOs and informal lending fill some of the gap, but nowhere near enough. The result is a massive gap in funding for agriculture that is locking millions of farmers in a poverty trap.

In Burundi, the current lack of access to credit for farmers is a critical obstacle to the development of the sector. For many years, the government budget has not financed agricultural credit while private banks have been reluctant to lend to agriculture. The government has recently approved a fund for agricultural micro-credit worth an initial Buf 2 billion, for which it will provide loan guarantees. The fund is expected to grow and to have branches in all the provinces of the country.⁵⁰ Such a fund is certainly needed: the following table shows that only around 1 per cent of all credit in Burundi goes to agriculture.

Table 8: Credit by branch of activities (billions of Buf)

	2009	%
Agriculture	3.6	1.1
Industry	20.9	6.2
Commerce	180.9	53.8
Building trade and Settlement	30.4	9.1
Tourism and hotel business	3.8	1.1
Domestic goods (furniture, electronics etc)	79.2	22.7
Miscellaneous	17.5	5.2
Total	336	100

Source: MINAGRIE, Strategy to create a fund for agricultural micro credit in Burundi

Apart from the new government scheme, only one bank – the National Bank of Economic Development (NBED), *Banque National pour le Developpement Economique* – has a farm credit line. However, the NBED finances big agri-business projects, not smallholders. Where formal credit is available in Burundi, it is almost always directed to cash crops such as coffee and tea; producers of food crops finance their recurrent production costs by borrowing in the informal sector, usually from relatives.⁵¹ What formal loans are available have high interest rates, which deter farmers; the NBED, which applies the lowest interest rate, offers 18 per cent, with others offering 20 per cent or more and some private micro-finance institutions like COOPSC (Cooperative of Saving and Credit) reaching rates of 36 per cent.

It is not known what proportion of farmers has access to credit. A recent report by the UN trade body, UNCTAD, notes that there are around 300,000 Burundians with micro-finance loans, more than twice the number of commercial bank clients, yet it is likely that very few of these are for agriculture. As of December 2010, there were 23 micro-finance institutions approved by the Bank of the Republic of Burundi, but none of these provided loans to agriculture. Current micro-finance schemes cannot currently reach larger numbers of people because of the lack of stable resources, limited capacity to manage large volumes of transactions and because of the high costs of credit, among other things.⁵² In Burundi, Insurance products against climatic risks in agriculture do not yet exist in Burundi.⁵³

Observations

The government's new scheme to help increase farmers' access to credit is certainly needed. The key will be to ensure that it has sufficient capital to reach large numbers of farmers, and that it is transparently and efficiently managed. Such a government-backed scheme is necessary given that private banks regard smallholder farmers as too risky an investment. The government should also ensure that women farmers are able to access small loans; they are currently especially disadvantaged since they cannot offer landholdings as collateral for loans.

8. REBUILDING AGRICULTURAL RESEARCH

The civil war significantly disrupted agricultural research efforts in Burundi and the activities of the principal research institute – the Institute of Agronomic Sciences of Burundi (IASBU) - practically stopped. The government has in recent years been reactivating agricultural research although the latest assessment of the GPRS states that there has only been a 'slow reestablishment' of research services and that such reconstruction 'must be accelerated'.⁵⁴

According to the Agricultural Science and Technology Indicators (ASTI) initiative, in 2008, Burundi's agricultural research investments totalled Buf 3.3 billion, equivalent to \$9.6 million (at purchasing power parity), in 2005 prices.⁵⁵ The government provides the following figures, reaching an allocation of Buf 3.7 billion in 2011, which amounts to around 8.6 per cent of the government's contribution to the agriculture budget (excluding donors):

Table 9: Budget for agricultural research (Buf millions)

Service	Year	2009 (in Buf)	2010 (in Buf)	2011 (in Buf)
IASBU administrative budget		1,179	1,179	1,673
IAZR		151	151	356
NCFT		82	88	82
Universities (Ministry of Education)		-	-	-
Agricultural research projects		635	80	1,642
Total agricultural research		2,048	1,499	3,753
% of government contribution to agriculture budget (excluding donors)		12.1	8.3	8.7

Source : Budgetary Laws 2009, 2010, 2011

In 2008, Burundi employed 98 agricultural researchers expressed in full time equivalents, an increase over the 69 recorded in 2000. Growth is largely attributable to the ISABU, which has been recruiting high numbers of young researchers. However, only 15 per cent of Burundi's agricultural researchers were women. In 2008, 74 per cent of Burundi's agricultural researchers were trained to postgraduate level but only 10 per cent held PhD degrees. Only two of ISABU's researchers then held PhD degrees, a very low level.⁵⁶

In 2008, 45 per cent of Burundi's agricultural researchers carried out crop research, 15 per cent were involved in post-harvest research, 12 per cent worked on livestock topics, and 5 per cent on forestry-related issues. The rest includes research on natural resources, fisheries, food security, and socioeconomic issues. Burundi's most intensively researched crop is coffee, accounting for 11 per cent of total crop and livestock research. Other important crops included vegetables (10 per cent), rice (7 per cent), fruit (6 per cent), and potatoes (6 per cent). The principal livestock commodities were beef cattle (12 per cent), poultry (4 per cent), and dairy products (4 per cent).

Agricultural research institutions in Burundi

ISABU is Burundi's principal agricultural research agency, accounting for nearly two-thirds of the country's agricultural research capacity and close to three-quarters of its investments. The institute was created in 1962 and is placed under MINAGRIE. Its programme is built around four main thematic areas: crops, livestock, farming systems, and rural socioeconomics. Its research focuses on the production of high-quality seeds; agro-forestry and food trees; erosion control; cattle race improvement techniques; fodder crops; farm profitability; and on organising production by region. ISABU also carries out soil analyses and plant-health diagnostics in its laboratories in close collaboration with MINAGRIE. The institute is headquartered in Bujumbura and has six agricultural experiment stations, ten research centres, and six research units.

Three other government agencies are involved in agricultural research: the National Centre for Food Technologies (CNTA) – which aims to improve the health and food security of the population – the National Veterinary Laboratory (LNV), and the Institute of Agronomic and Animal Production Research (IAZR). In 2008, the four higher-education agencies involved in agricultural research accounted for 16 percent of Burundi's agricultural research capacity.⁵⁷ The faculty of agronomic sciences of the University of Burundi also conducts agricultural research; it has, for example, developed varieties of marsh rice, and worked on edible mushrooms and on small livestock.

Observations

As agricultural research is rebuilt in Burundi, it is critical that it focuses on the needs of smallholder farmers, especially women farmers, and on sustainable agriculture approaches. Burundi is suffering from high land degradation, accelerating soil fertility losses, limited area under irrigation, and low use of improved water management practices. Research needs to focus on ways to increase crop productivity under these circumstances, especially by promoting soil and water conservation management.

According to ASTI, a core group of qualified researchers is crucial if ISABU is to conduct high-quality research, establish relations with policymakers and donors, and ensure proper management of its research. It is also critical to address the view among Burundi's scientists that ISABU is not an attractive employer because of its salary scale, which researchers consider to be unrewarding and which deters scientists from planning careers at the institute.⁵⁸

9. INPUT SUBSIDIES

MINAGRIE promotes various input subsidy programmes, outlined in the table below, notably those to import and distribute livestock to farmers (livestock restoration), to distribute cassava and banana stems to farmers and a fertilizer subsidy. In 2011, these three programmes amounted to Buf 29.7 billion, 69 per cent of the government's contribution to the agriculture budget (excluding donors).

Table 10: Funds allocated to inputs and allowances (Buf billion)

Rubric	Year	2009	2010	2011
	Livestock restoration (import and distribution of cows to farmers)		0.9	1.0
Agricultural inputs and allowances		3.7		
Multiplication and distribution to farmers of stems (cassava, banana)			1.6	9.7
Fertilizer programme			4.0	9.6
Distribution of market garden and fruit seeds			0.3	

Source: Budgetary Laws 2009, 2010, 2011

For 2012, the government planned the following input programmes:

Table 11: Input programmes, 2012

Programme	Objectives	Buf billion
Production of high performance banana trees	3,000 ha	2.0
Multiplication of cuttings of cassava resistant to 'mosaic' disease	2,000 ha	1.1
Potato seedlings	250 ha	0.8
Maize seedlings	2000 ha	1.0
Rice seedlings	5,000 ha	3.0
Palm tree seedlings	2,000 ha	
Fertilizers	5,000 tons	0.7
Imports of pesticides		0.9
Purchase of soil enrichments		0.7
Livestock restoration		5.1
Total		15.2

Source: Document of Budget Estimates 2012, MINAGRIE Minister's staff

Under the fertilizer subsidy programme, the government currently sets the price at Buf 900 per kg, compared to the market price of Buf 1,400 per kg – thus a 36 per cent subsidy. In 2012, the government planned to purchase around 5,000 tonnes of fertilizer. According to interviews with MINAGRIE staff, farmers access an average of 100 kgs of fertilizer, and around 60,000 farmers receive the subsidised fertilizer – this represents only around 1 in 25 farmers. The programme to multiply and distribute cassava and banana stems to farmers has been inspired by the highly destructive cassava mosaic disease, which has affected much of the country.

The government also provides certain subsidies to the tea and cotton sectors. The Burundi Tea Office (BTO), a parastatal corporation whose Director General is appointed by the President, has a budget separate to MINAGRIE and supports tea growers by supplying fertilizers and tea seedlings, by purchasing all farmers' tea crop at a fixed price and by providing technical training and.

Table 12: The BTO's support to tea farmers

	Year 2009	Year 2010	Year 2011
Fertilizers distributed to tea farmers	800 tons	1,150 tons	1,900 tons
Price of fertilizers to tea farmers in Buf/kg	500	500	500
Subsidies of fertilizers in Buf/kg	800	800	800
Seedlings distributed(pieces)	864,000	576,000	2,400,000
Price of seedlings in Buf/piece	150	150	150
Subsidies of seedlings in Buf	100%	100%	100%

Source: Figures supplied by the agronomic management of BTO

In cotton, Burundi's parastatal cotton company, COMACO, supports growers by purchasing outputs at a fixed price and by providing cotton seedlings, fertilizers and pesticides.

Table 13: COMACO's support to cotton farmers

	Year 2009	Year 2010	Year 2011
Number of cotton farmers	11,699	9,578	7,401
Areas sown	4,164 ha	3,309 ha	2,520 ha
Subsidies (ploughing and barrowing)		58%	60%
Seeds distributed in tons	124,920 tons	89,030 tons	63 tons
Price of the distributed seeds (Buf)	14.5 million	23.0 million	16.3 million
Plant-care products (acaricides, aphicides and pyrethroids) distributed in litres	13,983 litres	10,508 litres	7,786 litres
Total price of plant-care products (pesticides) in Buf		144 million	114 million
Subsidies of plant-care products	100%	100%	100%
Fertilizers distributed in quantities	22.7 tons	32.206 tons	4.960 Tons
Total price in Buf	16.7 million	26.8 million	4.1 million
Fertilizer subsidies	0%	20%	20%

Source: Figures supplied by the agronomic management of COMACO

Observations

These subsidy programmes have provided critical inputs to some farmers and have boosted production of crops such as green bananas, cassava and sweet potatoes. Yet the programmes reach relatively few farmers and suffer from misappropriation of inputs by some agricultural officials and private distributors. There are also few statistics and little analysis of the precise benefits of the programmes – for example on the impacts on productivity. Under the livestock restoration programme, some of the cows imported, although having high milk productivity, are very sensitive to diseases. One way to improve the programmes would be to support the creation and training of cooperatives and farmers' associations which would be in charge of distributing the fertilizer and pesticide inputs.

RECOMMENDATIONS

In order to promote the livelihoods of smallholder farmers, increase farm production and ensure the nation's food security, we call on the government of Burundi to:

- ▶ Maintain its **spending on agriculture** at a high level, specifically over 10 per cent of the national budget, for a sustained period to boost farm productivity and support smallholders. Donors must provide adequate and predictable funds.
- ▶ Increase the **quality of its agriculture spending** by investing more in adequate staff training and capacity building in the agriculture sector, and in the collection and monitoring of agricultural statistics. The government must also ensure that decision-making processes become more transparent and are opened up to participation by farmers and farmers' organisations; processes should be put in place to enable citizens to hold the government to account for its agriculture policies. The government should also review its decentralisation policy to ensure that greater agricultural decision-making and spending takes place at commune level.
- ▶ Prioritise the support of **women farmers** – those who do most of the farming in Burundi – by dedicating specific budget lines to women farmers and by better targeting women in extension services and in inputs, credit and other programmes. The government should take greater steps to ensure that women are treated equally under the law, especially on land ownership.
- ▶ Scale up investments – with donor support – in **sustainable agriculture**, especially the conservation and management of land and water resources, which is critical in a context of high land degradation, accelerating soil fertility losses, limited area under irrigation, and low use of improved water management practices. The sustainable intensification of Burundi's food crop subsector will not be possible without improvements to the natural resource base on which food crop production depends.⁵⁹ The government should consider developing a national sustainable agriculture strategy, which should include investments in greater use of organic manure systems. The issue of uncertain land tenure rights also needs to be resolved since such insecurity affects productivity by reducing incentives to invest in the property. The government and donors should also invest more in disaster risk reduction and climate resilient agriculture, through enhancing food security monitoring and an early warning system.
- ▶ **Improve agricultural extension services** deeply and across the board, especially to support women farmers, to promote sustainable agriculture, to provide market information services to farmers and to help farmers diversify their farm production into the most profitable crops. Significant investments in staff training and the quality of extension agents will need to be made. These services need to cease being top-down and involve the participation of farmers in the design of programmes, ensuring they are based on real needs.
- ▶ Ensure that its new scheme to help increase farmers **access to credit** has sufficient capital to reach large numbers of farmers, that it is transparently and efficiently managed and that women farmers are able to access small loans.
- ▶ Continue to rebuild and **improve the quality and scope of agricultural research** by focusing on women farmers and on sustainable agriculture practices that can increase farm yields, productivity and food security, including soil and water conservation techniques. The government and donors need to adequately fund agricultural research to ensure that the service has well-qualified and remunerated researchers.
- ▶ Ensure that **input subsidy programmes** reach a large number of farmers and are managed in a transparent way that reduces corruption. Consideration should be given to the cost-effectiveness of different kinds of input subsidies, especially those that can promote sustainable agriculture such as soil conservation and erosion control, composting, green manuring, biofertilizers and agro-forestry.
- ▶ Support the creation and capacity building of **producers' and farmers' organisations**, which so far only exist in the coffee and tea subsectors, and their legitimate role in agricultural budget and policy-making.

IMPROVING BURUNDI'S PUBLIC AGRICULTURE SPENDING

- ▶ Take necessary steps to protect smallholder farmers from the threat of industrial agriculture, and especially the potential for '**land grabs**', notably in the Imbo Plain which is currently the subject of interest from speculators.
- ▶ In light of climate change, put in place a **weather insurance scheme** to help smallholder farmers.
- ▶ Specifically promote agriculture programmes to support the country's **youth**, who are currently hit by high rural unemployment and who will not be sufficiently attracted to agriculture unless the environment improves, notably in the provision of water, electricity and the development of local rural centres.
- ▶ Take steps to ensure that smallholder farmers are able to better access **high quality seeds** in sufficient quantities; such access is currently lacking for the majority of Burundi's farmers.
- ▶ The government should also consider addressing **other issues** in its agriculture spending and policy, such as financing pilot projects in promoting water management for smallholder farmers during the dry season; improving the collection of agricultural statistics; and establishing a scheme for carefully managing the land in the Imbo Plain.
- ▶ We call on farmers' organisations and civil society organisations to:
 - ▶ Encourage and press the government to promote agricultural policies in a campaign on agricultural investment
 - ▶ Monitor government spending and policy commitments to establish the basis for a participatory policy-making process
 - ▶ Build their capacity to demonstrate that they are a key voice in the agricultural sector

REFERENCES

- 1 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.2
- 2 FAO, *State of Food Insecurity in the World 2011*, p.44
- 3 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.2
- 4 Republic of Burundi, *Poverty Reduction Strategy Paper*, September 2006, p.38
- 5 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.1
- 6 See *General Census of the Population and Settlement, 2008*, Ministry of Home Affairs, Census Central Office, Bujumbura, April 2011
- 7 Oxfam, *Investing in Agriculture in Burundi : Improving Food Security and Conditions for Women Farmers*, June 2011, p.2
- 8 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.1
- 9 Republic of Burundi, *Poverty Reduction Strategy Paper*, September 2006, p.24
- 10 Netherlands Embassy Office Bujumbura-Burundi, 'Multi-annual Strategic Plan 2012–2015', 2011. <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/jaarplannen/2012/02/15/meerjarige-strategische-plannen-burundi/meerjarige-strategische-plannen-burundi.pdf>
- 11 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.3
- 12 World Bank, *Agro-Pastoral Productivity and Markets Development Project*, Project Appraisal Document, 6 April 2010, p.1
- 13 World Bank, *Agro-Pastoral Productivity and Markets Development Project*, Project Appraisal Document, 6 April 2010, p.1
- 14 FAO and Emergencies, 'Burundi', <http://www.fao.org/emergencies/country-information/list/africa/burundi/en/>
- 15 FAO, FAO Initiative on Soaring Food Prices, 'Burundi', www.fao.org
- 16 Ilhem Baghdadli, *Breaking the Cycle: A Strategy for Conflict-sensitive Rural Growth in Burundi*, World Bank, 2008, p.15
- 17 Ilhem Baghdadli, *Breaking the Cycle: A Strategy for Conflict-sensitive Rural Growth in Burundi*, World Bank, 2008, p.10
- 18 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.3
- 19 World Bank, 'Burundi: Country Results Profile', www.worldbank.org
- 20 Netherlands Embassy Office Bujumbura-Burundi, 'Multi-annual Strategic Plan 2012–2015', 2011. <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/jaarplannen/2012/02/15/meerjarige-strategische-plannen-burundi/meerjarige-strategische-plannen-burundi.pdf>
- 21 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, pp.3-4
- 22 Republic of Burundi, *Poverty Reduction Strategy Paper*, September 2006, p.50
- 23 Republic of Burundi, *Poverty Reduction Strategy Paper*, September 2006, p.53
- 24 UNECA, *An Overview of the Food Security Situation in Eastern Africa*, 2010, p.
- 25 Netherlands Embassy Office Bujumbura-Burundi, 'Multi-annual Strategic Plan 2012–2015', 2011. <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/jaarplannen/2012/02/15/meerjarige-strategische-plannen-burundi/meerjarige-strategische-plannen-burundi.pdf>
- 26 World Bank, 'Burundi: Country Results Profile', www.worldbank.org
- 27 Netherlands Embassy Office Bujumbura-Burundi, 'Multi-annual Strategic Plan 2012–2015', 2011. <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/jaarplannen/2012/02/15/meerjarige-strategische-plannen-burundi/meerjarige-strategische-plannen-burundi.pdf>
- 28 Republic of Burundi, *Growth and Poverty Reduction Strategy Framework: Performance and Impact Assessment*, October 2010, p.36
- 29 Republic of Burundi, *Growth and Poverty Reduction Strategy Framework: Performance and Impact Assessment*, October 2010, p.36
- 30 Republic of Burundi, *Growth and Poverty Reduction Strategy Framework: Performance and Impact Assessment*, October 2010, p.38
- 31 Republic of Burundi, *Growth and Poverty Reduction Strategy Framework: Performance and Impact Assessment*, October 2010, p.10
- 32 Desire Nimubona, 'Burundi government to boost agriculture budget, Renouveau says', 12 January 2012, www.bloomberg.com

- 33 Netherlands Embassy Office Bujumbura-Burundi, 'Multi-annual Strategic Plan 2012–2015', 2011. <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/jaarplannen/2012/02/15/meerjarige-strategische-plannen-burundi/meerjarige-strategische-plannen-burundi.pdf>
- 34 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.5
- 35 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.5 ; Netherlands Embassy Office Bujumbura-Burundi, 'Multi-annual Strategic Plan 2012–2015', 2011. <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/jaarplannen/2012/02/15/meerjarige-strategische-plannen-burundi/meerjarige-strategische-plannen-burundi.pdf>
- 36 Republic of Burundi, *National Policy of Decentralization*, p.12
- 37 Ilhem Baghdadli, *Breaking the Cycle: A Strategy for Conflict-sensitive Rural Growth in Burundi*, World Bank, 2008, p.10
- 38 Republic of Burundi, *Poverty Reduction Strategy Paper*, September 2006, p.38
- 39 Republic of Burundi, *Growth and Poverty Reduction Strategy Framework: Performance and Impact Assessment*, October 2010, p.36
- 40 IFAD, 'Improving Women's Access to Agricultural Land in Burundi', undated, www.ifad.org
- 41 FAO, *The State of Food and Agriculture 2010-11*, p.5. If women farmers in Kenya had the same access to farm inputs and education as men food yields could increase by 22 per cent and the GDP growth rate would have doubled in 2004 from 4.3 per cent to 8.3 per cent. It is estimated that in Ghana if women had equal access to land and fertilizer as men, farm profits per hectare would double and that in Burkina Faso and Tanzania, provision of equal inputs and education to women as men could increase business incomes by 20 per cent. IFAD, FAO and World Bank, *Gender in Agriculture sourcebook*, 2009, p.522; 'Women in agriculture: The critical food producers', 15 October 2008, www.fao.org
- 42 See for example, ActionAid, *Fertile Ground: How Governments and Donors Can Halve Hunger by Supporting Small Farmers*, April 2010
- 43 According to the Director General of the HOMSAP, there are no accurate statistics available, but it is obvious that women are not very numerous.
- 44 Information supplied by the Deputy Dean of the FACAS of the University of Burundi
- 45 Information supplied by the head of the Office of Scholarships and Training.
- 46 Republic of Burundi, *Poverty Reduction Strategy Paper: First Annual Progress Report*, November 2008, p.36
- 47 Republic of Burundi, *Poverty Reduction Strategy Paper: First Annual Progress Report*, November 2008, p.39
- 48 Republic of Burundi, *Growth and Poverty Reduction Strategy Framework: Performance and Impact Assessment*, October 2010, p.13
- 49 IFAD, *Republic of Burundi: Country Strategic Opportunities Programme*, September 2008, p.3
- 50 Verbal communication of the Minister of Agriculture during the first National Forum on Food Security in Burundi, 12–14 December 2011, Bujumbura
- 51 World Bank, *Agro-Pastoral Productivity and Markets Development Project*, Project Appraisal Document, 6 April 2010, p.25
- 52 Janvier Nkurunziza, 'Why is Burundi's Financial Sector not Development-Oriented?', UNCTAD, 22 May 2009, <http://erd.eui.eu>
- 53 Netherlands Embassy Office Bujumbura-Burundi, 'Multi-annual Strategic Plan 2012–2015', 2011. <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/jaarplannen/2012/02/15/meerjarige-strategische-plannen-burundi/meerjarige-strategische-plannen-burundi.pdf>
- 54 Republic of Burundi, *Growth and Poverty Reduction Strategy Framework: Performance and Impact Assessment*, October 2010, pp.10, 13
- 55 ASTI, *Burundi: Recent Developments in Public Agricultural Research*, April 2011
- 56 ASTI, *Burundi: Recent Developments in Public Agricultural Research*, April 2011
- 57 ASTI, *Burundi: Recent Developments in Public Agricultural Research*, April 2011
- 58 ASTI, *Burundi: Recent Developments in Public Agricultural Research*, April 2011
- 59 Ilhem Baghdadli, *Breaking the Cycle: A Strategy for Conflict-sensitive Rural Growth in Burundi*, World Bank, 2008, p.54



GHANA'S AGRICULTURE SPENDING: INCREASING THE FOCUS ON KEY SERVICES AND WOMEN FARMERS



November 2011

CONTENTS

SUMMARY	34
INTRODUCTION	37
1. GOVERNMENT SPENDING ON AGRICULTURE	39
2. PROBLEMS WITH THE FOCUS OF AGRICULTURE SPENDING	41
▶ WOMEN FARMERS AND THEIR TRIPLE ROLE	41
▶ EXTENSION SERVICES	43
▶ EVALUATING THE BIG PROGRAMMES	45
▶ SUSTAINABLE AGRICULTURE /CLIMATE CHANGE ADAPTATION	45
▶ AGRICULTURAL RESEARCH	47
▶ ACCESS TO CREDIT	48
▶ FOOD CROPS VERSUS CASH CROPS	48
▶ NEGLECT OF THE NORTH?	49
▶ STAFFING AND PERFORMANCE IN MOFA	49
RECOMMENDATIONS	51
REFERENCES	52

SUMMARY

This report, based on extensive primary and secondary research, analyses the Ghanaian government's agriculture spending, assessing how well focused it is on the needs of smallholder farmers, especially women. It concentrates on key services to farmers such as access to inputs, extension and agricultural research and the extent to which the government is promoting sustainable agriculture. The report is based on extensive secondary research, interviews with government officials, donors, academics and NGOs, and fieldwork in Northern and Upper East Regions, where focus groups and individual interviews were held with small farmers in seven villages.

Government spending on agriculture

Ghana has increased its spending on agriculture in recent years and allocates just under 10 per cent of its budget to the sector. That said, considering that agriculture accounts for over a third of GDP, spending of one tenth of the government budget is relatively low. To achieve annual agricultural growth of 6 per cent, studies suggest that Ghana needs to devote around 14 per cent of government spending to agriculture. The government's allocation to the lead agriculture ministry – the Ministry of Food and Agriculture (MOFA) – is especially low, at 2.8 per cent of the total budget in 2011.

The government has produced an impressive range of policy documents to guide its agriculture spending. However, we identify nine needed improvements.

Women farmers and their triple role

Women are the key actors in Ghanaian agriculture, constituting over half the agricultural labour force and producing 70 per cent of the country's food. Women constitute 95 per cent of those involved in agro-processing and 85 per cent of those in food distribution. Yet there appear to be no budget lines specifically targeting women farmers in MOFA's budget apart from the allocation to the Women in Agriculture Department (WIAD). Yet WIAD's budget is very small: Of MOFA's GH¢ 221 million budget allocation in 2011, WIAD was to receive GH¢ 867,762 – just 0.4 per cent.

The government has taken some steps to promote gender mainstreaming in MOFA, but the Gender and Agricultural Development Strategy (GADS), developed in the late 1990s, has been largely unimplemented. WIAD is the only one of 12 directorates in MOFA headed by a woman and the senior extension staff in Accra are all male. MOFA's failure to recognize the gender of the farmers it is meant to be supporting is holding back food production and poverty reduction in Ghana. Women's triple role – on the farm, in the household and in the community – is a major barrier to increasing farm productivity. The government must broaden its efforts to support women's farm production and processing activities, especially to increase access to simple labour-saving technologies.

Extension services

As much as 80 per cent of MOFA's budget may well be spent on providing advice and training to farmers while around half of MOFA's staff – 3,000 people – are extension officers. Yet despite this spending, Ghana has poor extension services with only 12 per cent of men-headed households and a minuscule 2 per cent of female-headed households having access to extension. The service is a victim of a ban on recruitment of public sector employees whereby no new recruitment can take place. Many staff also lack adequate means of mobility, such as motorbikes, and salaries are low, making it even more difficult to attract talented staff. The smallholder farmers interviewed identify a range of knowledge gaps that should be addressed by the extension service to help improve their farm production, such as information on new varieties of maize and sustainable agriculture techniques, including composting. Unfortunately, the current state of the extension service means that farmers are largely losing out on these vital knowledge inputs.

The fertilizer and tractor subsidies

The fertilizer subsidy programme is a good use of resources to reach small farmers and has boosted farm production but it also suffers from various problems. Notably, the programme does not target women farmers, and it remains unclear how many women benefit from the programme. The tractor subsidy scheme requires major improvements if it is to be useful. Fieldwork shows that few farmers currently benefit from the tractor subsidy scheme although male farmers, in particular, regard tractors as their key priority need. Farmers say that the initial finance of between GH¢ 6,000-12,000 required to access a tractor on the hire purchase scheme is unaffordable and suggest that the deposit be reduced to GH¢ 2,000-5,000. Moreover, subsidising simpler technology might be more useful for small farmers. For example, Ghanaian farmers tend to use short-handled hoes whereas longer-handled hoes can reduce back-bending for long periods.

Sustainable agriculture/climate change adaptation

The Ghanaian government appears to be promoting farming using chemical fertilizers and pesticides much more than promoting sustainable agriculture that reduces or eliminates the need for such chemicals. Government support to organic farming, for example, is low level, reaching few farmers. Yet for farmers with small plots, there is a strong argument for promoting intensive organic farming that enhances the soils and preserves the environment. The extension system is currently ill-equipped to impart knowledge and technologies on sustainable agriculture. Our fieldwork finds that many farmers have never been trained in the use of compost, for example, but do want such training to improve their farming.

Agricultural research

Some figures suggest that Ghana has significantly increased its agricultural research spending in recent years, and some improved crop varieties have been developed. But, as with extension services, despite considerable spending, farm productivity is still not improving. Research is poorly disseminated to farmers while research and extension linkage committees (RELCs) at the district level often do not seem to work.

Access to credit

Only around 1 in 6 farmers are able to access credit, which falls to 1 in 10 in Upper East Region. Yet women farmers interviewed in our field research identify access to credit as their number one priority. Small loans at reasonable interest rates can finance important investments in businesses and equipment – notably processing equipment – that can make huge differences to farm production, marketing and income. Banks in Ghana currently distribute only 4 per cent of credit to the agriculture sector, and even the Agricultural Development Bank - the leading bank for agricultural financing in the country – earmarks only 30 per cent of its credit to agriculture. The government recognizes that there is 'ineffective agricultural finance' in Ghana but only limited steps are being taken to address the situation. In 2010, GH¢ 4 million in agricultural credit was disbursed under government programmes; an insufficient amount to address the demand from farmers.

Food crops versus cash crops

Ghana has long prioritised supporting export crops over food crops. During 2002-06, for example, the government allocated twice as much of the agriculture budget to the Ghana Cocoa Board as to MOFA. Since 2008, this trend has been reversed but there is a strong argument for an even greater focus on supporting food crop farmers. They constitute 45 per cent of those living in poverty, whereas export producers such as cocoa farmers account for less than a tenth. Studies show that growth in staple crop production reduces poverty more than export crops. The government buys farmers' entire cocoa output, providing them with a guaranteed market, and pays them a minimum guaranteed price. By contrast, the National Food Buffer Stock Company, established in 2010, purchased and stored just 6,949 MT of rice and 416 MT of maize.

Neglect of the North?

Ghana has achieved sustained economic growth in the past two decades but this has largely bypassed the northern regions, and inequality between south and north has widened. On Ghana's current growth path, national poverty will fall from 28 per cent to 16 per cent in 2015, but in the north from 63 per cent to 49 per cent. This means that by 2015 two-thirds of all poor Ghanaians will live in the north, highlighting the need for targeted interventions. Farmers in the three northern regions are overwhelmingly food crop farmers and so staple-led growth will reduce poverty more than export-led growth. The three northern regions account for around 17 per cent of Ghana's population and 28 per cent of MOFA's 2011 budget - this is a higher proportion of MOFA's spending but still not sufficient to address the depth of poverty in the North.

Staffing and performance in MOFA

MOFA faces various internal challenges related to the lack of a sufficiently consultative and transparent management style, a lack of proper documentation and information sharing and little emphasis on linking activities to outcomes. MOFA had 6,603 staff in 2009 of whom one third were administrative staff and secretaries, which is probably an excessive proportion. A large proportion of the investment funds (ie, for operations, as opposed to recurrent costs) allocated to MOFA remain unspent each year. The government says it is taking steps to address the disbursement problem by, for example, improving monitoring and providing training for staff on project management.

Recommendations

Ghana's agriculture spending needs to focus on the real needs of small farmers, particularly women:

- ▶ The government should increase its **spending on agriculture** and regard the 10 per cent allocation as a bare minimum not a target.
- ▶ Agriculture spending and policy needs to undergo a reorientation to focus on **women farmers**. The *extension service* needs to be overhauled to support women farmers. *Agricultural research* programmes need to be reviewed to promote increasing the productivity of crops grown by women, involving women in research design and dissemination. The *fertilizer subsidy programme* needs to ensure that women have at least equal access.
- ▶ The **extension service** needs to be driven by the imperative to increase food security and crop productivity, and should increase its support to sustainable agriculture
- ▶ Evaluations of the **fertilizer and tractor subsidies** should be conducted to gauge whether they provide the optimal support to small farmers compared to alternatives.
- ▶ The government needs to step up its support of **sustainable agriculture** and outline how it is going to encourage a much larger number of farmers to practice organic farming and approaches that reduce dependence on chemical inputs
- ▶ The government needs to reallocate resources more towards the three **northern regions**, especially to support increased productivity of staples through improved extension, research and credit facilities for farmers
- ▶ MOFA needs to be made accountable for results not outputs and needs to demonstrate how it is addressing the **internal inefficiencies** that have been identified in independent studies.

INTRODUCTION

This report, based on extensive primary and secondary research, analyses the Ghanaian government's agriculture spending, assessing how well focused it is on the needs of small farmers, especially women, who constitute the key actors. It concentrates on key services to farmers such as access to inputs, extension services and agricultural research and the extent to which the government is promoting sustainable agriculture.

Box 1: Methodology

This report is based on extensive secondary research on Ghana's agriculture sector, interviews with government officials, donors, academics and NGOs in Ghana and fieldwork in Northern and Upper East Regions. Focus groups and individual interviews were held with mixed (men and women) groups and women-only groups of small farmers in seven villages:

- ▶ Chanshegu (Tamale Metropolitan District, Northern Region)
- ▶ Zabzugu (Zabzugu/Tatale district, Northern Region)
- ▶ Kanshegu (Savalegu/Nanton district, Northern Region)
- ▶ Kpandai (Kpandai district, Northern Region)
- ▶ Botanga (Tolon/Kumbugu district, Northern Region)
- ▶ Nangodi (Talensi/Nabdam district, Upper East Region)
- ▶ Nayoki No.1 (Bawku Municipality, Upper East Region)

Farmers interviewed cultivate a variety of crops, principally maize, cassava, rice, beans, groundnuts, yam, millet, sorghum, and soyabeans. Farm sizes vary from 1-30 acres, with most having only a few acres and women usually 1-3 acres. Women farmers also cultivate leafy vegetables, okra, pumpkins, tomatoes and pepper and also spend a considerable time on processing activities and marketing the household's produce in local markets.

Hunger stalks the villages. In the villages of Zabzugu, Kanshegu, Kpandai and Nayoko, only around 30 per cent of households are able to feed themselves from their own production for the whole year; around 70 per cent cannot do so, and go hungry for 3-4 months every year. In the other villages, such as Chanshegu, no farmers said their household was able to feed itself for the whole year.

People adopt a variety of strategies to cope with hunger, but all reduce the size and frequency of their meals. In Zabzugu village, farmers say they borrow money and pay it back at harvest time, work on other peoples' farms to earn some money while women pick sheanuts (whose fruiting occurs during the hungry season) to sell in local markets. In Kanshegu, farmers sometimes have to sell animals to buy grains during the hungry season or women engage in petty trading or processing of shea butter and groundnut oil. In Nangodi, hunger often forces farmers to make a soup out of leaves.

