

# GHANA

## Strategy Support Program



### Are African Governments Serious About Agriculture?

Samuel Benin

DISCUSSION NOTE # 004

#### INTRODUCTION

To answer the question of whether African governments are serious about agriculture, there must be some benchmark against which to evaluate African governments' behavior as regards the sector. Some of the well-known benchmarks are:

- The Comprehensive Africa Agriculture Development Programme (CAADP) agriculture expenditure target of 10 percent of total expenditure
- The New Partnership for Africa's Development (NEPAD) agricultural R&D investment target of at least 1 percent of agriculture value added
- The Abuja Declaration to increase fertilizer use from 8 to 50 kg of nutrients per hectare
- The CAADP annual agriculture growth rate target of 6 percent

Using these four benchmarks, one can determine which governments are achieving or have achieved a specific target. Governments that demonstrate a consistent upward trend toward the target are more serious than those who display a stagnant or divergent trend away from the target.

The objective of this brief is to analyze available data on public agriculture expenditure in Africa—with a particular focus on Ghana—to assess the commitment of African governments to the agriculture sector, which they themselves have formally identified as the lead sector for achieving growth, raising incomes, reducing poverty, and increasing food and nutrition security.

#### RECENT TRENDS AND PATTERNS IN AGRICULTURE EXPENDITURES

**Greater or increased agriculture spending is reported under CAADP than previously**

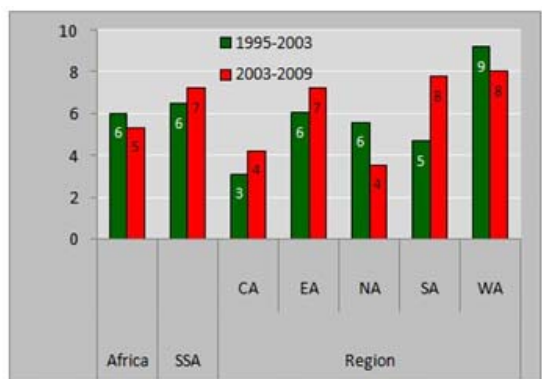
Recent data show that the amount of public agriculture expenditure has increased at a faster rate in many parts of Africa since CAADP came into force in 2003 (Figure 1a). The share of total

expenditure spent has also increased in many parts of Africa (Figure 1b). Although the performance in these two indicators for Africa as a whole was lower during the CAADP period (2003–2009) than previously (1995–2003), the trends in sub-Saharan Africa (SSA), and particularly in eastern and southern Africa, show increased performance in both indicators during the CAADP period than before. In SSA, the volume of public agriculture expenditure grew at an annual average rate of 15 percent during the 2003–2009 period compared with 8 percent in 1995–2003, while public expenditure as a share of total expenditure went up by an average of 1 percentage point during the CAADP period (6 percent in 1995–2003 as against 7 percent in 2003–2009). The largest increase in performance is seen in southern Africa, where the annual average growth rate went up by 13 percentage points (-4 percent in 1995–2003 as against 9 percent in 2003–2009) and the annual average share went up by 3 percentage points (5 percent in 1995–2003 as against 8 percent in 2003–2009) (Figures 1a and 1b). Similar to what is observed for Africa as a whole, performance in the two indicators in northern Africa was lower during the CAADP period than before.

**FIGURE 1A - PUBLIC AGRICULTURE EXPENDITURE GROWTH RATE IN AFRICA (%)**



**FIGURE 1B - PUBLIC AGRICULTURE EXPENDITURE SHARE IN AFRICA (%)**



Sources: Based on ReSAKSS compilation (Benin et al. 2011).  
 Notes: CA = central Africa; EA = eastern Africa; NA = northern Africa; SA = southern Africa; WA = western Africa.

**Agriculture spending intensity has gone up substantially under CAADP**

Although progress toward achievement of the Maputo Declaration is mixed across Africa, agriculture spending intensity (measured as a ratio of agriculture expenditures to agriculture value added, which better reflects commitments relative to the size of the sector) has improved in Africa as a whole as well as in all the sub-regions except in northern Africa (Figure 2). For Africa as a whole, spending intensity increased from 4.6 percent on average in 1995–2003 to 7.8 percent in 2003–2009; with the largest percentage point increases occurring in southern and western Africa. While this may seem encouraging, it is consistent with the generally slower growth in the agriculture sector during the CAADP period. We will come to this point again later.

**The race toward the CAADP 10 percent agriculture expenditure is mixed**

Although improvement in both average growth rate and share of agriculture expenditure during the CAADP period is indicated in some subregions, the reality is mixed. When the larger improvement in growth rate (Figure 1a) is compared with the smaller improvement in the shares (Figure 1b), it is suggested that average total expenditure has increased substantially while the share allocated to the nonagriculture sector as a whole has declined only slightly or has generally been maintained. As such, assessment of progress in achieving the Maputo Declaration, i.e. spending 10 percent of total expenditure on the agriculture sector, shows a mixed situation.

