

Tracking Agricultural Spending for Agricultural Growth and Poverty Reduction in Africa

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In most African countries agriculture and poverty are closely related, as the majority of poor depend upon agriculture for their livelihood. Public spending is a key instrument in promoting agricultural growth. Thus, monitoring agriculture spending is crucial. Agricultural growth also depends upon non-agriculture expenditures such as in rural infrastructure, health and education. It is important to monitor spending in these sectors as well.

The importance of agriculture for poverty reduction has been recognized by African leaders. The Comprehensive Africa Agriculture Development Programme (CAADP) has set a goal of achieving at least 6 percent annual growth rate in agriculture. In support of such targets, African leaders have signed the Maputo Declaration calling for a 10 percent budget allocation to agriculture by 2008 as part of their commitment to the CAADP goals. The objective of this brief is to track the progress of various countries in achieving this target.

Size and composition of total government spending

Over the past two decades, total spending in developing countries has increased by 6 percent annually (Table 1)¹. This spending is largely driven by Asia whose annual spending has increased by 8 percent. For African countries (Botswana, Burkina Faso, Cameroon, Côte d'Ivoire, Egypt, Ethiopia, Ghana, Kenya, Malawi, Mali, Morocco, Nigeria, Togo, Tunisia, Uganda, Zambia, and Zimbabwe), government expenditures grew at a rate of 3.6 percent over the period of 1980 to 2005. For Sub-Saharan African (SSA) countries (which includes all African countries listed above except Egypt, Morocco and Tunisia), total expenditure grew at a rate of 4.8 percent over the same period. The growth rates have steadily increased over each decade, from 2.3 percent in the 1980s, to 4.3 percent in the 1990s, and to 4.6 percent after 2000. This varies by country, however. Botswana, Burkina Faso, Ghana, and Uganda's total expenditures have grown at annual rates of about 7 percent since 2000—comparable to Asia's giants—whereas Cote d'Ivoire, Togo, and Zimbabwe have experienced negative rates.

¹ Total expenditures are broken down into the various sectors found in the International Monetary Fund's (IMF's) *Government Financial Statistics (GFS) Yearbook*. This study concentrates on six sectors, namely agriculture, defense, education, health, social security, and transportation and communication. The definition of these sectors is as per the GFS Manual 2001 which uses the internationally accepted standard for the Classification of the Functions of Government (COFOG).

Table 1—Government Expenditures in Developing Regions

	2000 international dollars, billions				Percentage of GDP (%)			
	1980	1990	2000	2005	1980	1990	2000	2005
AFRICA	114.1	145.0	222.9	279.6	28.5	25.6	28.5	29.4
ASIA	476.6	834.5	2013.9	3109.4	19.0	17.0	20.0	21.3
LAC	391.2	582.7	755.3	999.7	18.5	23.6	22.1	26.3
TOTAL	981.9	1562.2	2992.2	4388.8	19.5	19.7	21.0	22.7

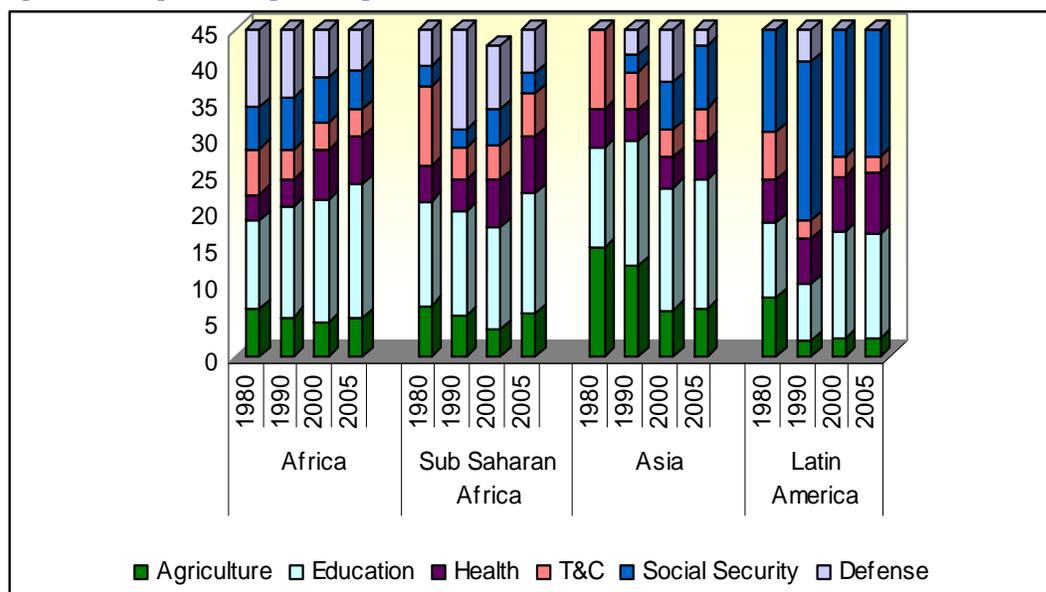
Source: Calculated using data from International Monetary Fund's (IMF) Government Financial Statistics Yearbook (various issues). LAC – Latin American countries