Agriculture and hunger in Ghana

Of Ghana's 24 million population, over half live in rural areas.¹ There are around 3.4 million farm households, with smallholders, whose average farm size is just 1.2 hectares (ha), accounting for 80 per cent of farm production.² The most widely grown food crops are maize and cassava followed by yam and plantain but the largest land area is given over to cocoa, with oil palm also important.³ Over 80 per cent of farm households own livestock.⁴ Agriculture remains the key economic sector in Ghana, contributing around 32 per cent of GDP, employing 55 per cent of the labour force and accounting for 75 per cent of export earnings, mainly from cocoa.⁵

Women are the key actors, constituting over half of the agricultural labour force and producing around 70 per cent of the country's food.⁶ An average of 1 in 3 households in Ghana is headed by a woman but in some areas, such as rural coastal regions, this is as high as 40 per cent.⁷ As in many other African countries, Ghanaian women do most of the planting, weeding, harvesting and transporting of produce and also dominate in food crop farming.⁸ Men tend to be more involved in cash crop production, especially cocoa, and initial land clearing and tilling of soils, while making most of the decisions on land, inputs and labour. Most farming households in Ghana also do some basic processing of food, notably of maize, cassava, ground nuts and fish; these functions are also dominated by women, who account for 95 per cent of those involved in agro-processing and 85 per cent of those in food distribution.⁹

The agricultural sector is characterized by low productivity, with crop outputs per hectare declining in recent years; recent rises in food production in Ghana are mainly explained by increases in cultivated land.¹⁰ Current maize, cassava and yam yields are at least three times less than what is achievable.¹¹ The major constraints to food security and agricultural growth include farmers' reliance on rain-fed farming (less than 1 per cent of the cultivated area is irrigated¹²), reliance on simple tools, poor access to inputs and financial services such as credit, inadequate food storage (a third of all harvested maize and cassava is lost¹³), poor road infrastructure and inadequate access to markets. A further issue, which emerged again in late 2010, is very high staple food prices; the price of maize in the Northern Region was 33 per cent higher in December 2010 than the previous five year average.¹⁴

Despite these challenges, Ghana has in many ways become an African success story when it comes to reducing hunger and poverty. According to the UN's Food and Agriculture Organisation (FAO), Ghana has already met Millennium Development Goal 1 of halving poverty by 2015, having reduced the proportion of undernourished people from 27 per cent in 1990-92 to 5 per cent in 2005-07 - the lowest proportion of any sub-Saharan African state.¹⁵ On its current growth path Ghana will reduce poverty from 28 per cent in 2006 to 16 per cent in 2015.¹⁶

Despite Ghana's successes, however, major challenges remain. The FAO characterizes 1.2 million Ghanaians as undernourished while the Ghanaian figures show that 14 per cent of children are underweight and 28 per cent are stunted due to malnutrition.¹⁷ Over 80 per cent of children and 48 per cent of women in rural Ghana are anaemic.¹⁸ Studies in northern Ghana, including our own (see Box 1) suggest that most farming households experience food insecurity for 3-7 months in any year.¹⁹ Ghana is also failing to produce sufficient quantities of rice. The country now imports 70 per cent of its rice, costing the country a colossal \$600 million in 2010, according to the government.²⁰

Further reducing poverty in Ghana primarily means better supporting food crop farmers, who are mainly women, and targeting Ghana's northern regions where poverty is deepest. Around 45 per cent of the poor are food crop farmers, notably those in Northern, Upper East and Upper West Regions who rely on food production not cash crops for export. Studies by the International Food Policy Research Institute (IFPRI) show that the key to reducing poverty is productivity growth in food staple crops which will have the effect of lowering food prices and increasing incomes (since most farmers are net food buyers).²¹ A 1 per cent annual growth in staples up to 2015 is likely to generate incremental income of \$130 million and reduce poverty by 0.9 per cent.²²

To address these challenges the government needs to be spending sufficiently, and wisely, on agriculture. We identify the following issues as among the most important.

1. GOVERNMENT SPENDING ON AGRICULTURE

The Maputo Declaration of 2003 committed African governments to allocate 10 per cent of their national budgets to agriculture. Ghana has increased its spending on agriculture since 2003 and has in recent years been allocating just under the 10 per cent target.

Table 1: Expenditure on agriculture, 2002-09 (GH¢ million)

	2002	2003	2004	2005	2006	2007	2008	2009
Ministry of Food and Agriculture (MOFA)	8	11	14	42	75	78	155	339
Fisheries	7	4	5	18	15
Forestry	2	4	7	11	15	26	34	68
Agricultural research	10	13	22	29	67	94	56	93
Debt servicing related to agriculture	15	12	14	45	42	47	68	5
Presidential Special Initiatives	..	3	6	14	16	31	2	1
Ghana Cocoa Board	16	20	27	94	149	113	58	170
Feeder roads (roads to farming areas)	na	na	na	na	na	na	na	92
<i>Agriculture sector total</i>	52	63	91	242	369	394	392	781
Total National expenditure	760	1,102	1,031	2,516	3,570	3,964	3,842	8,659
<i>Share of agriculture in national expenditure</i>	6.8	5.7	8.8	9.6	10.3	9.9	10.2	9.0

Source: MOFEP, 2010, source given to authors

Nb. Agriculture spending is spread across various government ministries and departments. For example, the forestry allocation is that to the Forestry Commission in the Ministry of Land and Natural Resources; Agricultural research includes the allocations to a dozen agriculture-related research institutes in the Council for Scientific Research; the Ghana Cocoa Board is a separate government department; Presidential Special Initiatives are budgeted for in the Office of the President; Fisheries falls under MOFA but separate figures are provided here.

Two points should be stressed regarding Table 1:

- ▶ There is no agreed definition of what constitutes the agriculture sector, meaning it is hard to precisely pin down spending.²³ The table is provided by the Ministry of Finance and Economic Planning but our research has not been able to produce similar, disaggregated figures for the 2010 and 2011 budgets since it is unclear where some of the comparable budget lines lie.
- ▶ The figures if anything exaggerate spending. For example, it is questionable whether debt servicing related to agriculture – which is very significant in some years – should really be considered as spending on agriculture. Since the money goes to creditors, it is certainly not spending on farmers.

GHANA'S AGRICULTURE SPENDING: INCREASING THE FOCUS ON KEY SERVICES AND WOMEN FARMERS

The current government under President John Atta Mills, which came into office in January 2009, has made a priority of the agriculture sector; in the 2011 budget speech it identifies 'accelerating agricultural modernisation' as one of six priority spending areas.²⁴ The government's main agricultural strategy – the Medium Term Agriculture Sector Investment Plan (METASIP) – commits the government to spending 'at least 10 per cent' of its budget on agriculture up to 2015.²⁵ Ghana signed the Comprehensive Agriculture Development Programme (CAADP) compact in October 2009.

Ghana has one of the highest government allocations to agriculture in Africa. That said, considering that agriculture accounts for over a third of GDP, spending of one tenth of the government budget is relatively low. One recent study noted that to achieve annual agricultural growth of 6 per cent Ghana needs to devote around 14 per cent of government spending to agriculture (compared to the 8.5 per cent then judged to be prevailing).²⁶ Agricultural growth averaged 5 per cent over 2007-09.²⁷ Investment in agriculture is critical for economic growth – studies show that for every marginal cedi invested in agriculture, GH¢ 16.8 is returned.²⁸

The government's allocation to the lead agriculture ministry, MOFA, is especially low – at 2.8 per cent of the total budget in 2011 and 3.9 per cent in 2010.²⁹ Also, agriculture sector spending is heavily dependent on donors, which funded 53 per cent of MOFA's entire budget in 2011, accounting for nearly all the funds allocated for investments as opposed to recurrent expenditures.³⁰

Positively, MOFA's spending is significantly decentralized. Of its 2011 budget, the 10 regional agricultural development units were allocated GH¢ 158 million (71 per cent).^{1*} Most of this allocation (GH¢ 88 million) goes to the regional directorates, the rest (GH¢ 70 million) is allocated to the 170 individual districts.³¹

Raising more money to finance agriculture

Where can the government find extra resources for agriculture? There are a number of options:

- ▶ The government could earmark a proportion of the revenues likely to flow from the newly-discovered oil deposits. The estimates of annual government revenues from these vary from \$200 million - \$1.6 billion.³²
- ▶ Tax payments by mining companies in Ghana are notoriously low and could be increased. Mining companies are provided a number of tax concessions concerning import duties, royalty payments, turnover taxes and PAYE payments.³³ One estimate is that low tax rates have cost the government \$68 million every year in lost revenues.³⁴ The proportion of mining tax revenue in total income tax collection in Ghana amounts to only around 10 per cent.³⁵
- ▶ Forestry companies have also been given large tax concessions in recent years, many allowed to be registered as Free Zone companies liable to pay no taxes. One estimate is that the revenue losses to Ghana from these concessions amount to around 0.5 per cent of GDP.³⁶
- ▶ Clamping down on tax evasion and tax avoidance by transnational corporations (TNCs) could also bring in increased revenues. One estimate is that Ghana lost revenues of €30-51 million per year during 2005-07 from false invoicing and transfer pricing by TNCs.³⁷ Recent ActionAid research on the transnational brewing company, SAB Miller, shows that the company's Accra Brewery has paid no corporate income in the past two years in Ghana but has transferred millions of pounds to tax havens.³⁸
- ▶ Ghana spends nearly as much on the Ministry of Defence as on MOFA even though the country is not at war and faces no likely external military threat. The allocation to the Ministry of Defence was GH¢ 205 million in 2011 (compared to GH¢ 221 million to MOFA) and GH¢ 179 million in 2010 (compared to GH¢ 257 million to MOFA).³⁹

1* One of the 'compulsory triggers' attached to CIDA's budget support to MOFA is that the latter is required to spend 60-70 per cent of its funds at regional and district level

2. PROBLEMS WITH THE FOCUS OF AGRICULTURE SPENDING

The Ghanaian government has recently produced an impressive range of agriculture policy documents to guide its spending while the METASIP provides a basis on which to move agriculture forward. The METASIP places primary emphasis on improving agricultural performance through increasing productivity and market access for farmers, developing rural infrastructure, upgrading the skills of operators in the value chain, research to improve livestock breeds and crop varieties, market information and policies to facilitate supply and access to inputs.⁴⁰ Equally positive is that MOFA has reasonably well-trained and motivated staff.

However, we identify nine needed improvements in MOFA's performance and in the focus of spending.

Box 2: Priorities for government spending identified by farmers

Focus group discussions were held in six villages in Northern and Upper East Regions where first a mixed (men and women) group and then a women-only group were asked what they thought their three priority needs were. The top three responses (with the number of mentions in brackets) were:

Mixed Group	Women Group
Access to tractors (6)	Access to credit/finance (5)
Access to credit/finance (4)	Access to processing equipment (2)
Access to fertilizer/timely delivery of inputs (4)	Access to tractors (2)

For the mixed group, which was dominated by men, access to tractors is the key priority, mentioned by farmers in all six villages. For women, access to credit (on which more below) is the top priority.

Women farmers and their triple role

Despite the fact that women constitute most farmers and produce most of Ghana's food, they are virtually invisible in the agriculture budget. This is especially ironic given that MOFA's very purpose (distinct from the Ghana Cocoa Board, for example) is to support food crops. There appear to be no budget lines specifically targeting women farmers in MOFA's budget apart from the allocation to the Women in Agriculture Department (WIAD). WIAD, established in the 1970s, promotes food security and builds the capacity of women farmers to increase their competitiveness, especially in agro-processing. It also lobbies other directorates in MOFA to promote gender concerns. Yet WIAD's budget is very small:

- ▶ Of MOFA's GH¢ 221 million budget allocation in 2011, WIAD was set to receive GH¢ 867,762 – just 0.4 per cent.⁴¹
- ▶ In 2010, WIAD was allocated GH¢ 833,930 – 0.3 per cent of MOFA's budget. Yet of this latter sum, GH¢ 500,000 was to 'procure necessary material and logistics requirements of directorates' while only around GH¢ 141,000 was available for WIAD's core task of building the capacity of food processors in value addition, such packaging, branding quality control and environmental hygiene.
- ▶ And then there is the issue of what money WIAD actually receives - in the three years, 2008-10, for example, it has received only around 70 per cent of its budget allocation⁴² (which may well be similar to other MOFA departments).

WIAD has only 12 staff at head office, 10 in the regions and around 60 in the districts. It is meant to work in all 170 districts of the country but only works in around 60 due to vacancies and lack of resources.⁴³

The government has taken some steps to promote gender mainstreaming in MOFA and across the government and MOFA is one of two government departments that is supposed to be promoting gender-responsive budgeting, according to the terms of the Canadian government's aid to MOFA. In practice, however, little progress has been made.

For example:

- ▶ MOFA developed a Gender and Agricultural Development Strategy (GADS) in the late 1990s that remains operative but has been largely unimplemented (see Box 3).
- ▶ The Ministry of Women's and Children's Affairs, established in 2001, is mandated to coordinate policy-making and planning but plays almost no role in agriculture – it is significant that none of its expenditure is regarded as agriculture spending.
- ▶ MOFA is dominated by men and WIAD is the only one of 12 directorates in MOFA headed by a woman. Only 5 of the 25 deputy directors in MOFA are women.
- ▶ The senior extension staff in Accra are all men, although there are some women in senior positions in the districts.⁴⁴ The government says it is making efforts to increase the number of female extension officers and that it aim to reach 30 per cent. But at present the proportion is only around 15 per cent.⁴⁵
- ▶ Less than half the female staff in MOFA interviewed for a recent IFPRI study believe that women have equal opportunities for promotion.⁴⁶
- ▶ The Parliamentary Select Committee on Food, Agriculture and Cocoa Affairs has 20 members of whom only 3 are women. More generally, only 19 out of 168 Ghanaian MPs are women, signifying that gender imbalances in Ghana go well beyond the agriculture sector.

Box 3: The Gender strategy – just a piece of paper?

The GADS provides a framework for achieving a 'gender-sensitive' agricultural sector and identifies eight objectives:

- ▶ Enhance the institutional capacity of MOFA to address gender issues
- ▶ Promote production and use of sex and age disaggregated agricultural data.
- ▶ Improve extension service delivery to women farmers
- ▶ Improve access by farmers to financial services
- ▶ Improve access to information on land rights
- ▶ Develop and promote improved and appropriate technologies in agriculture
- ▶ Promote the diversification and development of new processed products
- ▶ Enhance environmental protection through appropriate agricultural practices

These objectives are worthy but little progress has been made on most of them. Ironically, the preface states: 'a strategy is only as good as it is implemented'.⁴⁷ Various indicators and commitments outlined in the strategy are being missed. It also commits the government to establishing a databank for sex-disaggregated information on the agricultural sector, which also has not yet been implemented although IFPRI is presently supporting MOFA in collecting gender-disaggregated data at household level. The strategy also calls for a 'yearly reduction' in the extension officer/farmer ratio; the precise figures are not known but it is likely the trend has been the other way. Our research suggests that, overall, the strategy is not being taken seriously in MOFA, and that it has been all but forgotten.

The METASIP states that 'gender equity will be emphasized in all activities' but almost no details are given on how this will be implemented and there are no indications that women farmers will be especially targeted.⁴⁸ A CAADP review of the METASIP notes that it does not make explicit the mechanisms to promote gender integration at all levels.⁴⁹ In reality, women farmers appear to be barely consulted in MOFA planning. 'We are the lone voice in the desert' is how one WIAD official puts it.⁵⁰

MOFA's failure to recognize the gender of the farmers it is meant to be supporting is holding back food production and poverty reduction in Ghana. Agricultural policies that exclude the primary producers of food are self-defeating while the eradication of gender discrimination is one of the key ways to increase the supply of food. It is estimated that if women farmers in Africa had the same access as men to land, seed and fertilizer, farm productivity could increase by up to 20 per cent.⁵¹ Yet Ghanaian women farmers face the same barriers to extension services, credit and other services as women elsewhere in Africa:

- ▶ For every 100 Ghanaian men accessing credit, only 47 women do.⁵²
- ▶ Only 10 per cent of Ghanaian women farmers own land compared to 23 per cent of men and their average value of land holdings is three times lower.⁵³

Box 4: Women farmers' views of their triple role

Our research finds that women farmers need more support from both the agriculture and other budgets. Within agriculture, more spending is needed to support women's *processing* activities, especially for cassava, pepper, fish and fruits where there is significant internal and regional demand. Especially important is increasing access to simple labour-saving technologies. Indeed, WIAD's analysis is that women farmers engaged in agro-processing would find much more use for batch dryers for cassava, cassava presses, improved roasting stoves or small harvesters for rice than the provision of tractors – the government's currently favoured policy.⁵⁴ In Zabzugu village, women farmers said they needed a grinding mill for processing rice – there was not a single such mill in the whole community.

Policies outside the agriculture budget are also critical. It is not only women's role as farmers that needs to be supported more, but also their role in the household and community – their triple role. This role needs to be much better recognized than currently if women farmers are to get the support they need. Our fieldwork found that most women farmers see these triple roles as major barriers to increasing their farm productivity – especially time-consuming is looking after children, including preparing them for school, and household duties such as cooking. The attitude of men is of course a major barrier here. But it is also critical for the government to broaden its efforts to increase women's access to simple labour-saving devices, such as improved stoves, that reduce the time spent cooking for the family and conducting routine household work, and to find ways of promoting childcare services for farmers.

Extension services

Extension services are vital in providing advice and training to poor farmers to improve food production and household income. Farmers can improve their productivity by accessing training or information on the best farming techniques, on new, higher-yielding crop varieties or on what crops are likely to produce most profit next season.

Unfortunately, it is hard to establish exactly how much the Ghanaian government allocates to extension services since these are provided not only by MOFA's extension department (and by the Ghana Cocoa Board) but also by all the regional directorates and other departments. As much as 50-80 per cent of MOFA's budget may well be spent on providing advice, training and capacity building to farmers while around half of MOFA's staff – 3,000 people – are extension officers.⁵⁵

Yet despite this considerable spending, the METASIP recognises that Ghana has 'poor extension services'.⁵⁶ Indeed, one concern is that with so many departments responsible for training and capacity-building, the extension system is too dispersed in MOFA.

Access to extension services by farmers appears to be very low, though estimates vary widely:

- ▶ A recent study notes that only 12 per cent of male-headed households and a minuscule 2 per cent of female-headed households have access to extension.⁵⁷
- ▶ By contrast, a recent study by the NGO, SEND, found that 65 per cent of farmers sampled receive extension services.⁵⁸ Yet of the 35 per cent not receiving such extension advice, fully three-quarters said they were not even aware that district agricultural directorates offer such services.⁵⁹

The official farmer-to-extension agent ratio of around 1: 1,500 compares favourably to many other African countries but there are many vacancies. A recent IFPRI study found that only 56 per cent of operational areas have designated extension officers.⁶⁰ In January 2009, the Ghanaian media reported that of the allotted number of 650 extension staff in the Northern Region, only 300 were actually in place, with just 11 of them being women.⁶¹

The extension service suffers from the ban on recruitment of public sector employees whereby replacements can be made but no new recruitment can take place. The numbers in the extension service are dwindling and the average age is rising and may now be close to 50 in part because the service is generally unattractive to young people.⁶² Officials argue that even though there are not enough extension staff, extension messages to farmers can be increasingly relayed through radio. There is some truth in this but personal contacts are vital in imparting key information and demonstrating farming techniques.

Most training of extension staff appears to take place among higher levels closer to Accra while extension officers in the districts attend training sessions only once every two to ten years, often for a week or less. Opportunities for learning on the job are therefore limited. Considering that knowledge dissemination is the major task of the extension service, 'the failure to provide adequate knowledge to this group indicates an inefficient use of existing capacity'.⁶³ Many staff also lack adequate means of mobility, such as motorbikes, while salaries are low, making it even more difficult to attract talented staff.

The government notes that 47,000 farmers in 940 farmer organizations were trained in business capacity in 2010.⁶⁴ It also says that in 2008 MOFA's technology support programme retrained all extension officers to demonstrate best practices and proven technologies in crop and livestock production to about 60,000 farmers.⁶⁵ Yet such demonstrations of best practice appear to be very limited in scope and there is currently insufficient capacity devoted to a number of critical areas for farmers such as using new crop varieties with fertilizer, finding markets for produce, simple techniques to store and process cassava and how to produce and process from the new breeds of livestock that are delivered to farmers, for example. 'Simulation farms' that demonstrate best practice barely exist. Furthermore, the extension service appears to provide little support to agro-processing, a critical function where women predominate.⁶⁶

Box 5: Farmers' views of extension services

The farmers consulted in our fieldwork have greater access to extension services than most farmers in Ghana, partly due to existing connections to MOFA or to services provided by NGOs. However, the Director of Agriculture for Tamale Municipality says that the ratio of extension officers to farmers is just 1: 2,000 for the municipality.⁶⁷ The groups interviewed identify a large range of knowledge and information gaps that should be addressed by the extension service to help them in their farming. These include knowledge of:

- ▶ New varieties of maize
- ▶ Preservation of beans without the use of chemicals
- ▶ Credit and tractors services available in the community
- ▶ Sustainable agriculture techniques, including composting
- ▶ Other farming approaches such as contour bounding, tree planting to act as wind breaks, appropriate sowing times

Some farmers, such as women farmers in Nangodi village in Upper East Region, noted the need not just for one-off advice but refresher sessions and ideally continuous visits by extension officers. Unfortunately, the current state of the extension service means that farmers are losing out on these vital knowledge inputs.

Evaluating the big programmes

In recent years the government has embarked on several flagship programmes that, it argues, demonstrate its commitment to promoting agriculture. Since these programmes are consuming an increasing share of the agriculture budget, our concern is that these programmes should be subject to independent cost-benefit analysis. We believe that the fertilizer subsidy programme is likely a good use of resources to reach small farmers but that the tractor subsidy scheme requires major improvements if it is to be useful.

The Fertilizer Subsidy Programme

Faced with the soaring cost of fertilizer, the government re-introduced a subsidy programme in July 2008 under which farmers could buy fertilizer with region-specific coupons distributed by MOFA extension officers. The idea was to return the price farmers paid for fertilizer to the levels prevailing in July 2007.⁶⁸ The programme is a public-private partnership in which the government consulted heavily with fertilizer importers in the design stage and relied exclusively on the private distribution system to deliver fertilizer to farmers. It has been supported by some donors such as the World Bank and African Development Bank. The government initially subsidized 43,000 MT of fertilizer in 2008, which has risen to 150,000 MT for 2011. The costs of the programme has also risen, from GH¢ 21 million in 2008 to GH¢ 69 million in 2011. As a percentage of MOFA's budget, the subsidy programme accounted for around 12 per cent in 2010, growing to around 31 per cent in 2011.⁶⁹

Independent studies of the programme suggest that it has increased fertilizer usage and boosted production levels of many farmers.⁷⁰ But in the first two years of the programme there were various problems with the coupon system. Many coupons arrived too late meaning that subsidized fertilizer was not available during the planting season when it was most needed. There was also widespread corruption and diversion of coupons from the intended beneficiaries while coupons also entailed high overhead and administrative costs. In 2010, the coupon scheme was abolished in favour of a waybill system to ensure a more transparent distribution system.

Other challenges remain such as:

- ▶ the potentially excessive amount of time spent by extension officers on administering the programme
- ▶ the lack of consultation with farmers on their preferences for different types of fertilizer.⁷¹
- ▶ the need to link the programme to other issues, such as enabling farmers to find markets in which to sell their surplus produce and to increase their access to credit facilities.⁷²

The programme does not target women farmers and it remains unclear how many women benefit from the programme. A 2009 evaluation by the Peasant Farmers Association of Ghana found that of those farmers who tried but failed to get access to coupons, 60 per cent were women.⁷³ Our fieldwork among farmers found that many women had poorer access to the subsidy than men; in Kanshegu village, for example, women farmers said that access depended on whether their children were strong enough to stand in a queue waiting for coupons. Due to their triple role responsibilities, many women simply cannot wait so long in such queues. Women farmers in Kpandai village, for example, make the suggestion that there should be a minimum allocation of the fertilizer to women. WIAD has called for 30 per cent of the beneficiaries of the subsidy to be women.

An evaluation of the subsidy programme is currently being undertaken by the Joint Sector Working Group (consisting of government and donors), which will be the first major study of the scheme since the abolition of the coupons.

The Tractor Subsidy Scheme

The government is establishing Agricultural Mechanisation and Service Centres (AMSECs) in every district to increase production and raise productivity. A key aspect of this is the provision of subsidized tractors to be made available to farmers on hire purchase. In late 2010, for example, 110 tractors were being provided to cooperatives under a 30 per cent subsidy paid by government.⁷⁴

Fieldwork in northern Ghana shows that few farmers currently benefit from the scheme although men farmers, in particular, regard tractors as their key priority need (see Box 7). A study by SEND notes that 60 per cent of farmers do, and 40 per cent do not, use tractors on their farms; most currently hire tractors from private companies, with only 3 per cent accessing tractors under the subsidy scheme.⁷⁵ Moreover, tractors are mainly suitable for farmers with a larger area of flat land with few trees, which does not apply to many smallholders. Simpler technology might be more useful for small farmers. For example, Ghanaian farmers tend to use short-handled hoes whereas longer-handled hoes can reduce back-bending for long periods. Subsidies to provide such simpler technology could be more useful than more grandiose and expensive schemes. There is a critical need to subject these programmes to cost-benefit analysis and to consider alternatives in consultation with farmers.

Box 6: Farmers' views of the tractor subsidy scheme

Our research in seven villages in Northern and Upper East Regions found that men, in particular, identify tractors as their key farming priority. However, virtually no-one we spoke to had access to tractors under the subsidy scheme for the simple reason that the deposit was so high it put the scheme completely beyond their reach. Farmers in these villages said that the initial finance required to access a tractor - of between GH¢ 6,000-12,000 - is simply unaffordable. Different groups recommended that the deposit would need to be reduced to between GH¢ 2,000 and 5,000 for some of them to be able to afford it. One farmer in Kpandai, for example, said that inadequate access to tractors makes preparing farmlands difficult and time-consuming while another, a member of a farmers cooperative in Botanga, said: 'Our irrigable site is about 1,000 acres but we do not have a single tractor on the field'.

Our research also found that while most men had heard of the tractor subsidy scheme, most women had not. Of those that had, however, many were demanding such services, seeing them as a key priority, as noted above, since tractors make land clearing faster and free women up for other activities. However, women continue to face various practical, logistical and cultural barriers to accessing such services. The Director of Agriculture for Tamale Municipality says that there was just one formal female applicant to the scheme in the past year.⁷⁶ In Zabzugu village, women farmers said that since there were so few tractors available, it was only the men who were able to access them.

Sustainable agriculture/climate change adaptation

The Ghanaian government, like most other governments in Africa, appears to be promoting farming using chemical fertilizer and pesticide much more than promoting sustainable agriculture that reduces or eliminates the need for such chemicals. The government is not systematically promoting organic farming, for example, to anything like the same extent as its support for increased fertilizer use. The three volumes of documents outlining the METASIP, amounting to over 350 pages, make only one mention of the promotion of organic farming ('... encourage organic production of yams for export market'⁷⁷). Some government support is given to, for example, the Environmental Protection Agency to train farmers in organic pest control. But these activities appear to be low level, and underfunded, reaching few farmers.⁷⁸ A study for IFPRI found that only 5-10 per cent of farmers use organic fertilizers, compared to 21 per cent using chemical fertilizers.⁷⁹ This was even before the fertilizer subsidy programme - after its introduction, SEND found that 67 per cent now use chemical fertilizer.⁸⁰

There is of course a big global debate on the merits of chemicals-based farming versus sustainable agriculture that reduces or eliminates the need for chemical inputs. For farmers with small plots, there is a strong argument to promote intensive organic farming that enhances the soils and preserves the environment. But to do this, the extension system needs to be equipped with knowledge and technologies. A leading academic on extension at the University of Ghana at Legon says that the extension service scores 'near zero' when it comes to promoting sustainable agriculture and that this failure is 'wiping out pro-poor production'.⁸¹

Box 7: Farmers' views of sustainable agriculture

Our fieldwork found that some farmers do, and some do not, use compost in their farming, largely depending on the availability of animals. Many farmers questioned have not heard of sustainable agriculture and thus have never been trained in the use of compost, for example, but many farmers do want more such training and also want to find ways of increasing the availability of manure. Several farmers note the increased yield resulting from composting. In Nagodi, Upper East Region, farmers said that an acre of maize grown without fertilizer might yield one 50kgs bag whereas with composting would yield 1.5-3 bags.

Promoting sustainable agriculture is increasingly vital in light of climate change. The METASIP states that addressing climate impacts must be integrated into agriculture sector activities, including assistance to farmers with methods to adapt to climate change. It also calls for the introduction of drought/flood-tolerant crops, investment in infrastructure to facilitate the development of adaptive agricultural systems and capacity building programmes for extension officers on climate-related issues.⁸² However, a CAADP review of the METASIP notes that climate change 'is not adequately addressed in the plan' and that the government needs to indicate a plan of action to manage climate change, making some recommendations on how it might do this.⁸³

Better tackling climate change is critical since Ghana in future is likely to be combating sea level rises in the south alongside desertification in the north. The Environmental Protection Agency predicts that average temperatures will rise and rainfall will decrease in all agro-ecological zones of the country.⁸⁴ The government notes that 69 per cent of Ghana's land surface is prone to severe erosion, at a cost of 2 per cent of GDP.⁸⁵

Agricultural research

Investing in agricultural research and development (ARD) is vital for imparting knowledge to farmers and developing improved crop varieties and techniques to increase yield or promote sustainable agriculture. Studies suggest that investments in ARD offer the greatest potential for enhancing productivity and reducing poverty, and that in Africa as a whole, for every one per cent yield increase resulting from investments in ARD, two million Africans can be lifted out of poverty.⁸⁶ The CAADP programme calls on African countries to double their annual spending on agricultural research within ten years.⁸⁷

As with some other budget items, pinning down exact levels of expenditure on ARD is not easy in Ghana. Table 1 above shows that the government has allocated around 15 per cent of agricultural sector spending to ARD during 2007-09, amounting to an average of GH¢ 81 million a year.⁸⁸ Other sources estimate an allocation of around 22 per cent of the budget.⁸⁹ However, very different figures are provided by Agricultural Science and Technology Indicators (ASTI) – a trusted global source of data managed by IFPRI – which estimates that Ghana spent GH¢ 352 million in 2008 (at 2005 prices), which represents a large increase over previous years. ASTI estimates that the country has over 500 full time ARD research staff, 17 per cent of whom are women. Most research is focused on crops, with cassava, cocoa, maize and rice the most heavily researched.⁹⁰ There are around 29 agencies in Ghana, mainly government bodies, involved in agricultural research, 15 of which are for higher education. The Council for Scientific and Industrial Research, the main body responsible for ARD, consists of over a dozen institutes specialized in crops, cocoa, oil palm etc.

There have been some successes in ARD in Ghana. In 2010, for example, the Crops Research Institute showcased 12 improved rice, maize and cassava varieties that had taken four years to develop.⁹¹ But, as with extension services, despite considerable spending on ARD there is little to show for it overall since farm productivity is not improving. One major reason for this – again alongside inadequate extension services – is poor dissemination of research to farmers. The government recognizes that there has been a 'top-down approach to research', low uptake among farmers and low levels of funding, and commits itself to increasing funding to ARD.⁹²

Research and extension linkage committees (RELCs) at the district level are meant to create linkages between research and extension yet often do not seem to work. A recent IFPRI study found that although MOFA's technical directorates are responsible for assessing technologies for promotion through the extension system, no periodic assessment of these technologies is conducted, meaning that farmers are relying on old and inappropriate information. The study concludes that 'technology development and assessment needs to be a continuous process that ensures a supply of productivity-enhancing technologies that are profitable for farmers'. It also concluded that 'the extension staff does not appear to receive adequate direction as to what crops to focus on and what technologies to promote'.⁹³

Access to credit

Without access to loans at low interest rates, farmers are unable to invest in future production or to take a risk and diversify into producing new crops. Yet official figures are that only one in five rural households in Ghana has a savings account.⁹⁴ A study by SEND showed that only 16 per cent of small farmers are able to access credit. There were wide regional variations – in Greater Accra, over half of farmers had access to credit; whereas in Upper East, less than 1 in 10 did.⁹⁵ Family and friends are the main sources of credit – only 1 in 5 of those accessing credit do so from government/district sources, and a further 1 in 5 from banks or cooperative unions.⁹⁶ As our field research, noted above, shows, access to credit was identified by women farmers as their number one priority. Small loans can finance important investments in businesses and equipment – notably processing equipment – that can make huge differences to farm production, marketing or income.

Banks in Ghana currently distribute only 4 per cent of available credit to the agriculture sector, way behind trade, services and manufacturing.⁹⁷ Indeed, the picture is becoming worse – in the late 1990s, for example, agriculture accounted for over 12 per cent of all credit.⁹⁸ Even the Agricultural Development Bank - the leading bank for agricultural financing in the country – earmarks only 30 per cent of its credit to agriculture.⁹⁹ There is no crop insurance even though the country depends on rain-fed agriculture and is subject to weather changes.

The government recognizes that there is 'ineffective agricultural finance' in Ghana but only limited steps are being taken to address the situation.¹⁰⁰ The provision of credit is partly a private sector activity but there also needs to be a strong role for government. Indeed, the Ghanaian government notes that in 2010 GH¢ 4 million in agricultural credit was disbursed under government programmes.¹⁰¹ This is a very small amount and far from sufficient to address the demand from farmers. The problem is not a lack of banks. There are well over 100 banks in Ghana with the largest providers of formal financial services being the rural and community banks (RCBs) established by the government in the 1970s. The RCBs are small institutions which are owned by shareholders resident in local communities; with 584 service outlets, the RCBs now have 680,000 borrowers, providing small loans and savings facilities mainly to farmers and micro-entrepreneurs.¹⁰²

Food crops versus cash crops

Ghana for a long time prioritised supporting export crops over food crops. During 2002-06, for example, the government allocated twice as much to the Cocoa Board as MOFA. Since 2008, however, this trend has been reversed, with MOFA receiving more than the Cocoa Board. The change is positive but there is a strong argument for an even greater focus on supporting food crop farmers.

Food crop farmers constitute 45 per cent of those living in poverty, whereas export producers such as cocoa farmers constitute less than a tenth.¹⁰³ Food crops also make up 62 per cent of Ghana's agricultural GDP, cocoa only 11 per cent.¹⁰⁴ Although many smallholder cocoa farmers are poor, and thus need government support, cocoa is also grown by large- and medium-sized farmers, hence supporting food crop farmers will do more to reduce the poverty of small farmers in Ghana. Studies show that growth in staple crop production reduces poverty more than export crops.¹⁰⁵

Box 8: Cocoa versus food

Recent high growth rates in the cocoa sector are attributed to government support and relatively high cocoa prices. Indeed, the government provides fertilizer subsidies and widespread training of cocoa farmers in the safe use of pesticides. MOFA officials say that the Ghana Cocoa Board's extension officers have salaries three times as high as those in MOFA's extension service.¹⁰⁶ Moreover, the government buys farmers' entire cocoa output, providing them with a guaranteed market. In 2010, for example, the Cocoa Board purchased 632,000 MT of cocoa and paid farmers a minimum guaranteed price of 70 per cent of the net FOB price.¹⁰⁷ This support is far greater than given to food crop farmers - the National Food Buffer Stock Company (NAFCO) was established in 2010 and purchased and stored just 6,949 MT of rice and 416 MT of maize, for example.¹⁰⁸

Neglect of the North?