Since 2003 when the declaration was made, only 11 countries—Burkina Faso, Chad, Ethiopia, Ghana, Guinea, Malawi, Mali, Niger, Senegal, Zambia, and Zimbabwe—have surpassed the CAADP 10 target in any year, while only seven of them—Burkina Faso, Ethiopia, Guinea, Malawi, Mali, Niger, and Sene-

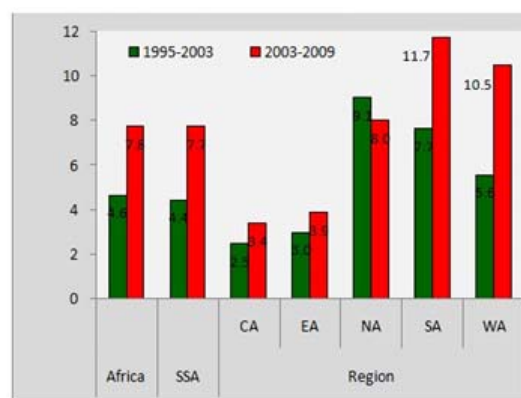
gal—have consistently surpassed the target in most years (Figure 3). Even among the latter group, Burkina Faso, Ethiopia, and Niger have continuously cutback on the shares and are now hovering around the 10 percent threshold. The question is whether they cut back because they think the CAADP 10 percent target is optimal irrespective of the actual returns, or because they are not getting the expected returns from the additional expenditures. Further investigation is required to answer these questions. Several countries, including Cameroon, Democratic Republic of Congo, Ghana, Namibia, Nigeria, São Tomé and Príncipe, Sudan, Togo, and Zambia, show a consistent increase in their expenditure share over time. In the remaining countries, the expenditure shares have generally declined or stagnated.

Together, the recent trends and patterns on agriculture expenditure suggest that African governments’ seriousness about the agriculture sector depends on several factors. It is not surprising that governments in western Africa, where implementation of CAADP has advanced the most, seem to be most serious about meeting the CAADP 10 percent target.<sup>1</sup>

In northern Africa, where CAADP has least caught on, there is significant divergence from the target. Because these countries are middle income with nonagricultural sources of growth and development, it may be argued that these governments are shifting emphasis to sectors with larger returns.

In southern Africa, where many of the countries are also of middle income status, most governments already spend an average of 5–10 percent of the total national budget per year on the sector. In fact, the subregion as a whole spends more on the sector as a share of value added than any other subregion in the continent (Figure 2).

**FIGURE 2 - PUBLIC AGRICULTURE EXPENDITURE AS PERCENT OF AGRICULTURE VALUE ADDED, ANNUAL AVERAGES, 1995-2009**



Sources: Based on ReSAKSS compilation (Benin et al. 2011).

<sup>1</sup> All 15 countries in the region have signed a CAADP compact and have an investment plan in place.

Notes: CA = central Africa; EA = eastern Africa; NA = northern Africa; SA = southern Africa; WA = western Africa.

Against the CAADP 10 percent agriculture expenditure target, governments in the remaining two subregions, eastern and central Africa, may be judged as the least serious about the sector. Most of the countries here spend less than an average of 5 percent of total expenditure (Figure 3). The two subregions also spend the least on the sector as a share of agriculture value added (3.4 percent for central Africa in 2003–09 and 3.9 percent for eastern Africa during the same time period)(Figure 2).

### Do the trends reflect changes in spending or changes in accounting?

Since the Maputo Declaration, the issue of what to count as agriculture expenditure has continuously been debated. The

African Union put out a definition on agriculture for the purpose of tracking expenditures in the sector (AU/NEPAD 2005), which is clear with respect to subsectors of crops, livestock, forestry, and fishery, but leaves room for different interpretations when it comes to issues such as natural resource management, hydroelectric dams for irrigation, and feeder roads. Many governments and their development partners have since launched agriculture public expenditure reviews to assess the current situation as well as past trends.

