



## AGRICULTURE FOR DEVELOPMENT POLICY BRIEF

# More and Better Investment in Agriculture

*Faster agricultural growth and increased response to better price incentives depend on investments in core public goods such as market infrastructure, research, institutions, and support services. In most countries of Sub-Saharan Africa, those public investments are very low. In many other countries in all regions, inefficiency and inequitable subsidies crowd out investments in these core public goods. More and better-quality expenditures require improved budgetary processes aligned to well-articulated agricultural strategies. Greater public disclosure and transparency of budget allocation and impacts are needed to mobilize political support for budgetary reforms.*

## Investing in core public goods pays.

Agricultural growth and poverty reduction depend critically on investments in rural infrastructure (irrigation, roads, transport, power, and telecommunications), as well as on investments in markets, rural finance, and research and extension.

Those types of investments generally provide high returns. Average rates of return on investment in agricultural research and extension, for example, have been documented in the range of 35 percent (Sub-Saharan Africa) to 50 percent (Asia) in 700 studies. Those rates are far above the cost of money accessible to developing countries.

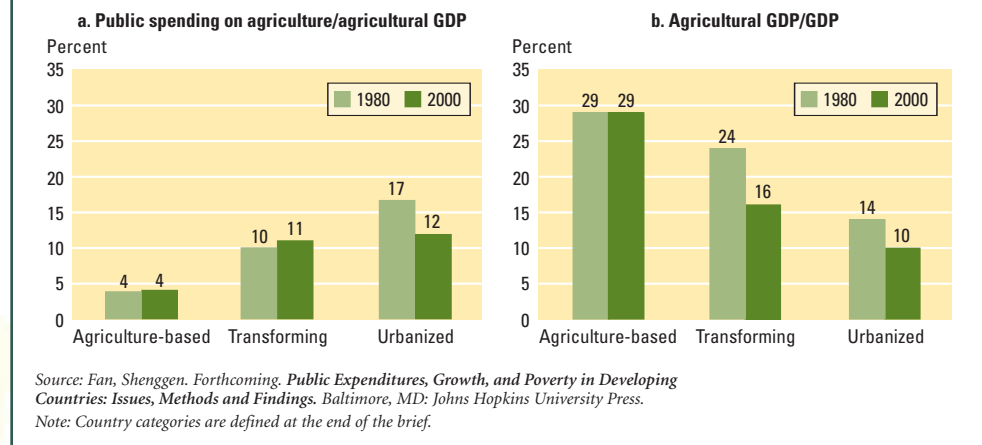
Investment in irrigation has also provided high payoffs in Asia. In Sub-Saharan Africa, after many failures in the 1980s, returns on irrigation projects now often reach the 15 to 20 percent commonly obtained in the rest of the world. Evidence from rural China, India, and Uganda shows that the highest returns, in terms of both growth and poverty reduction, are from investments in agricultural research, rural roads, and education.

## But agricultural spending in Sub-Saharan Africa is low.

Public spending on agriculture as a share of agricultural gross domestic product (GDP) in agriculture-based countries (mostly in Sub-Saharan Africa) was significantly less (4 percent in 2004) than in the transforming countries (mostly in Asia) during the agricultural growth spurt in the 1980s (10 percent) (figure 1, panel a). Current levels of agricultural spending in Sub-Saharan Africa are

insufficient for sustained growth. Recent advocacy by the New Economic Program for African Development to increase agricultural spending to 10 percent of national budgets aims to reverse that trend. Similar spending levels brought success to the now transforming countries.