Ghana has achieved sustained economic growth in the past two decades but this growth has largely bypassed the northern regions. Inequality between south and north has widened considerably. In 2005/06, 63 per cent of the population in Northern Region lived in poverty compared to 20 per cent in the rest of Ghana. On Ghana's current growth path, national poverty will fall from 28 per cent to 16 per cent in 2015, but in the north from 63 per cent to 49 per cent.¹⁰⁹ This means that by 2015 two-thirds of all poor Ghanaians will live in the north, highlighting the need for targeted interventions.¹¹⁰

The reason for increasing inequality is that much growth has been generated by export agriculture to which northern Ghana makes little contribution. Farmers in the three northern regions are overwhelmingly food crop farmers and not cocoa or other cash crop producers. Structural adjustment programmes in the 1990s and government policy since then placed more emphasis on cash crop exports than on food staples. Studies by IFPRI show that in northern Ghana the crops whose growth exerts the largest effects on poverty reduction are groundnut, cassava and cowpea and that staple-led growth will reduce poverty more than export-led growth.¹¹¹

MOFA's spending is still not focused enough on the north. Around 17 per cent of Ghana's population lives in the three northern regions and most of them, as noted, live in poverty. Of MOFA's 2011 budget allocation of GH¢ 158 million to the 10 Regional Agricultural Development Units, GH¢ 45 million (28 per cent) went to the three northern regions.¹¹² This is a higher proportion of funds relative to population but still insufficient to address the depth of poverty in the north. MOFA's biggest single regional allocation was to the Greater Accra Regional Development Unit even though this region accounts for only 3 per cent of Ghanaians living in poverty; and where only 3 per cent of the population is engaged primarily in agriculture!¹¹³ The rural population of Greater Accra is less than half a million, whereas most of the 4.2 million population in the three northern regions are farmers.

The Savannah Accelerated Development Authority and the Northern Rural Growth Programme have been launched and the government proposes to spend 50 per cent of the funds under the METASIP (which does not include all agricultural spending) on the three northern regions. This is a significant amount, yet a CAADP review notes that this 'would still leave a huge gap between expected poverty rates in northern Ghana and the rest of the country'.¹¹⁴

Staffing and performance in MOFA

A recent public expenditure review of MOFA highlights numerous internal challenges, including the need to adopt a more consultative and transparent management and leadership style, a lack of proper documentation and information sharing, the questionable reliability of data collected by MOFA and little emphasis on linking activities to outcomes. The study also notes that 'meetings and travel seem to take an inordinate share of the time of senior managers'.¹¹⁵ MOFA officials said in personal interviews that many of these challenges are being addressed.¹¹⁶

GHANA'S AGRICULTURE SPENDING: INCREASING THE FOCUS ON KEY SERVICES AND WOMEN FARMERS

Another internal challenge is staffing. MOFA had 6,603 staff in 2009 of whom fully one third (2,163) were administrative staff and secretaries.¹¹⁷ This is a large, probably excessive proportion, diverting resources away from key ministry functions; one MOFA official interviewed in this research estimates that barely half of these staff are productive and are simply being kept in employment.¹¹⁸ In the 2011 budget allocation to MOFA of GH¢ 221 million, GH¢ 64 million (29 per cent) was for personal emoluments and administration – a ration that would be unacceptable in a business environment.¹¹⁹

MOFA's actual spending – as compared to budget allocations – is difficult to gauge since figures are not easily obtainable. However, the evidence suggests that a large proportion of the investment funds (ie, for operations, as opposed to recurrent costs) allocated to MOFA remain unspent each year. In 2006, for example, MOFA spent less than 40 per cent of the investment funds available. There is a particular problem in the districts. An IFPRI study shows that in 2007 East Akim district, for example, did not receive any of the investment funds allocated to it.¹²⁰ In the 2011 budget speech, the government notes that 'unfortunately, a large part of the financial resources provided by development partners remain unutilised'. It puts down this slow disbursement to:

- ▶ Inadequate matching funds for projects
- ▶ Difficulty in project design
- ▶ Non-adherence to disbursement procedures
- ▶ Poor management and supervision of projects
- ▶ Ineffective reporting systems

The government says it is taking steps to address the disbursement problem by, for example, providing adequate counterpart funds, improving monitoring and providing training for staff on project management and procurement guidelines.¹²¹

RECOMMENDATIONS

The agriculture budget and spending need to focus on the real needs of smallholder farmers, particularly women, and the government should review its spending and policies to reflect this focus.

- ▶ The Joint Sector Working Group should take steps to agree a **definition of agriculture spending**, in order to effectively monitor spending year on year and thereby improve budget transparency.
- ▶ MOFA needs to be made accountable for tangible results not merely outputs and needs to develop an action plan with deadlines to address the **internal inefficiencies** that have been identified in independent studies.
- ▶ The government should increase its **spending on agriculture** and regard the 10 per cent allocation as a bare minimum not a target.
- ▶ In order to make a real impact on food production and food security, agriculture spending and policy needs to undergo a reorientation to focus on **women farmers**. WIAD's call for 30 per cent of all MOFA projects to focus on women should be supported. In addition, it is proposed that:
 - (a) The *Gender Strategy* be reviewed and updated and a timetable for implementation set out.
 - (b) The *extension service* be overhauled to support women farmers. Current barriers faced by women in accessing extension need to be identified and the service improved to overcome them
 - (c) *Agricultural research* programmes be reviewed to focus on increasing the productivity of crops grown by women, by developing new varieties, and involving women in research design and dissemination
 - (d) The *fertilizer subsidy programme* be reviewed to ensure that women have at least equal access
- ▶ The **extension service's** mission needs to be driven by the imperative to increase food security and crop productivity, providing focused support to different categories of farmers. It needs to massively increase its support to sustainable agriculture and the training in and the provision of simple technologies
- ▶ Independent evaluations of the government's '**big programmes**' – the fertilizer and tractor subsidies – need to be conducted to gauge whether they provide value for money and are the best support to small farmers compared to alternatives. These evaluations could be funded by donors. Subsidy schemes that provide cheaper, simpler technologies for small farmers should be considered, and subjected to consultation with farmers
- ▶ The government needs to step up its support of **sustainable agriculture** and outline how it is going to encourage much large number of farmers to practice organic farming and approaches that reduce dependence on chemical inputs
- ▶ The government needs to reallocate resources more towards the three **northern regions**, especially to support increased productivity of staples through much improved extension, research and credit facilities for farmers

REFERENCES

- 1 Ghana Statistical Service, '2010 Population and Housing Census', February 2011; MOFA, *Agriculture in Ghana: Facts and Figures 2009*, April 2010, p.7
- 2 Ghana Statistical Service, *Ghana Living Standards Survey*, September 2008, p.vii ; Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.13
- 3 MOFA, *Agriculture in Ghana: Facts and Figures 2009*, April 2010, p.8
- 4 African Development Fund, *Ghana Country Gender Profile*, October 2008, p.17
- 5 MOFEP, *Budget Statement and Economic Policy for 2011*, p.19, www.mofep.gov.gh; 'Agriculture for Development in Ghana: New opportunities and challenges', *Resakss Issue Brief*, August 2009, p.1
- 6 SEND, 'Putting words into action: Strategic financing of smallholder agricultural development for food security and poverty reduction', undated
- 7 African Development Fund, *Ghana Country Gender Profile*, October 2008, p.3
- 8 These are, however, figures from the late 1990s. MOFA, *Gender and Agricultural Development Strategy*, undated, section 1.4
- 9 These are, however, figures from the late 1990s. MOFA, *Gender and Agricultural Development Strategy*, undated, section 1.4
- 10 Republic of Ghana, *Ghana: Review of Ongoing Agricultural Development Efforts*, undated, p.2, www.resakss.org
- 11 MOFA, *Agriculture in Ghana: Facts and Figures 2009*, April 2010, p.12
- 12 Shashidhara Kolavilli at al, 'Do CAADP Processes Make a Difference to Country Commitments to Develop Agriculture?: The Case of Ghana', *IFPRI Discussion Paper*, July 2010, p.4
- 13 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.23
- 14 *Food Security Monitoring System Bulletin*, December 2010, p.4
- 15 FAO, *State of Food Insecurity in the World 2010*, p.52
- 16 'Agriculture for Development in Ghana: New opportunities and challenges', *Resakss Issue Brief*, August 2009, p.1
- 17 FAO, *State of Food Insecurity in the World 2010*, p.52; <http://www.fao.org/countries/55528/en/gha/>; Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.13
- 18 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.13
- 19 Wilhemina Quaye, 'Food security situation in northern Ghana, coping strategies and related constraints', *African Journal of Agricultural Research*, Vol.3, May 2008, p.339
- 20 'Government to support traditional areas to produce local crops', GNA, 8 November 2010
- 21 'Agriculture for Development in Ghana: New opportunities and challenges', *Resakss Issue Brief*, August 2009, p.3
- 22 Republic of Ghana, *Ghana: Strategic Options and Sources for Agricultural growth, Poverty Reduction and Food Security*, undated, p.2, www.resakss.org
- 23 A recent IFPRI public expenditure review of MOFA noted that 'the team was unable to obtain disaggregated data for the entire amount spent by the government on the agricultural sector'. Shashidhara Kolavilli at al, 'Institutional and Public Expenditure Review of Ghana's Ministry of Food and Agriculture', *IFPRI Discussion Paper*, August 2010, p.40
- 24 Budget speech for the 2011 financial year, 18 November 2010, p.46, www.mofep.gov.gh;
- 25 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.v
- 26 Republic of Ghana, *Ghana: Long-Term Funding for Agricultural Growth, Poverty Reduction and Food Security*, undated, p3, www.resakss.org
- 27 MOFA, *Agriculture in Ghana: Facts and Figures 2009*, April 2010, p.8
- 28 Republic of Ghana, *Ghana: Long-Term Funding for Agricultural Growth, Poverty Reduction and Food Security*, undated, p3, www.resakss.org
- 29 Ministry of Finance, 2011 Appropriation: Summary of Expenditure by Function, Economic Item and Funding, www.mofep.gov.gh; Republic of Ghana, *Medium Term Expenditure Framework for 2010-*

GHANA'S AGRICULTURE SPENDING:
INCREASING THE FOCUS ON KEY SERVICES AND WOMEN FARMERS

- 2012 and Annual Estimate for 2010, Book 12A, Ministry of Food and Agriculture
- 30 Ministry of Finance, 2011 Appropriation: Summary of Expenditure by Function, Economic Item and Funding, www.mofep.gov.gh
- 31 Ministry of Finance, 2011 Appropriation: Summary of Expenditure by Function, Economic Item and Funding, www.mofep.gov.gh
- 32 Wilson Pritchard, *Taxation and Development in Ghana: Finance, Equity and Accountability*, April 2009, p.9
- 33 Wilson Pritchard, *Taxation and Development in Ghana: Finance, Equity and Accountability*, April 2009, p.33
- 34 The Minerals and Mining Act of 2006 allows royalties to be charged on a sliding scale of between 3 and 6 per cent, but no company has ever paid more than 3 per cent. This has led to considerable lost revenues. See Christian Aid et al, *Breaking the Curse: How Transparent Taxation and Fair Taxes can turn Africa's Mineral Wealth into Development*, March 2009, pp.ix, 29
- 35 Wilson Pritchard, *Taxation and Development in Ghana: Finance, Equity and Accountability*, April 2009, p.33
- 36 Wilson Pritchard, *Taxation and Development in Ghana: Finance, Equity and Accountability*, April 2009, p.37
- 37 Wilson Pritchard, *Taxation and Development in Ghana: Finance, Equity and Accountability*, April 2009, p.29
- 38 ActionAid, *Calling Time: Why SAB Miller Should Stop Dodging Taxes in Africa*, November 2010
- 39 Ministry of Finance, 2011 Appropriation: Summary of Expenditure by Function, Economic Item and Funding, www.mofep.gov.gh; Republic of Ghana, Medium Term Expenditure Framework for 2010-2012 and Annual Estimate for 2010, Book 12A, Ministry of Food and Agriculture
- 40 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.15
- 41 Ministry of Finance, 2011 Appropriation: Summary of Expenditure by Function, Economic Item and Funding, www.mofep.gov.gh
- 42 Interview with MOFA official, Accra, March 2011
- 43 Interview with MOFA official, Accra, March 2011
- 44 Interview with MOFA official, Accra, March 2011
- 45 Interview with MOFA official, Accra, March 2011
- 46 Shashidhara Kolavilli et al, 'Institutional and Public Expenditure Review of Ghana's Ministry of Food and Agriculture', *IFPRI Discussion Paper*, August 2010, p.27
- 47 MOFA, *Gender and Agricultural Development Strategy*, undated, Preface
- 48 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.24
- 49 CAADP, *CAADP Post Compact Review: Ghana – Technical Review Report*, June 2010, p.25
- 50 Interview with MOFA official, Accra, March 2011
- 51 IFAD, FAO and World Bank, *Gender in agriculture sourcebook*, 2009, p.522. If women farmers in Kenya had the same access to farm inputs and education as men food yields could increase by 22 per cent and the GDP growth rate would have doubled in 2004 from 4.3 per cent to 8.3 per cent; IFAD, FAO and World Bank, *Gender in agriculture sourcebook*, 2009, p.16. It is estimated that in Ghana if women had equal access to land and fertilizer as men, farms profits per hectare would double and that in Burkina Faso and Tanzania, provision of equal inputs and education to women as men could increase business incomes by 20 per cent; 'Women in agriculture: The critical food producers', 15 October 2008, www.fao.org.
- 52 UNECA, *Women and Access to Land and Credit: Discussions and Key Findings of the African Gender Development Index in Selected African Countries*, June 2007, p.17, www.uneca.org
- 53 SEND, 'Putting words into action: Strategic financing of smallholder agricultural development for food security and poverty reduction', undated
- 54 Interview with MOFA official, Accra, March 2011
- 55 Interviews with MOFA officials and academics, Accra, March 2011
- 56 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.xi
- 57 Ruth Meinzen-Dick, 'Engendering Agricultural Research', Paper for Global Conference on Agriculture and Rural Development, March 2010, p.23, <http://gcardblog.files.wordpress.com/2010/03/engendering-agricultural-research.pdf>

GHANA'S AGRICULTURE SPENDING:
INCREASING THE FOCUS ON KEY SERVICES AND WOMEN FARMERS

- 58 SEND-West Africa, *Investing in Smallholder Agriculture for Optimal Result: The ultimate policy choice for Ghana*, 2010, p.45
- 59 SEND-West Africa, *Investing in Smallholder Agriculture for Optimal Result: The ultimate policy choice for Ghana*, 2010, p.45
- 60 Shashidhara Kolavilli et al, 'Institutional and Public Expenditure Review of Ghana's Ministry of Food and Agriculture', *IFPRI Discussion Paper*, August 2010, p.26
- 61 'Northern Region needs more agriculture extension officers', GNA, 31 January 2009
- 62 Interview with academic, University of Legon, March 2011
- 63 Shashidhara Kolavilli et al, 'Institutional and Public Expenditure Review of Ghana's Ministry of Food and Agriculture', *IFPRI Discussion Paper*, August 2010, p.27
- 64 Budget speech for the 2011 financial year, 18 November 2010, p.17, www.mofep.gov.gh
- 65 MOFEP, *Budget Statement and Economic Policy for 2009*, p.62, www.mofep.gov.gh
- 66 Interview with academic, University of Legon, March 2011
- 67 Interview in Tamale, March 2011
- 68 Afua Branoah Banful, 'Operational Details of the 2008 Fertilizer Subsidy in Ghana – Preliminary Report', *GSSP Background Paper 18*, IFPRI, May 2009, p.1
- 69 Figures on government spending on the subsidy programme from 'Govt allocates GH¢ 69m for fertilizer subsidy', *Ghanaian Times*, 4 May 2011; MOFA allocations are from Ministry of Finance, 2011 Appropriation: Summary of Expenditure by Function, Economic Item and Funding, www.mofep.gov.gh; Republic of Ghana, Medium Term Expenditure Framework for 2010-2012 and Annual Estimate for 2010, Book 12A, Ministry of Food and Agriculture
- 70 Peasant Farmers Association of Ghana, *Assessing the Effectiveness and Efficiency of the Coupon System of Distribution of Fertilizer to Peasant Farmers*, April 2009
- 71 David Yawson et al, 'Ghana's Fertilizer Subsidy Policy: Early Field Lessons from Farmers in Central region', *Journal of Sustainable Development in Africa*, Vol.12, No.3, 2010; Peasant Farmers Association of Ghana, *Assessing the Effectiveness and Efficiency of the Coupon System of Distribution of Fertilizer to Peasant Farmers*, April 2009
- 72 David Yawson et al, 'Ghana's Fertilizer Subsidy Policy: Early Field Lessons from Farmers in Central region', *Journal of Sustainable Development in Africa*, Vol.12, No.3, 2010
- 73 Peasant Farmers Association of Ghana, *Assessing the Effectiveness and Efficiency of the Coupon System of Distribution of Fertilizer to Peasant Farmers*, April 2009, p.22
- 74 'Agriculture is backbone of "Better Ghana Agenda" – Veep', GNA, 7 November 2010
- 75 SEND-West Africa, *Investing in Smallholder Agriculture for Optimal Result: The ultimate policy choice for Ghana*, 2010, p.39
- 76 Interview in Tamale, March 2011
- 77 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, Volume 3 – Commodity Programmes, August 2009, p.55
- 78 'Vegetable farmers schooled in organic farming practices', GNA, 5 September 2009
- 79 Shashidhara Kolavilli et al, 'Institutional and Public Expenditure Review of Ghana's Ministry of Food and Agriculture', *IFPRI Discussion Paper*, August 2010, p.7
- 80 SEND-West Africa, *Investing in Smallholder Agriculture for Optimal Result: The ultimate policy choice for Ghana*, 2010, p.38
- 81 Interview with academic, University of Legon, March 2011
- 82 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.45
- 83 CAADP, *CAADP Post Compact Review: Ghana – Technical Review Report*, June 2010, p.iv
- 84 Oli Brown and Alex Crawford, *Assessing the Security Implications of Climate Change for West Africa*, IISD, 2008, pp.21-3
- 85 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.45
- 86 James Thurlow et al, 'Agricultural Growth and Investment Options for Poverty Reduction in Zambia', *ReSAKSS Working Paper no.19*, November 2008, p.53
- 87 NEPAD, *Comprehensive Africa Agriculture Development Programme*, November 2002, Section 5.7
- 88 MOFEP, 2010, source given to authors
- 89 Babatunde Omilola, *Comprehensive monitoring and evaluation report for the Comprehensive African Agriculture Development Programme*, April 2010, p.12, www.resakss.org
- 90 ASTI, 'Ghana: Recent Developments in Agricultural Research', *Country Note*, June 2010

GHANA'S AGRICULTURE SPENDING:
INCREASING THE FOCUS ON KEY SERVICES AND WOMEN FARMERS

- 91 'Crop Research Institute introduces 12 new improved crop varieties', GNA, 17 March 2010
- 92 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.48
- 93 Shashidhara Kolavilli at al, 'Institutional and Public Expenditure Review of Ghana's Ministry of Food and Agriculture', *IFPRI Discussion Paper*, August 2010, p.22
- 94 Ghana Statistical Service, *Ghana Living Standards Survey*, September 2008, p.viii
- 95 SEND-West Africa, *Investing in Smallholder Agriculture for Optimal Result: The ultimate policy choice for Ghana*, 2010, p.42. A study of farmers in the three Northern regions found that access to credit was 11 per cent in Upper East, 14 per cent in Northern Region and 19 per cent in Upper West; Wilhemina Quaye, 'Food security situation in northern Ghana, coping strategies and related constraints', *African Journal of Agricultural Research*, Vol.3, May 2008, p.338.
- 96 SEND-West Africa, *Investing in Smallholder Agriculture for Optimal Result: The ultimate policy choice for Ghana*, 2010, p.42
- 97 MOFA, *Agriculture in Ghana: Facts and Figures 2009*, April 2010, p.22
- 98 MOFA, *Agriculture in Ghana: Facts and Figures 2009*, April 2010, p.22
- 99 UNDP analyst cited in 'Micro-credit to farmers could ensure food security', GNA, 16 January 2009
- 100 Government of Ghana, *Medium Term Agriculture Sector Investment Plan, 2011-2015*, September 2010, p.xi
- 101 Budget speech for the 2011 financial year, 18 November 2010, p.17, www.mofep.gov.gh
- 102 Aja Nair and Azeb Fissaha, *Rural Banking: the Case of Rural and Community Banks in Ghana, 2020 Vision, Brief 5*, July 2010, p.1
- 103 African Development Fund, *Ghana Country Gender Profile*, October 2008, p.4; SEND-West Africa, *Investing in Smallholder Agriculture for Optimal Result: The ultimate policy choice for Ghana*, 2010, p.27
- 104 MOFA, *Agriculture in Ghana: Facts and Figures 2009*, April 2010, p.1
- 105 Ramatu Al-Hassan and Xinshen Diao, 'Regional Disparities in Ghana: Policy Options and Public Investment Implications', *IFPRI Discussion Paper*, March 2007, p.vi
- 106 Interview with MOFA official, Accra, March 2011
- 107 Budget speech for the 2011 financial year, 18 November 2010, p.18, www.mofep.gov.gh; MOFEP, *Budget Statement and Economic Policy for 2011*, p.72, www.mofep.gov.gh
- 108 Budget speech for the 2011 financial year, 18 November 2010, p.17, www.mofep.gov.gh
- 109 'Agriculture for Development in Ghana: New opportunities and challenges', *Resakss Issue Brief*, August 2009, p.2
- 110 Republic of Ghana, *Ghana: Agricultural Growth, Poverty Reduction and Food Security: Past performance and Prospective Outcomes*, undated, p.4, www.resakss.org
- 111 Ramatu Al-Hassan and Xinshen Diao, 'Regional Disparities in Ghana: Policy Options and Public Investment Implications', *IFPRI Discussion Paper*, March 2007, p.vi
- 112 Ministry of Finance, 2011 Appropriation: Summary of Expenditure by Function, Economic Item and Funding, www.mofep.gov.gh
- 113 SEND-West Africa, *Investing in Smallholder Agriculture for Optimal Result: The ultimate policy choice for Ghana*, 2010, p.27
- 114 CAADP, *CAADP Post Compact Review: Ghana – Technical Review Report*, June 2010, p.iv
- 115 Shashidhara Kolavilli at al, 'Institutional and Public Expenditure Review of Ghana's Ministry of Food and Agriculture', *IFPRI Discussion Paper*, August 2010, p.24
- 116 Interviews with MOFA officials, Accra, March 2011
- 117 MOFA, *Agriculture in Ghana: Facts and Figures 2009*, April 2010, p.25
- 118 Interview with MOFA official, Accra, March 2011
- 119 Ministry of Finance, 2011 Appropriation: Summary of Expenditure by Function, Economic Item and Funding, www.mofep.gov.gh
- 120 Shashidhara Kolavilli at al, 'Institutional and Public Expenditure Review of Ghana's Ministry of Food and Agriculture', *IFPRI Discussion Paper*, August 2010
- 121 Budget speech for the 2011 financial year, 18 November 2010, p.48, www.mofep.gov.gh



SAYING ONE THING, DOING ANOTHER: HOW THE ZAMBIAN GOVERNMENT NEEDS TO IMPROVE AGRICULTURE SPENDING



Mark Curtis
July 2011

CONTENTS

SUMMARY	58
INTRODUCTION	60
1. GOVERNMENT SPENDING ON AGRICULTURE	61
▶ BROKEN PROMISES ON THE 10 PER CENT SPENDING COMMITMENT	61
▶ MAKING WAY FOR AGRICULTURE	62
2. PROBLEMS WITH THE FOCUS OF AGRICULTURE SPENDING	63
▶ WOMEN FARMERS	63
▶ THE FARMER INPUT SUPPORT PROGRAMME	64
▶ THE FOOD RESERVE AGENCY	68
▶ EXTENSION SERVICES	69
▶ AGRICULTURAL RESEARCH	70
▶ SUSTAINABLE AGRICULTURE AND CLIMATE CHANGE ADAPTATION	71
▶ THE QUALITY OF SPENDING IN MACO	72
RECOMMENDATIONS	74
REFERENCES	76

SUMMARY

This report, based on extensive secondary research and fieldwork among small farmers, analyses the Zambian government's agriculture spending, asking how well focused it is on the needs of small farmers, especially women. It focuses on access to inputs, extension services, agricultural research and the extent to which the government is promoting sustainable agriculture.

Agriculture-led growth is likely to provide the largest benefits for Zambia's poor and the wider economy – more so than growth led by copper, Zambia's key mineral export. Increased, and better, investments in agriculture are therefore critical. Yet despite commitments made to allocate 10 per cent of its national budget to agriculture, Zambia has allocated an average of only 7 per cent in the past five years. Moreover, in the last two years – 2010 and 2011 – the percentage has been cut. Studies suggest that if Zambia were to achieve the Comprehensive Africa Agriculture Development Programme (CAADP) target of 6 per cent annual agricultural growth up to 2015, the proportion of people in poverty would fall by 6 per cent, lifting 780,000 people above the poverty line. Failing to spend sufficiently on agriculture is fundamentally a question of lack of political will.

We identify seven further problems with current agriculture spending:

- ▶ **Women**, who constitute the majority of farmers in Zambia, are not the explicit focus of any of the roughly 5,000 budget lines in the Ministry of Agriculture and Cooperatives (MACO) budget. Zambia's failure to target agriculture spending on women is causing massive production losses. If women in Zambia benefitted from the same capital investments in farm inputs, including land, as men, output in Zambia could increase by up to 15 per cent.
- ▶ The government's **fertilizer subsidy programme** (the Farmer Input Support Programme) accounts for 35 per cent of the agriculture budget – a very large proportion for a programme that delivers only limited benefits to Zambia's small farmers. Such a subsidy programme can increase small farmers' food security, but nationally it has delivered only small productivity gains. It also tends to keep farmers in maize, hindering diversification into other crops, undermines private sector suppliers of inputs and is subject to widespread corruption.
- ▶ A large proportion of the agriculture budget is allocated to the **Food Reserve Agency** to buy the country's maize output. Such a policy of government intervention can benefit small farmers, providing them with a guaranteed market for their outputs. But the FRA purchases are both very expensive within a small overall budget (thus diverting funds away from providing other services to farmers) and benefit only the third of farmers who sell maize. FRA purchases are made even in areas well-served by private markets where this might be unnecessary.
- ▶ The government is failing to invest sufficient resources in **extension services** to farmers, devoting only around 5 per cent of agriculture spending to this area. Thus extension services in Zambia are extremely poor, and are largely failing to contribute to increasing productivity or to help farmers diversify or promote sustainable agriculture.
- ▶ MACO is spending just 1.6 per cent of its budget on **agricultural research**. Investing in agricultural research is vital for imparting knowledge to farmers and developing improved crop varieties and techniques to increase yield. Zambia's lack of investment in this area is holding back potential productivity gains for many crops while the meagre resources devoted to research on livestock – which contributes around 35 per cent of gross farm revenue for small farmers in Zambia – is reducing farmers' ability to eradicate widespread animal diseases.
- ▶ The government is making some efforts to promote **sustainable agriculture** and address **climate change** but its spending on this area is miniscule – probably less than 1 per cent of the agriculture sector budget – which pales in comparison to its support for fertilizer. Yet sustainable agriculture approaches, such as using termite soil, animal dung and agro-forestry, have good prospects in Zambia, with some studies suggesting they can produce higher yields than using chemical fertilizers. Zambia's small farmers are especially vulnerable to climate change and extreme weather events – droughts and floods – are increasing.

The reduced availability of water for agriculture will cost Zambia \$4.3 billion over a ten year period and keep 300,000 below the poverty line.

- ▶ MACO's spending is often **inefficient** and **centralized**, with 85 per cent of the budget spent at headquarters in Lusaka and only 15 per cent in the provinces and districts. Corruption is widely believed to be pervasive across the agriculture budget. Thus increasing investments in agriculture must be accompanied by reduced corruption and increased efficiencies in MACO and other ministries. The ability of the public to influence the government budget is very limited and there is no formal, structured role for small farmers to engage in policy-making.

Underlying many problems in Zambia's agriculture sector is the mismatch between what the government says it plans to do, and where it actually spends its money – a situation which makes for unpredictable policies and hinders planning, not least by farmers. The government appears to speak with one voice to donors – saying it will focus on providing public goods such as infrastructure, research and extension and increased private sector participation in agriculture – and another to its citizens – by spending increasing amounts on public subsidy programmes. This messy, unstrategic mix in agriculture policy means that neither private-sector led development nor state-led development is being promoted well.

Agriculture spending and policy in Zambia need a complete overhaul:

- ▶ On **spending levels**, the government should re-commit to allocating 10 per cent of the national budget to agriculture and give a formal commitment stating when it will achieve this target. It should reduce spending in Lusaka and increase spending by the provinces and districts.
- ▶ On **women farmers**, the government should conduct a review of how to re-orient spending towards the majority food producers in the country, focusing on improving extension services, agricultural research and the subsidy programme.
- ▶ On the **fertilizer subsidy programme**, our view is that in its current form, there is a strong argument for it to be abolished given that other services to farmers are suffering as a result. If it is to continue, the programme must be fundamentally reformed to: offer good extension support to farmers to help them improve farming to graduate out of the programme; establish clearer criteria for selecting beneficiaries; target women farmers; involve farmers cooperatives in the monitoring of the programme at district level; include a subsidy for seeds other than maize.
- ▶ On the **Food Reserve Agency**, the government should scale back its procurement and purchase only from disadvantaged and remote areas where farmers find it hard to access to markets.
- ▶ The government should increase its spending on **agricultural research, extension services** and the promotion of **sustainable agriculture**
- ▶ On the **budgeting process**, the government should introduce legislation to ensure that citizens and farmers play an important role in annual and planning budgets, mid-term reviews and implementation of plans.
- ▶ On **corruption**, the government should ensure that the agriculture sector is subject to reviews and investigations by anti-corruption bodies and subject supplemental funding for government departments to full parliamentary scrutiny.

INTRODUCTION

This report, based on extensive secondary and primary research, analyses the Zambian government's agriculture spending, asking how well focused it is on the needs of small farmers and especially women, who constitute the key actors. It focuses on access to inputs, extension services, agricultural research and the extent to which the government is promoting sustainable agriculture.

Box 1: Field research

This report is based on extensive secondary research on Zambia's agriculture sector, interviews with government officials, donors, academics and NGOs in Zambia and fieldwork among small farmers in four districts: Chongwe district, just east of Lusaka; Mumbwa in Central Province, 250 kms from Lusaka; and Choma and Kalomo districts, both in Southern Province around 300- 350 kms from Lusaka.

Agriculture employs two-thirds of Zambia's population of 13 million.¹ Half of all Zambians live in around 1.3m² small-scale farming households with an average land holding of just 1.2 hectares (ha).³ Around 65 per cent of the poor in rural areas are subsistence farmers.⁴ Women are the main farmers, comprising around 70 per cent of the agricultural workforce.⁵ They are the main producers of food and manage, either independently or jointly, around 60 per cent of the land under maize production.⁶ One in five farming households are headed by women but due to lack of access to inputs and support services they presently achieve only two-thirds of the production of male-headed households and own half the number of livestock.⁷ The average farm size of a female-headed household is 0.6 ha smaller than those headed by men (thus around half the size for an average small farmer).⁸

Maize, the dominant, staple crop, is grown by 70 per cent of all farming households.⁹ Yet around 70 per cent of all maize farmers do not sell maize at all and only 5 per cent are net sellers (selling more than they buy), meaning they are made worse off by maize price rises.¹⁰ Most farmers who are net buyers of food spend around 80 per cent of their incomes on food.¹¹ Other important crops grown include cassava, groundnuts, sorghum, beans, cotton and sugar.

Zambia has huge agricultural potential, with only 15 per cent of its arable land currently cultivated and with good water endowments. Yet small farmers face numerous problems, including inadequate access to markets and credit services, low soil fertility, disease and pest attacks on crops and livestock, poor access to farm technologies, dependence on rain (only three per cent of arable land is irrigated) and vulnerability to drought. Aside from recent bumper harvests, the agriculture sector has been stagnating over the past 20 years, with only marginal productivity increases for most crops, including maize, and low agricultural investments by government.¹²

Agriculture-led growth is likely to provide the largest benefits for Zambia's poor and the wider economy – more so than growth led by copper, Zambia's key mineral export.¹³ Indeed, the government admits that although economic growth has averaged 5 per cent per year since 1999, this 'has had little positive effect on the income levels of the poor' since it has been growth mainly in mining, construction and manufacturing – where few of the poor work.¹⁴ Agriculture currently contributes only 12 per cent of Zambia's GDP despite employing two-thirds of the population.¹⁵ This is a relatively small contribution to the national economy compared to other African countries: In Ghana, for example, agriculture provides a third of GDP while employing 55 per cent of the population¹⁶; in neighbouring Malawi, agriculture contributes nearly 40 per cent of GDP, while employing around 85 per cent of the population.¹⁷

Increased, and better, investments in agriculture are critical. As one recent report notes, 'what is required to get agriculture moving in Zambia is for the government to adequately fund public agricultural institutions, infrastructure and provide an enabling agriculture policy environment'. It adds that 'smallholder crop production in particular is in dire need of support if agriculture is going to make a dent in reducing poverty levels'.¹⁸

Box 2: Poverty and hunger in Zambia

Poverty remains deep in Zambia. The national poverty rate fell only marginally, from 69 per cent to 64 per cent, during 1996 - 2006 (the latest survey) while rural poverty fell from 82 to 78 per cent during 1996 - 2004 but then rose again to 80 per cent in 2006.¹⁹ On its current growth path Zambia will not meet the first Millennium Development Goal of halving poverty by the target year of 2015. The percentage of people in poverty is projected to be 58 per cent by 2015 and in rural areas as high as 71 per cent. With an expanding population, the absolute number of poor people will increase by 2015.²⁰

Life expectancy in Zambia is a mere 51 years, partly reflecting the huge toll of HIV/AIDS.²¹ Figures from the UN's Food and Agriculture Organisation show that 43 per cent of Zambians are under-nourished; this proportion has grown since 1990 and is the highest in southern Africa.²² Especially during the peak hunger season – September to February – most families reduce their food intake, leading to micro-nutrient deficiencies and stunting (low height for age). The recommended calorie intake per person per day is 2,400 for someone engaged in light work, but research in three districts in 2010 by the Jesuit Centre for Theological Reflection (JCTR) found an average calorie intake of just 1,500.²³

1. GOVERNMENT SPENDING ON AGRICULTURE

Broken promises on the 10 per cent spending commitment

In 2003 Zambia, along with other African governments, promised in the Maputo Declaration to allocate 10 per cent of its national budget to agriculture. The percentage has risen since 2004, as outlined in Table 1, but Zambia has allocated an average of only 7 per cent of its budget to agriculture in the past five years (this is higher than some African states but only half the level of neighbouring Malawi). Moreover, in the last two years – 2010 and 2011 – the percentage has been cut.

Table 1: Percentage of government budget allocated to agriculture, 2004-11²⁴

2004	2005	2006	2007	2008	2009	2010	2011
3.0	5.8	5.7	8.8	5.8	8.2	7.3	6.7

Table 2: Budget to the agriculture sector, 2009-11 (Trillion Kwacha1*)²⁵

	2009	2010	2011
Ministry of Agriculture and Cooperatives (MACO)	1.07	0.87	0.98
Ministry of Livestock and Fisheries Development	..	0.26	0.26
Allocations from other ministries	0.18	0.08	0.12
<i>Total allocation to agriculture</i>	1.26	1.22	1.37
Total government budget	15.28	16.72	20.54
Agriculture budget as % of government budget	8.2	7.3	6.7

1* As of mid-2011, the exchange rate was ZK 7,700 = £1 and ZMK 4,750 = US\$1. Zambia's agriculture budget of ZK 1.37 trillion in 2011 amounts to around £177 million or US\$287 million.