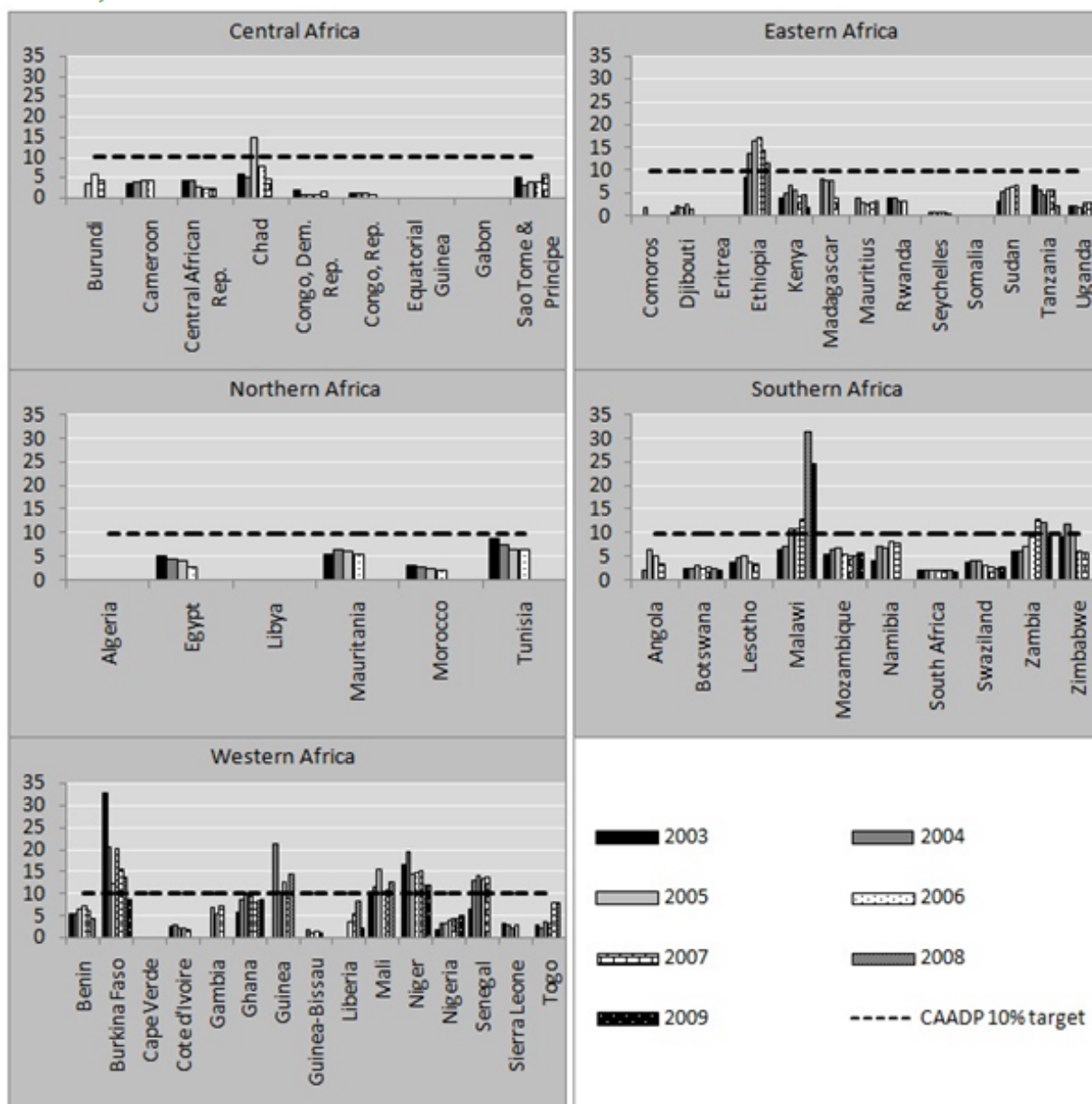
What is clear from such reviews is that more is spent on agriculture than previously reported, with the level of underreporting being larger the farther back one goes. This could partly explain some of the trends and is an important issue to consider as regards the CAADP 10 percent target, which was set at a time

when public agriculture expenditure may well have been underreported. Before discussing this issue, let us first look at the issue of past underreporting using the case of Ghana.

Estimating Ghana's public agriculture expenditures from its national accounts is very challenging because there are several ministries, departments, and agencies (MDAs) whose expenditures should be wholly or partly accounted to the sector (Box 1).

However, the national accounts do not have line items that separately capture all the agriculture-related expenditures. National expenditures related to crops and livestock, fishery, forestry, and research may be obtained from the respective MDAs. Expenditures related to cocoa, the Presidential

**FIGURE 3 - PUBLIC AGRICULTURE EXPENDITURE AS PERCENT OF TOTAL EXPENDITURE IN AFRICA, 2003-2009**



Source: Based on ReSAKSS compilation (Benin et al. 2011a).