Assessing the percentage of total government expenditures to gross domestic product (GDP) provides a more useful measure of the amount a country spends relative to the size of its economy. On average, developing countries spend much less than developed countries. For example, total government outlays as a percentage of GDP in the Organization for Economic Co-operation and Development (OECD) countries ranged from 27 percent in 1960 to 48 percent in 1996 (Gwartney, Holcombe, and Lawson 1998), compared to 13 to 35 percent in most developing countries.

For the three developing regions in our sample (Africa, Asia and Latin America or LAC), the percentage of total government expenditures to GDP increased from 19 percent in 1980 to 23 percent in 2005 on average. Over the past two decades, Africa spent the most, roughly 25 to 29 percent, compared with Asia's 20 percent. Within Africa and among the sampled countries, Botswana, Zimbabwe, Nigeria, and Malawi spent the most, up to 40 percent. Evidently, African governments do not lack overall public resources.

How do governments allocate their total spending? This is an important question as it reflects government priorities. Examining the composition of total expenditures across regions reveals many differences. The top three sectors of priorities for Africa in 2005 were education, defense and health. The percentage of expenditures in education was the largest (18 percent), comparable to that in Asia. Defense accounted for 8 percent of total government expenditures in the region, also similar to the percentage in Asia. A discouraging trend was that African countries spent very little on transportation and telecommunication. This share in Africa has gradually declined from 6.3 percent in 1980 to 3.8 percent in 2005. If we focus only on SSA, the shares fell by nearly one-half between 1980 and 2005, reaching 6 percent in 2005.

Figure 1 – Composition of public expenditure



Sources: Calculated using data from International Monetary Fund's Government Finance Statistics (various issues). Notes: T&C stands for transportation and communication.

In general, other expenditures, which include government spending on fuel and energy; mining, manufacturing and construction; subsidies and general administration, have accounted for about half of total government spending in Africa. A bulk of this typically goes to government subsidies and expenses relating to general administration. The large and increasing share of these expenditures may be crowding out spending on more productive items such as agriculture, education, and infrastructure.

Agricultural Spending

In Africa, government expenditures on agriculture increased gradually at an annual rate of 2.6 percent in the last two decades. For SSA only, agricultural expenditure grew slightly faster, at 3.6 percent annually. While this is positive, it was still lower in comparison to Asia where expenditures in the sector have more than doubled during the same period – reaching an annual growth rate of 4.1 percent.

Table 2 - Agriculture Expenditure

	2000 international dollars, billions				Percentage of GDP (%)			
	1980	1990	2000	2005	1980	1990	2000	2005
AFRICA	7.3	7.8	10.3	14.8	7.1	5.4	6.0	7.4
SSA	3.0	3.6	4.0	8.3	4.1	3.7	3.5	6.2
ASIA	71.1	103.0	128.4	201.6	9.6	8.6	7.9	10.2
LAC	31.5	12.2	18.9	25.5	14.7	5.8	9.1	9.4
TOTAL	109.9	123.0	157.6	241.8	10.4	7.9	7.9	9.9

Source: Calculated using data from International Monetary Fund's (IMF) Government Financial Statistics Yearbook (various issues).

There are large variations across countries in Africa, nevertheless. Ghana, Kenya, Malawi, Morocco, Togo, and Zambia, for example, experienced negative growth rates of agricultural spending between 1980 and 2005. On the other hand, Burkina Faso, Ethiopia, Nigeria, and Tunisia saw high growth rates of over 8 percent in the same period, having accelerated largely after 2000. This is indicative of the commitment of these countries to pro poor growth. In Burkina Faso, for example, poverty fell from 55 percent in 1998 to 46 percent in 2003 (World Development Indicators, 2007).