It should be noted that actual spending on agriculture is regularly higher than the budgeted amount due to over-spending on the Farmer Input Support Programme (FISP) and by the Food Reserve Agency (FRA). In 2008, for example, the allocation to the agriculture sector was ZK 539 billion but disbursements were ZK 793 billion, amounting to 7 per cent of the budget.²⁶ Nevertheless, the Zambian government has repeatedly broken its promises on agriculture spending:

- ▶ On 14 October 2009, for example, President Ruipah Banda, elected in October 2008, gave a speech pledging that 'my Government will continue to provide a steady increase in the budget allocation to the agriculture sector until we attain the Maputo Declaration'.²⁷ Yet five days earlier, on 9 October, the government's budget speech showed that the allocation to agriculture had been cut from 8 to 7 per cent.²⁸
- ▶ In the Fifth National Development Plan (FNDP), drawn up in 2006, the government committed itself to increase the agricultural budget to 9 per cent of the national budget 'by 2010'.²⁹ In fact, by 2010, the proportion was little over 7 per cent.

In January 2011, the government signed the compact of the Comprehensive Africa Agriculture Development Programme (CAADP), pledging again to reach the 10 per cent commitment. Yet the 2011 budget speech three months earlier had again cut the proportion of the budget allocated to agriculture. The Sixth National Development Plan (SNDP) - the new government strategy that covers 2011-15 - sets an 'annual target' for spending on agriculture of 8 per cent in 2011 - which has already not been met - 9 per cent in 2012, 10 per cent in 2013, 10 per cent in 2014 and 12 per cent in 2015.³⁰

The SNDP states that agriculture is the 'priority sector in achieving sustainable economic growth and reducing poverty in Zambia' and concedes that the sector has received 'low investment'.³¹ But it remains to be seen whether this recognition will affect actual spending decisions.

Box 3: Benefits of agriculture growth: Meeting the CAADP target

Studies suggest that if Zambia were to achieve the CAADP target of 6 per cent annual agricultural growth up to 2015, the proportion of people in poverty would fall by 6 per cent, lifting 780,000 people above the poverty line. Food security would also improve, increasing per capita cereal consumption from 81 kgs to 93 kgs.³²

Achieving 6 per cent growth means significantly increasing agriculture spending, alongside major efficiency improvements. One estimate is that Zambia needs to increase agriculture expenditure by 17 - 26 per cent per year to achieve the target, which translates into an additional ZK 343 - 616 billion per year. If Zambia had spent the middle point of these figures in 2010 (around ZK 480 billion extra), this would have amounted to around 10 per cent of the national budget.³³

Making way for agriculture

Failing to spend sufficiently on agriculture is fundamentally a question of lack of political will. Several changes to Zambia's national budget can be identified that could raise more resources for agriculture.

One concerns the military budget. Every year, Zambia spends more on defence than on agriculture. The Ministry of Defence was allocated over 7 per cent of the national budget in 2011 and has received ZK 3.9 trillion in the past three years (2009-11), which goes principally to the army. Zambia is not at war and faces no likely external threat. 'You might think the country is at war, looking at the size of the military budget', is how one NGO activist put it.³⁴

An obvious way of increasing government revenues for allocation to agriculture is to raise taxes payable by mining companies, especially re-introducing the windfall tax which was repealed in 2009. Had the windfall tax on mining company revenues remained in force, hundreds of billions of Kwacha would already have accrued to the government.³⁵

2. PROBLEMS WITH THE FOCUS OF AGRICULTURE SPENDING

In addition to insufficient resources allocated to agriculture, this study identifies seven major problems with current agriculture spending. In summary:

- ▶ **Women**, the majority of farmers in Zambia, are not the explicit focus of any of the roughly 5,000 budget lines in the MACO budget.
- ▶ The **Farmer Input Support Programme** accounts for 35 per cent of the agriculture budget – a very large proportion for a programme that delivers only limited benefits to Zambia’s small farmers.
- ▶ A large proportion of the budget is spent by the **Food Reserve Agency** to buy maize from the third of farmers who sell it, even in areas well-served by private markets where this might be unnecessary.
- ▶ The government is failing to invest sufficient resources in **extension services**, devoting only around 5 per cent of agriculture spending to this area.
- ▶ MACO is spending just 1.6 per cent of its budget on **agricultural research**.
- ▶ Probably less than 1 per cent of the agriculture sector budget is allocated to promoting **sustainable agriculture** and climate change adaptation.
- ▶ MACO’s spending is often **inefficient** and **centralized**, with 85 per cent of the budget spent at headquarters in Lusaka and only 15 per cent in the provinces and districts, and with corruption pervasive.

Women farmers

The agriculture budget gives little indication that women comprise the majority of Zambia’s farmers. Women farmers are not the explicit focus of any of the roughly 5,000 budget lines in the 250-page MACO budget contained in the ‘Yellow Book’ that outlines the annual government budget. The only mentions of gender are various small budget lines concerning HIV/AIDS awareness training, gender mainstreaming and spending on International Women’s Day.

The government has on paper long been committed to ‘ensuring gender equity in the provision of effective services’ to farmers.³⁶ But this is not realised in practice. Interviews with senior MACO staff confirm that officials have no active plan to target women farmers in their policies, nor do they know how to.³⁷ This does not mean that women do not benefit from some agricultural policies – they do, but probably to a small extent. In September 2010, for example, it was reported that the government had procured 150 hammer mills and Family Drip Irrigation Systems for women’s groups.³⁸ The FISP does not target women farmers specifically but the World Bank review of the 2007/08 subsidy programme found that 37 per cent of beneficiaries were women.³⁹ Government policy is that vulnerable groups (which include women, those with disabilities and people living with AIDS) should receive 30 per cent of land being reallocated. In 2008, however, women received 19 per cent of all new land titles.⁴⁰ MACO seeks to ensure that 30 per cent of its workforce is female and MACO officials say that this is achieved in the extension service.⁴¹

The government recognizes on paper that there are ‘huge disparities’ between men and women as regards socio-economic well-being and access to productive assets.⁴² Women farmers face particular barriers to accessing land (due to cultural and legal discrimination), credit (due to lack of collateral, such as land ownership) and markets (due to lower participation in farmers groups and less access to transport, for example). Extension services in Zambia are mainly directed to those who own land (ie, men) and rarely identify women as the target audience. Local officials often make little effort to share information with women, and prioritise reaching men. Also, extension services tend to focus more on cash crops (grown mainly by men) than food crops (grown mainly by women) such as nuts, sorghum, millet, cowpeas and cassava.⁴³

Zambia’s failure to target agriculture spending on women causes massive production losses. According to a World Bank study, if women in Zambia benefitted from the same capital investments in farm inputs, including land, as men, output in Zambia could increase by up to 15 per cent.⁴⁴

Box 4: Gender mainstreaming

There have been limited attempts in MACO to promote gender mainstreaming. MACO has appointed Gender Focal Points in each department of the Ministry who are members of a Gender Committee; however, a recent report for SIDA notes that this committee has not met for several years. Efforts to budget for gender activities in MACO tend to fail and requests from Departmental Directors for gender mainstreaming activities are routinely refused.⁴⁵ Moreover, MACO generally fails to collect and publish reliable gender-disaggregated data. When departments are allocated financing for gender-related activities, there is often weak budget execution; in 2008, for example, the Ministry of Finance had an approved budget of ZK 35 million for the collection of gender statistics, but spent only ZK 1.8 million.⁴⁶

In the national budget, the Gender in Development Division in the Cabinet Office – whose mandate is to coordinate and monitor implementation of the National Gender Policy – was allocated a paltry ZK 17 billion in 2011, and none of its budget lines in the Yellow Book mentions agriculture. The FNDP's national budget plans indicated that the government would spend just ZK 9.5 billion out of ZK 38 trillion – ie, 0 per cent – on gender.⁴⁷ It is no surprise that the mid-term review of the FNDP concluded that gender-responsive development has remained 'elusive' in Zambia and tasked all government ministries to implement comprehensive gender training programmes.⁴⁸ It is unclear whether MACO has undertaken this. Gender mainstreaming remains a paper commitment only, perhaps since there is no Act of Parliament to make gender mainstreaming mandatory.⁴⁹

The Farmer Input Support Programme

The FISP has accounted for 35 per cent of Zambia's agriculture budget and nearly half of MACO's budget in the last three years (2009-11). This is the *budgeted* amount – actual spending is even higher (see Box 8). This is a very large proportion of the budget for a programme that suffers from numerous problems and delivers only limited benefits to Zambia's small farmers despite its increasing geographical coverage.

Box 5: The Farmer Input Support Programme

The FISP began in 2002 as a temporary measure to increase food security and productivity by providing subsidized fertilizer and seed for maize to farmers in a way that promoted the participation of private sector traders in supplying the inputs. The programme stipulates that subsidized inputs are available only to farmers in approved cooperatives, those cultivating 1-5 ha of maize and those who have not defaulted on any previous credit programme.

In the 2010/11 season the government targeted 891,000 farmers to receive the subsidy, involving 178,000 tonnes of fertilizer, 97,900 tonnes of maize seed and – for the first time – 30 tonnes of rice seed. The number of beneficiaries increased from 534,000 the previous year. Farmers received four 50kgs bags of fertilizer (two basal, two top-dressing fertilizer) and a 10kgs bag of maize seed at a price to farmers of ZK 50,000 for fertilizer and ZK 80,000 for the seed.

Zambia achieved a record maize harvest of 2.8 million tonnes in 2010, which some attributed to the FISP. However, one study shows that favourable weather conditions played a greater role than the subsidy.⁵⁰ Furthermore, according to the World Bank's review of the 2007/08 programme, the subsidy produced an extra 82,000 – 146,000 tonnes of maize (against the government's claim of 375,000 tonnes) out of a total of 1.5 million tonnes – just 5 to 10 per cent. The review did, however, note that the subsidy provided value for money in that its costs were less than those that would have been needed to import the same amount of maize.⁵¹

In the January 2009 budget speech the government conceded that the FISP 'has had a limited impact on increasing agricultural productivity' and said that a review had been initiated.⁵² Indeed, the government's mid-term review of the FNDP, published in October 2009, offered a scathing analysis of the subsidy programme:

'The efficiency and effectiveness of the Fertilizer Support Programme has remained questionable, which raises legitimate questions regarding the rationale of its massing such a disproportionate share of the agriculture sector budget. During the field assessment, this Mid-Term Review established that the FSP is not reaching the intended beneficiaries due to leakages and poor targeting. In the current form, the FSP is likely to undermine the overall performance of the agriculture sector and defeat the very purpose of the FNDP in the agriculture sector... In addition, the FSP's skewed support towards one crop (maize), important though it is the national staple food, has distorted funding to the entire sector and continued to undermine the larger FNDP goal of crop diversification'.⁵³

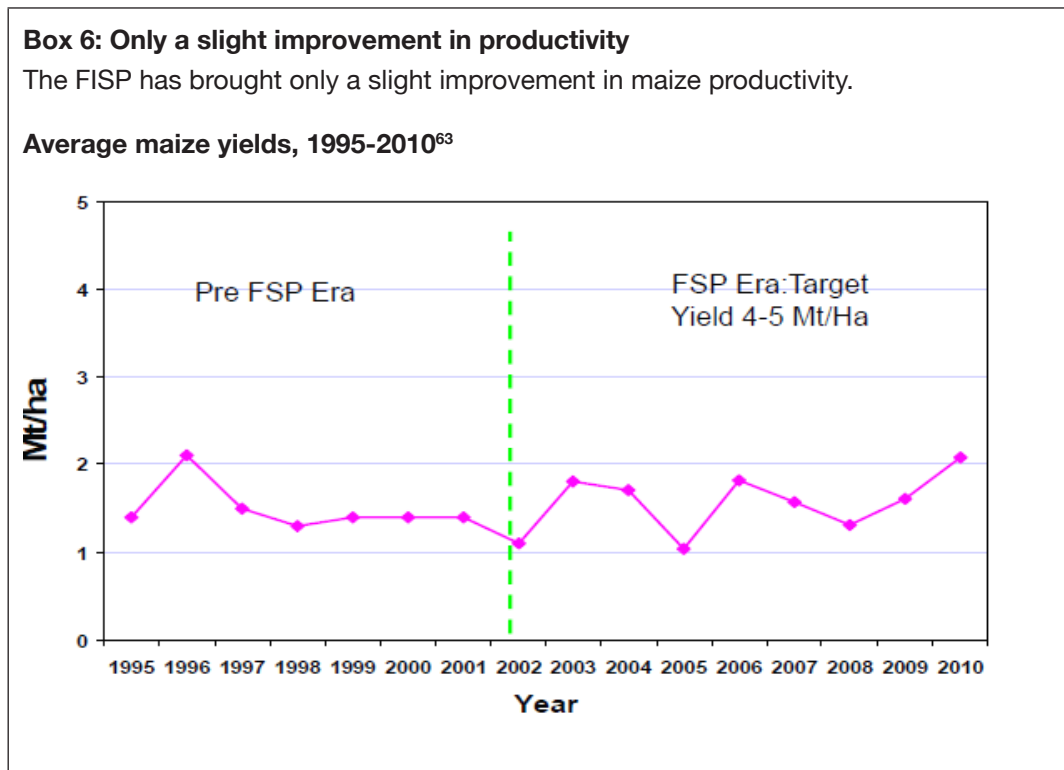
The review, produced by the World Bank in June 2010, has resulted in some changes to the subsidy programme. The number of small farmers receiving the subsidy has risen, the number of bags of fertilizer allocated has been reduced and there are also improvements in the selection of beneficiaries, which is now to be done by 'Camp Agricultural Committees' - which were set up to include farmers groups chiefs and religious leaders - rather than by MACO officials at provincial and district level.^{2*} The government is also committed to introducing a voucher system which would enable farmers to obtain fertilizer from private dealers rather than from government suppliers.

These improvements in the FISP are welcome but numerous problems remain, including:

- ▶ The subsidy, which is almost entirely focused on maize, **keeps farmers in maize** irrespective of their comparative advantage, and can undermine diversification, which is important as fully one third of all rural farm households grow only maize and no other crops.⁵⁴ The FISP concentrates public spending in the maize belt while cassava growers in the cassava belt in the Northern and Western regions of Zambia are poorly served – indeed, there is no government programme in the national budget to support cassava production (which does not require fertilizer).⁵⁵
- ▶ All farmers are made to plant the **same varieties of seeds** using the same fertilizer (D-compound and Urea) despite different soil fertility needing different fertilizer applications.
- ▶ **Corruption is rampant.** The World Bank review of the 2007/08 subsidy programme found that 20 per cent of the inputs released at district level were never received by cooperatives.⁵⁶ There are reports that bogus farmers cooperatives have arisen to claim the fertilizer, which they then sell at full market prices, while extension officers in charge of fertilizer distribution have put their names and their relatives' names on beneficiary lists.⁵⁷
- ▶ Many farmers **receive their inputs late**, severely undermining their effectiveness. The World Bank review found that 69 per cent received their inputs late, after the start of the rains, and also that 55 per cent of farmers received less than the 4 bags of fertilizer.⁵⁸
- ▶ The FISP tends to **undermine private input suppliers**. Much of the subsidy goes to areas in Central, Copperbelt and Eastern provinces where there are already reasonable private sector input suppliers.⁵⁹ The World Bank review found that around 50 per cent of subsidy beneficiaries were able to buy inputs on the open market before receiving subsidised inputs, meaning that many purchases would have taken place anyway.⁶⁰
- ▶ The FISP requires MACO staff at district level to spend a large amount of their time **administering the programme**. District Agricultural Officers spend an average of 63 per cent of their time during August-January each year attending to the FISP, which diverts them from providing critical extension support.⁶¹

^{2*} It remains to be seen whether the recent changes in the process for selecting beneficiaries will be an improvement. The World Bank review found that the selection of beneficiaries was 'arbitrary' and that guidelines stating that, for example, farmers must be cultivating 1-5 ha of land, were largely ignored. Indeed, 51 per cent of farmers receiving the subsidy cultivated *less than* 1 ha of maize while 12 per cent said farming was not their main source and income and 22 per cent said they were retired. The programme may thus well benefit the smallest farmers and the retired, which is a good thing, but by failing to reach those targeted it may well not contribute optimally to increasing agricultural production. It also remains to be seen which farmers will mainly benefit from the recent expansion of the programme. The World Bank's review of the 2007/08 subsidy found that it tended to go to better off farmers – 35 per cent of subsidy recipients owned draught animals, for example, while the average in Zambia is 11 per cent. Figures from 2008 show that 5 per cent of all crop growing households received 50 per cent of the combined value of FISP and FRA subsidies. (Antony Chapoto, 'What is the 2011 National Budget for Zambia Agriculture', Presentation, 19 October 2010, p.32)

- ▶ The original design of the subsidy programme was that individual farmers would benefit from the subsidy for only two years, but this stipulation has been set aside. At the same time, the government has **no exit strategy** from the FISP. In general, input subsidies work best when new technology becomes available and farmers control water and have good extension support – none of these holds in Zambia.⁶²



One danger with the FISP is that it is creating a dependency for farmers that is expensive for Zambia’s taxpayers. It is not accompanied by sufficient training and advice to farmers on how to survive without it or how to use the inputs most effectively. Some Zambians believe that the FISP is more a political programme to secure the support of farmers across the country. The committees distributing the inputs are in many cases dominated by local politicians. Transparency International says that ‘most people on the committees around the country belong to the ruling party or are political cadres supportive of the government. The FISP is partly how they get their votes’. Our finding from talking to farmers is that the government should not assume that farmers are awed by the subsidy, and that they think there are better alternatives, such as sustainable agriculture approaches (see Box 7 below).

Box 7: Listening to farmers

The Chongwe District Farmers Association (DFA) in Chongwe district, just east of Lusaka, has nearly 1,000 members farming plots ranging from 0.5 - 100 ha with an average of 10 ha – relatively large for Zambia. The farmers grow maize, groundnuts, soya and cassava with some raising livestock, and one in five households is headed by a woman. Nearly all the DFA members sell maize and around half of them buy subsidized fertilizer. There are around 25,000 farmers in the district in total, many of them members of other cooperatives.

A group of five leaders in the DFA say that the main problem with the FISP until now has been that the distribution of inputs has been controlled by the District Agricultural Officers and extension officers who influence which cooperatives and farmers receive the inputs, making the role of farmer cooperatives marginal. Although they are meant to monitor the system, the officials in effect controlled it in a top-down way. The distribution of inputs has not been based on a needs assessment but on the whim of officials, often favouring friends or relatives. They are hoping that the government's decision to make the Camp Agricultural Committees and farmers select beneficiaries will make a difference in the coming season. The farmers also say it would be relatively easy to ensure that the inputs went to the right farmers if cooperatives are responsible for this and if the process is done openly – the key issue is monitoring and holding to account those responsible.

In our focus group, the farmers begin by saying they need fertilizer, which triples production compared to not using it. Last season they bought subsidised fertilizer for ZK 50,000 per bag compared to the price of ZK 210,000 in the shops. But they say that of the 500 members who received subsidized fertilizer around one quarter of them could afford to buy at the market price. The farmers also say that although fertilizer increases yield and the subsidy reduces the cost, they do not regard the subsidy as the ideal policy. Rather than subsidising fertilizer, it would be better for the government to subsidise the cost of other inputs like ploughs, simple tools and irrigation equipment that would help them promote crop rotation, produce other crops and diversify into crops like soya beans and groundnuts, for example, which do not require fertilizer. One reason is that it is not simply fertilizer use that influences output but the quality of soils and the ability to promote crop rotation.

The farmers also say that the subsidy should not last forever and that, with other kinds of support, they could increase production without it. When asked what training and advice they most wanted, the farmers say training on organic practices and on planting distances, liming to break acid levels, weeding, fertilizer application and market information – none of which is readily available. They say the FISP is not accompanied by extension support and so there is a lot of misapplication of fertilizer (either too much or too little, sometimes at the wrong time). One problem is that although there are around 50 extension officers in the district, of 1,000 DFA members only 30-40 ever see extension officers – and only then if they are friends or relatives! Otherwise, no farmer sees extension officers except during the time that the subsidy inputs are distributed. The farmers say the extension officers do not visit the farmers because the services are meant to be 'demand driven'. However, when they hear of farmers visiting the officers, the latter say they lack fuel and transport and are unable to advise them.

In Choma district, women farmers say they have only recently been able to access subsidized fertilizer under the FISP and that even now that access is less than for men. These women are organized in farmer clubs which receive less fertilizer allocations than cooperatives, which are male-dominated and recognized more by the government as worthy recipients of the FISP. Otherwise, to access the FISP, women have to lie about their marital status and say they are single or widowed (ie, the head of their household) – since allocations are otherwise always to the men in the household. The women's farmer clubs interviewed in our fieldwork have not seen an extension worker in the last two years. Extension officials only visit the area during the period of the FISP when the maize is bought and to conduct elections in the cooperatives which select those who will sit on committees to decide who will receive allocations under the FISP.

The Food Reserve Agency

The government is allocating a large proportion of the agriculture budget to the Food Reserve Agency to buy the country's entire maize output, which it regards as important to support the country's farmers and their food security. Such a policy of government intervention can benefit small farmers, providing them with a guaranteed market for their outputs. But the problem is that the FRA purchases are both very expensive within a small budget (thus diverting funds away from providing other services to farmers) and benefit only the third of farmers who sell maize. In 2010, the FRA was allocated ZK 100 billion in the agriculture budget but the government eventually spent a massive ZK 1.3 trillion – amounting to 1.7 per cent of GDP - to buy the country's maize. To find the resources, the government had to take out a loan from a consortium of banks, use mining tax arrears and find extra resources from elsewhere in the budget.⁶⁴

The FRA purchases can undermine private markets since many purchases would have been made anyway by private firms.⁶⁵ Many traders who would otherwise buy from small farmers are believed to avoid doing so until after the FRA maize buying season is over.⁶⁶ Thus the FRA is going beyond its mandate to purchase from disadvantaged or remote areas where farmers find it hard to access markets and is spending public money buying from areas where farmers should already be able to find markets. That said, analysis of FRA purchases during the 2005/06 and 2006/07 marketing seasons found that it made higher purchases in regions (such as Northern and Luapula in the cassava belt) with fewer markets for farmers to sell their produce to private traders, and that much lower purchases were made in regions (such as Central and Copperbelt) where there are vibrant commercial maize markets. The study concluded that 'FRA, therefore, may be filling a void created by the limited presence of private traders' and that its distribution of spending was consistent with the aim of reducing income disparities.⁶⁷

FRA purchasing is still needed in disadvantaged areas beyond the line of rail (the country's most developed area that links the Copperbelt with the cities of Lusaka and Livingstone) where, because of poor infrastructure, the private sector is not able to go. Until this infrastructure is developed, the FRA should buy from rural farmers and gradually withdraw as the private sector is built up.

The bigger the maize output the more the government spends on buying that maize. Yet each year the size of the FISP is decided separately from deciding the funding level to the FRA and what price it will pay for maize.⁶⁸ President Rupiah Banda said in a speech in October 2009 that:

'Government intervention through the Food Reserve Agency is not sustainable and inadequate to resolve the problems of marketing. Therefore, the need to establish a robust and well thought out marketing institution using both public and private resources is not only essential but an urgent one.... The new outfit... should be ready to participate in the forthcoming marketing season'.⁶⁹

This has, however, not yet happened; media reports suggested that a committee was to submit a report to the Cabinet in early 2011.⁷⁰

There are also suspicions, widely held in Zambia, that considerable FRA budget allocations - especially supplemental ones that are not subject to parliamentary scrutiny - often disappear. In one case in 2008, several people working on a temporary basis for the FRA in Nyimba district of Eastern province were convicted for pocketing ZK 500 million of FRA funds; they were acting as bogus farmers claiming they had delivered far more maize to the FRA than they actually had.⁷¹ Anecdotal evidence is also that some of the FRA's 'late' payments to farmers for their maize deliveries are in fact never paid.

Box 8: Too much spending on the FISP and FRA?

The government accepts, on paper, that its agriculture spending is skewed towards the FISP and the FRA, but this does not stop it continuing to spend ever more. The government's mid-term review of the FNDP, of October 2009, stated that:

'The current situation where funding to agriculture is skewed towards the Fertilizer Support Programme and the Food Reserve Agency should be reviewed to ensure that more funding is equally released for other important programmes'.⁷²

Similarly, the Ministry of Finance's 2007 Progress Report on the FNDP noted that since most agriculture funds go the FISP and the FRA, 'the core programmes of the sector were under funded'. It recommended that 'financial resources be re-aligned to the core programmes in the agricultural sector'.⁷³

The budget is one thing, but disbursements another. In most countries, disbursements amount to much less than the budgeted figure. Zambia suffers from the reverse problem - disbursements have been higher than the budget due to supplemental spending on the FISP and the FRA:

- ▶ In 2009, ZK 100 billion was allocated to FRA but ZK 198 billion was disbursed. ZK 430 billion was allocated to the FISP but ZK 565 billion was spent.⁷⁴
- ▶ In 2008, the FISP had an approved budget of ZK 187 billion, but the government spent ZK 492 billion, while the FRA had an approved budget of ZK 80 billion but spent ZK 340 billion.⁷⁵

The government is failing to act on what it knows. Spending on the FISP and FRA may achieve some short-term production gains but long term agricultural productivity in Zambia requires much greater investments in extension, research and promoting sustainable agriculture, among other things. MACO is more a Ministry of Maize than a ministry of agriculture and the FISP and FRA programmes are not the same as promoting real food security. The FISP and FRA are believed by most analysts to be essentially political programmes to buy farmers' votes.

Extension Services

Extension services are vital in providing advice and training to poor farmers to improve food production and household income. Farmers can improve their productivity by accessing training or information on the best farming techniques, on new, higher-yielding crop varieties or on what crops are likely to produce most profit next season. Yet the government is failing to invest sufficient resources in extension services, devoting only around 5 per cent of agriculture spending to this area.⁷⁶ This is a low proportion compared to most African states; even Malawi, where extension services are also under-funded, spends around 7 per cent of its agriculture budget on extension, while Kenya spends around 25 per cent⁷⁷ and Ghana over 50 per cent⁷⁸. Consequently, extension services in Zambia are extremely poor, and are largely failing to contribute to increasing productivity or to help farmers diversify or promote sustainable agriculture.

In the Budget speech for 2011, the government said it was allocating ZK 13.3 billion to construct and rehabilitate 'camp houses', step up efforts to increase farmer training, and improve the mobility of extension workers.⁷⁹ In the 2009 budget the government allocated ZK 25.4 billion for the procurement of motorbikes and bicycles and ZK 12.3 billion for construction and rehab of camp houses for extension workers.⁸⁰ These are very low sums.

The government recognizes in the SNDP the 'inadequate extension services'⁸¹ and MACO officials concede that 'quality is not as good as it should be'.⁸² The government's mid-term review of the FNDP, published in October 2009, calls for 'more resources' to be allocated to extension.⁸³ The government stated in the 2009 budget speech that it recruited 1,700 extension workers in 2008.⁸⁴ Yet this doesn't tally with the government's figure that there are only 1,472 extension officers posted around the country.⁸⁵ The government also claims that since there are 1,700 Camp Agricultural Committees, almost 90 per cent have extension officers providing key information to farmers.⁸⁶ This is likely an exaggeration – a 2005 survey found that 77 per cent of farmers never saw an extension officer, and things have improved little since then.⁸⁷

Extension services have not contributed to significant improvements in crop yields for most crops, especially maize. One reason for the poor performance of extension services is that half the extension budget during 2000-08 has gone on salaries, leaving relatively few resources for operations.⁸⁸ The extension service is also overwhelmingly focused on administering the FISP and on cash crops. Although the government talks of diversification, only limited support is provided to other crops and there is no coherent strategy to promote sustainable agriculture. There is little technical training for farmers in going beyond food production, seeing farming as a business or economic empowerment – critical issues that could wean people off the FISP. Farmers interviewed in Kalomo district lament the fact that hiring livestock veterinary vet specialists is too expensive. ‘We have the animals but we cannot access the vet services’, one farmer said. ‘Government must go back to the old days where they used to provide vet services for the public.’ There are many good quality staff in the extension service, notably District Agricultural Coordinators, including in remote rural areas, but they are not being used to their greatest effect owing to lack of resources and also because of overly top-down, centralized planning. Local and district officers are not able to demand what they need in a bottom up process that connects to farmers; instead, they are largely presented with policies and budgets from on-high.

Agricultural research

The government is spending a miniscule proportion of its agriculture budget on agricultural research. Just 1.6 per cent of MACO’s budget (amounting to ZK 16 billion) was allocated to the country’s principal research institute, the Zambia Agriculture Research Institute (ZARI), and its 10 agricultural research stations in 2011 (excluding fisheries and livestock research).⁸⁹ Indeed, agricultural research has been at a standstill in Zambia over the past two decades.

Investing in agricultural research is vital for imparting knowledge to farmers and developing improved crop varieties and techniques to increase yield, manage water or promote sustainable agriculture. Studies suggest that investments in agricultural research offer the greatest potential for enhancing productivity and reducing poverty, and that in Africa as a whole, for every one per cent yield increase resulting from investments in agricultural research, two million Africans can be lifted out of poverty.⁹⁰ The CAADP programme calls for African countries to double their annual spending on agricultural research within ten years.⁹¹ Yet Zambia appears to be moving in the opposite direction. Under the FNDP the government committed itself to spending 12.5 per cent of agriculture sector spending on agricultural research and development.⁹² This would be a reasonable proportion of the agriculture budget, but current spending must be much less than this (an overall figure for the whole agriculture sector is not available).⁹³

ZARI’s annual report for 2009 – the latest available – states that its budget for 2009 was ZK 17 billion but that implementation of its core research programme in 2009 was only ‘moderate’ since only 5 months of ZARI’s activities were funded at 56 per cent of the budget, its staff strength was 80 per cent of capacity and it lacked sufficient vehicles and equipment.⁹⁴ One indicator useful for comparing agricultural research spending over time is research ‘intensity’, meaning research spending as a percentage of agricultural output. In 2008, for every \$100 of agricultural output the country invested only \$0.29 in agricultural research, down from \$0.47 in 2001.⁹⁵ ASTI notes that there has been a recent rise in the number of agricultural researchers but that Zambia’s research institutions are still contending with the effects of long-term underinvestment.⁹⁶

This lack of investment is likely contributing to Zambia’s failure to increase productivity for many crops. Equally, the meagre resources devoted to research on livestock – which contributes around 35 per cent of gross farm revenue for small farmers in Zambia – is also serious, reducing farmers’ ability to eradicate diseases that continue to deplete livestock populations.⁹⁷

Sustainable agriculture and climate change adaptation

Although the government is making some efforts to promote sustainable agriculture and adaptation to climate change, its actual spending on this area is miniscule – probably less than 1 per cent of the agriculture sector budget - and pales in comparison to its support for fertilizer. The government budget makes only a few explicit mentions of sustainable agriculture, highlighted below.^{3*}

Table 3: Support to sustainable agriculture in the government budget

	2009	2010	2010
MACO, Agriculture Department: 'Conservation farming'	870 m (Of which 'Conservation agriculture support': 700 m; 'Development of land management manual': 170 m)	434.2 m (Of which 'Conservation agriculture support': 76 m; 'Development of land management manual': 93 m; 'Staff development in climate change adaptation': 245.2 m)	350 m (Of which 'Staff development in climate change adaptation': 80 m; 'Management and coordination': 50 m; 'Supervision, monitoring and backstopping': 120m; 'Climate change advocacy and sensitisation': 100m)
MACO, Provincial DACO budgets allocation to districts: 'Land management for conservation agriculture'	0	Approx 2.6 billion	0
MACO, Agriculture Research Stations (Misamfu, Mochipapa and Copperbelt): 'Promotion of agro-forestry'	117 m	91 m	75 m
Ministry of Tourism, Environment and Natural Resources – Forestry Department: 'Promotion of community agro-forestry'	0	1.3 b	300 m
APPROXIMATE TOTAL	987 million	4.4 billion	725 million

The SNDP states that 'government will continue to promote increased use of sustainable farming practices, including conservation farming, agro-forestry, climate change adaptation and mitigation'.⁹⁸ Conservation farming – defined as minimizing soil disturbance, maximizing soil cover and diversifying cropping patterns – is being encouraged by the government and supported by some donors, such as Norway. According to a 2009 FAO report, Zambia has 110,000 ha of land under conservation agriculture; a relatively large amount.⁹⁹ Conservation farming has been adopted by around 270,000 farmers on portions of their land.¹⁰⁰

^{3*} These are the only explicit mentions that could be found. There may be other budget lines that contribute to the promotion of sustainable agriculture or climate change adaptation, such as in the Environment and Natural Resources Department of the Ministry of Tourism, Environment and Natural Resources, which has a budget of ZK 27 billion in 2011. The table above also excludes donor-funded projects, some of which are promoting conservation farming.

There are a variety of sustainable agriculture approaches with good prospects in Zambia, including using termite soil, animal dung and agro-forestry. Some studies suggest that the use of termite soil – which is rich in calcium, phosphorus and organic matter – can provide maize yields that are 33 per cent higher than by using chemical fertilizers.¹⁰¹ Some NGOs have experience of farmers successfully making the transition from fertilizers to organic farming, such as JCTR's partners in Chongwe district.

Promoting sustainable agriculture in Zambia takes on greater importance given the government's support for chemical fertilizers in the FISP. Maize mono-cropping (planting maize in the same field year after year), combined with the use of acidifying fertilizer and conventional tillage can oxidise organic matter, reduce the water holding capacity of soils and reduce soil fertility. Nitrogen-based fertilizers, as used in the FISP, can also pollute the underground water table and kill beneficial pests such as bees that can control other pests and are important in the reproduction life cycle of plants.¹⁰²

Box 9: Addressing climate change?

The government, while recognizing the need to address climate change, appears to be investing little in adaptation. Climate change receives scant mention in the budget, as Table 3 indicates. It has been reported in the Zambia media that in 2010 the government allocated ZK 5 billion to agriculture and climate change issues.¹⁰³ This is a higher figure than is noticeable in the government budget but even if correct, it amounts to just 0.4 per cent of agriculture sector spending.