Special Initiative (PSI) on agriculture, feeder roads, and debt servicing, all of which are now reported as agriculture expenditure categories by MOFEP (Table 1) cannot be obtained from the reported accounts.

and 1.5 percent, respectively) because they do not include some of the large expenditure items on cocoa and debt servicing for which data are unavailable. In 2009, some expenditures associated with the Millennium Challenge Account, District Assemblies Common Fund, and feeder roads were also included

### BOX 1—AGRICULTURE MINISTRIES, DEPARTMENTS AND AGENCIES (MDAS) AND ACCOUNTS IN GHANA

Government spending on the agricultural sector takes place not only through the conventional ministries of agriculture, but also through various other government MDAs and special accounts.

In Ghana, fishery and forestry each fall under their own separate ministries, both distinct from the Ministry of Food and Agriculture (MoFA) which handles crops (except cocoa) and livestock.

Cocoa falls under the Ghana Cocoa Board, which in turn is under the Ministry of Finance and Economic Planning (MOFEP). Agricultural research and development (R&D) is managed by the Council for Scientific and Industrial Research (CSIR), which reports to the Ministry of Environment, Science and Technology (MEST).

Other government expenditures on agriculture in Ghana are undertaken by the Ministry of Trade and Industry (such as spending relating to food imports and agricultural marketing and trade), the Ministry of Road Transport (feeder road development), the Ministry of Local Government and Rural Development, the Ministry of Women and Children's Affairs, the Ministry of Manpower, Youth and Employment (these three allocate resources to agricultural community-based development projects), and the Presidential Special Initiative (PSI) on agriculture.

TABLE 1 - PUBLIC AGRICULTURE EXPENDITURE IN GHANA, 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Figures in Roman font denote millions of Ghana cedis. Figures in italics denote % of total expenditure. Figures in red denote % of agriculture value added.										
Agriculture sector as a whole	9.1	13.8	51.9	62.7	91.2	241.6	368.6	393.7	392.2	781.4
	1.4	1.5	6.8	5.7	8.8	9.6	10.3	9.9	10.2	9.0
	0.9	1.0	3.0	2.6	3.0	6.6	6.8	6.2	4.4	6.9
Crops and livestock (MoFA)	5.2	6.3	8.2	11.0	14.1	42.4	75.0	77.6	155.3	338.6*
	0.8	0.7	1.1	1.0	1.4	1.7	2.1	2.0	4.0	3.9*
	0.5	0.5	0.5	0.5	0.5	1.2	1.4	1.2	1.8	3.0*
Fisheries	n.a.	n.a.	n.a.	n.a.	n.a.	6.5	4.2	5.0	18.0	14.6
	n.a.	n.a.	n.a.	n.a.	n.a.	0.3	0.1	0.1	0.5	0.2
	n.a.	n.a.	n.a.	n.a.	n.a.	0.2	0.1	0.1	0.2	0.1
Forestry	1.1	1.0	2.1	4.0	6.7	10.5	15.5	25.9	34.2	67.8
	0.2	0.1	0.3	0.4	0.7	0.4	0.4	0.7	0.9	0.8
	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.6
Cocoa	n.e.	n.e.	16.4	20.0	27.5	93.9	148.7	112.9	57.6	169.2
	n.e.	n.e.	2.2	1.8	2.7	3.7	4.2	2.8	1.5	2.0
	n.e.	n.e.	1.0	0.8	0.9	2.6	2.7	1.8	0.6	1.5
Research (CSIR)*	2.8	6.5	10.2	13.0	22.1	29.1	67.2	94.2	56.5	93.3
	0.4	0.7	1.3	1.2	2.1	1.2	1.9	2.4	1.5	1.1
	0.3	0.5	0.6	0.5	0.7	0.8	1.2	1.5	0.6	0.8
PSI	n.e.	n.e.	n.e.	2.8	6.4	13.7	15.7	30.9	2.2	0.7
	n.e.	n.e.	n.e.	0.3	0.6	0.5	0.4	0.8	0.1	0.0
	n.e.	n.e.	n.e.	0.1	0.2	0.4	0.3	0.5	0.0	0.0
Feeder roads	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	91.7
	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	1.1
	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	0.8
Debt servicing	n.e.	n.e.	15.0	11.9	14.3	45.4	42.3	47.2	68.4	5.5
	n.e.	n.e.	2.0	1.1	1.4	1.8	1.2	1.2	1.8	0.1
	n.e.	n.e.	0.9	0.5	0.5	1.2	0.8	0.7	0.8	0.0
<b>Total (all sectors)</b>	<b>665.8</b>	<b>905.4</b>	<b>760.1</b>	<b>1,102.9</b>	<b>1,031.8</b>	<b>2,515.9</b>	<b>3,570.0</b>	<b>3,964.3</b>	<b>3,842.8</b>	<b>8,659.3</b>

Sources: Authors' calculations based on Send-Ghana 2010, MOFEP 2010, and World Bank 2012.