The share of total government expenditures going into the agricultural sector can serve as a useful measure of how much of a priority the government regards the sector. The CAADP has set a target of 10 percent of the national budget to agriculture. This share in Africa has ranged from 4 to 6 percent on aggregate since 1980. It is currently about 6 percent and thus far from the target.

Where do countries stand relative to the CAADP Goal?

Many countries in our sample committed 10 percent or more of their national budgets to agriculture during the early 1980s, including Botswana, Ghana, Malawi, Tunisia, Uganda, and Zambia. By 2005, only Burkina Faso, Ethiopia, Malawi, and Mali were spending 10 percent of their budget on agriculture (see table 3). Another eight countries are close behind at rates of 8 to 10 percent: Chad, Mozambique, Gambia, Madagascar and Zambia. A majority achieved between 3 and 6 percent, while a few are below 3 percent, including: Lesotho, Central African Republic, Togo, Democratic Republic of Congo, Ghana and Guinea Bissau.

Table 3 – Government expenditure on agriculture as a percentage of total expenditure (%)

	2002	2003	2004	2005	2006
Benin ¹	3.5	4.4	3.9	..	..
Botswana ¹	4.4	4.7	4.5	3.3	..
Burkina Faso ^{1,2}	9.2	9.2	15.9	15.0	..
Burundi ³	3.6	6.1	4.4	..	..
Cameroon ^{1,2}	3.5	3.4	3.6	3.6	..
Central African Republic ¹	..	..	2.7	..	..
Chad ¹	..	..	9.7	..	..
Congo, Dem. Rep. ³	0.8	0.7	1.5	1.8	..
Cote d'Ivoire ^{1,2}	5.5	4.5	4.4	4.4	..
Egypt ¹	6.0	5.9	5.1	5.0	..
Ethiopia ¹	7.4	7.5	13.6	16.5	..
Gabon ³	0.6	0.9	0.8	..	..
Gambia ¹	..	..	8.5	..	..
Ghana ¹	1.0	0.9	0.8	0.8	..
Guinea ¹	..	..	14.0	..	..
Guinea Bissau ¹	..	..	0.5	..	..
Kenya ¹	5.0	4.6	4.2	3.8	..
Lesotho ³	4.1	4.9	3.0	2.9	..
Madagascar ³	8.0	7.9	8.0	8.0	..
Malawi ⁴	8.7	6.6	7.0	11.0	9.0
Mali ¹	10.6	12.7	14.5	10.8	..
Mauritania ¹	..	..	5.5	..	..
Mauritius ³	2.7	3.4	2.9	2.9	..
Morocco ¹	4.0	3.2	2.8	2.6	..
Mozambique ³	17.1	1.2	9.1	9.1	..
Namibia ³	6.0	6.0	5.3	5.5	..
Niger ¹	..	..	0.9	..	..
Nigeria ^{1,4}	3.2	3.2	3.2	3.8	5.8
Rwanda ^{1,5}	8.6	3.9	4.0	3.4	3.3
Senegal ¹	3.8	3.6	4.4	..	..
Sudan ³	1.7	3.1	5.4	..	..
Swaziland ³	4.0	3.3	3.3	5.0	..
Tanzania ³	4.5	6.8	5.5	5.5	..
Togo ^{1,2}	2.0	2.4	2.3	2.3	..
Tunisia ^{1,2}	5.4	8.9	7.7	7.5	..
Uganda ⁴	4.2	4.2	5.0	3.2	5.2
Zambia ⁴	1.8	2.3	4.0	8.0	8.0
Zimbabwe ¹	8.3	9.0	6.6	7.7	..
Africa ¹	4.5	4.5	5.3	6.0	..

Sources:

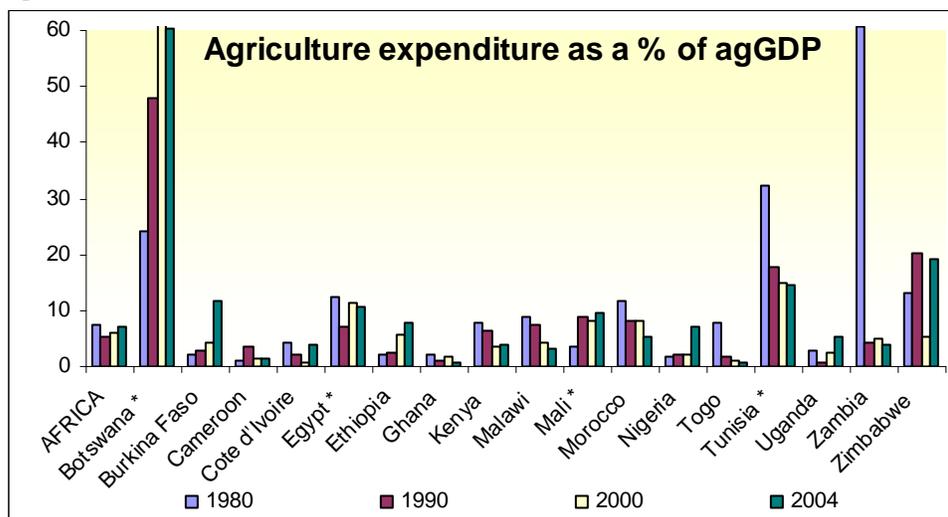
1. Calculated by IFPRI using International Monetary Fund's Government Finance Statistics Yearbooks using the international standards of the Classification of the Functions of Government (COFOG), with some revisions from country sources
 2. Projected by IFPRI for 2005 figures using the IMF data in 1 above.
 3. From the NEPAD/AU/FAO/World Bank 2006 budgetary tracking surveys, which also adopted the COFOG standards of measure.
 4. From preliminary in-country surveys by ReSAKSS nodes with in-country network partners (Zambia, Nigeria), and in some cases as part of broader Public Expenditure Review studies under taken in collaboration with the World Bank and national government agencies (e.g. Uganda, Malawi). For Nigeria, 2006 figure are preliminary estimates based on the Federal budget.
 5. From Diaio et al. 2007 (IFPRI)
- .. Data unavailable

A recent study undertaken by IFPRI (Fan et. all, 2008) suggests the countries that have achieved the 10 percent goal (Burkina Faso, Ethiopia, and Mali, with the exception of Malawi) will reach the first Millennium Development Goal of cutting poverty in half by 2015. The rest of the countries are still far from the target and will not be able to achieve this goal under the current trends. For these countries, agriculture expenditures will need to grow between 23 to 32 percent per year to achieve the MDG goal.

A more meaningful measurement of the priority given to agriculture by government is the ratio of agricultural expenditures to agricultural GDP. This provides a better measure of government spending on agriculture relative to the size of the sector since it explicitly weighs in the size of the agricultural sector in the overall economy when comparing across countries. This is very different from the ratio with respect to total expenditures. For example, 10 percent of total spending may translate into a 5 percent share of agricultural GDP for countries where the sector is large, and therefore, important to the national economy. In other cases, the 10 percent of total spending may translate into a 15 percent share of agricultural GDP for countries where the agricultural sector is less important. In the first case, the country may be spending too little, while in the latter case, it may be spending more than it needs to.

This percentage of agricultural expenditures to agricultural GDP is low in Africa when compared with Asia. On aggregate, Africa spent between 5 to 7 percent as a share of agricultural GDP, while for Asia it has been between 8 to 10 percent (see Figure 2). Country level data in Africa shows that the range can be considerable (from 1 to 60 percent). Since 1980, about half of African countries decreased their agricultural expenditures relative to their agricultural GDP. Botswana had the highest percentage in 2005, 60 percent, which implies the country may be over spending in this sector. Togo and Ghana, on the other hand, spent less than 1 percent. These are countries that may not be committing enough to the sector relative to its size in the national economy. A large majority of countries spend less than 10 percent.

Figure 2



Source: Calculated using data from International Monetary Fund's Government Financial Statistics Yearbook (various issues). * indicates values from 2005

Conclusion

A large body of literature shows that public investments in rural areas have contributed significantly to agricultural growth and rural poverty reduction. These investments have also contributed to urban poverty reduction through growth in the national economy and lower food prices. As agriculture forms the backbone of many African economies, the trend of increasing commitments to agriculture and rural development is heartening. Today, most African leaders have recognized that the way forward is through agriculture growth and rural development. But, as the evidence shows, only a few countries have translated this into budgetary commitments. As it turns out, these are the same countries that are also most likely to reach the first Millennium Development Goal.

A big challenge looming ahead for Africa is the recent surge in world food prices, which threatens to reverse any past gains in reducing poverty. Higher food prices will severely affect rural and urban consumers, especially among the poor. By increasing spending in agriculture and rural development now, African government can avert this threat by rapidly increasing agricultural productivity and ensuring a long term and stable supply of affordable food to millions of Africans in general and the poor in particular.

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