The mid-term review of the FNDP stated that Zambia 'still lacks a coordinated and institutionalised response to environment and climate change issues'.¹⁰⁴ However, the government has established a climate change facilitation unit in the Ministry of Environment and Tourism and a climate change focal point in MACO.¹⁰⁵ ZARI is conducting some research on agro-forestry and on helping farmers to adapt to climate change, but is unclear how much and likely to be small.¹⁰⁶ A senior government extension official has said extension officers do disseminate information to farmers on climate change.¹⁰⁷

These investments are insufficient to adequately address the issue. Small farmers in Zambia are especially vulnerable to climate change, dependent as they are on rain-fed farming. Food shortages experienced at times since the early 1990s are largely the result of droughts. Extreme weather events are on the increase: between 2000 and 2007, for example, there were two drought years, two flood years and only two normal condition years. In addition to direct casualties from floods, these events have caused huge production losses for farmers in some areas. Meteorological studies indicate that rainfall patterns have changed significantly since the late 1980s and that there are longer or shorter rainy season periods in the northern or southern parts of the country. In the north longer rainfalls often causes maize to rot in the fields whereas in the south the shortage of rain is often insufficient for most maize varieties except those maturing early, which mainly have lower yields.¹⁰⁸ A study for IFPRI calculates that reduced availability of water for agriculture induced by climate change will cost Zambia \$4.3 billion over a ten year period and will keep 300,000 below the poverty line. The most severe impacts will be in the southern and central regions of the country.¹⁰⁹

The quality of spending in MACO

MACO's spending suffers from several inefficiencies and is highly centralized. Around 85 per cent of its budget is allocated to headquarters in Lusaka, leaving only around 15 per cent to be spent by the provincial and district coordination offices. In 2011, only ZK 140 billion was available to be spent among the 9 provinces and 73 districts.¹¹⁰ Of this already small sum, little is available to be spent on farmers, since much goes on salaries. In the 2011 budget for Northern province, for example, an allocation of ZK 15.7 billion was made to the Provincial Agriculture Coordination Office (PACO) while ZK 5.3 billion was provided to the District Agriculture Coordination Office (DACO, which then funds the 12 districts in the province). Yet of the amount provided to the PACO, fully 92 per cent is allocated to salaries. (It is unclear what proportion of the DACO budget goes to salaries, but it is again likely to be high).¹¹¹

Although 25 per cent of MACO's 2011 budget goes to personal emoluments (ie, mainly salaries) and recurrent departmental charges¹¹² – a not excessive proportion – the government's mid-term Review of the FNDP

notes that there is ‘significant resource wastage and misapplication on personnel-related expenditure such as allowances at the expense of real investments’.¹¹³ In some departments of MACO, there is also lack of absorption capacity so that even when the budget rises, there is little ability to spend the money well or at all. In some cases money has been returned to the Treasury, for example the return in 2007 of ZK 8 billion by MACO meant for irrigation programmes.¹¹⁴ Capacity problems in MACO include poor quality or non-existent data and knowledge systems that could improve planning or provide convincing arguments to the Minister of Finance to increase the agriculture budget, and insufficient capacity to undertake public expenditure reviews and policy analysis.¹¹⁵ Capacity at the district level is also often weak and there are few monitoring indicators to assess results at the local level.¹¹⁶

Corruption is widely believed to be pervasive across the agriculture budget.¹¹⁷ One reason for cutting the agriculture budget in the past was that there was so much leakage of funds. As the NGO umbrella group, Civil Society for Poverty Reduction, notes in its annual budget analysis, simply increasing resources to poverty reduction programmes, including agriculture, will not by itself translate into improved services due to leakage of funds.¹¹⁸ Thus increasing investments in agriculture must be accompanied by reduced corruption and increased efficiencies in MACO and other ministries.

According to the Open Budget Index for 2010¹¹⁹, Zambia scores less than other southern African countries on budget transparency. The index notes that ‘the government provides the public with minimal information on the central government’s budget and financial activities’, which ‘makes it extremely difficult for citizens to hold the government accountable for its management of the public’s money’.¹²⁰ Influencing the budget is even more difficult – Civil Society for Poverty Reduction notes that although there is formally space for citizen participation in the budget, the government makes little effort to ensure this and that civil society voices are very infrequently taken on board.¹²¹ Zambia’s legal framework provides for only very limited ways in which parliament and citizens can influence the draft budget figures once presented – a major democratic deficit.¹²²

Zambia’s weak decentralization means there are few formal structures in place to consult with local communities.¹²³ There is no formal, structured role for small farmers to engage in government policy-making and most Provincial Development Coordinating Committees and District Development Coordinating Committees are not functioning optimally, making it difficult for farmers and CSOs to participate in decision-making processes at regional and national level.¹²⁴ Such untransparent and unresponsive government budgeting goes a long way to explaining why agricultural spending is so far removed from what farmers really need.

Box 10: The gulf between rhetoric and reality

Underlying many problems in the agriculture sector is the mismatch between what the government says it plans to do, and where it actually spends its money – a situation which makes for unpredictable policies and hinders planning by actors in the agricultural sector, not least farmers. The government’s mid-term review of the FNDP refers to the ‘huge gulf between what was budgeted for in the FNDP and the actual expenditure, revealing clear indications that the Plan provided very little guidance to Government’s expenditure pattern’.¹²⁵

Indeed, the government appears to speak with one voice to donors – telling them what they want to hear – and another to its citizens – giving them what it believes they want. For example, in the FNDP, drawn up in 2006, the government said it would ‘focus on providing public goods’ such as infrastructure, research and extension and would encourage ‘increased private sector participation’ in agriculture such as in input supply and output marketing.¹²⁶ The FNDP committed the government to spend only ZK 150 billion on the FISP during 2007-08 and then to phase it out altogether as of 2009, along with FRA maize procurement.¹²⁷ The FNDP also ranked ‘long term investments’ as the priority role for government in the agriculture sector, with promoting research ranked second (and subsidies ranked just fourth).¹²⁸ Yet in practice, all these commitments have been overridden in favour of the government’s big subsidy programmes (which might work, but only if implemented well). Thus there is a messy, unstrategic mix in agriculture spending and policy in Zambia – with neither private-sector led development nor state-led development being promoted well.

RECOMMENDATIONS

Our view is that agriculture spending and policy in Zambia need a complete overhaul.

On **spending levels**, the government should meet its CAADP commitments and:

- ▶ Re-commit to spending 10 per cent of the national budget on agriculture and give a formal commitment stating exactly when it will achieve this target
- ▶ Find new sources of funding for agriculture within the national budget (for example by considering re-allocating funds from the Defence budget) or by improving domestic resource mobilisation (for example by increasing taxes payable by the mining sector)
- ▶ Reduce spending in Lusaka and increase spending by the provinces and districts

On **women farmers**, the government must engage in a rethink and refocus much spending and policy. It should:

- ▶ Increase efforts to collect good sex-disaggregated data to inform policy-making
- ▶ Conduct a review of how to re-orient spending to focus on the majority food and agricultural producers in the country, including issues such as:
 - ▶ Providing extension services more appropriate to women, in places where they can access information, on the crops grown by them, in formats that are appropriate.
 - ▶ Providing market facilities and market information for crops grown by women.
 - ▶ Involving women in research that develops crop varieties and technologies appropriate to them.
 - ▶ Targeting more women to become members in existing or new cooperatives.
 - ▶ Providing women heads of household with equal access to premium land under irrigation.
 - ▶ Providing incentives for micro-finance institutions to lend more to women.¹²⁹

On the **FISP**, our view is that in its current form, there is a strong argument for the programme to be abolished given that other services to farmers are suffering as a result. If it is to continue, the programme must be fundamentally reformed to:

- ▶ Include good extension support to farmers to help them improve farming and business practices and graduate out of the programme
- ▶ Establish clearer criteria for selecting beneficiaries, who should be in disadvantaged areas less well-served by private input suppliers and markets.
- ▶ Women farmers should be explicitly targeted in the programme and farmer clubs – which are often women's clubs – should be part as much part of the FISP as cooperatives.
- ▶ Involve farmers cooperatives in the monitoring of the programme at district level
- ▶ Provide a subsidy for seeds other than maize
- ▶ Develop a plan to eventually phase out the programme and replace it with improved extension and research and possibly subsidised credit for farmers

On the **FRA**, the government should:

- ▶ Scale back procurement spending and return to the FRA's mandate of purchasing only from disadvantaged or remote areas where farmers find it hard to access to markets.

On **other key services**, the government should:

- ▶ Substantially increase its spending on agricultural research, extension services and the promotion of sustainable agriculture

SAYING ONE THING, DOING ANOTHER:
HOW THE ZAMBIAN GOVERNMENT NEEDS TO IMPROVE AGRICULTURE SPENDING

On the **budgeting process**, the government should:

- ▶ Introduce new legislation to ensure that citizens and farmers play an important role in annual and planning budgets, mid-term reviews and implementation of plans.

On **corruption**, the government should:

- ▶ Ensure that the agriculture sector is subject to reviews and investigations by anti-corruption bodies
- ▶ Subject supplemental funding for government departments to full parliamentary scrutiny.
- ▶ Establish guidelines on the composition of the Camp Agricultural Committees and District Agricultural Committees distributing FISP inputs and selecting beneficiaries, to ensure they do not include individuals linked to political parties but farmers, civil society organizations and other independents.
- ▶ Increase farmer cooperatives and civil society involvement in the monitoring of FISP and FRA spending at local level.

REFERENCES

- 1 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.9
- 2 Estimates of the number of farming households in Zambia vary from 1.1 to 1.5 million.
- 3 http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/07/14/000333037_20090714002021/Rendered/PDF/487740ESW0P1021C0Disclosed071131091.pdf, p.3; James Thurlow et al, 'Agricultural Growth and Investment Options for Poverty Reduction in Zambia', *ReSAKSS Working Paper no.19*, November 2008, p.8
- 4 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.9
- 5 Economics Association of Zambia, 'Zambia Public Expenditure Review: Agriculture', Presentation, 2 December 2010
- 6 African Development Bank, *Republic of Zambia: Multi-Sector Country Gender Profile*, April 2006, p.10
- 7 <http://www.fao.org/docrep/008/j5511e/j5511e00.HTM>, section 6.2
- 8 T.Jayne et al, 'Access to Land and Poverty Reduction in Rural Zambia: Connecting the Policy issues', Food Security Research project, September 2009, p.4
- 9 James Thurlow et al, 'Agricultural Growth and Investment Options for Poverty Reduction in Zambia', *ReSAKSS Working Paper no.19*, November 2008, p.11
- 10 Antony Chapoto, 'What is the 2011 National Budget for Zambian Agriculture', Presentation, 19 October 2010, p.32
- 11 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.53
- 12 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.21
- 13 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.9
- 14 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.40
- 15 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.53
- 16 MOFEP, *Budget Statement and Economic Policy for 2011*, p.19, www.mofep.gov.gh; 'Agriculture for Development in Ghana: New opportunities and challenges', *Resakss Issue Brief*, August 2009, p.1
- 17 Government of Malawi, *A Medium Term Plan for the Farm Inputs Subsidy Programme (2011-2016)*, Third Version, March 2010, p.3
- 18 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, pp.9, 22
- 19 Antony Chapoto, 'What is the 2011 National Budget for Zambian Agriculture', Presentation, 19 October 2010, p.4
- 20 'Six Percent Agricultural Growth Promotes Poverty Reduction in Zambia', *ReSAKSS Issue Brief, No.17*, October 1009, p.1
- 21 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.40
- 22 FAO, *State of Food Insecurity in the World 2010*, p.52
- 23 'Food security key to development', says JCTR, 23 August 2010, www.jctr.org.zm
- 24 Republic of Zambia, *Fifth National Development Plan, 2006-2010*, December 2006, p.8; Republic of Zambia, *Estimates of Revenue and Expenditure for the year 2010*, and *Estimates of Revenue and Expenditure for the year 2011* (The Yellow Book)
- 25 Republic of Zambia, *Estimates of Revenue and Expenditure for the year 2010*, *Estimates of Revenue and Expenditure for the year 2011*. Except allocations from other ministries, which derive from Antony Chapoto, 'What is the 2011 National Budget for Zambian Agriculture', Presentation, 19 October 2010, p.18. Budgets include direct donor spending on projects (but exclude general budget support, some of which would go to agriculture), which amounted to 21 per cent of MACO, fisheries and livestock budget in 2005, 27 per cent in 2006, 33 per cent in 2007, 23 per cent in 2008, 12 per cent in 2009,

- 20 per cent in 2010 and 13 per cent in 2011. Antony Chapoto, 'What is the 2011 National Budget for
Zambian Agriculture', Presentation, 19 October 2010, p.18
- 26 Ministry of Finance and National Planning, *Economic Report 2008*, p.48
- 27 Speech by President Rupiah Banda, 14 October 2009, www.znfnu.org.zm
- 28 2010 Budget Address by Honourable Dr Situmbeko Musokotwane, 9 October 2009, www.mofnp.gov.zm
- 29 Republic of Zambia, *Fifth National Development Plan, 2006-2010*, December 2006, p.23
- 30 'Agriculture, Livestock and Fisheries' section of the SNDP 'zero draft' provided to the researchers,
January 2011, unpaginated
- 31 'Agriculture, Livestock and Fisheries' section of the SNDP 'zero draft' provided to the researchers,
January 2011, unpaginated
- 32 Six Percent Agricultural Growth Promotes Poverty Reduction in Zambia', *ReSAKSS Issue Brief, No.17*,
October 1009, p.1
- 33 Six Percent Agricultural Growth Promotes Poverty Reduction in Zambia', *ReSAKSS Issue Brief, No.17*,
October 1009, p.2
- 34 Interview in Lusaka, January 2011
- 35 Saviour Mwambwa et al, *A Fool's Paradise?: Zambia's Mining Tax Regime*, Centre for Trade Policy and
Development, December 2010
- 36 Republic of Zambia, *Fifth National Development Plan, 2006-2010*, December 2006, p.48
- 37 Interview with MACO officials, Lusaka, January 2011
- 38 'State buys agro tools for women's groups', *Times of Zambia*, 1 September 2010
- 39 World Bank, *Zambia: Impact Assessment of the Fertilizer Support Program*, 9 June 2010, p.33
- 40 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009,
p.103
- 41 Interview with MACO officials, Lusaka, January 2011; Cathy Farnworth and Monica Munachonga,
'Gender Approaches in Agricultural Programmes- Zambia Country Report', *UTV Working Paper 2010*,
p.11
- 42 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009,
p.103
- 43 African Development Bank, *Republic of Zambia: Multi-Sector Country Gender Profile*, April 2006
- 44 World Bank, FAO and IFAD, *Gender in Agriculture Sourcebook*, 2010, p.3
- 45 Cathy Farnworth and Monica Munachonga, 'Gender Approaches in Agricultural Programmes- Zambia
Country Report', *UTV Working Paper 2010*, p.22
- 46 Economics Association of Zambia, 'Zambia Public Expenditure Review: Agriculture', Presentation, 2
December 2010
- 47 Republic of Zambia, *Fifth National Development Plan, 2006-2010*, December 2006, p.355
- 48 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009,
p.105
- 49 Cathy Farnworth and Monica Munachonga, 'Gender Approaches in Agricultural Programmes- Zambia
Country Report', *UTV Working Paper 2010*, p.22
- 50 47 per cent of the yield increase was accounted for by favourable weather and 25 per cent by
increased fertilizer use. William Burke et al, 'Factors Contributing to Zambia's 2010 Maize Bumper
Harvest', Food Security Research Project, September 2010, p.1
- 51 World Bank, *Zambia: Impact Assessment of the Fertilizer Support Program*, 9 June 2010, p.ix
- 52 Budget Address by Honourable Dr Situmbeko Musokotwane, 20 January 2009, www.mofnp.gov.zm
- 53 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009,
p.48
- 54 James Thurlow et al, 'Agricultural Growth and Investment Options for Poverty Reduction in Zambia',
ReSAKSS Working Paper no.19, November 2008, p.5
- 55 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia:
Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009,
p.34
- 56 World Bank, *Zambia: Impact Assessment of the Fertilizer Support Program*, 9 June 2010, p.vii
- 57 Michael Muleba, 'Fertilizer support is a subsidy disaster', www.ms.dk
- 58 World Bank, *Zambia: Impact Assessment of the Fertilizer Support Program*, 9 June 2010, p.viii
- 59 World Bank, *Zambia: Impact Assessment of the Fertilizer Support Program*, 9 June 2010, p.ix. A
study of the distribution of the FISP during the 2005/06 and 2006/07 marketing seasons found
that the provinces receiving the highest amounts of fertilizer were Lusaka and Copperbelt, where

- there is already a vibrant commercial fertilizer sector and where farmers already find it easier to access commercial fertilizer outlets; here, the subsidy thus crowds out fertilizer sales that would have occurred anyway. Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.36
- 60 World Bank, *Zambia: Impact Assessment of the Fertilizer Support Program*, 9 June 2010, p.x
- 61 World Bank, *Zambia: Impact Assessment of the Fertilizer Support Program*, 9 June 2010, p.3
- 62 Steven Haggblade, 'Returns to Investment in Agriculture', Food Security Research Project, January 2007, p.4
- 63 Antony Chapoto, 'What is the 2011 National Budget for Zambian Agriculture', Presentation, 19 October 2010, p.34
- 64 'Budget to handle bumper harvest', *Times of Zambia*, 4 January 2011
- 65 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.28
- 66 William Burke et al, 'Factors Contributing to Zambia's 2010 Maize Bumper Harvest', Food Security Research Project, September 2010, p.4
- 67 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.36
- 68 World Bank, *Zambia: Impact Assessment of the Fertilizer Support Program*, 9 June 2010, p.17
- 69 Speech by President Rupiah Banda, 14 October 2009, www.znfu.org.zm
- 70 Chsihimba Chsihimba, 'Refined crop marketing beckons in 2011', *Times of Zambia*, 12 January 2011
- 71 Interview with Transparency International, Lusaka, January 2011
- 72 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.16
- 73 Ministry of Finance and National Planning, *2007 Annual Fifth National Development Plan Progress Report*, p.31
- 74 Antony Chapoto, 'What is the 2011 National Budget for Zambian Agriculture', Presentation, 19 October 2010, p.18
- 75 Agricultural Consultative Forum, 'Discussing the 2009 National Budget for Zambian Agriculture: Workshop', Lusaka, 4 February 2009, p.29
- 76 This is the budget allocation to Agricultural Services & Technology Development (K60.8 billion) – which includes spending on ARD and extension - out of total agriculture budget listed in this table of ZK 1,182 billion; *Green Paper 2008-10* at http://www.mofnp.gov.zm/index.php?option=com_docman&task=cat_view&gid=66&Itemid=122, p.17. Jones Govereh et al note that in recent years, the government has devoted just 4 per cent to extension and agricultural research combined, and that 75 per cent of that 4 per cent goes on salaries. 'Trends in agricultural and poverty indicators in Zambia', Resakss policy brief, June 2007, p.3.
- 77 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.39-40. Figures here show Shs 5.9 billion allocated to agriculture extension under Crop Development and Management, Shs 529 million to advisory and extension services under Cooperative Development and Management, and Shs 906 million to livestock extension and capacity building under Livestock Resources Management and Development
- 78 ActionAid Interviews with Ghana's Ministry of Food and Agriculture officials and academics, Accra, March 2011
- 79 <http://www.lusakatimes.com/2010/10/10/full-2011-budget-speech-finance-minister/>
- 80 Budget Address by Honourable Dr Situmbeko Musokotwane, 20 January 2009, www.mofnp.gov.zm
- 81 'Agriculture, Livestock and Fisheries' section of the SNDF 'zero draft' provided to the researchers, January 2011, unpaginated
- 82 Interview with MACO officials, Lusaka, January 2011
- 83 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.54
- 84 Budget Address by Honourable Dr Situmbeko Musokotwane, 20 January 2009, www.mofnp.gov.zm
- 85 Interview with MACO officials, Lusaka, January 2011
- 86 Catherine Nyirenda, 'Agro experts behind bumper harvest', *Times of Zambia*, 13 August 2010
- 87 A 2005 survey found that 77% of farmers 'never' saw an extension worker, 5% did so 'very often', 7%

- 'often' and 11% 'rarely'. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/B/2009/07/14/000333037_20090714002021/Rendered/PDF/487740ESW0P1021C0Disclosed071131091.pdf, p.5
- 88 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.30
- 89 Republic of Zambia, *Estimates of Revenue and Expenditure for the year 2011* (The Yellow Book)
- 90 James Thurlow et al, 'Agricultural Growth and Investment Options for Poverty Reduction in Zambia', *ReSAKSS Working Paper no.19*, November 2008, p.53
- 91 NEPAD, *Comprehensive Africa Agriculture Development Programme*, November 2002, Section 5.7
- 92 James Thurlow et al, 'Agricultural Growth and Investment Options for Poverty Reduction in Zambia', *ReSAKSS Working Paper no.19*, November 2008, p.53
- 93 According to one report, spending on agricultural research reached an historical low of ZK 18 billion in 2005 but rose to ZK 20 billion in 2008 - a figure which is different than that given in the government budget. This spending is largely allocated to overheads and salaries. ASTI, *Zambia: Recent Developments in Agricultural Research*, Country Note 2010, p.1
- 94 ZARI, *2009 Annual Report*, pp.11, 13
- 95 ASTI, *Zambia: Recent Developments in Agricultural Research*, Country Note 2010, p.5
- 96 ASTI, *Zambia: Recent Developments in Agricultural Research*, Country Note 2010, p.7
- 97 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.30
- 98 'Agriculture, Livestock and Fisheries' section of the SNDP 'zero draft' provided to the researchers, January 2011, unpaginated
- 99 FAO, *Scaling Up Conservation Agriculture in Africa: Strategy and Approaches*, July 2009, p.14
- 100 P.Simasiku et al, 'Natural Resource Management, Food Security and Rural Development in Zambia: Moving from Research to Action', Food Security Research Project, February 2010, p.5
- 101 Stanislaus Ngosa, 'Exploring other soil enriching practices', *Times of Zambia*, 10 April 2010
- 102 Rackson Shamutuku, 'Maize mono-cropping, a recipe for disaster', *Times of Zambia*, 11 December 2010; Tiyese Sakala, 'Organic farming: Solution to climate change', *Times of Zambia*, 4 September 2010
- 103 'Adopt conservation farming, farmers urged', *Times of Zambia*, 23 June 2010
- 104 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.115
- 105 'Adopt conservation farming, farmers urged', *Times of Zambia*, 23 June 2010
- 106 ZARI, *2009 Annual Report*, p.8
- 107 Catherine Nyirenda, 'Agro experts behind bumper harvest', *Times of Zambia*, 13 August 2010
- 108 Susanne Neubert, *Agricultural Development in a Changing Climate in Zambia: Increasing Resilience to Climate Change and Economic Shocks in Crop Production*, German Development Institute, 2011, p.8
- 109 James Thurlow et al, 'The Impact of Climate Variability and Change on Economic Growth and Poverty in Zambia', *IFPRI Discussion Paper*, August 2009, p.vii
- 110 MACO's budget allocation to the PACOs and DACOs for all provinces amounted to ZK 220 billion in 2009, ZK 107.6 billion in 2010 and ZK 141 billion in 2011 – an average of 15 per cent of the MACO budget. Republic of Zambia, *Estimates of Revenue and Expenditure for the year 2010 and 2011* (The Yellow Book)
- 111 Republic of Zambia, *Estimates of Revenue and Expenditure for the year 2010 and 2011* (The Yellow Book)
- 112 Antony Chapoto, 'What is the 2011 National Budget for Zambian Agriculture', Presentation, 19 October 2010, p.18
- 113 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.54
- 114 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.37
- 115 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.12
- 116 Federico Bonaglia, *Zambia: Sustaining Agricultural Diversification*, OECD, 2008, p.30

SAYING ONE THING, DOING ANOTHER:
HOW THE ZAMBIAN GOVERNMENT NEEDS TO IMPROVE AGRICULTURE SPENDING

- 117 Interviews in Lusaka, January 2011
- 118 CSPR, *Budget Execution and Service Delivery Barometer, January to June 2010*, p.23
- 119 <http://www.internationalbudget.org/what-we-do/open-budget-survey/>
- 120 Open Budget Index 2010, Zambia, available at : <http://www.internationalbudget.org/what-we-do/open-budget-survey/?fa=countryDetails&id=2327&countryID=ZM>
- 121 CSPR, *Budget Execution and Service Delivery Barometer, January to June 2010*, pp.1-10
- 122 CSPR, *A Brief Policy and Sectoral Analysis of Zambia's Fiscal Policies and Trends, 2006-2010*, March 2010, p.1
- 123 Concern, *Unheard Voices: Women Marginal Farmers Speak Out – A Zambian Case Study*, October 2009, p.20
- 124 Michael Muleba, 'Budget Monitoring Report 2010', FOSUP, December 2010, p.12
- 125 Republic of Zambia, *Mid-Term Review: Fifth National Development Plan, 2006-2010*, October 2009, p.48
- 126 Republic of Zambia, *Fifth National Development Plan, 2006-2010*, December 2006, p.47
- 127 Republic of Zambia, *Fifth National Development Plan, 2006-2010*, December 2006, p.47
- 128 Jones Govereh et al, 'Trends and Spatial Distribution of Public Agricultural Spending in Zambia: Implications for Agricultural Productivity Growth', *ReSAKSS Working Paper No.26*, February 2009, p.32
- 129 African Development Bank, *Republic of Zambia: Multi-Sector Country Gender Profile*, April 2006



SUPPORTING SMALL FARMERS: THE NEED FOR CHANGE IN KENYA'S AGRICULTURE BUDGET



Mark Curtis
January 2011

CONTENTS

SUMMARY	83
INTRODUCTION	86
1. THE NEED TO INCREASE GOVERNMENT SPENDING ON AGRICULTURE	87
2. IMPROVING THE FOCUS OF GOVERNMENT SPENDING	90
▶ EXPLICITLY FOCUSING ON WOMEN FARMERS	90
▶ IMPROVING ACCESS TO FREE EXTENSION SERVICES	91
▶ CONTINUING, BUT REFORMING, THE INPUT SUBSIDY PROGRAMME	93
▶ INCREASING ACCESS TO CREDIT	95
▶ FOCUSING AGRICULTURAL RESEARCH AND DEVELOPMENT ON SMALL FARMERS	96
▶ TACKLING INEFFICIENCIES IN THE MINISTRIES	100
RECOMMENDATIONS	99
REFERENCES	100

SUMMARY

This report analyses the Kenyan government's agriculture budget, assessing how well focused it is on the needs of small farmers, especially women. It analyses overall expenditure levels and the extent of farmers' access to inputs, extension services, credit and agricultural research. It is based on extensive secondary research, interviews with key officials and fieldwork in three districts of western Kenya: West Pokot, Greater Trans Nzoia and Greater Kakamega.

Over 80 per cent of Kenya's population of 40 million derives their livelihoods from agriculture and pastoralism. Four million small farm households produce three-quarters of the country's food. The key actors are women, who account for 75 per cent of the labour force in small-scale agriculture, manage 40 per cent of small farms and play the major role in food preparation and storage. Yet Kenya's farmers face massive challenges. Their landholdings are small, productivity is low and most have little access to inputs, financial services and markets to sell any surplus produce. Poverty and hunger remain deep and persistent. Around 48 per cent of Kenyans, especially subsistence farmers and pastoralists, live in poverty and over 40 per cent – around 16 million people – lack sufficient food.

The need to increase agriculture spending

Kenya, along with other African governments, committed itself in the 2003 Maputo Declaration to spending 10 per cent of its national budget on agriculture. It is not easy to calculate how much Kenya actually spends on agriculture since the government provides contradictory figures, but all suggest that it is spending much less than 10 per cent. The most recent Medium Term Expenditure Framework suggests that the government is barely a third of the way towards meeting the Maputo Declaration target. The government states that it is committed to increasing spending on agriculture to 8 per cent of the budget by 2020, thus still falling short of the target.

Kenya's failure to spend sufficiently on agriculture flies in the face of evidence that agriculture-led growth in Kenya is more than twice as effective in reducing poverty as industry-led growth. The International Food Policy Research Institute (IFPRI) calculates that increasing the share of government spending to 10 per cent, involving investments in irrigation, agricultural research and extension services to farmers, would lift 1.6 million people above the poverty line.

The Kenyan government has produced some impressive agriculture policy documents and strategies that, on paper, go a long way to addressing the challenges faced by small farmers. However, we identify six major reforms needed to improve agriculture spending.

Explicitly Focusing on Women Farmers

Our fieldwork finds that only 5 per cent of women farmers receive extension services, less than 2 per cent have access to credit and 14 per cent benefit from the government's input subsidy programme. Women farmers are largely bypassed in Kenya's agriculture budget. The only mention of women in the Ministry of Agriculture's *Strategic Plan* for 2008–12, for example, is a 'mainstreaming gender' budget line for 2008–12, which is allocated just KShs 1 million, amounting to 0.007 per cent of ministry spending. The government says it is taking some steps to mainstream gender in agriculture policy but it is noteworthy that Kenya has not hitherto had a gender strategy for the agriculture sector even though the government has long recognised that farmers are overwhelmingly women.

Improving Access to Free Extension Services

Figures vary on the proportion of Kenyan farmers accessing extension services. The World Bank claims that 50 per cent of farmers now have access, but our fieldwork suggests that in some districts, at least, access is much lower. The government is allocating around 25 per cent of its agriculture budget to extension services – a relatively high amount compared to other African countries. Yet the service is still recognised as

inadequate. The increased reliance on private extension providers means that extension services are skewed towards well-endowed regions, bypassing poorer farmers, and are not backed by sufficient state funding to make them work. Paying for services is beyond the reach of most poor farmers. Moving to 'demand-driven' services requires further state investments in building the capacity of farmer organizations, since the poorest farmers are not currently organised and little able to demand services.

Continuing, but Reforming, the Input Subsidy Programme

Kenya's input subsidy programme – the National Accelerated Agricultural Inputs Access Programme (NAAIAP) - is welcomed by most farmers, according to our research, and should be continued, but several problems need to be addressed. Corruption and cronyism are seen as pervasive, with district agricultural officers having too much discretion in determining who receives the vouchers. Many farmers also lament the fact that the NAAIAP denies them right to choose the fertilizer and seed they are more familiar with. Around 22 per cent of men and 14 per cent of women interviewed in our fieldwork are benefiting from the input subsidy.

Increasing Access to Credit

Our research finds that only 7 per cent of farmers – and less than 2 per cent of women farmers – have access to credit. Access has diminished over time and most credit is available to large farms and commercial enterprises, typically those producing for export. The government is supporting several credit programmes, but they suffer from particular problems. The Agricultural Finance Corporation - the government's main institution for providing agricultural credit - lends only to farmers with more than five acres while clients are required to raise 20 per cent of the project cost.

Focusing Agricultural Research on Small Farmers

Investing in agricultural research and development (ARD) is vital for imparting knowledge to farmers and developing improved crop varieties and techniques to increase yield. Kenya has a large ARD system and the government allocates around 11 per cent of the agriculture budget to the principal research institute, KARI. But studies suggest that ARD has produced meagre impacts, that farmers have little influence over research priorities and that research findings are poorly disseminated through the extension system. The government is paying little attention to sustainable agriculture, notably organic farming, while apparently placing more emphasis on developing GM technology.

Tackling Inefficiencies in the Ministries

Kenya's agriculture sector, and especially the Ministry of Agriculture, suffers from several internal inefficiencies, such as problems in spending the (already low) budgetary allocation, high recurrent costs, corruption and top-down decision-making. The government should conduct an internal review to determine the optimal approach to addressing each of these problems.

Recommendations

Kenya's agriculture spending needs to focus on addressing the real needs of small farmers, particularly women:

- ▶ The government should **spend a minimum of 10 per cent** of its national budget on agriculture and should announce a timetable for fulfilling this commitment.
- ▶ Agriculture spending and policy need to be reoriented to explicitly focus on **women farmers**. The *extension service* needs to be overhauled to support women farmers. *Agricultural research* programmes need to be reviewed to focus on increasing the productivity of crops grown by women and to involve women in research design and dissemination.
- ▶ The **extension service** requires increased public investment to provide free services to more poor farmers, and to be reoriented to help farmers promote sustainable agriculture approaches that maximize their productivity.
- ▶ **Input subsidy programmes** such as a NAAIP should be continued but reformed. The government must take steps to ensure that farmers are *consulted* concerning the right types of seeds and fertilizer to be provided. *Women farmers* should be more explicitly targeted to receive vouchers. The government should also outline how it is going to do more to combat pervasive *corruption*.
- ▶ The government must do much more to ensure that small farmers, especially women, are able to access **credit services**. The government should increase its capitalisation of the Agricultural Finance Corporation and other government credit schemes to reach more farmers.
- ▶ The government needs to invest more in **agricultural research**, ensure that outputs are better disseminated to farmers and place more emphasis on supporting **sustainable agriculture**, including organic farming.
- ▶ The Ministry of Agriculture needs to address the various **internal inefficiencies** identified in our analysis by conducting an internal review to determine how each of these will be tackled.

INTRODUCTION

This report, based on extensive secondary research and primary research in three districts, analyses the Kenyan government's agriculture budget, assessing how well focused it is on the needs of small farmers, especially women. It analyses overall expenditure levels and the extent of farmers' access to inputs, extension services, credit and agricultural research.

Box 1: Research methodology

An extensive literature review of Kenya's agriculture budget and policy was conducted, together with interviews with government, donor, academic and civil society organisation staff. Field research with individuals and groups of small farmers and pastoralists was conducted in three districts of western Kenya: West Pokot (an Arid and Semi-Arid Land area or ASAL) and Greater Trans Nzoia and Greater Kakamega (high rainfall areas).

Background: Farming and Hunger in Kenya

Over 80 per cent of Kenya's population of 40 million lives in rural areas and derive their livelihoods from agriculture and pastoralism.¹ Four million small farm households produce three-quarters of the country's food. The key actors are women, who account for 75 per cent of the labour force in small-scale agriculture, manage 40 per cent of small farms and play the major role in food preparation and storage. Up to two-thirds of the female population in rural areas are subsistence farmers.² Maize is presently the main staple crop in the country and the most important crop for food security.

Agriculture accounts for 26 per cent of Kenya's GDP directly and another 27 per cent indirectly, and for 65 per cent of exports.³ Yet Kenya's farmers face massive challenges. Kenya has a structural deficit in the production of several key foods, including maize, which heightens the risk for the millions of net food buyers in the country – which includes most small farmers.⁴ Their landholdings are small, productivity is low and most have little access to inputs, financial services and markets to sell any surplus produce, while being dependent on increasingly erratic rainfall since less than 7 per cent of the cropped land is under irrigation. Extreme weather events such as droughts and floods have also increased in frequency over the past few decades, further eroding livelihoods. Most rural roads are poor while crop and livestock diseases, together with post-harvest losses, are significant. Women farmers tend to be poorer than men and face even greater challenges in accessing inputs and services. The country possesses insufficient strategic food reserves, an inadequate distribution system to move food from surplus to deficit areas and inadequate disaster preparedness and response systems.⁵

Hunger remains deep and persistent. Around 48 per cent of Kenyans, especially subsistence farmers and pastoralists, live in poverty⁶ and over 40 per cent – around 16 million people – lack sufficient food⁷. This produces devastating health problems – more than a third of children are stunted (low height for age) and one in 6 under-fives is underweight for their age.⁸ Millions of Kenyans, especially those in food insecure regions of the arid north, coast and eastern provinces, are regularly fed by food aid. Over half of Kenya's 13 million urban dwellers live in informal settlements lacking basic services and many of them are unable to meet their food needs.⁹ One academic paper notes: 'It is not easy to reconcile that in a country where agriculture is the mainstay of the economy, famine is so frequent'.¹⁰

Studies suggest that agriculture-led growth in Kenya is likely to derive from increases in productivity in maize, livestock, traditional exports such as tea and coffee, pulses, oilseeds and horticultural crops. In some parts of Kenya, agricultural growth driven by cereals, notably maize, is likely to be most effective in reducing poverty.¹¹ The government estimates that average yields are well below potential, with yield gaps for crops ranging from 150 – 260 per cent.¹²

Different strategies are however, needed in Kenya's ecologically distinct regions. In Kenya's *high rainfall areas*, which cover only 11 per cent of the country, mainly in the west – but which are home to 80 per cent of Kenyans – farmers grow the full range of crops available in the country, including cereals, pulses, fruits and vegetables and a range of livestock. In Kenya's *semi-arid areas*, which cover a fifth of the country, mainly in the south, pastoralism is common but rain-fed agriculture, encompassing a variety of crops, is also practiced. In the arid lands, covering 68 per cent of the country in the north and east, the land is not suitable for rain-fed agriculture and pastoralism is the main source of livelihood and therefore livestock products are likely to be key to agricultural growth. The latter regions, in particular, are subject to more frequent and more severe droughts and associated hunger, partly as a result of global climate change.¹³

1. THE NEED TO INCREASE GOVERNMENT SPENDING ON AGRICULTURE

'Kenya does not seem to be making much progress towards achievement of the Maputo Declaration.' Government Public Expenditure Review 2010¹⁴

'As a country we are barely investing in the [agriculture] sector.'
Senior Kenyan civil servant in the agriculture sector¹⁵

Kenya, along with other African governments, committed itself in the 2003 Maputo Declaration to spending 10 per cent of its national budget on agriculture. It is not easy to calculate how much Kenya actually spends on agriculture since the government provides contradictory figures, but all suggest that it is spending much less than 10 per cent. The most recent Medium Term Expenditure Framework, published in January 2011, provides the following figures for spending on agriculture as a proportion of the national budget:

Table 1: Proportion of national budget allocated to agriculture¹⁶

2007/08	2008/09	2009/10
3.4	2.9	3.7

On this calculation (which refers to spending by five ministries – see note below), the government is barely a third of the way towards meeting the Maputo Declaration target. However, the government's Medium-Term Investment Plan (MTIP) for 2010-2015 states that the allocation to agriculture has averaged 5.9 per cent of the national budget in the three previous years (which are not specified).¹⁷ The Medium Term Budget Strategy papers provide still different figures. The difference between these figures is mainly explained by including different ministries in agriculture spending.^{1*}

In terms of *future* spending levels, the MTIP states that it is committed to raising spending on agriculture from 5 to 8 per cent of the budget by 2020.¹⁸ Thus 17 years after making the 10 per cent commitment, the government will still not have achieved the Maputo Declaration target. Indeed, the most recent MTEF, for 2011/12 – 2013/14, states: 'There is... the urgent need to increase agricultural allocation to 10 per cent in line with [the] Maputo Declaration'.¹⁹

^{1*} In some budget figures, such as most annual budget figures, 'agriculture and rural development' spending refers to expenditure by five ministries: The Ministries of Agriculture, Livestock Development, Cooperative Development and Marketing, Lands, and Fisheries Development. Table 1 above, for example, appears to cover spending by those five ministries. In the Medium-Term Investment Plan, however, the government says it includes spending by 10 ministries, although it actually lists 12: the five above plus the Ministries of Water and Irrigation, Environment and Mineral Resources, Science and Technology, Regional Development Authorities, Trade, Development of Northern Kenya and Other Arid Lands, and Forestry and Wildlife.