PSI = Presidential Special Initiative, which began in 2003

\* Includes Millennium Challenge Account and District Common Fund expenditure

\* As an institute, CSIR expenditures, and nonagricultural institutes account for 17% (Kolavalli et al. 2009).

n.a. = not applicable. Fisheries, prior to 2005, was under MoFA and was included in the line item for crops and livestock.

n.e. = not estimated. Data were unavailable, expenditure is unknown, or data were included as agriculture expenditure at the time.

Furthermore, agriculture expenditures associated with other accounts cannot be obtained from the national accounts and they are not included in Table 1.

as part of the total expenditure. While adding these items may be justified in that they are truly agriculture-related expenditures, their omission from the preceding years' expenditures distorts the trend.

If we retroactively add such expenditures,<sup>2</sup> and consider that agriculture-related expenditures in other MDAs are not accounted for, it can be concluded that Ghana's total agriculture expenditure, both in absolute value terms and as shares of total national expenditure and agriculture value added, is likely to be much higher than reported in Table 1. This means that Ghana is very likely to have consistently met or surpassed the CAADP 10 percent target for the past several years.<sup>3</sup> When one

Table 1.

Prior to MOFEP's report on compliance with the 2003 Maputo Declaration, it was widely believed that Ghana spent only about 2 percent of its total expenditure on the agriculture sector in the 1990s (Arkroyd and Smith 2007; World Bank 2007). As Table 1 shows, Ghana now reports spending far more on the agriculture sector. Since 2005, agriculture expenditure as share of total expenditures has hovered around the CAADP 10 percent target. The shares for 2000 and 2001 are much lower (1.4

<sup>2</sup> MCA started in 2006, DACF was introduced in 1993, while feeder roads goes far back.

<sup>3</sup> The same can be said with regard to the NEPAD agricultural R&D investment target of at least 1 percent of agriculture value added. Alt-

looks further back to the 1980s and 1990s, public agriculture expenditures were almost certainly much higher, considering the likely underreporting during those years (Table 2).<sup>4</sup> This may also give the impression that agriculture expenditures have severely contracted. During those times, however, governments were directly involved in agriculture production, cooperatives, and marketing boards.

**TABLE 2 - PUBLIC AGRICULTURE EXPENDITURE IN SELECTED AFRICAN COUNTRIES, 1980 - 2000.**

	As % of total national expenditure					As % of total agriculture value added				
	1980	1985	1990	1995	2000	1980	1985	1990	1995	2000
Botswana	9.7	9.8	6.5	6.0	4.2	14.7	6.4	4.9	4.4	2.7
Egypt	4.4	4.2	5.4	5.0	6.8	18.3	20.0	19.4	16.8	16.7
Ethiopia	6.9	9.9	6.9	9.1	10.4	n.a.	57.8	54.3	57.5	49.9
Ghana	12.2	6.2	6.1	5.1	3.2	57.9	44.9	44.8	38.8	35.3
Kenya	8.4	10.4	6.0	5.5	6.8	32.6	32.6	29.5	31.1	32.4
Malawi	10.2	8.4	11.1	11.1	8.8	43.7	42.9	45.0	30.4	39.5
Morocco	6.5	5.0	5.0	4.2	3.5	18.5	16.4	18.3	15.1	14.9
Tunisia	14.5	8.3	8.5	8.3	9.3	14.1	15.8	15.7	11.4	12.3
Uganda	32.5	3.9	2.2	2.9	2.6	72.0	52.7	56.6	49.4	29.6
Zambia	13.4	10.7	5.6	2.5	2.1	15.1	14.6	20.6	18.4	22.3

Source: Authors' calculations based on IFPRI 2011.

These were abandoned during the structural adjustment era and state enterprises were privatized. The reorientation of the role of the state in agriculture production and marketing thus drastically reduced government agriculture expenditures.

Interestingly, a new form of direct governmental involvement in agricultural production and marketing—similar to the situation in the 1980s and 1990s, but without the direct hiring of agricultural workers and marketing boards by the govern-

ment—appears to have resurfaced over the past decade. The Government of Ghana, for example, has four major subsidy programs (fertilizer, agricultural mechanization, block farming and youth in employment, and buffer stock—see Box 2 for details), that provide inputs and insurance<sup>5</sup> and then contracts with farmers to provide labor (particularly on the block farms) and the private sector to provide stocking and managerial services (for the fertilizer, AMSEC and NAFCO programs).

## CONCLUSIONS

*African governments maybe serious about the agriculture sector, but the recent behavior of many seems to be polarized by the CAADP 10 percent target.*

In general, African governments seem to be serious about the agriculture sector, because their behavior in the sector, measured here by how much they spend on the sector over time, seems to respond to the needs of or demands by dominant interest groups in the sector as well as to widely accepted benchmarks of performance. In the last decade, this stimulus is CAADP and particularly the 10 percent agriculture expenditure target.