Box 2: Government spending plans under the MTIP

The Medium-Term Investment Plan envisages Kenya spending Kshs 306 billion on agriculture over five years. Of the Kshs 306 billion, Kshs 247 billion is development spending, the rest recurrent costs. Around 58 per cent of the development spending is targeted to the ASAL regions. Donors are expected to contribute 31 per cent of total MTIP spending.

MTIP expenditure covers six areas:

- Increasing productivity, commercialisation and competitiveness
- Promoting sustainable land and natural resources management
- Promoting private sector participation
- Reforming delivery of agricultural services
- Increasing market access and trade
- Ensuring effective coordination and implementation

Over three-quarters of MTIP spending is directed towards the first two areas noted above.²⁰

Kenya's spending on agriculture is pitifully low considering that most Kenyans depend on farming for their livelihood, and also given the depth of hunger in the country. The government's failure to spend sufficiently on agriculture also flies in the face of evidence of the benefits of agricultural growth. A World Bank study notes that agriculture-led growth in Kenya is more than twice as effective in reducing poverty as industry-led growth.²¹ The US-based International Food Policy Research Institute (IFPRI) calculates that increasing the share of government spending to 10 per cent, involving substantial investments in irrigation and research/extension, would lift 1.6 million people above the poverty line and grow agriculture by 5.3 per cent per year during 2006-15 (compared to around 3 per cent currently).²²

There is an historical precedent for reaching the 10 per cent target - Kenya allocated 10 per cent of all government spending to agriculture in the first decade after independence (1965-75).²³ Increases in government spending must be matched by efficiency improvements in the agriculture sector ministries, considered further below.

Box 3: Agricultural aid to Kenya

Donors have provided an average of 14 per cent of Kenya's agricultural sector spending in recent years.²⁴ In 2010/11, donors were funding Kshs 15.4 billion worth of agriculture projects.²⁵ Over 40 per cent of agricultural aid is in the form of concessional loans rather than grants.²⁶ Donors are organized in a Harmonisation, Alignment and Coordination group which has registered improvements in the coordination of agricultural aid in recent years. However, they were still promoting over 30 separate projects just in the two largest agriculture ministries (those for Agriculture and for Livestock Development) in 2008/09.²⁷

Finding more resources for agriculture

Where can the government find extra resources for agriculture? There are a number of options:

- ▶ The richest Kenyans could be paying more in **tax to government**. In recent years in particular, the Kenyan elite has benefitted disproportionately from economic policy, accumulating more wealth, while the majority population becomes poorer.²⁸ A 2004 study showed that the wealthiest 10 per cent of Kenyans controlled 42 per cent of wealth and that the bottom 10 per cent accounted for less than 1 per cent of wealth – figures that if anything have diverged even more since then.²⁹
- ▶ Reductions in the amount the government spends on **public administration** could be made. Expenditure on public administration is nearly three times greater than that on agriculture, accounting for 11 per cent of the government budget in 2008/09.³⁰
- ▶ The government could re-allocate some of its **military spending** to agriculture. Kenya spends twice as much on national security (the military and the national intelligence service) as on agriculture, accounting for 9 per cent of the government budget in 2008/09.³¹

Box 4: Low spending means few services - The case of William Mole Kasotot

'If our group could be assisted with a "money maker" – irrigation equipment, research and extension services, we will be able to bid farewell to hunger and malnutrition in this area'.

Farmers interviewed were unanimous in lamenting the government's failure to end hunger. Indeed, some farmers believe that government policies are making matters worse, a view attributed to rising food prices and low prices of agricultural produce and livestock paid by government to pastoralists. In the drought prone ASALs, herders and farmers say hunger is increasing as men and their livestock migrate in search of pasture, leaving hungry women, children and the old behind. Farmers in the ASAL area of West Pokot district, Kongelai division, believe their capacity to become food sufficient is hampered by the lack of government services, especially extension.

One farmer in the district, William Mole Kasotot, a 50 year old father of nine children in Simotwa village, started crop and vegetable farming in 1990 when he first bought seeds. Before 1990, William, like most other farmers in the area, relied mostly on keeping local breeds of cows (zebu) and goats. He had 30 cows and 70 goats but some had to be slaughtered for the family and others sold, while many died due to the prolonged drought and famine that hit the community. William says: 'It rained here last towards end of April and early May 2009. I planted maize seeds but when the crop was just one-meter high the rains failed completely and the entire maize crop on my farm died'. During periods of famine and drought, as now, William and other farmers are forced to rely on food aid and reduce the number of meals the family takes.

William also says: 'Since 1990 I have received no support in the form of extension, input subsidy, training or capacity building on any component of crop production from Government. All you see here [drawing attention to his plot of vegetables] is out of our own struggles to be able to feed ourselves. But this is not enough, if our group could be assisted with a "money maker", like irrigation equipment, research and extension services, we will be able to bid farewell to hunger and malnutrition in this area'.

He adds: 'Whenever rains fail I produce kales, cow peas, pumpkin, onions, bananas and some sugarcane through irrigation using buckets to ferry water from the river. Since with irrigation I am able to produce food throughout the year, I sell a proportion of the vegetables to buy maize and meet other needs while the rest is consumed at home'.

2. IMPROVING THE FOCUS OF GOVERNMENT SPENDING

The Kenyan government has produced some impressive agriculture policy documents and strategies that, on paper, go a long way to addressing the challenges faced by small farmers. The framework guiding the agriculture sector was provided by the Strategy for Revitalising Agriculture, drawn up in 2004, which has been revised into the Agricultural Sector Development Strategy (ASDS) covering 2010-2020, in turn reflecting the aspirations of the government's broader Vision 2030 strategy. The government has developed a Medium-Term Investment Plan (MTIP) for 2010-15 which springs from the ASDS and the compact with the Comprehensive Africa Agriculture Development Programme that the government signed in July 2010. The government's key policy goals in the sector include raising agricultural productivity, developing irrigation, increasing the commercialisation of agriculture and improving the governance of sectoral institutions.³²

Despite these positive policies, we identify six major reforms needed to improve government agriculture spending.

Explicitly Focusing on Women Farmers

Our fieldwork in three districts – outlined in more detail in the sections that follow – finds that only 5 per cent of women farmers receive extension services, less than 2 per cent have access to credit and 14 per cent benefit from the government's input subsidy programme.

One reason for these alarmingly low figures is government policy. Despite producing most of the country's food, women farmers are largely bypassed in Kenya's agriculture budget. The only mention of women in the Ministry of Agriculture's *Strategic Plan* for 2008-12, for example, is a 'mainstreaming gender' budget line for 2008-12, which is allocated just Kshs 1 million, amounting to 0.007 per cent of ministry spending.³³

The government says it is taking some steps to mainstream gender in agriculture policy. The new Agricultural Sector Development Strategy, for example, states that it will:

'develop a gender policy for the agricultural sector to ensure women's empowerment and mainstreaming of needs and concerns of women, men, girls and boys in all sectors'.³⁴

The government envisages addressing in this strategy such issues such as women's heavy workloads and limited access to productive resources, credit, inputs and technology.³⁵ The Medium-Term Investment Plan also states that the government 'will ensure articulation of powerful indicators to track progress toward gender equality in resource allocation and associated impacts'.³⁶

These commitments are welcome, but it is noteworthy that Kenya has not hitherto had a gender strategy for the agriculture sector even though the government has long recognised that farmers are overwhelmingly women. Moreover, there is a clear danger that the commitment to gender mainstreaming will remain fine words. Indeed, the government already said it was going to mainstream gender in agricultural policy in its Strategic Plan of 2007 – and then failed to mention women or gender at all in the 19 page budget that was attached to the plan.³⁷ There is thus a major mismatch between government rhetoric and the reality of policy when it comes to women farmers. Rhetorically, the government recognizes that:

'Traditional interventions in agricultural development are likely to affect men and women differently. An effective gender approach to designing and implementing interventions in agriculture would take these differences into consideration, focusing on equality and equity of the outcomes rather than just equal treatment'.³⁸

The clear need is for such recognition to be put into practice but there is little evidence of this so far, including in actual budgetary decisions. Government spending must explicitly target women farmers much more effectively across all areas of policy, especially in the provision of extension services, inputs, credit and agriculture research.

There is some evidence, however, that the government is increasing its efforts to support women farmers. The World Bank-supported Agricultural Productivity and Agribusiness project has a good focus on women, on paper, proposing to mainstream gender in its support to Kenya's research and extension services and to analyse women's and men's different roles.³⁹ Similarly, the National Agriculture and Livestock Extension Programme (NALEP) is meant to ensure that women constitute at least 25 per cent of the members of Focal Area Development Committees (FADC) – the grassroots institutions that are meant to spearhead development activities in a focal area on behalf of the community. The government says that women actually constitute around 35 per cent of the FADC membership.⁴⁰ However, a recent report for the Swedish government development agency, SIDA, found that the 25 per cent minimum quota was not reached in any of the locations visited by the project team.⁴¹ This quota, while welcome, is still very low given that three-quarters of farmers are women.

Box 5: Regina Jackson and the lack of government support

Regina Jackson, a woman farmer aged 35, lives in Akiriamet village of West Pokot district with her husband and four children, all of them girls. Regina is a member of Simatwa farmers group and farms just half an acre of land, producing vegetables such as kales, spinach, *managu*, cow peas, tomatoes and onions which the family eats, while selling small amounts to local schools.

Farming in the area is mainly subsistence-based since drought, plot size and lack of knowledge and skills on good crop husbandry are major challenges. Regina and other farmers receive few services from government, and struggle on their own to put at least one meal a day on the table for their families. Regina says that the last time the area registered high yields was in 1998. Thereafter, the rains became increasingly scarce to support food and livestock production. She and her husband had to sell their goats to cope with the situation, but once the money was spent they remained hungry. So Regina and her husband dug a borehole not far from the local river to begin a vegetable irrigation project. To obtain start-up capital for the project Regina sold eggs and poultry, which enabled her to buy inputs such as vegetable seedlings/seeds.

Regina says: 'I plant my vegetables through irrigation four times in a year. And through sale of my vegetables I can today raise up to Ksh 100 a day and I can afford to donate money to a fundraising project in our area. Something I was not able to do before. My biggest problem now is the back-breaking exercise of watering the vegetables using 'buckets' in the morning and evening. If I can get a water pump, pipes, rubber and other irrigation equipments I can produce more vegetables for my household and sale in schools. I hope that one day Government will come and avail its services of extension, trainings and on-farm demonstrations on better crop husbandry methods to us', she says. Such government support would provide a major boost to farmers like Regina and end cycles of hunger but is largely lacking.

Improving Access to Free Extension Services

Extension services are vital in providing advice and training to poor farmers to improve food production and household income. Farmers can, for example, increase their productivity by accessing training or information on the best farming techniques, on new, higher-yielding crop varieties or on what crops are likely to produce most profit next season.

Figures vary on the proportion of Kenyan farmers accessing extension services. The World Bank, which is funding the partially-privatised extension service, claims that 50 per cent of farmers now have access.⁴² Similarly, the government claims that the number of farmers reached through the extension service rose from 1.0 million in 2003 to 2.1 million in 2007 and then to 2.9 million in 2009/10.⁴³ However, our fieldwork suggests that in some districts, at least, access is much lower (see Box 6). It also suggests that the actual ratio of extension officers to farmers is less than officials claim.

Access to extension services also varies by region. Whereas the average distance from farm household to extension officer is 3 kms in the central highlands, it is over 11 kms in the coastal lowlands.⁴⁴ The differences are important as households closer to extension services tend to use higher yielding technologies and

achieve higher yields than those far away. The government's Medium-Term Investment Plan acknowledges that increased access to extension is 'especially critical' in underserved areas where food insecurity is prevalent.⁴⁵

Since 2007, Kenya has been promoting a new extension policy – the National Agricultural Sector Extension Policy (NASEP) – that encourages public-private partnerships in the provision and financing of extension services. The system maintains a government role in service provision but includes a much greater role for the private sector and NGOs. Indeed, around a fifth of the 10,000 or so extension service providers in Kenya are now private sector, and around 16 per cent are NGOs; the government service accounts for around 40 per cent.⁴⁶ The new 'demand-driven' system requires farmers to pay for services provided by private suppliers ('cost recovery'). The latest MTEF figures suggest that the government is allocating around 25 per cent of its agriculture budget to extension services (Kshs 7.4 billion out of an agriculture budget of Kshs 30 billion) – a relatively high amount compared to other African countries.⁴⁷

Thus the government recognises the importance of extension services and has made some efforts to improve them in recent years by bringing in a new system and, more specifically by trying to better some parts of it by, for example, procuring new motor vehicles, establishing information desks in the districts and recruiting some new officers. However, the government recognises that, despite improvements, extension services remain inadequate.⁴⁸ We believe one reason for this is that the increased reliance on privatised approaches is not backed by sufficient state funding to make them work. This is recognised even by the coordinator of the World Bank-funded project supporting the new extension system, a Kenyan civil servant, who says that if the government committed a few more dollars worth of funding to every Kenyan farmer, the system would work.⁴⁹ Moving to 'demand-driven' services actually requires further state investments in building the capacity of farmer organizations, since the poorest farmers especially are not currently organised and little able to demand services.

This is a missed opportunity. IFPRI has calculated that for every million shillings of government spending on extension and agricultural research, 103 people could be lifted out of poverty and GDP could rise by Kshs 6.3 million. Spending an extra 1 per cent of GDP on extension and research would reduce poverty by over 2 per cent.⁵⁰

The other major problem with the partially-privatised extension system is, according to two prominent academics, that:

*'Private extension provision is generally skewed towards well-endowed regions and high-value crops. Remote areas and poor producers, especially those growing low-value crops with little marketable surplus are poorly served... Private extension is not a substitute for public extension.'*⁵¹

The study argues that private providers should operate in areas where they have strong incentives to do so and allow the public sector to provide services where the private sector is unable. This accords with our field findings (see Box 6); paying for services is beyond the reach of most poor farmers and private providers rarely venture into 'less profitable' areas.

Box 6: Farmers' experience of extension services

Our fieldwork shows that 22 per cent of farmers overall benefit from extension services, but only 5 per cent of women farmers. Access is higher in the 'high potential' districts of Greater Trans Nzoia and Greater Kakamega than in the ASAL district of West Pokot.

In the whole of Milimani Division, in the western part of Greater Trans Nzoia district, our information is that there are only two extension officers for 25,000 small farmers. In a focus group in Saboat Division, in the eastern part of Greater Trans Nzoia district, farmers say there are only two extension officers for 50,000 farmers in the division. This contradicts the view of the Trans Nzoia East District Agriculture Office that there is one extension officer for 1,200 farmers. Sources in the Ministry of Agriculture Department of Planning say that the current extension officer/farmer ratio across the country generally is also around 1: 2,000.

Most of the small number of farmers who say they see extension officers do so during the provincial Agricultural Society of Kenya shows and field days by extension officers. Extension agents are almost never seen on farms. Many farmers complain that when they ask extension officers to visit them, they rarely turn up despite promises to do so. The general view among the farmers interviewed is that extension services are skewed in favour of the large scale farmers who are seen as the 'rich'. The current system, which is partly motivated by profit, tends to work against small farmers. Indeed, those accessing such services have mostly relied on private extension services providers, which they find very expensive. In Kabras West division of Greater Kakamega district, women farmers say that before the *Njaa Maarufuku* Programme (on which more below) they never received government extension services but now, although the services have become more regular, they have to pay Kshs 500 per visit per extension officer per week. Most farmers interviewed are unhappy with this arrangement.

The few training sessions that are available tend to be at bad times for women. The usual 10am sessions are criticized by women as inappropriate; they call for training to be conducted after 1pm to allow them to do the necessary domestic chores in the morning. Many women farmers also say that extension officers look down upon them and do not take them seriously. In one instance, a group of 170 women forwarded their names to an extension officer who was running a program for distributing seeds, but the women were ignored.

Small farmers require not only more advice on increasing farm productivity, but information on markets and prices to sell their produce, value addition and other income opportunities. Yet our fieldwork suggests that the extension system is rarely providing such functions to *most* farmers, especially the poorer ones who most need them.

Continuing, but Reforming, the Input Subsidy Programme

Kenya has since 2007 been promoting an input subsidy programme – the National Accelerated Agricultural Inputs Access Programme (NAAIAP) - that aims ultimately to reach 2.5 million farmers with half to one hectare of land. It focuses on farmers not currently using agricultural inputs, providing them with a voucher to buy a 'Kilimo pack' of 100 kgs of fertilizer and 10 kgs of improved seed, enough for around one acre of maize. The focus has been on 33 districts in 'medium and high potential' areas of the country.⁵² Our research among farmers finds that the subsidy is welcomed by most and should be continued, but that there are several problems that need to be addressed by the government, notably corruption and the choice of which seeds and fertilizers to use (see Box 7).

In the first two seasons – 2007 and 2008 – the programme reached 35,000 farmers, the plan being to raise this to reach 100,000 farmers in 2009.⁵³ In 2009/10, the programme actually reached 90,000 farmers, according to government figures.⁵⁴ This subsidy programme is being funded mainly by the government with support from the World Bank, which notes that 'the scheme has produced good results in the first two seasons', allowing farmers in higher-potential areas, for example, to reach yields of ten bags of maize per acre.⁵⁵

Unlike in many other countries' subsidy programmes, women and other vulnerable groups are, encouragingly, supposed to be given preferential consideration⁵⁶, although it is unclear whether this happens in practice across the country. Extension workers and agro-dealers are also supposed to be trained to help farmers make sound decisions in choosing the seed varieties and fertilizer types. The programme also has a credit component, involving a warehouse receipts system for maize farmers, a competitive grants program to provide resources to financial institutions to entice them develop new savings and credit products suitable for small scale farmers, and a subsidized credit program through which private commercial banks provide financial services to the farmer.

Box 7: Farmers' experience of the subsidy programme

Around 22 per cent of men and 14 per cent of women interviewed in our fieldwork had benefited from the input subsidy. They generally welcome the programme, saying that it helps them increase their yields, in turn helping to reduce hunger, uplifting farmers and increasing their income to make commitments such as school fees affordable. But they also identify a number of problems with the programme that the government and its donor backers need to address.

First, corruption and cronyism are pervasive in the programme. It was said that district agricultural officers had too much discretion in determining who received the vouchers. These officers often relied on the chiefs to provide the names of the eligible beneficiaries but the chiefs often gave them the names of their relatives and friends. In Kiptoror and Milimani Locations – in Greater Trans Nzoia District – farmers said that distribution of the subsidy was based partly on ethnicity, which creates bad blood between those farmers receiving it and those that did not. One farmer cited a case where a man, his wife and son all received a voucher worth Ksh 7,300. Other said that widows were asked to pay bribes to receive vouchers. Some relatively well-off farmers who were less needy but still obtained vouchers sold them for cash.

The diversion of vouchers and fertilizer meant that many eligible farmers, especially women, lost out, receiving no inputs at all. In Kiptoror, for example, there are around 18 villages with nearly 3,000 households, but of the 192 (50kg) bags of fertilizers that were meant to be distributed in this division, only 19 bags arrived.

Another problem relates to the choice of seed and fertilizer. Most farmers interviewed in Kiptoror lamented the fact that the NAAIAP denies them right to choose the fertilizer and seed they are more familiar with. The farmers say they prefer HB 614 maize seed and DAP/CAN fertilizer but were forced to take HB 624 maize seed and NPK fertilizer for planting and Urea for top-dressing. Most farmers interviewed say that HB 624 maize is not good for their area and can only do well in colder areas. Other farmers complained of the late arrival of the vouchers, saying that the planting began in early April but they only received fertilizer in late April or early May.

While welcoming the subsidy programme, farmers think it could be vastly improved if the government were to consult with communities. Instead, farmers regard the scheme largely as a top-down initiative that inspires divisions between those who have been favoured and those not – even though all are poor. One farmer in Kaplamai division, Greater Trans Nzoia district, who praised NAAIAP and what the government is doing for farmers, said to our interviewer:

'This NAAIAP programme is really good but you should go back and tell those Government officers to at least find time and visit the farms to see how the maize seeds and fertilizer they gave us are doing'.

Increasing Access to Credit

Without access to loans at low interest rates, farmers are unable to invest in future production or to take a risk and diversify into producing new crops or starting up a new business or activity. Yet our research finds that only 7 per cent of farmers – and less than 2 per cent of women farmers – have access to credit (see Box 9). Despite some government programmes, access has diminished over time and most credit is available only to large farms and commercial enterprises, typically those producing for export.⁵⁷

The Ministry of Agriculture's Strategic Plan for 2008-12 says that 'access to bank credit by farmers is still a major challenge despite the fact that Kenya has a relatively well developed banking system'. It recognizes that 'inadequate credit to finance inputs and capital investment is a main cause [of] low productivity in agriculture' and indeed that it is 'impossible for most farmers to access credit'. But it then allocates just Kshs 110 million to enhancing access to credit in 2008/09, just 0.8 per cent of the Ministry's budget.⁵⁸ The small number of farmers who get credit tend to do so from commodity-based providers (such as the Kenya Tea Development Agency) and informal money lenders.

Table 3: Sources of agricultural credit (Per cent share)⁵⁹

	1997	2000	2007
Commodity-based credit providers	13.5	55.8	48.7
Informal money lenders	16.5	10.6	19.8
Traders/Input stockiest	10.4	6.2	10.5
Cooperatives/SACCOs	55.8	25.9	10.3
Agricultural Finance Corporation (GOK)	3	0.5	5.2
Micro-finance institution/NGO	-	0.5	3.1
Commercial banks	0.8	0.5	2.5

The government is supporting several credit programmes, but which suffer from particular problems, for example:

- ▶ The **Agricultural Finance Corporation (AFC)** is the government's main effort at addressing agricultural credit, set up at independence to provide long-term credit. It lends only to farmers with more than 5 acres while clients are required to raise 20 per cent of the project cost.⁶⁰ The government says it has recently recapitalized the AFC and that it has disbursed loans totaling KShs 5 billion in the five years up to 2008, but this is to just 27,000 farmers.⁶¹ During 2003 – 2007, the AFC lent to just 1 per cent of rural households, 86 per cent of which were in the Rift Valley, to farms averaging 19 acres.⁶² Indeed, the government bluntly states of the AFC that it is among the state institutions that 'have been mismanaged and run down and are no longer important sources of finance for agriculture'.⁶³
- ▶ The **Women Enterprise Fund**, launched by the government in 2007 and managed by the Ministry of Gender, Children and Social Development, is a source of finance for women who cannot easily access the formal financial sector. Targeted at micro-businesses generally, not just farmers, borrowers are not required to provide land as collateral and the repayment interest rate is low, ranging from 0-8 per cent. By June 2010 (the latest available figures), the fund had loaned Kshs 1.09 billion, benefiting 206,000 women. It is not clear, however, how many of that number are farmers - even if it were all (which is not credible), it would still a fraction of the women farmers in the country. There are also problems accessing the fund – farmers must apply in groups of at least ten people, ostensibly to reduce the risk of default.⁶⁴
- ▶ A more far-reaching programme may well be the government's **Kilimo Biashara** scheme, launched in 2008 as part of the input subsidy programme together with Equity Bank and the Alliance for a Green Revolution in Africa (AGRA). This provides farmers with loans at a 10-12 per cent interest rate (compared to a standard bank rate of 18 per cent) and aims to reach 2.5 million farmers.⁶⁵ According to a World

Bank report, however, the programme is aimed at 'better-endowed enterprise-oriented farmers'.⁶⁶ Our field research reveals other problems with this programme (see Box 9).

Box 8: Farmers' access, or lack of it, to credit

In the three districts we visited, only 6.9 per cent of farmers overall, and just 1.7 per cent of women, have ever accessed agricultural credit. It was only farmers in the 'high potential' districts of Greater Trans Nzoia and Greater Kakamega who have ever taken out loans; not a single farmer had done so in the ASAL district of West Pokot.

Various reasons are given for not taking out loans. Key reasons are that many farmers have less than the five acres required to access an AFC loan and that most, especially women, do not have title deeds to their land and thus cannot satisfy banks' collateral requirements. Other farmers do not know where to access such loans, while others refer to overly high interest rate payments. Many fear that by taking on a loan they might lose their land if they cannot repay it. In Kwanza constituency of Greater Trans Nzoia district, where only one out of 13 farmers interviewed had taken out a loan (from a private micro finance enterprise), some farmers fear that they cannot afford to start paying back interest even before their crops have matured; they suggest that banks should allow farmers some grace period until their crops are harvested and sold before they start repaying loans.

Kilimo Biashara

Focus group discussions with farmers in Greater Trans Nzoia and Greater Kakamega districts reveal a number of problems with this programme. Farmers in one focus group say they cannot meet Equity Bank's requirements to access such credit, such as the demand to possess a log book and land title deeds – which documents most farmers say they do not have – and to show receipts for the last three years of sale of maize to the National Cereals and Produce Board. Equally, although the cost of one acre of maize production per season is around Kshs 27,000, Equity Bank only lends small farmers up to Kshs 10,000 per season. This is payable at 10 per cent interest but with additional hidden charges to the farmer, such as a credit appraisal cost charged at 3 per cent and life insurance charged at 0.275%, meaning that farmers pay 13.275 per cent interest in total.

Njaa Marufuku Kenya (NMK)

This programme - initiated in 2005 by the government with support from the UN's Food and Agriculture Organisation - supports community-driven agricultural development initiatives targeting the poor. It promotes increased productivity, improvements in nutrition and provides small grants for scaling up agricultural activities. Our research finds that farmers in receipt of NMK loans are generally welcoming of them, but their biggest concern relates to the corruption that pervades such government schemes. One women's farmer group in Greater Kakamega district, which has benefited from an NMK grant, received only Kshs 115,000 instead of the required Kshs 120,000; farmers suspect that the remainder has been pocketed. Other groups also express concerns with the extension officers running the programme. It was alleged that some consume up to a third of any grant through frequent and at times unnecessary visits to the beneficiary farms – and that the motivation for such visits was the Kshs 500 officers are entitled to per visit.

Focusing Agricultural Research on Small Farmers

Investing in agricultural research and development (ARD) is vital for imparting knowledge to farmers and developing improved crop varieties and techniques to increase yield or promote sustainable agriculture. Studies suggest that investments in ARD offer the greatest potential for enhancing productivity and reducing poverty, and that in Africa as a whole, for every one per cent yield increase resulting from investments in ARD, two million Africans can be lifted out of poverty.⁶⁷ The CAADP programme calls on African countries to double their annual spending on agricultural research within ten years.⁶⁸

Kenya has a large ARD system with various institutions. The government allocated around 11 per cent of the agriculture budget (Kshs 2.7 billion) to the principal research institute, KARI, in 2008/09. Government plans envisage this falling to around 8 per cent of the budget in 2011/12.⁶⁹ This proportion is higher than in many African countries; the World Bank notes that over the last decade, Kenya's ARD spending has averaged 2.6 per cent of agricultural GDP, more than the Sub-Saharan average of 0.62 per cent. But the Bank also notes that this is still 'far too low to produce significant changes in agricultural development' and also that 'meagre research resources have been inefficiently used yielding minimal results'.⁷⁰

One other major problem is that 'there is little influence by farmers on research priorities', even on those programmes for which farmer groups actually pay, according to the government's 2010 Public Expenditure Review.⁷¹ Other core problems include ineffective delivery of research findings through the extension system, poor accountability and a limited scope to retain researchers due to poor career opportunities.⁷² The situation has not been helped by the heavy reliance on donor funding, which has been unreliable in recent years as donors have reduced aid due to poor governance.⁷³ The government recognises some weaknesses in its ARD work, such as insufficient research-extension-farmer linkages and that the country's various research institutes work too independently, and says that it is committed to improving the research service.⁷⁴

IFPRI notes that a combination of effective research and extension services is likely to provide significant returns to spending – as noted above, for every million Shillings spent on ARD and extension, an additional 103 people can be lifted above the poverty line.⁷⁵

Box 9: Sustainable agriculture, GM and climate change

As in most other African countries, too little of Kenya's agricultural research focuses on promoting sustainable agriculture approaches such as organic farming, integrated pest management, agro-forestry and conservation agriculture, which reduce or eradicate the need for chemical fertilizer or pesticides. KARI's Strategic Plan for 2009-14 identifies sustainable natural resource management as one of six priority themes but does not mention the promotion of, for example, organic farming in its 100 page analysis.⁷⁶

At the same time, the government is promoting GM technology. The Gates Foundation is funding KARI to develop GM drought-resistant maize to provide seed for farmers in five African countries; the technology is being provided by Monsanto.⁷⁷ While ignoring organic farming, KARI's Strategic Plan identifies 'biotechnology and genetic resources' as one of six priority themes that will receive Kshs 3.7 billion funding over the five years, a tenth of KARI's expenditure, and more than the allocation to natural resources management. It is unclear how much of this will go to GM research specifically, but the plan notes that 'biotechnology provides unprecedented opportunities' to promote a number of technologies including genetic modification, and that KARI will continue to work with 'large seed companies as clients' as well as NGOs and others.⁷⁸

A greater focus on sustainable agriculture is more vital than ever in light of climate change. The government's National Climate Change Response Strategy notes that 'the evidence of climate change in Kenya is unmistakable': rainfall has become unpredictable and irregular, extreme weather is now the norm, and the maximum temperature has risen since the early 1960s by 0.2 – 1.3 degrees centigrade.⁷⁹ A World Bank analysis predicts that global warming will have a 'substantial impact' on Kenyan farmers' net crop revenue – by 2030, temperature rises will mean a 21 per cent loss (\$54 per hectare) in medium and low potential zones, although high potential areas will gain by 1 per cent.⁸⁰

In the 2010/11 budget speech, Finance Minister Uhuru Kenyatta noted the need to address the impacts of climate change and 'reverse damages' to land, water and biodiversity. The government increased the allocation to Environment, Water and Sanitation to Kshs 51 billion, a third more than the previous year, although it is unclear precisely how much of this is targeted to addressing climate change specifically.⁸¹

Tackling Inefficiencies in the Ministries

Kenya's agriculture sector, and especially the Ministry of Agriculture, suffers from several internal inefficiencies that are common among governments in Africa, but which need to be tackled to increase the effectiveness of spending. Duplication and overlap between the mandates and roles of ministries, leading to wastage of resources, is one problem. Other problems include:

Inability to spend the budgetary allocation

One problem is actually spending the (already low) budget allocation. Kenya's disbursement rate for all agriculture spending was 80 per cent in 2007/08, 84 per cent in 2008/09 and 92 per cent in 2009/10, according to government figures. For externally-funded programmes, however, the spending rate has declined from 84 per cent in 2007/08 to just 44 per cent in 2009/10. The government blames this on delayed disbursements from donors, cumbersome international procurement procedures and lack of data on funds expended by donors on behalf of government⁸² but internal inefficiencies are also partly responsible.

High recurrent costs

Recurrent costs take up a large proportion of the agriculture budget, leaving little for development spending on projects and investments.

- ▶ Salaries amounted to 27 per cent of total agriculture spending in 2010/11.⁸³ In some agriculture sector ministries the proportion is much higher – a massive 52 per cent in the Ministry of Livestock Development during 2006/07–2008/09, for example.⁸⁴ Within the Ministry of Agriculture there are an excessive number of administrative and support staff – 2,272 for just 5,316 technical staff.⁸⁵
- ▶ Development spending averaged just 33 per cent of the agriculture budget in the three years from 2007–2009 (of which most was funded by donors).⁸⁶ The Ministry of Agriculture notes that 'the low level of the development budget has been cited as a major constraint to overall agricultural production and performance'.⁸⁷

Corruption

Corruption is also pervasive in agriculture, despite the Ministry of Agriculture's tagline (on its website) stating: 'Ministry of Agriculture is [a] corruption free zone'.⁸⁸ A senior agriculture researcher in a leading public policy institute estimates that 20–30 per cent of the government's agriculture budget goes missing.⁸⁹ A senior civil servant said that there is 'widespread pilferage' compounding the 'gross inefficiencies' in the agriculture sector ministries.⁹⁰ The greatest avenues for corruption are during the procurement and supply of goods and services and at the point of service delivery.⁹¹

Top-down decision-making

There are few real opportunities for farmers – especially poorer farmers, and even more especially women farmers – to influence agriculture budgeting or policy. No farmer interviewed in our fieldwork has participated in policy-making or budget tracking at the local level. Farmers say they have no idea how much money is available to local authorities to spend on agricultural activities. Analysis by Kenya's Institute for Public Policy Research and Analysis shows that there is only limited farmer participation in the government's overall annual budget process. Line ministries prepare Public Expenditure Reviews that inform the budget, but 'they hardly publish this information for public consumption'. Parliamentary oversight over budget formulation is weak and surveys reveal that over half of Kenyans are not even aware of District Development Committees that coordinate development activities at sub-national level.⁹² The main group representing farmers – the Kenya National Farmers' Union – has increasing influence over government policy, but this is still limited, and anyway does not principally represent small farmers.

Patronage politics

Compounding a top-down decision making process is the long-standing general problem of patronage politics, whereby Presidential and Cabinet policy and funding has often favoured farmers in certain agro-ecological areas, rather than being explicitly pro-poor.⁹³ Overall, government policies have been biased towards high potential agricultural areas resulting in wide regional differences in access to infrastructure and agricultural services.⁹⁴ Each of these inefficiencies need to be better addressed by the government, first by conducting an internal review to determine the optimal approach to each one.