Unfortunately, the 10 percent agriculture expenditure target may be polarizing the fundamental issue of the investment needed (i.e. what types of investment, how much of each type of investment, where should they be invested, and when should they be invested) in a particular country. This is what is intended to be laid out in each country's CAADP compact and national agricultural investment plan (NAIP). In the majority of the NAIPs, if

not all of them, the investments required to achieve the stated development objectives translate into amounts that are in excess of the CAADP 10 percent agriculture expenditure target (see analyses in Diao et al. 2012). Therefore, the convergence observed in the western Africa region, particularly for Burkina Faso and Niger where the expenditure shares are declining toward the target, is troubling. The same concern applies to the declining trend in Ethiopia toward the target. Probably more concerning are those countries with agriculture expenditure shares stagnating below the target or diverging from it. Some major questions that need further investigation arise:

though the target was surpassed in 2006 at 1.2 percent and in 2007 at 1.5 percent, because research expenditures on fisheries and cocoa are included under the line items on fishery and cocoa and not under the line item on research, total agriculture research expenditures may be higher than reported.

<sup>4</sup> The data in Table 2 mostly captures expenditures by MoFA (i.e. crops and livestock).

<sup>5</sup> This is because of the low credit repayment rate (Benin et al. 2012a).

- Are the investments required to achieve the country-specific development objectives, as articulated in their agricultural development plans, being compromised in pursuit of achieving the CAADP 10 percent target?
- Are governments taking a cheaper option of showing commitment to the 10 percent target that require little adjustment or reform in the political and public expenditure management system, or are they meeting the larger investment requirements articulated in their own agricultural development plans, which may require large adjustments or reforms in the political and public expenditure management system?<sup>6</sup>
- For countries showing declining agriculture expenditure shares—either those *above* the 10 percent target and converging to it or those *below* the target and diverging from it—is it because they are not getting the expected returns and are therefore shifting emphasis to other sectors with larger marginal returns to spending?
- Where there is stagnation in agriculture expenditure shares, is it because they have reached equilibrium where the returns to additional spending in agriculture and nonagriculture are equal?

### Relevance of the CAADP 10 percent target for an efficient and effective agriculture-led development strategy

We can argue that the data available at the time of the Maputo Declaration showed very low levels of agriculture investment in Africa, and that the analysis (which was based on the Asian experience) showed that increasing investments toward the 10 percent target would create the critical mass of investments necessary to generate growth, raise income, reduce poverty, and increase food and nutrition security. The envisaged change at the time was that governments would increase investments beyond what was reported. As such, assessment of progress toward the target should have been carried out against the baseline measure of agriculture investments. Because the baseline used in the analysis may have been underestimated, the results of the analysis may be biased (or the 10 percent target may be inapplicable) to the extent that any investments omitted from the analysis are correlated with the investments included in the analysis (Greene 1993). Depending on the direction and magnitude of the correlation between the investments that were omitted from the analysis and those that were included, the size of the bias could be larger or smaller, but indeterminate *a priori* because of the influence of other factors and the correlation of those other factors with the investments omitted from the analysis. Basically, as new information be-

<sup>6</sup> See Headey et al. (2009) for discussion of factors that hinder governments from spending more on the agriculture sector.

comes available, the desired target should be continuously evaluated on a country-by-country basis to determine what works best under the changing conditions.

A related issue is what to count toward meeting the CAADP 10 percent target. In the Send-Ghana 2010 report, for example, it was recommended that Ghana redefine the Maputo Declaration to exclude recurrent expenditure, which averages 53 percent of total agriculture expenditures. Then there is the issue of what constitutes investments. For example, subsidies associated with the government's four major programs (fertilizer subsidy, agricultural mechanization, block farming and youth in employment, and buffer stock), which consume about 80 percent of MoFA's expenditure, are counted as investments. A similar issue is whether or not to count all donor funding as investments.