RECOMMENDATIONS

Kenya's agriculture spending needs to focus on addressing the real needs of smallholder farmers, particularly women. We believe that the government should review its spending and policy to outline how it is going to do. We recommend:

- ▶ The government should be **spending a minimum of 10 per cent** of its national budget on agriculture, to support small farmers and to help eradicate hunger, and should announce a timetable for fulfilling this commitment.
- ▶ Agriculture spending and policy needs to undergo a reorientation to explicitly focus on **women farmers**.
 - ▶ The *extension service* needs to be overhauled to support women farmers. Current barriers faced by women in accessing extension need to be identified and the service improved to overcome them
 - ▶ *Agricultural research* programmes need to be reviewed to focus on increasing the productivity of crops grown by women and to involve women in research design and dissemination
- ▶ The **extension service** also requires increased public investment to provide free services to more poor farmers, and to be reoriented to help farmers promote sustainable agriculture approaches that maximize their productivity.
- ▶ **Input subsidy programmes** such as a NAAIP should be continued but reformed.
 - ▶ The government must take steps to ensure that farmers are *consulted* concerning the right types of maize seed and fertilizer to be provided.
 - ▶ *Women farmers* should be more explicitly targeted to receive vouchers
 - ▶ The government should also outline how it is going to do more to combat the pervasive *corruption* and *cronyism* at local level that is prevalent in the NAAIP
- ▶ The government must do much more to ensure small farmers, especially women, are able to access **credit services**.
 - ▶ The government should increase its capitalisation of the Agricultural Finance Corporation and other government credit schemes to reach more farmers, alongside ensuring that such programmes are managed properly.
 - ▶ Stringent loan requirements such as collateral need to be relaxed, loans should be payable only after crops have matured and more schemes must be open to those farming small plots.
- ▶ The government needs to invest more in **agricultural research**.
 - ▶ It should ensure that outputs are better disseminated to farmers and that farmers are involved in research design.
 - ▶ More focus must be placed on supporting **sustainable agriculture**, including organic farming.
- ▶ The Ministry of Agriculture, and other agriculture sector ministries, need to address the various **internal inefficiencies** identified in our analysis – concerning the inability to spend the budgetary allocation, high recurrent costs, corruption, top-down decision-making and patronage politics – by conducting an internal review to determine how each of these will be tackled.

REFERENCES

- 1 This includes pastoralism. Ministry of Agriculture, *Strategic Plan 2008-2012*, para 1.1; Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, p.3; James Thurlow et al, 'Rural Investments to Accelerate Growth and Poverty Reduction in Kenya', *IFPRI Discussion Paper 00723*, October 2007, p.6
- 2 Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, pp.4, 12
- 3 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.viii
- 4 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.14
- 5 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.23; Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, p.11
- 6 Government of Kenya, Central Bureau of Statistics-Geographical Dimensions of Well Being, Volume II, 2005; IFAD, 'Rural poverty in Kenya', <http://www.ruralpovertyportal.org/web/guest/country/home/tags/kenya>
- 7 Republic of Kenya, *First Medium Term Plan 2008-2012*, 2008, p.65
- 8 FAO, *State of Food Insecurity in the World 2010*, p.15
- 9 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.14
- 10 Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, p.12
- 11 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.19
- 12 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.32
- 13 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.21
- 14 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.128
- 15 Interview in Nairobi, November 2009
- 16 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.ix
- 17 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.48
- 18 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.48
- 19 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.2
- 20 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, pp.5, 48-50
- 21 World Bank, *Project Appraisal Document for the Kenya Agricultural Productivity and Agribusiness Project*, 15 May 2009, p.1
- 22 James Thurlow et al, 'Rural Investments to Accelerate Growth and Poverty Reduction in Kenya', *IFPRI Discussion Paper 00723*, October 2007, pp.26, 28
- 23 Stephen Akroyd and Lawrence Smith, *Review of Public Spending to Agriculture: A Joint DFID/World Bank Study*, Oxford Policy Management, January 2007, p.34
- 24 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.143
- 25 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.67
- 26 Government of Kenya, Ministry of Finance, *Development Estimates 2008/2009*, p.4
- 27 Government of Kenya, Ministry of Finance, *Development Estimates 2008/2009*, Table v
- 28 Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, p.19
- 29 Society for International Development, *Pulling Apart: Facts and Figures on Inequality in Kenya*, 2004, p.v

- 30 Government of Kenya, Ministry of Finance, *The Medium Term Budget Strategy Paper, 2009/10-2011/12*, June 2009, Table 9
- 31 Government of Kenya, Ministry of Finance, *The Medium Term Budget Strategy Paper, 2009/10-2011/12*, June 2009, Table 9
- 32 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.130
- 33 Government of Kenya, Ministry of Agriculture, *Strategic Plan, 2008-2012*, p.67
- 34 Government of Kenya, *Agricultural Sector Development Strategy, 2010-2020*, 2010, p.81
- 35 Cathy Farnworth and Marceline Obuya, *Gender Aware Approaches in Agricultural Programmes – Kenya Country Report*, SIDA, 2010, p.16
- 36 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.28
- 37 Government of Kenya, Ministry of Agriculture, *Strategic Plan, 2008-2012*, p.35
- 38 Government of Kenya, *Agricultural Sector Development Strategy, 2010-2020*, 2010, p.81
- 39 World Bank, *Project Appraisal Document for the Kenya Agricultural Productivity and Agribusiness Project*, 15 May 2009, pp45-6
- 40 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.149
- 41 Cathy Farnworth and Marceline Obuya, *Gender Aware Approaches in Agricultural Programmes – Kenya Country Report*, SIDA, 2010, p.13
- 42 Figure reported by the World Bank based on the Technology Adoption Survey; http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/10/21/000333038_20091021012722/Rendered/PDF/ICR10010P0823910disclosed0101191091.pdf, p.12
- 43 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.12; Republic of Kenya, *First Medium Term Plan 2008-2012*, 2008, p.66
- 44 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.148
- 45 Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.29
- 46 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.143
- 47 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.39-40. Figures here show Kshs 5.9 billion allocated to agriculture extension under Crop Development and Management, Kshs 529 million to advisory and extension services under Cooperative Development and Management, and Kshs 906 million to livestock extension and capacity building under Livestock Resources Management and Development
- 48 Government of Kenya, *Agricultural Sector Development Strategy, 2010-2020*, 2010, p.24
- 49 Interview in Nairobi, November 2009
- 50 James Thurlow et al, 'Rural Investments to Accelerate Growth and Poverty Reduction in Kenya', *IFPRI Discussion Paper 00723*, October 2007, p.31
- 51 Milu Muyanga and T.S.Jayne, 'Agricultural Extension in Kenya: Practice and Policy Lessons', *Tegemeo Working Paper 26*, 2006, pp.ii, 17
- 52 Ministry of Agriculture, *Economic Review of Agriculture*, 2009, pp.12, 16
- 53 World Bank, *Project Paper on an Agricultural Inputs Supply Project*, 8 April 2009, p.16
- 54 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.12
- 55 World Bank, *Project Paper on an Agricultural Inputs Supply Project*, 8 April 2009, p.4
- 56 World Bank, *Project Paper on an Agricultural Inputs Supply Project*, 8 April 2009, p.4
- 57 Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, p.9; Government of Kenya, *Medium-Term Investment Plan, 2010-2015*, undated, p.35
- 58 Government of Kenya, Ministry of Agriculture, *Strategic Plan, 2008-2012*, pp.7, 62
- 59 Betty Kibaara et al, *Trends in Kenyan Agricultural Productivity 1997-2007: Agricultural Productivity, Competitiveness and Rural Poverty in Kenya: Laying the Foundation for Vision 2030*, 2008
- 60 AFC, 'Frequently asked questions', www.agrifinance.org
- 61 Government of Kenya, Ministry of Agriculture, *Strategic Plan, 2008-2012*, p.17
- 62 Interview with the Marketing and Business Development Manager, AFC, Nairobi.
- 63 Government of Kenya, *Agricultural Sector Development Strategy, 2010-2020*, 2010, p.20
- 64 <http://www.gender.go.ke/index.php/Women-Enterprise-Fund-WEF/intro-women-enterprise-fund-wef.html>

- 65 AGRA, 'Kilimo Biashara lives: Bringing Hope to Kenya's Smallholder Farmers', undated, <http://www.agra-alliance.org/content/story/detail/969>
- 66 World Bank, *Project Paper on an Agricultural Inputs Supply Project*, 8 April 2009, p.16
- 67 James Thurlow et al, 'Agricultural Growth and Investment Options for Poverty Reduction in Zambia', *ReSAKSS Working Paper no.19*, November 2008, p.53
- 68 NEPAD, *Comprehensive Africa Agriculture Development Programme*, November 2002, Section 5.7
- 69 Government of Kenya, Ministry of Finance, *The Medium Term Budget Strategy Paper, 2009/10-2011/12*, June 2009, Annex 6
- 70 World Bank, *Project Appraisal Document for the Kenya Agricultural Productivity and Agribusiness Project*, 15 May 2009, pp.31-2
- 71 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.132
- 72 Stephen Akroyd and Lawrence Smith, *Review of Public Spending to Agriculture: A Joint DFID/World Bank Study*, Oxford Policy Management, January 2007, p.37; Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, p.8
- 73 Stephen Akroyd and Lawrence Smith, *Review of Public Spending to Agriculture: A Joint DFID/World Bank Study*, Oxford Policy Management, January 2007, p.37
- 74 Government of Kenya, Ministry of Agriculture, *Strategic Plan, 2008-2012*, p.7; Government of Kenya, *Agricultural Sector Development Strategy, 2010-2020*
- 75 James Thurlow et al, 'Rural Investments to Accelerate Growth and Poverty Reduction in Kenya', *IFPRI Discussion Paper 00723*, October 2007, pp.22, 32
- 76 KARI, *Strategic Plan 2009-2014*, June 2009
- 77 Rachel Keeler, 'Kenya: Gates Foundation and Monsanto to develop genetically modified seeds for small farmers', 26 November 2009, www.ratio-magazine.com
- 78 KARI, *Strategic Plan 2009-2014*, June 2009, p.54
- 79 Government of Kenya, *National Climate Change Response Strategy: Executive Brief*, April 2010, p.9
- 80 Jane Kabubo-Mariana, 'The Economic Impact of Climate Change on Kenyan Crop Agriculture: A Ricardian Approach', *Policy Research Working Paper, 4334*, World Bank, August 2007, p.3
- 81 Budget Speech for the Fiscal Year 2010/2011, 10 June 2010, www.finance.go.ke
- 82 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.ix
- 83 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, p.41
- 84 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.148
- 85 Ministry of Planning, National Development and Vision 2030, *Public Expenditure Review: Policy for Prosperity 2010*, p.148
- 86 Republic of Kenya, *Medium Term Expenditure Framework 2011/12 – 2013/14*, January 2011, pp, 20-22; Government of Kenya, Ministry of Finance, *The Medium Term Budget Strategy Paper, 2009/10-2011/12*, June 2009, Annex 8(a) and 8(b)
- 87 Government of Kenya, Ministry of Agriculture, *Strategic Plan, 2008-2012*, p.36
- 88 <http://www.kilimo.go.ke/>; accessed 21 April 2011
- 89 Interview in Nairobi, November 2009
- 90 Interview in Nairobi, November 2009
- 91 Dickson Khainga et al, 'Governance in Public Expenditure Management: Key Issues and Challenges in Kenya', *Discussion Paper 77*, 2007, pp.14-15
- 92 Dickson Khainga et al, 'Governance in Public Expenditure Management: Key Issues and Challenges in Kenya', *Discussion Paper 77*, 2007, pp.11-13
- 93 Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, July 2006, p.20
- 94 Patrick Alila and Rosemary Atieno, 'Agricultural Policy in Kenya: Issues and Processes: Paper for the Future Agricultures Consortium', IDS/University of Nairobi, July 2006, p.22



THE AGRICULTURE BUDGET AND POLICY IN SIERRA LEONE: POSITIVE STEPS, REQUIRED REFORMS



Mark Curtis
January 2011

CONTENTS

INTRODUCTION	105
1. AGRICULTURE AND HUNGER IN SIERRA LEONE	105
▶ HUNGER	105
▶ KEY PROBLEMS FACED BY FARMERS	106
2. GOVERNMENT SPENDING ON AGRICULTURE	108
▶ THE COMMITMENT TO AGRICULTURE	108
▶ THE GOVERNMENT'S ALLOCATION TO AGRICULTURE – FALLING NOT RISING	109
▶ THE MAFFS BUDGET	111
▶ WHAT IS THE GOVERNMENT ACTUALLY SPENDING?	111
3. GOVERNMENT POLICY ON AGRICULTURE: KEY AREAS FOR IMPROVEMENT	112
▶ IMPLEMENTING POLICY	112
▶ ADDRESSING CORRUPTION	113
▶ THE NEED FOR POLICY REFORMS	113
▶ A REAL FOCUS ON WOMEN FARMERS	113
▶ IMPROVING EXTENSION SERVICES	114
▶ IMPROVING AGRICULTURAL RESEARCH	115
▶ RE-LOOKING AT SUBSIDY SCHEMES	116
▶ DEVELOPING A POLICY ON FOREIGN INVESTMENTS	117
RECOMMENDATIONS	118
REFERENCES	119

INTRODUCTION

This report analyses the government of Sierra Leone's agriculture budget and policy. It asks how well-focused these are on the needs of small-scale farmers who dominate food production in the country and who comprise most of those living in poverty and hunger. It focuses on some policy areas that are key for small-scale farmers such as extension services, the subsidy programme and agricultural research. It focuses especially on women farmers who comprise the overwhelming majority of smallholders in the country.

The report finds that the government is devoting increasing attention to agriculture and is producing an impressive series of policy and strategy documents showing how it intends to support small-scale farmers and boost agricultural production. But it also finds that there are major gaps between government rhetoric and reality, especially concerning actual spending levels and the implementation of policy. The agriculture sector suffers from numerous fundamental problems which need to be better addressed if small-scale farmers are to improve their quality of their life.

1. AGRICULTURE AND HUNGER IN SIERRA LEONE

Agriculture is the backbone of Sierra Leonean society and the economy, contributing around 46 per cent of GDP and providing employment for 75 per cent of the population. Agriculture was identified by Sierra Leoneans as their number one priority in the consultations on the Poverty Reduction Strategy Paper (PRSP), the *Agenda for Change*.¹ The most important actors in agriculture are women, who constitute around 75 per cent of the labour force in food production, processing, marketing and preparation, from the farm to the table.² Agriculture is dominated by roughly 400,000 farm households, most of whom are small-scale farmers. Around 56 per cent of these households cultivate less than 1 hectare (ha) of land while 44 per cent cultivate 1 ha or more.³ The main farming practice is shifting cultivation with mixed cropping, with rice being the main crop and key staple food, Grown by most farmers, alongside cassava, maize, sorghum, sweet potatoes and groundnuts.

Hunger

In 2002, the then President Ahmad Tejan Kabbah avowed that 'within the next five years, no Sierra Leonean should go to bed hungry'.⁴ Eight years on, hunger is still widespread, though figures vary widely. The International Food Policy Research Institute (IFPRI) estimates that 46 per cent of the population was undernourished in 2004-06 – the sixth highest rate in the world.⁵ The UN gives a figure of 26 per cent as being food insecure, ie, unable to afford a basic diet and having difficulty meeting immediate needs. As many as 86 per cent of the population experience some form of difficulty in acquiring food supplies during the hungry season from June to September.⁶

Tragically, around 40 per cent of Sierra Leone's children under five are chronically undernourished.⁷ A household food security survey in 2007 found that one third of households prepared only one meal per day for adults and one fifth prepared only one meal for under-fives.⁸ Since 1990, ten ECOWAS states have succeeded in reducing the proportion of the population living in hunger, but five remain above the 'alarming' threshold; Sierra Leone is the only one above the 'extremely alarming' threshold.⁹

Box 1: Poverty

Sierra Leone is one of the world's poorest countries in the world and was ranked 180 out of 182 on the UN's Human Development Index for 2009 (only Afghanistan and Niger were below). Around 70 per cent of the country's 5.6 million population, and 79 per cent of those in rural areas, live below the poverty line. The literacy rate is 38 per cent while life expectancy is 42 years.¹⁰ Women, especially, are trapped in poverty, partly due to persistent norms of social exclusion.¹¹ Income distribution is highly unequal: The richest 20 per cent of the population accounts for half of all income; the poorest 20 per cent for just 16 per cent.¹²

Both in rural and urban areas, households spend around half their incomes on food. Most farmers practice subsistence farming, failing to produce enough food to sell in local markets and are therefore net buyers, rather than sellers, of food and thus vulnerable to high food prices. During the global food price crisis in 2008, the price of rice in Sierra Leone increased by 60 per cent from January to July that year. This pushed an additional 200,000 people below the poverty line, according to the World Bank.¹³ International prices of food have since come down but local prices are still high.¹⁴ Both commodity and food prices – especially for coffee and cocoa, the country's two most important cash crops - remain highly volatile. For example, a coffee grower in Kailahun, a major coffee-growing district, could buy only half the amount of rice from the sale of his coffee in October 2009 as compared to August 2009, due to a near-halving of the coffee price received during those two months.¹⁵

Box 2: Health indicators

Sierra Leone has one of the highest rates of child and maternal mortality rates in the world: Incredibly, 1 in 5 children do not live to see their fifth birthday and 1 in 8 women die in pregnancy or childbirth.¹⁶ The prevalence of stunting and underweight among children is also extremely serious. National assessments by health workers indicate that the overall health situation is becoming worse not better.¹⁷

infant mortality	under-5 mortality	maternal mortality	% of children under 5 who are stunted (low height for age)	% of children under 5 who are underweight
123 per 1,000 live births	194 per 1,000 births	2,100 per 100,000 live births	36	21

Sources: UNICEF, Statistics on Sierra Leone, http://www.unicef.org/infobycountry/sierraleone_statistics.html#70; World Food Programme, *Sierra Leone Food Security Monitoring Bulletin*, December 2009

Key problems faced by farmers

Farmers in Sierra Leone face numerous barriers to increasing their productivity. The main constraints include the inability to combat crop damage due to insects and diseases, lack of access to inputs such as seeds and basic tools, insufficient rehabilitation of tree crop plantations, and lack of access to credit, shown in the following two tables.¹⁸

Table 1: Farm owner's ranking of constraints to their business

% of farmers evaluating issue a 'major problem' for daily operation				
	total	big	medium	small
pests	74%	85%	77%	69%
access to financing	85%	90%	85%	84%
cost of food for workers	69%	76%	66%	70%
% of farmers evaluating issue a 'major problem' for daily operation				
access to financing	85%	90%	85%	84
access to basictools and equipment	73%	66%	69%	78%
access to seeds	64%	78%	59%	65%

Source: World Bank, *Project Appraisal Document: Rural and Private Sector Development Project*, 19 April 2007, p.26

Table 2: Villagers explanations of the causes of poverty of the poorest people

	% of respondents
Crop damage by pests	24
Plantations not yet rehabilitated	21
Sickness	16
Lack of seeds, herbicides or fertiliser	10
Lack of labour for agriculture/plantation work	6
Poor road conditions	5
Lack of agricultural equipment	4
Low rice yields	3
High weed infestations	3
Increases in price of food items	2
Lack of wage labour opportunities	2
Infertility of upland soils	1
Difficulty in marketing produce	1
Insufficient land access	1
Poor burning of upland farms	1
Flooding	1

Source: World Food Programme, *Sierra Leone: Household Food Security Survey in Rural Areas*, November 2009, p.48

The following constraints explain why Sierra Leone is unable to adequately feed its people:

- ▶ Farmers lack **technology** and rely on hoes, cutlasses and bare hands. Only around 2 per cent of farmers use ploughs or oxen.¹⁹
- ▶ The cost of **inputs**, such as fertilisers and pesticides, is high and distribution outlets few. Less than 5 per cent of farmers have access to fertilisers or insecticides and fertiliser use is one of the lowest in sub-Saharan Africa.²⁰
- ▶ Crop **yields** are low – the average irrigated rice yield is lower in Sierra Leone than for the West Africa region.²¹
- ▶ Post-harvest **crop losses**, mainly due to poor storage facilities, stand at around 40 per cent.²²
- ▶ Less than 2 per cent of arable land is **irrigated** and there is little use of technologies for water conservation or drainage.²³
- ▶ Transport **infrastructure** is in a very poor state and transport costs are high, meaning that farmers growing a small surplus are invariably unable to take it to the market. Rural electrification is rare.
- ▶ Access to **markets** is a problem. Markets are located 15 miles or more away from more than one in five villages while only 18 per cent of villages are 2 miles or less from the nearest market.²⁴
- ▶ Only 1 in 10 farm households has access to agricultural **credit**.²⁵ Around 50-60 suppliers of micro-finance are active in the country providing around 13,000 customers with a combined loan portfolio of less than \$5 million – demand is estimated as at least nine times greater.²⁶ Commercial banks have a near-zero outreach to the rural areas and agricultural loans account for only around 2 per cent of total loans.²⁷
- ▶ The **extension** service, which should provide advice and training to farmers, lacks capacity and most farmers do not interact with extension workers.²⁸

- ▶ Most farmers are not organised in **producer groups** and lack the support of institutions that can provide access to market information and strengthen their bargaining power vis-a-vis traders.²⁹

Farmers also face problems associated with **environmental change** and **mining**:

- ▶ Soils suffer from declining fertility and it is estimated that 90 per cent of the country's original forests have been destroyed by the prevailing slash and burn cultivation practices.³⁰ According to the UN's Global Environmental Facility, the impacts of climate change are already tangible in the country. Sierra Leone is experiencing seasonal drought, strong winds, thunderstorms, landslides, heat waves, floods and changed rainfall patterns.³¹
- ▶ Some farmers have been deprived of their farming land by mining operations. A 2009 report by the National Advocacy Coalition on Extractives found that hundreds of people had lost access to farming land over the previous two years, due to Sierra Rutile's mine expansion in Bonthe district. The villagers to whom NACE spoke all said that their food production, food security and incomes had suffered as a result, pushing them deeper into poverty. They were given very low compensation for the loss of their land and only one-off payments (at rates set by the government) for the loss of trees and crops. Although Sierra Rutile has repeatedly committed itself to rehabilitate land used for mining back to farming land, no significant rehabilitation has taken place.³²

Sierra Leone could certainly feed its people: Around 74 per cent of the country's land area is suitable for cultivation. However, less than 15 per cent of the arable land is currently being cultivated.³³ The sector's contribution to growth has lagged behind expectations. Agriculture grew by 4.2 per cent during 2005-2007, short of the target of 6 per cent set by the Comprehensive African Agriculture Development Programme (CAADP), to which Sierra Leone is committed.³⁴ This rate will mean that Sierra Leone will fail to meet Millennium Development Goal One – which requires reducing the 2003 national poverty rate of 70 per cent to 42 per cent by 2015. To achieve this requires the agriculture sector to grow by 7.1 per cent up to 2015.³⁵

Sierra Leone used to be a net exporter of various agricultural commodities but is now a net importer of several food crops, including its key staple, rice, largely due to the destruction of infrastructure during the war and economic adjustment programmes which encouraged the reduction of trade barriers and imports of rice. In 1975 Sierra Leone is said to have achieved rice self-sufficiency, but it is now easier and cheaper to import rice from Asia than to obtain rice from the districts due to the lack of adequate rice mills. Threshing and winnowing are invariably done by hand and further drying is on mud floors and tarmac roads; the quality of local rice is generally low due mainly to the lack of use of modern rice mills.³⁶ Despite this, the level of rice self-sufficiency increased from 57 per cent in 2002 to 71 per cent in 2007.³⁷

2. GOVERNMENT SPENDING ON AGRICULTURE

The commitment to agriculture

President Ernest Bai Koroma, who was sworn into office in September 2007, declared the following year that agriculture was his government's top priority. The *Agenda for Change*, the country's second generation PRSP covering 2008-12, makes agriculture a priority sector. In the past two years, an impressive series of ambitious, multi-faceted, plans for the sector has been drawn up, possibly as much by donors as the government. Indeed, the UN High Level Task Force on the Global Food Security Crisis notes that Sierra Leone is considered 'a model for the way it has undertaken planning in the sector'. The country is also being promoted by the African Union/NEPAD as a 'showcase' example for the region.³⁸

In September 2009, the *National Sustainable Agriculture Development Plan* (NSADP) for 2010-2030 was launched to provide the framework for implementing the agriculture objectives outlined in *Agenda for Change*.³⁹ Within the NSADP, the priority programme is the *Smallholder Commercialisation Programme* (SCP), drawn up in early 2010 and with a funding requirement of \$403 million over the first five years, most of which is intended to come from donors. At the core of the SCP is the aim of creating 2,750 Farmer Based Organisations (FBOs) and a network of 650 Agricultural Business Centres (ABCs) to service them.⁴⁰ With around 30 farmers in each FBO, the programme would reach 82,500 households – out of around 400,000

in the country.⁴¹ In 2010, around 390 FBOs received a subsidised inputs package of fertilizer, improved seed varieties and labour saving machinery such as rice cutters and power tillers. The ABCs will provide the FBOs with a six-month training course in agricultural techniques, financial and business management and marketing skills. The SCP also aims to provide some farmers with better access to financial services and also envisages establishing a social protection safety net to increase nutrition and food security for 1.5 million people.⁴²

In the SCP and NSDAP programmes, the government has committed itself to increasing agricultural productivity through transforming subsistence farming into commercial agriculture. This involves improving research and extension services delivery, promoting efficient resource management, improving agriculture infrastructure (such as irrigation and storage facilities) and mainstreaming cross-cutting issues such as gender and youth.⁴³ The NSADP aims to increase agricultural growth to 6 per cent per year by 2015.⁴⁴ The need for a focus on rice, cassava, oil palm and fisheries is regarded as necessary if Sierra Leone is to achieve MDG1.⁴⁵ A National Rice Development Strategy is also being prepared, aiming to achieve self-sufficiency in rice by 2013 by increasing productivity and the area under cultivation. An extension policy is also being developed.

The government's allocation to agriculture – falling not rising

'The government's budget allocation to the agricultural sector has been grossly inadequate, which hinders the development of the sector. Policy pronouncements by government for the importance of the agricultural sector do not match the actual allocations and disbursements, which makes it impossible to achieve set targets of making agriculture the engine of growth for sustainable economic development'.
(National Sustainable Agriculture Development Plan 2010-30⁴⁶)

Has the government's professed commitment to agriculture translated into actual budgetary and spending decisions? Unfortunately, the answer to this is largely no. Government claims on the level of agriculture spending are rather misleading.

In the most recent budget speech – for 2010 – the government claimed to be allocating Le 118.3 billion to the agriculture sector, which, the Finance Minister said, amounted to 10 per cent of government expenditure 'consistent with the Maputo declaration' (the commitment made by African states in 2003 to spend at least 10 per cent of the national budget on agriculture). This Le 118.3 billion allocation was broken down as:

Table 3: Agriculture budget figures given in the 2010 budget speech

	Le billion
Recurrent budget	23.2
Domestic capital budget as counterpart funds	7.8
'Rehabilitation of key trunk roads connecting agricultural producing areas to market centres'	26.2
Feeder roads	8.4
Agricultural research	3.4
Donor funded projects from the capital budget	36.6
Transfers to local councils for agricultural activities	13

Source: Budget Speech 2010, MOFED

It is unclear how the government arrived at 10 per cent. According to the budget, total expenditure in 2010 would be Le 1,770 billion. This means that the allocation to agriculture actually amounts to 6.7 per cent of the budget.⁴⁷ However, the government's figures above include spending of Le 34.6 billion on roads. If spending on roads is deducted, the allocation to agriculture comes to only Le 84 billion, or 4.7 per cent of the government budget. The government has clearly made a conscious decision to define road building as agriculture – in the 2007 budget speech of the former government, for example, roads are not included.⁴⁸

In fact, deducting the allocation to roads, the allocation to agriculture as a proportion of the government budget has gone down in recent years. In 2007, the then government allocated Le 67.1 billion to agriculture (which included a full Le 43.3 billion of donor-funded projects). This amounted to 5.5 per cent of the government budget, more than the present proportion.⁴⁹

The present government claims to have massively increased agricultural spending over the former government. The government has stated in its communications to CAADP⁵⁰, and in pronouncements by the Minister of Agriculture, Sam Sesay,⁵¹ that it has increased the budgetary allocation to agriculture from 1.6 per cent in 2008 to 7.7 per cent in 2009. But when the government claims that the allocation to agriculture was previously around 1.7 per cent of the budget, it seems to be *excluding* donor-funded projects. However, when it now claims to be spending 10 per cent, it *includes* donor-funded projects, as well as roads. This is extremely misleading. Yet international organisations appear to be accepting Sierra Leone's claims at face value. The UN High Level Task force on Hunger, for example, notes that Sierra Leone is allocating 9.9 per cent to agriculture in 2010.⁵²

Government spending is certainly higher than during the first half of the decade. The allocation to agriculture was only 2.5 – 3 per cent of the government budget in 2001-2003⁵³ and averaged 2.8 per cent during 2003-06.⁵⁴ The increase began before the present government took power.

The national budget allocation appears skewed in favour of some less productive ministries. In 2010, the government allocated around the same to the Security Services (Le 83 billion) as to agriculture (minus the allocation for roads); Le 41 billion of the Security Services budget was allocated to the Ministry of Defence – much more than to the Ministry of Agriculture and Food Security.⁵⁵

Neither is agriculture being sufficiently prioritised at council level. Decentralised governance, which was introduced in Sierra Leone in 2004 after 32 years of centralisation, means that much agricultural spending can take place at council level. But, as is recognised in the NSADP, 'presently local councils budget outlay for agricultural development is minimal'.⁵⁶

Box 3: Allocation to agricultural research

The government's budget allocation to agricultural research – Le 3.4 billion in 2010 - is very low, but actual spending on agriculture research appears to be higher than this allocation. Slightly different figures than provided by the government are given in a recent report by ASTI (Agricultural Science and Technology Indicators) which states that Sierra Leone invested Le 7.5 billion in agricultural research in 2009, of which Le 5.5 billion was allocated to the Sierra Leone Agricultural Research Institute (SLARI). The report notes that the country has 72 full-time agricultural researchers.⁵⁷

The MAFFS budget

The budget of the Ministry of Agriculture and Food Security is as follows:

Table 4: The MAFFS budget, 2010-2012

	2010 Le million	2011 Le million	2012 Le million
Office of the Permanent Secretary	1,480	1,750	2,130
Crops Division	413	449	484
Forestry Division	416	451	486
Livestock Division	224	259	297
Agricultural Engineering Services Division	273	300	330
Planning, Evaluation, Monitoring and Statistics Division	1,680	1,757	1,840
Office of the Director General, Food Security	17,191	18,490	19,427
Agricultural Extension Services Division	3,930	3,723	3,896
TOTAL	25,607	27,179	28,890

Source: MAFFS, 2012 Budget Summary and Strategic Plan, provided to the researchers

Nb. The allocation to MAFFS in these figures is slightly higher than given by the Minister in the 2010 Budget Speech.

Some specific areas of the MAFFS budget deserve mention:

- ▶ The allocation to **extension services** is more than the Le 3,930 shown in Table 4 since other divisions in the MAFFS also allocate money to extension. In total, the MAFFS allocation to extension for 2010 is Le 5.0 billion, or 20 per cent of the Ministry's budget.
- ▶ For 2010, the allocation to the **procurement of fertiliser** is Le 4.7 billion and for procurement of **equipment and pesticides** is Le 3.4 billion. Together, these comprise 27 per cent of the MAFFS budget. The allocation for the procurement of tractors is 2.7 billion or 11 per cent of the MAFFS budget.
- ▶ The only budget allocation specifically for women (who comprise the majority of farmers) is that to the Women in Agriculture and Nutrition unit, which is part of the Extension Division in the MAFFS. This amounts to just Le 157 million (£24,000) or 0.6 per cent of the MAFFS budget.

What is the government actually spending?

However, these budgetary allocations are themselves highly misleading. Research for this study consulted several civil servants, including several senior officials in the MAFFS, who all say that their divisions are lucky to spend 50 per cent of their annual budgetary allocation. What money does come through from the Ministry of Finance tends to appear in the third and fourth quarters of the year by which time some activities can be

less useful or useless (for example, if related to the farming cycle). In one unit of one division of MAFFS *no money at all* had yet been released nine months into the 2010 financial year. In 2009, that unit spent just 20 per cent of its allocated budget since the money never came through from the Ministry of Finance.⁵⁸

It appears that the government's budgetary allocation to agriculture is little more than an aspiration, not a really existing sum of money that is actually available. The President is aware of such low disbursement rates among several government departments but clearly the practice continues. The CAADP review of the Smallholder Commercialisation Plan notes that the SCP Investment Plan presents no information on recent years' agriculture budget performance, including actual spending compared to allocations.⁵⁹ Yet this information is critical for assessing the realism of the scale-up in resources that the government is asking donors to provide for the SCP. Officials say that the government must move to a system where each government department has the correct pool of money allocated, and that this be clearly demarcated from other departments.⁶⁰

Sierra Leone is certainly not alone in its low disbursement rate. One recent analysis found that Uganda spends 57-79 per cent of its agriculture allocation and that Kenya's disbursement rate for development expenditure averaged 66 per cent.⁶¹ Another study of six West African countries (Benin, Burkina Faso, Cote D'Ivoire, Mali, Ghana and Togo) showed that the disbursement rate of agriculture budgets varied from 59 per cent in Togo to 76 per cent in Cote D'Ivoire.⁶² But this is no comfort for Sierra Leone's farmers - the low disbursement rate means that very little is actually being spent on providing them with urgently-needed services.

3. GOVERNMENT POLICY ON AGRICULTURE: KEY AREAS FOR IMPROVEMENT

To improve its agriculture sector spending, the government should address problems with the implementation of policy and several policy reforms.

Implementing policy

The major problem with Sierra Leone's agriculture policy is whether the basically good commitments on paper can really be implemented. The MAFFS is still suffering from the legacy of the war, when many skilled staff left the country or were killed. It is no secret that the MAFFS, and the agriculture sector more broadly, suffer from poorly trained staff, insufficient training opportunities and too much bureaucracy, such as too many 'coordination' units. Planning capacity, economic analysis and management skills are all weak. Performance targets are invariably lacking and there is a lack of a results-oriented management culture ('I can stay all day in my office until 8 pm and constantly work, but I won't be rewarded and will still earn little', is how one MAFFS head of division put it⁶³). Low salaries are also a major problem - heads of division in the MAFFS earn around Le 600,000 a month with other civil servants earning up to Le 500,000. The NSADP recognises that a 'massive expert crisis' is on the horizon in 3-5 years when existing agriculturalists will retire and few new people will be able to train others. Thus the government is highly dependent on donors to develop this expertise.⁶⁴ At district level, the capacity and personnel problems are even starker: The quality of local government staff is generally inadequate and officers are not used to taking leadership in such a decentralised system after decades of centralised control.

While the government is aware of these problems, and there are some attempts to address them, it is very unclear how they will be tackled on a sufficient scale. There is, for example, no plan to massively overhaul the MAFFS or, as yet, significant donor money available to support a necessarily large capacity-building programme.

The SCP's Investment Plan, which outlines the programme in some detail, has been reviewed by CAADP, which offers many criticisms.⁶⁵ One key point is that the funding requirement for the SCP is massively above current funding to agriculture but that the programme is expected to be implemented largely within existing government institutional arrangements and capacity.⁶⁶ This is unrealistic. The CAADP review notes that the SCP 'could be manageable if targeted measures to address current capacity constraints are developed through new hiring'.⁶⁷

Unless radical reforms take place, increased future spending on agriculture may well be wasted. In Sierra Leone, a 1 per cent increase in agriculture spending was found in a recent study to increase agricultural growth by only around 0.25 per cent.⁶⁸ Across West Africa, government spending on agriculture is notoriously inefficient. The same study also found that a 1 per cent increase in spending on agriculture in West Africa will increase the regional growth rate by only 0.27 per cent, as compared to 0.37 per cent in Africa as a whole. Thus increases in regional spending on agriculture, including in Sierra Leone, must be accompanied by major efficiency reforms.