The recent inclusion of expenditure on feeder roads as part of total agriculture expenditure in Ghana has also drawn criticism that such expenditures should be part of the road sector. But several studies have shown that investments in feeder roads have substantial impact on agricultural productivity (Benin et al. 2012a; Fan 2008). Similarly, expenditures on educa-

#### BOX 2: THE FOUR MAJOR PROGRAMS OF MOFA

1. *The Agricultural Mechanization Service Center (AMSEC) is a credit facility where qualified private sector companies are given a machinery package of 5 tractors with matching basic implements (plow, harrow, and trailer) at a subsidized price and interest so that agricultural mechanization services can be made available in a timely and affordable manner to rural farmers.*
2. *The fertilizer subsidy program, which is currently implemented via the waybill system by subsidizing it at the port entry, makes the subsidy available to all types of farmers that can afford the subsidized price. The subsidy is about 64 percent of the retail market price.*
3. *The block farms and youth in employment program is conceptualized to exploit scale economies, including lower unit cost of input and service delivery, by bringing several beneficiaries together into one large production area, and providing them with extension services as well as credit in the form of mechanization services (via the AMSEC program), certified seed, subsidized fertilizer (via the fertilizer subsidy program) and pesticides. The credit is expected to be paid back in-kind at harvest to NAFCO.*
4. *The buffer stock program (also known as NAFCO) was set up as a limited liability company with an initial outlay from the government. It is expected to manage the government's emergency food security and, in addition, to stabilize prices by providing a minimum guaranteed price (to mop up excess produce from farmers at time of harvest) as well as a maximum price (to sell produce during the lean season to avoid price hikes).*

Source: MoFA 2010 and Benin et al. 2012a.

tion, health and other infrastructure and services could be considered as they also affect agricultural productivity.

The above arguments point to the ultimate question of how incremental agriculture expenditures should be prioritized to generate the greatest bang for the buck. This principle for public resource allocation is clearly articulated in the majority of development strategies. Box 3 presents the case of Uganda.

It is futile to answer the question of prioritization of incremental agriculture expenditures in isolation. Because resources are limited and different types of public spending and investments affect development outcomes differently, with varying time lapses, the prioritization issue has to be based on analysis of the efficiency and effectiveness of different types of public spending (Fan 2008; Fan et al. 2009; Benin et al. 2012a&b).

## MONITORING AND EVALUATION

To properly and comprehensively answer the question of prioritization, solid M&E data are necessary. Because the effect of public expenditure materializes with a lag rather than contemporaneously, and because the effect of public expenditure is not neutral, the disaggregation of public expenditure data by type and across space and over time is critical.

Unfortunately, not only are such disaggregated data unavailable, but even the data that *are* available as country-level expenditures in a majority of African countries are characterized by severe measurement errors. This shortcoming is reflected in the small number of studies on the returns to agriculture public investments in a handful of African countries (Fan et al. 2008; Mogues and Benin 2012) as well as in discrepancies in data points for similar indicators in different databases and sources (e.g. the sources for compiling agriculture expenditure

data in Tables 1 and 2 in this brief and Tables 5.1 and 5.2 in Benin et al. 2012b).

Governments and their development partners should thus put serious effort into organizing, coordinating, and collecting data for the long term, thus establishing national databases that serve the M&E needs of different projects and programs, rather than supporting many small data collection efforts with limited national and economy-wide M&E applications.

### BOX 3: CONDITIONS FOR PUBLIC SPENDING ALLOCATION—THE CASE OF UGANDA

*The demands for public expenditure invariably outstrip the resources available to fund them. Therefore, Government of Uganda rigorously prioritizes its expenditures to provide taxpayers with value for their money. If public expenditure is to maximize its contribution to the Poverty Eradication Action Plan (PEAP), it is imperative to meet three conditions:*

- *Inter-sectoral budget allocations must be shifted in favor of those sectors that can make the strongest contributions to tackling the core challenges of the PEAP: accelerating pro-poor growth, human development and restoring security and support for regions afflicted by conflict.*
- *Intra-sectoral budget allocations must be shifted in favor of projects and programs that most clearly contribute to poverty eradication in a cost-effective manner.*
- *Efficiency must be improved in all areas of public expenditure so that better value for money, in terms of the quality and quantity of public services, can be achieved with the scarce resources available.*

Source: MFPED 2004.

Notes: The PEAP has been replaced by the National Development Plan and a similar but abridged principle for public resource allocation is articulated (NPA 2010).