Although some government plans are ambitious, they are still likely to reach only a small proportion of farmers. Only 390 FBOs were supported in 2010, representing less than 15,000 farmers in the whole country. As noted above, the SCP's aim is to eventually create 2,750 FBOs, meaning that 82,500 households will benefit from the support to FBOs – but this compares to around 400,000 farming households in the country, or just over 20 per cent. The SCP envisages that other farmers will also benefit from the improvements brought about by the SCP, through for example access to district storage facilities and improved rural roads.⁶⁹ But these gains are hard to quantify. Even if the full programme is implemented – which, as noted, is unlikely – most farmers in the country will not be reached. The government should be even more ambitious about making radical reforms to the agriculture sector, and donors should provide much more support to enable them to do this.

Addressing corruption

The independent Anti-Corruption Commission has been established to improve governance and the fight against corruption is a declared priority of the government. The National Public Procurement Authority is the regulatory and oversight body advising the government on all issues relating to public procurement. Despite this, and some improvements in the country as a whole, corruption remains a serious problem, including in agriculture.

Some MAFFS money simply disappears. Construction (road-building) and procurement processes are traditionally vehicles for corruption. Recently, the MAFFS paid 2-3 times as much on the procurement of fertiliser and seed than a leading donor paid for the same, with no explanation why.⁷⁰ The NSADP recognises the 'weak management and little financial accountability in most of the agricultural programmes' in Sierra Leone.⁷¹ Corruption is reinforced by loose management structures and the lack of clear work mandates and performance standards, especially in the MAFFS, and thus is linked to the need for fundamental reform in the MAFFS.

Ongoing corruption, along with bureaucratic inefficiency, explains why most donors remain reluctant to provide general budget support (as opposed to separate project aid) to the government, and insist on their own checks and balances to be in place, and why they are not prepared to significantly increase their aid to the country. This becomes a vicious circle, however – unless more aid is provided to build the capacity of institutions to prevent and combat corruption, these practices will continue.

The need for policy reforms

When it comes to agriculture *policy*, the government has, as noted, produced an impressive range of documents that focus on improving most of the areas that are critical for small farmers, such as extension, research and credit. However, a number of needed improvements and areas for re-focusing can be identified.

A real focus on women farmers

Women constitute the majority of farmers in most African countries and Sierra Leone is no exception: Women account for 75 per cent of workforce and also head 11 per cent of all households across the country and nearly one in five in Kono and Bonthe districts.⁷² Yet almost all agricultural policies – in Sierra Leone as elsewhere on the continent – assume farmers are men. Agricultural policies that are not focused on the primary producers of food make little sense and the eradication of gender discrimination is one of the key ways to increase the supply of food. It is estimated that if women farmers in Africa had the same access as

men to land, seed and fertilizer, farm productivity could increase by up to 20 per cent.⁷³

Although not all agricultural policy needs to be different towards women than men, much of it does. In one survey in Uganda, for example, male farmers said the biggest barriers to increasing agricultural production were transport, marketing constraints and the lack of credit, whereas women mentioned the time needed to look after their families, to prepare food and work on their husbands' gardens.⁷⁴ In Sierra Leone, labour-saving devices are especially needed for processing - for example grating machines that can process cassava into *gari*, speeding up the manual method of doing this. The head of Women in Agriculture and Nutrition (WAIN), Victoria Lebbie, says that other support needed includes building the capacity of women farmer organisations, developing managerial and entrepreneurial skills, and taking women farmers to see model farmers. Access to credit for women farmers needs to be improved since the type of credit currently available in Sierra Leone tends not to be useful to poor farmers; the money usually has to be repaid in the first month, whereas it can take months to see returns from farming.⁷⁵

The government's agriculture plans and policies on gender are somewhat vague and might be going through the motions. The SCP, for example, says little about how it proposes to mainstream gender.⁷⁶ Few if any policies appear to prioritise women farmers. The WAIN unit was recently established in the MAFFS and has the task of facilitating access of women to extension services, credit and land, organising women into farmer groups and exposing women to income generating activities. WAIN is the only agriculture budget line mentioning women. But, as recognised in the NSADP, the unit is 'weak and under-resourced both in terms of personnel and logistics' and receives a miniscule allocation from the budget.⁷⁷ Victoria Lebbie has said:

*'Until consideration is given to the important roles of women as partners in the production process, food security will be difficult to achieve. Such considerations need to take into account the constraints women face such as the use of rudimentary tools, low yielding planting materials, lack of access to information and credit as well as pressures on their energies and times'.*⁷⁸

Agricultural services are largely passing women by. It is not known what proportion of women farmers have access to fertiliser, extension and credit, but anecdotal evidence suggests that the figure is near zero. Women are also under-represented among agriculture sector staff. One Divisional Director in MAFFS says that the 'greatest problem' facing the extension system is the lack of women officers. 'We probably have only 1-2 per district', he says.⁷⁹ There are no more than 50 women extension officers in the whole country.⁸⁰

Improving extension services

Extension services are vital in helping farmers increase their productivity by accessing training or information on the best farming techniques, on new, higher-yielding crop varieties or on what crops are likely to produce most profit next season. However, a 2007 World Bank report on Sierra Leone notes that 'the research and extension system has not benefitted agricultural producers in the rural areas' and that these services 'remain largely informal activities that, at times, benefit only a handful of farmers'. It states that 'the government has gradually become uninvolved' in the extension system.⁸¹

The government recognises the weakness of the extension service and is committed to improving it. The service is tasked, for example, with supporting smallholders with Farmer Field Schools that provide technical skills and organisational training. But the government's level of ambition appears, again, too low, and progress in improving this area is too slow.

The extension service may well be the weakest link in the agriculture sector, a critical problem given its importance. The extension staff in the field officially numbers around 600, which is already low; however, the actual number of extension officers on the ground may currently be no more than 150.⁸² This reality is nowhere recognised in government planning documents. The field officers have little money or transport, and many of the staff are ageing and about to retire, meaning there is a critical skills gap. Salaries are also very low - frontline extension officers working with farmers earn Le 150-200,000 a month.

Progress has been very slow in developing a national extension policy. The PRSP, *Agenda for Change*, which was drawn up in 2008, stated that a national extension policy was to be produced 'within one year', yet is still

being developed.⁸³ Coherence is critical since at present there are a plethora of actors in the extension system (mainly NGOs, alongside the government service), with little cohesion among them. The NSADP notes that extension methodology is being turned towards a loosely defined collection of participatory approaches, none of which has taken on operational dominance. The introduction of Farmer Field Schools to strengthen FBOs at village level and the ABCs is certainly a step in that direction, but much greater resources, careful management and urgency are needed if farmers are really to benefit from the extension service any time soon.

Improving agricultural research

Investing in agricultural research and development is vital for imparting knowledge to farmers and developing improved crop varieties and techniques to increase yield, manage water or use natural resources sustainably. The CAADP programme calls for African countries to double their annual spending on agricultural research within ten years.⁸⁴

Similar to extension policy, the government recognises Sierra Leone's weak research service and is taking steps to improve it. The Sierra Leone Agricultural Research Institute was established in 2007 to bring research together under one roof but serious rehabilitation of its research centres only began in 2009.⁸⁵ The two existing institutes – Njala University and Rokupr Rice Research Station – are still not fully rehabilitated and functional. SLARI is institutionally weak and lacks trained manpower to undertake research on the most important crops and livestock.⁸⁶ The NSADP notes that strengthening farmers' access to technologies would have major positive impacts but that the research programme has hitherto developed technologies that are either inappropriate for farmers or have not filtered down to them. No new rice varieties have yet been developed.⁸⁷ A strategic plan for SLARI was developed in 2008 but the MAFFS notes that 'SLARI continues to operate in a conventional research-driven model', although it recognises the need to shift to a more farmer-based model.⁸⁸

A recent report by IFPRI notes that SLARI's strengths include its collaboration with university, national and international research centres, political support and the existence of a well-constituted governing council. But weaknesses include the shortage of skilled staff, poor infrastructure and weak channels of communication both within SLARI and among extension workers and researchers. Of particular concern is the weak research-extension-farmer linkages and that 'research performed does not relate to real problems farmers face, and the results are not well disseminated for adoption'. The report also notes that the proportion of female scientists is 'extremely low' in a country where women play a major role in farming'.⁸⁹

SLARI was established as an autonomous institution independent of government in order to prevent its budget being swallowed up by other divisions and to do better research. But some officials now say that it has become too autonomous with insufficient links to the MAFFS.⁹⁰ Within the donor community, expectations that SLARI might deliver are not high.⁹¹ But donors are insufficiently funding ARD: Of SLARI's (small) budget, only 15 per cent was funded by donors or development bank loans in 2009.⁹²

Re-looking at subsidy schemes

The main thrust of the government's agriculture policy is to commercialise the sector and promote farming as a business, creating an enabling environment for the private sector to develop. The Minister of Agriculture, Sam Sesay, has explicitly said that the days of large-scale state intervention are over and that 'the government has only a regulatory and monitoring function'.⁹³ This isn't strictly true as the government is promoting direct subsidy programmes – both in the Tractor Hire Purchase scheme and in the inputs package (of fertilisers, seeds etc) for the FBOs under the SCP scheme. However, as with other governments in Africa, it is important for the government of Sierra Leone to get the balance right between the role of the state and the role of the private sector in helping poor farmers. Donors have often got this hopelessly wrong (emphasising the private sector too much and undermining the role of government), and farmers have suffered. This review argues that on the one hand, it is questionable whether the tractor subsidy is really the optimal policy; on the other hand, there is a case to be made that the inputs subsidy could be much larger-scale.

The government's Tractor Hire Purchase scheme has involved procuring 265 imported tractors sold to private buyers at a 40 per cent subsidy – farmers pay back the remaining 60 per cent over seven years. Most of these tractors have gone to large-scale farmers although some farmer groups have collectively bought some to be shared over a number of small plots. The majority of the tractors have been sold in the north, with few in the south: as of October 2010, while Tonkolili has bought 48 tractors, for example, only 1 in Kenema, 9 in Bo and 12 in Bonthe have been sold.⁹⁴

No evaluation has been done of the programme so it is uncertain whether it is the best use of government resources. Anecdotal evidence suggests that the tractors have contributed to increased production.⁹⁵ But the basic focus on large farmers is certainly questionable – even MAFFS officials interviewed in this research do not believe that large-scale farmers are more productive than small farmers, for example.⁹⁶ The budget allocation for the procurement of tractors in 2010 was Le 2.7 billion (£415,000) or 11 per cent of the MAFFS budget, though one official in the MAFFS estimated the cost to be nearer Le 5 billion (nearly £1 million). For Le 2.7 billion, nearly 27,000 extra bags of fertiliser could be bought at the current subsidised price. The government should do a cost-benefit analysis to establish whether the tractor scheme or more subsidised inputs to small farmers is the best way to increase productivity and food security.

Currently, the government pays 40 per cent of the cost of the inputs packages under the SCP that were provided to the 390 FBOs in 2010. The market price for fertiliser is around Le 170,000 - 180,000 per 50 kg bag, but is sold at Le 100,000 - 105,000 under this subsidy. These packages reach a relatively small number of farmers, and the private market in fertilisers is undeveloped, with the cost of fertiliser way beyond most farmers' ability to pay. Thus one argument, supported by several senior officials in the MAFFS, is that the subsidy programme should be much bigger. This argument also draws on the recent experience of other countries operating large-scale subsidy schemes, notably Malawi, which has significantly boosted food production as a result (though the scheme also suffers from several flaws).⁹⁷

Careful consideration should be given to whether a scale-up in the subsidy programme would be beneficial or not. On the one hand, the country needs a massive boost in farm productivity and food security, and subsidies can be an immediate way to provide this. An alternative is if a much improved extension and research system were to provide good advice and affordable technologies and training in improved techniques to large numbers of farmers, especially in the use of sustainable agriculture such as using more soil organic matter and managing soils more efficiently. Yet both the extension and research services are unlikely to deliver these, at least in the short-term, adding to the argument for larger-scale, short-term subsidies.

On the other hand, the obvious dangers, typical of all subsidy programmes, include excessive costs, the crowding out of private sector suppliers of inputs, and corruption. One difference between Sierra Leone and Malawi is that in the latter maize can be processed by hand, whereas rice requires milling machines, which are in short supply in Sierra Leone. These machines could be covered by a large subsidy programme but this would clearly increase the costs. Subsidy schemes by themselves are also rarely magic bullets - productivity rises have to be accompanied by farmers being able to sell their surplus, meaning creating more markets. Some farmers, for example some in Kambia district, have been able to increase their production and sales – and have even afforded high fertiliser costs without subsidy – because they have markets to sell to in neighbouring Guinea.⁹⁸

Developing a policy on foreign investment

The government is going all-out to attract foreign investment in agriculture. The NSADP notes that the government will review land laws to give legal status to freehold interests, establish user rights over state lands and ‘facilitate access by non-Sierra Leoneans’. Such reforms are intended to ensure ‘certainty and predictability for both domestic and foreign investors’.⁹⁹ A government publicity brochure tells of the ‘opportunities for investment’ and that the country has a ‘rapidly growing biofuel sector’ with existing ethanol (sugar, cassava) and biodiesel (oil palm) production, with ‘similar estates present in all districts, representing expansion possibilities’.¹⁰⁰ The Sierra Leone Investment and Export Promotion Agency (SLIEPA), together with the MAFFS and the Ministry of Trade, have developed a three-year strategy to bring new investors to the country, especially in sugar and oil palm. The target is to create 25,000 new jobs and to support 25,000 farmers who will supply the processing units created by these investments.¹⁰¹

Sierra Leone needs more foreign investment but there are clear dangers in government policy. One only has to look to the mining sector to see what happens with essentially unregulated foreign investment – local communities can be made worse off, corruption encouraged and government transparency reduced, due to the special tax deals signed between companies and government. Some agricultural investors are being given a 10-year corporate tax holiday and there are reports that around 1.5 million hectares of land are being negotiated in various parts of the country for lease to foreign investors.¹⁰²

Box 3: The Addax project

One project – Swiss-based Addax Bionergy’s sugar cane/ethanol project in Makeni, which will develop a sugar cane plantation on around 10,000 hectares - is the subject of recent reports alleging that it will take over the land of dozens of farmers and may pollute water resources and soils.¹⁰³ Addax argues that the project will employ 2,000 people and that the local population views the project positively. It says that only small parts of the project area are used for food production, that farmers will continue to access their rice paddies and that while no villages will be displaced, ‘some isolated settlements may be asked to move’ but with the company either re-building homes elsewhere or offering compensation.¹⁰⁴ Currently, compensation rates – set by the government – are very low: Addax will pay farmers the standard rate of \$5 per acre (\$12 per hectare).¹⁰⁵

The main issue is that this push for foreign investment is taking place while the country still has no overall investment policy, no land use policy or a biofuel policy.¹⁰⁶ The President of the National Federation of Farmers says:

*‘We are not against such investments but only under a clear policy, that clearly values local land and property and pays fair compensation rates, giving people alternative livelihoods if, worst comes to the worst, they are displaced’.*¹⁰⁷

The UN’s International Fund for Agricultural Development (IFAD) notes:

*‘It is important that the government ensures the equitable spread of the benefits of these investments while preventing and mitigating negative effects, especially of non-food and biofuel production schemes, on food security and social standards in the country’.*¹⁰⁸

Yet in the absence of a policy, ensuring an equitable share of the benefits from foreign investment will be largely impossible. Foreign investments need to be managed carefully, not only for their immediate environmental and economic impacts but because of the broader, long-term changes they can bring. For example, some argue that farmers would be better off becoming agricultural labourers for large firms since being a rice farmer may trap farmers into permanent poverty. On the other hand, these labour opportunities can be low paid and precarious. These alternatives need to be properly thought through rather than brushed aside in the current rush for investment.

RECOMMENDATIONS

The government must allocate **at least 10 per cent** of its total national budget to agriculture, in line with the Maputo declaration. This figure should not include activities such as road-building.

The government must urgently address the issue of **under spending** in the agriculture sector by ensuring its sets realistic budget allocations and has mechanisms in place to monitor disbursements.

Much greater **oversight and monitoring** of agriculture sector spending needs to be put in place, both to eradicate corruption and to increase efficiency.

- ▶ The Anti-Corruption Commission should be tasked with monitoring agriculture spending, especially in the area of fertiliser procurement.
- ▶ Donors should allocate more aid to increase the capacity of government, parliament and civil society to provide this oversight.
- ▶ NGOs should do more to monitor agriculture sector spending

The **functioning of agriculture sector institutions**, especially the MAFFS, needs to be reviewed to build expertise and professionalism in the sector, addressing key problems such as human resource and planning skills, low salaries and the lack of a results-oriented culture.

A number of agriculture **policy reforms** need to be implemented:

- ▶ Agriculture policy must prioritise the needs of women farmers, especially in extension and research services, and rural credit
- ▶ The government must speed up the development of a national extension policy, ensuring a more efficient extension service that addresses the needs of women farmers as well as men.
- ▶ Greater attention needs to be paid to agricultural research, to ensure it is focused on the real needs of farmers
- ▶ The government should re-look at its subsidy programmes, evaluate the tractor scheme and consider scaling up the inputs subsidy package, targeting smallholder farmers
- ▶ The government must urgently develop policy guidelines on land acquisitions for agricultural investments, such as biofuels and other related ventures. Foreign investments in agriculture should be subjected to advance debate and scrutiny by all stakeholders as well as transparent rules and regulations that meet recognised standards. Contracts and other agreements signed by government must take into account the effect on farmers and farming communities. Where loss of trade or land cannot reasonably be avoided, timely and adequate compensation must be paid in agreement with those affected
- ▶ The government should ensure that a good policy is in place to address climate change and support adaptation measures, through sustainable agriculture practices.

REFERENCES

- 1 Republic of Sierra Leone, *An Agenda for Change: Second Poverty Reduction Strategy, 2008-2012*, p.9
- 2 Victoria Lebbie, 'An Overview on the activities of women in agriculture on small-scale production in Sierra Leone: Presented at ECOWAS Nutrition Forum, September 2008, www.pfnutrition.org
- 3 Republic of Sierra Leone, *Review of Ongoing Agricultural Development Efforts*, undated, p.1, www.resakss.org
- 4 Republic of Sierra Leone, *Review of Ongoing Agricultural Development Efforts*, undated, p.2, www.resakss.org
- 5 IFPRI, *Global Hunger Index 2010*, 2010, p.47
- 6 UN High Level Task Force on the Global Food Security Crisis, *Progress Report April 2008-October 2009*, p.155
- 7 MAFFS, *Smallholder Commercialisation Programme: Investment Plan*, May 2010, p.7
- 8 World Food Programme, *Sierra Leone: Household Food Security Survey in Rural Areas*, November 2009, p.35
- 9 Babatunde Omilola, 'Monitoring and Assessing Targets of the Comprehensive Africa Agriculture Development Programme and the First Millennium Development Goal (MDG) in Africa', *ReSAKSS Working Paper*, July 2010, p.75
- 10 IFAD, *Sierra Leone: Country Strategic Opportunities Programme*, April 2010, p.1
- 11 MAFFS, *Smallholder Commercialisation Programme: Investment Plan*, May 2010, p.7
- 12 http://www.unicef.org/infobycountry/sierraleone_statistics.html#70
- 13 World Food Programme, *Sierra Leone Annual Report 2008*, p.9
- 14 FAO, 'Initiative on soaring food prices: Sierra Leone', www.fao.org
- 15 World Food Programme, *Sierra Leone Food Security Monitoring Bulletin*, December 2009, p.4
- 16 IRIN, Sierra Leone: Child and maternal mortality worst in the world', 3 March 2008
- 17 UN High Level Task Force on the Global Food Security Crisis, *Sierra Leone: Full Country Visit Report*, April-May 2009, p.5
- 18 World Bank, *Project Appraisal Document: Rural and Private Sector Development Project*, 19 April 2007, p.26; World Food Programme, *Sierra Leone: Household Food Security Survey in Rural Areas*, November 2009, p.xi; World Food Programme, *Sierra Leone: Household Food Security Survey in Rural Areas*, November 2009, p.47
- 19 World Food Programme, *Sierra Leone: Household Food Security Survey in Rural Areas*, November 2009, p.43
- 20 World Bank, *Project Appraisal Document: Rural and Private Sector Development Project*, 19 April 2007, p.28; MAFFS, *Smallholder Commercialisation Programme: Investment Plan*, May 2010, p.9
- 21 Kwadwo Asenso-Okyere et al, 'Rebuilding after Emergency: Revamping Agricultural Research in Sierra Leone after Civil War', *IFPRI Discussion Paper*, May 2009, p.6
- 22 MAFFS, *Smallholder Commercialisation Programme: Investment Plan*, May 2010, p.9
- 23 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.16
- 24 World Food Programme, *Sierra Leone: Household Food Security Survey in Rural Areas*, November 2009, p.x
- 25 World Food Programme, *Sierra Leone: Household Food Security Survey in Rural Areas*, November 2009, p.40
- 26 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.17
- 27 IFAD, *Sierra Leone: Country Strategic Opportunities Programme*, April 2010, p.2; Republic of Sierra Leone, *An Agenda for Change: Second Poverty Reduction Strategy, 2008-2012*, p.105
- 28 World Bank, *Project Appraisal Document: Rural and Private Sector Development Project*, 19 April 2007, p.28
- 29 IFAD, *Sierra Leone: Country Strategic Opportunities Programme*, April 2010, p.14
- 30 World Bank, *Project Appraisal Document: Rural and Private Sector Development Project*, 19 April 2007, p.24
- 31 GEF, *Sierra Leone: Integrating adaptation to climate change into agricultural production and food security*, undated, p.1

- 32 See NACE, *Sierra Leone at the Crossroads: Seizing the Chance to Benefit from Mining*, March 2009
- 33 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.11
- 34 Republic of Sierra Leone, *Agricultural Growth, Poverty Reduction and Food Security*, undated, p.2, www.resakss.org
- 35 Republic of Sierra Leone, *Agricultural Growth, Poverty Reduction and Food Security*, undated, p.4, www.resakss.org
- 36 Coalition for African Rice Development, *National Rice Development Strategy*, 2009, p.8
- 37 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.11
- 38 UN High Level Task Force on the Global Food Security Crisis, *Sierra Leone: Full Country Visit Report*, April-May 2009, p.2
- 39 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.36
- 40 MAFFS, *Smallholder Commercialisation Programme: Investment Plan*, May 2010, p.7
- 41 <http://www.fao.org/isfp/country-information/sierra-leone/en/>
- 42 MAFFS, *Smallholder Commercialisation Programme: Farm for Business*, Leaflet.
- 43 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.7
- 44 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.29
- 45 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.9
- 46 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.37
- 47 GOSL, 2010 Budget, Annex 1 - Budget profile for FY 2008-2012, www.mofed.sl
- 48 GOSL, 2007 Budget speech, www.mofed.sl
- 49 GOSL, 2007 Budget speech and Annex 1 – Budget profile for FY2006-2009.
- 50 Republic of Sierra Leone, *Compact to Support the Implementation of the National Sustainable Agricultural Development Plan*, September 2009, p.5
- 51 Mohamed Fofaneh, 'Sierra Leone: New agriculture plan sprouts', Inter Press Service, 29 July 2009
- 52 UN High Level Task Force on the Global Food Security Crisis, *Progress Report April 2008-October 2009*, p.155
- 53 World Bank, *Project Appraisal Document: Rural and Private Sector Development Project*, 19 April 2007, p.27
- 54 Babatunde Omilola, 'Monitoring and Assessing Targets of the Comprehensive Africa Agriculture Development Programme and the First Millennium Development Goal (MDG) in Africa', *ReSAKSS Working Paper*, July 2010, p.90
- 55 GOSL, 2010 Budget, Annex 2 – Non Salary, Non Interest Recurrent Indicative Budgetary Ceilings for 2010-12, www.mofed.sl
- 56 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.36
- 57 The discrepancy between these figures is partly explained by the fact that, since SLARI receives less than half the amount of government funding it requests at the beginning of each financial year, some of the shortfall is met by SLARI's own commercialisation activities, including renting out guesthouses on SLARI grounds, conducting third party consultancies and selling planting materials. The largest source of SLARI's external funds in 2009 was the Africa Rice Centre, which funds the New Rice for Africa (NERICA) project, promoting the dissemination of new rice varieties in various West African countries. Gert-Jan Stads and John Momoh, *Sierra Leone: Recent Developments in Agricultural Research*, ASTI, April 2010, p.4
- 58 Interview in Freetown, October 2010
- 59 CAADP, *CAADP Post Compact Review: Sierra Leone – Technical Review Report*, 13 June 2010, p.33
- 60 Interviews in Freetown, October 2010
- 61 ActionAid, *Fertile Ground: How Governments and Donors can Halve Hunger by Supporting Small Farmers*, April 2010, p.53
- 62 Babatunde Omilola, 'Agricultural Investment and Resource Efficiency in Africa: From Quantity to Quality', *ReSAKSS Issue Brief*, July 2010, p.2

- 63 Interview in Freetown, October 2010
- 64 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.9
- 65 The CAADP review is available here: <http://www.nepad-caadp.net/pdf/Final%20Sierra%20Leone%20Technical%20Review%20Report%20-%201.pdf>
- 66 CAADP, *CAADP Post Compact Review: Sierra Leone – Technical Review Report*, 13 June 2010, p.14
- 67 CAADP, *CAADP Post Compact Review: Sierra Leone – Technical Review Report*, 13 June 2010, p.30
- 68 Babatunde Omilola, 'Agricultural Investment and Resource Efficiency in Africa: From Quantity to Quality', *ReSAKSS Issue Brief*, July 2010, p.3
- 69 MAFFS, *Smallholder Commercialisation Programme: Investment Plan*, May 2010, p.29
- 70 Interview in Freetown, October 2010
- 71 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.38
- 72 World Food Programme, *Sierra Leone: Household Food Security Survey in Rural Areas*, November 2009, p.9
- 73 IFAD, FAO and World Bank, *Gender in agriculture sourcebook*, 2009, p.522. If women farmers in Kenya had the same access to farm inputs and education as men food yields could increase by 22 per cent and the GDP growth rate would have doubled in 2004 from 4.3 per cent to 8.3 per cent; IFAD, FAO and World Bank, *Gender in agriculture sourcebook*, 2009, p.16. It is estimated that in Ghana if women had equal access to land and fertilizer as men, farms profits per hectare would double and that in Burkina Faso and Tanzania, provision of equal inputs and education to women as men could increase business incomes by 20 per cent; 'Women in agriculture: The critical food producers', 15 October 2008, www.fao.org.
- 74 Marzia Fontana and Cristina Paciello, *Gender dimensions of rural and agricultural employment: Differentiated pathways out of poverty – A global perspective*, Draft, Institute of Development Studies, March 2009, p.34
- 75 Interview in Freetown, October 2010
- 76 CAADP, *CAADP Post Compact Review: Sierra Leone – Technical Review Report*, 13 June 2010, p.25
- 77 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.19
- 78 Victoria Lebbie, 'An Overview on the activities of women in agriculture on small-scale production in Sierra Leone: Presented at ECOWAS Nutrition Forum, September 2008, www.pfnutrition.org
- 79 Interview in Freetown, October 2010
- 80 Interview in Freetown, October 2010
- 81 World Bank, *Project Appraisal Document: Rural and Private Sector Development Project*, 19 April 2007, p.27
- 82 Interview in Freetown, October 2010
- 83 Republic of Sierra Leone, *An Agenda for Change: Second Poverty Reduction Strategy, 2008-2012*, p.47
- 84 NEPAD, *Comprehensive Africa Agriculture Development Programme*, November 2002, Section 5.7
- 85 Gert-Jan Stads and John Momoh, *Sierra Leone: Recent Developments in Agricultural Research*, ASTI, April 2010, p.4
- 86 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.17
- 87 Interview in Freetown, October 2010
- 88 MAFFS, *Smallholder Commercialisation Programme: Investment Plan*, May 2010, p.10
- 89 Kwadwo Asenso-Okyere et al, 'Rebuilding after Emergency: Revamping Agricultural Research in Sierra Leone after Civil War', *IFPRI Discussion Paper*, May 2009, p.31
- 90 Interviews in Freetown, October 2010
- 91 Interviews in Freetown, October 2010
- 92 Gert-Jan Stads and John Momoh, *Sierra Leone: Recent Developments in Agricultural Research*, ASTI, April 2010, p.4
- 93 Cited in interview with Sam Sesay, 24 July 2010, <http://farastaff.blogspot.com>
- 94 Information from MAFFS official, Freetown, October 2010
- 95 Interviews in Freetown, October 2010
- 96 Interviews in Freetown, October 2010
- 97 ActionAid, *Fertile Ground: How Governments and Donors can Halve Hunger by Supporting Small Farmers*, April 2010, p.34

- 98 Interview in Freetown, October 2010
- 99 Republic of Sierra Leone, *National Sustainable Agriculture Development Plan 2010-2030*, August 2009, p.14
- 100 GOSL, 'Agriculture', Brochure for 2009 Sierra Leone Conference, www.sierraleoneconference2009.org
- 101 'SLIEPA launches initiative to bring 25,000 new agriculture jobs to Sierra Leone', 10 February 2010, www.sliepa.org
- 102 MADAM Sierra Leone, 'Right to food', www.madam-sl.org
- 103 Joan Baxter, 'Protecting investors, but what about the people?', *Pambazuka News*, 5 June 2010; MADAM Sierra Leone, 'Right to food', www.madam-sl.org
- 104 'Q&A: Addax Bioenergy sugarcane ethanol project in Maskeni, Sierra Leone', www.addax-oryx.com
- 105 'Q&A: Addax Bioenergy sugarcane ethanol project in Maskeni, Sierra Leone', www.addax-oryx.com
- 106 IFAD, *Sierra Leone: Country Strategic Opportunities Programme*, April 2010, p.4
- 107 Interview in Freetown, October 2010
- 108 IFAD, *Sierra Leone: Country Strategic Opportunities Programme*, April 2010, p.4

ANNEX

Source: IFAD, Sierra Leone: Country Strategic Opportunities Programme, April 2010

Key file 1: Rural poverty and agricultural/rural sector issues

Priority areas	Affected groups	Main issues	Actions needed
Social Services and Economic Infrastructure	<ul style="list-style-type: none"> Rural households Entities involved in commodity value chains (inputs supply, post-harvest operations, marketing, etc.) 	<ul style="list-style-type: none"> Social and economic infrastructure has been severely damaged by the civil war across the rural areas, including shelter Historic neglect and bias against provision of social and economic infrastructure in rural areas Health services and education enrolment rates are drastically down, maternal and child health indicators are among the lowest in Africa HIV/AIDS is spread across the rural areas. 	<ul style="list-style-type: none"> Rehabilitation of economic and social infrastructure in the rural areas, and shelter rehabilitation Encourage participatory local areas development plans to set the priorities and engage the population in the rehabilitation efforts Provide funding on a matching grant basis to fund priority subprojects identified by the communities Rehabilitation of schools and health centres to resume servicing the community's needs Provide support to national HIV/AIDS programme in the rural areas.
Food Production	<ul style="list-style-type: none"> Poor farming households in rural areas 	<ul style="list-style-type: none"> Farmers across the country were severely decapitalized during the decade of civil war (loss of tools, livestock, and shelters) Limited access to agricultural inputs (seeds, fertilizers, pesticides, tools, machinery) Investments in inputs under present conditions are rarely profitable The prevailing cropping system - shifting cultivation - is over-cropping the available suitable land Agricultural research institutions are not functioning properly due to severe destruction in their physical facilities and disruptions in their research programmes Average yield is very low Lowlands under-utilized with potential for irrigation development High post-harvest losses. 	<ul style="list-style-type: none"> Promote private sector investment in the rural areas through enterprises development for processing and marketing Reinvigorate service delivery systems by public and private sectors Promote sedentary cropping system which have a higher yield level for a diversified cropping pattern and shorter fallow periods Introduce auxiliary plants for soil fertility improvement Promote other food crops production (e.g. cassava) to diversify the rice-based diets Promote food processing to increase the shelf life of produce and add value to the production Rehabilitate and restore the research facilities, and restart and finance the research programmes Promote improved quality seeds and new technologies Develop irrigation and IVS rehabilitation Promote appropriate harvesting and storage methods.
Export Crop Production	<ul style="list-style-type: none"> Farmers involved in cash crop production Private sector entities involved in export crop production 	<ul style="list-style-type: none"> Tree crops such as coffee, cacao, oil palm, cashew nuts, rubber, have been neglected during the civil war, and prior to that due to unfavourable terms of trade and poor marketing system. Low yield due to improper maintenance Limited exporter capture the whole market. 	<ul style="list-style-type: none"> Promote private sector investments in the renovation of old trees, and rehabilitation of existing plantations to increase productivity Promote the development of processing facilities to add value, and to improve product quality and marketability Encourage the production of horticultural products and tropical fruits for the export market

IMPROVING AFRICAN AGRICULTURE SPENDING:
BUDGET ANALYSIS OF BURUNDI, GHANA, ZAMBIA, KENYA AND SIERRA LEONE

Priority areas	Affected groups	Main issues	Actions needed
			rural areas.
Decentralization of services and decision making regarding revenue collection and budget allocations	<ul style="list-style-type: none"> Decentralised government entities, at the District, Chiefdom and Ward levels 	<ul style="list-style-type: none"> Government services are highly centralized in Freetown Unwillingness of some MDAs to devolve functions as prescribed in the Local Government Act, 2004 Poor budgetary allocations to the rural areas and to the agriculture and rural development sectors Weak capacity of public services in the rural areas. 	<ul style="list-style-type: none"> Promote decentralized planning and implementation of development efforts by the village communities Take advantage of the opportunities afforded by Central Government reforms of local governments to promote popular participation and transparent decision making process Promote contractual arrangements with service providers, and public and private sector agencies to promote accountability.
Public Agricultural Sector Institutions	<ul style="list-style-type: none"> MAFFS at all levels both at central and district levels, and including government entities and personnel involved in research and development, & extension activities 	<ul style="list-style-type: none"> MAFFS as well as MLGCD, have very poor implementation capacities MAFFS' technical expertise requested by many NGOs at district level Public research and extension services systems are not functioning Limited budgetary support available to the sector through the national allocations. 	<ul style="list-style-type: none"> Promote restructuring of the Ministries involved in agriculture and rural development Participate with other donors who are planning support to restructuring and capacity building of institutions servicing the sector Promote the development of appropriate strategies and support the decentralization of their services.
Gender Issues	<ul style="list-style-type: none"> Women, especially those in rural poor HH's 	<ul style="list-style-type: none"> Persistent marginalization of women in the rural areas would hinder development The war exposed women to both physical and psychological abuses. 	<ul style="list-style-type: none"> Take into account the specific needs of women when promoting the development of decentralized micro financial services institutions Encourage the participation of women in the development committees at both the village and ward levels, so that their special needs are taken into consideration.
Youth Issues	<ul style="list-style-type: none"> Youth's, especially those in rural poor HH's & affected by war 	<ul style="list-style-type: none"> One of the causes cited for the war is the marginalization of the rural youth The war took away the productive youth from the rural areas and brought back the war wounded and psychologically disturbed young men. 	<ul style="list-style-type: none"> Encourage the membership of the youth in the development committees at both the village and ward levels, so that their special needs are taken into consideration Provide special skills training to equip the youth with necessary capacity to earn a living Provide soft loans to the youth through the Community Banks and the FSAs.