## REFERENCES

- Arkroyd, S. and L. Smith. 2007. *Review of public spending to agriculture*. Oxford Policy Management, London.
- Benin, S., A. Nin-Pratt, S. Wood, and G. Guo. 2011a. *Trends and Spatial Patterns in Agricultural Productivity in Africa, 1961–2010*. ReSAKSS Annual Trends and Outlook Report 2011. Washington, DC: IFPRI.
- Benin, S., M. Johnson, K. Jimah, J. Taabazuig, A. Tenga, E. Abokyi, G. Nasser, G. Ahorbo, and V. Owusu. 2011b. *Evaluation of Four Special Initiatives of the Ministry of Food and Agriculture, Government of Ghana: Fertilizer Subsidy, Agricultural Mechanization, Block Farms and Youth in Agriculture, and National Buffer Stock Company*. Report for the Ministry of Food and Agriculture. Washington, DC: IFPRI.
- Benin, S., S. Fan, and M. Johnson. 2012a. "Estimating Public Agricultural Spending Requirements." In *Strategies and Priorities for African Agriculture: Economywide Perspectives from Country Studies*, edited by X. Diao, J. Thurlow, S. Benin, and S. Fan. Washington, DC: IFPRI.
- Benin, S., T. Mogue, G. Cudjoe, and J. Randriamamonjy. 2012b. "Public expenditures and agricultural productivity growth in Ghana." In *Public Expenditures for Agricultural and Rural Development in Africa*, edited by T. Mogue and S. Benin. Routledge, UK.
- Fan, S., T. Mogue, and S. Benin. 2009. *Setting Priorities for Public Spending for Agricultural and Rural Development in Africa*. IFPRI Policy Brief No. 12. Washington, DC: IFPRI.
- Fan, S., ed. 2008. *Public expenditures, growth and poverty: Lessons from developing countries*. Baltimore: Johns Hopkins University Press.
- Greene, W. H. 1993. *Econometric analysis*. New York: Macmillan Publishing Company.
- Headey, D. D., T. Benson, S. Kolavalli, and S. Fan. 2009. *Why African Governments Under-invest in Agriculture: Results from an Expert Survey*. Paper presented at the International Association of Agricultural Economists Conference, Beijing, China, 16–22 Aug 2009.
- IFPRI. 2011. *Statistics of Public Expenditure for Economic Development (SPEED) Database*. [www.ifpri.org/book-39/ourwork/programs/priorities-public-investment/speed-database](http://www.ifpri.org/book-39/ourwork/programs/priorities-public-investment/speed-database).
- Kolavalli, S., R. Birner, S. Benin, L. Horowitz, S. Babu, K. Asenso-Okyere, N. M. Thompson, and J. Poku. 2010. *Public expenditure and institutional review: Ghana's Ministry of Food and Agriculture*. IFPRI Discussion Paper 1020. Washington, DC: IFPRI.
- Mogues, T., and S. Benin, eds. 2012. *Public Expenditures for Agricultural and Rural Development in Africa*. Routledge, UK.
- MoFA (Ministry of Food and Agriculture). 2010. *Annual Program Review*. Accra: MoFA.
- MOFEP (Ministry of Finance and Economic Planning). 2010. *Ghana's Compliance with the 2003 Maputo Declaration*. Accra: MOFEP.
- MFPED (Ministry of Finance, Planning and Economic Development). 2004. *Poverty Eradication Action Plan 2004/05–2007/08*. Kampala, Uganda: MFPED.
- NPA (National Planning Authority). 2010. *National Development Plan, 2010/11–2014/15*. Kampala, Uganda: NPA. [www.npa.ug/docs/NDP2.pdf](http://www.npa.ug/docs/NDP2.pdf).
- Send-Ghana. 2010. *Investing in Smallholder Agriculture for Optimal Result: the Ultimate Policy Choice for Ghana*. [www.ghananewsagency.org/details/Science/Send-Ghana-launches-report-on-agricultural-sector/?ci=8&ai=12012](http://www.ghananewsagency.org/details/Science/Send-Ghana-launches-report-on-agricultural-sector/?ci=8&ai=12012).
- World Bank. 2007. *World development report 2008: Agriculture for Development*. Washington, DC: World Bank.
- World Bank. 2012. *World Development Indicators*. Washington, DC: World Bank. <http://databank.worldbank.org/data/home.aspx>.

### INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

2033 K Street, NW • Washington, DC 20006-1002 USA  
T: +1.202.862.5600 • F: +1.202.467.4439  
Skype: ifprihomeoffice • Email: [ifpri@cgiar.org](mailto:ifpri@cgiar.org)

### GSSP – IFPRI

Contact: Shashi Kolavalli - Senior Research Fellow and Program Coordinator  
c/o IWMI, PMB CT 112 • Cantonments, Accra, Ghana  
Martin Odei Block • CSIR Campus • Airport Residential Area  
T: +233-(0)-21-780716 • F: +233-(0)-21-784752  
[gssp.ifpri.info](mailto:gssp.ifpri.info)

This publication has been prepared as an output of the Ghana Strategy Support Program, which is funded by USAID and facilitated by The International Water Management Institute (IWMI) headquarters. It has not been peer reviewed. Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies of the International Food Policy Research Institute ([www.ifpri.org](http://www.ifpri.org)), its partners, or its collaborators.

Copyright © 2013 International Food Policy Research Institute. All rights reserved. To obtain permission to republish, contact [ifpri-copyright@cgiar.org](mailto:ifpri-copyright@cgiar.org)