**Figure 1. Agricultural GDP and Public Spending on Agriculture**



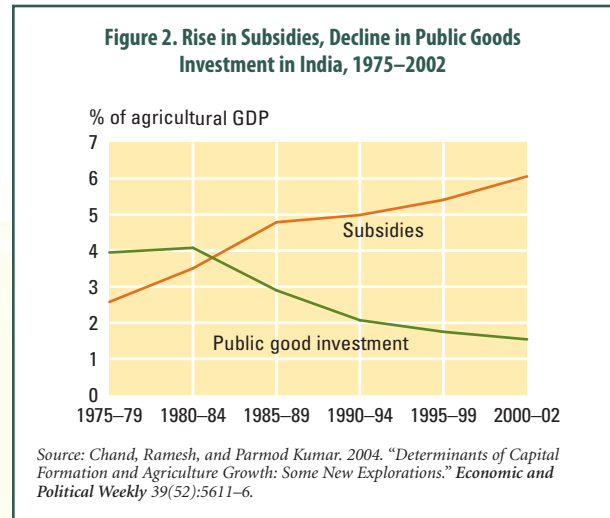
In the transforming and urbanized countries of Asia and Latin America, the decline in public funding for agriculture partly reflects agriculture's declining importance in the economy (figure 2). Nonetheless, reversals have recently occurred in several countries, including China, India, and Mexico, motivated by the need to fight widespread rural poverty and narrow a widening rural-urban income gap.

## “Misinvestment” is pervasive in many countries.

Underinvestment in agriculture is further compounded by misinvestment—that is, spending on private goods, such as input subsidies and transfers, that benefit richer farmers more. Thus, the quality of public spending—the efficiency and equity of resource use—is often an even more important issue to address than its level.



Recent reviews of public expenditures suggest that public budget allocations to subsidies and transfers are high: 37 percent in Argentina, 43 percent in Indonesia, 75 percent in India, and 75 percent in Ukraine. In Kenya, transfers to parastatal organizations and subsidies accounted in 2002/03 for 26 percent of total government expenditures in agriculture. In Zambia, in 2003/04, 85 percent of nonwage spending went to subsidies to farmers—mostly larger farmers—for fertilizer and maize prices. The bias toward subsidies often increases as a country's income rises. In India, for example, agricultural subsidies as a share of agricultural GDP have risen steadily from 1975 to 2002 (figure 2).



Not all subsidies are inefficient. Subsidies can help overcome temporary market failures (as part of a broader strategy), offset fixed costs of infrastructure, and reduce risk (see brief on New Approaches to Input Subsidies).

But subsidies have seldom been used for those purposes. Instead, they have mostly benefited richer farmers. Given scarce fiscal resources, increasing subsidies are often at the expense of high-return investments in public goods. In Zambia, where 37 percent of the agricultural budget is spent on fertilizer subsidies, only 15 percent of the 2003/04 budget was spent on research, extension services, and rural infrastructure—investments that have shown high payoffs. Likewise in India, increasing subsidies have crowded out investments in core public goods, which have fallen (figure 2). Even where subsidies are initially effective, they often create vested interest, which makes their removal difficult once they are no longer needed. Thus, subsidies as generally practiced lead to inefficient and inequitable resource use at a high cost to farmers in terms of foregone growth and income.

### Better budgetary processes can improve expenditure allocation.

Aligning budgets with agricultural strategies and policies is important to prevent underinvestment and misinvestment. However, these strategies and policies must be empirically and analytically

well founded. Vietnam is pioneering the use of evidence-based assessments to ensure that spending on core public goods for agriculture is included in its medium-term expenditure plans.

Investing is more challenging for the agriculture-based countries, given the considerable financial resources required for the agriculture-for-development agenda. Donor funding can help meet those requirements, but increasing the domestic revenue base and improving budget planning and management are national responsibilities. Medium-term expenditure frameworks that are based on program budgets with clear objectives, specific costing, and transparent allocation will align financial resources (including donor contributions) with priorities.

Detailed reviews of public expenditures in the agricultural sector are often a first step in providing a comprehensive picture of the current use of fiscal resources. More in-depth analyses of the effectiveness of expenditures in particular subsectors can also provide valuable information. Agricultural research organizations have been especially active in providing estimates of rates of returns—usually high—to their investments.

### Political economy matters.

Improving the efficiency of resource use requires addressing the political economy pressures that determine budget allocations. Institutional, demographic, and economic variables jointly shape the size and quality of public spending. Economic sectors or groups of producers that control a large portion of national wealth often have the means to influence public policies to their benefit. In Latin America, for example, the share of rural subsidies provided by governments is higher where there is more income inequality, probably because of the political power of large farmers. If the ineffectiveness of public expenditures is a result of the influence of special interest groups, the solution might be to strengthen the voice of a wider group of stakeholders, especially smallholders. In Senegal, the apex farm organization is active in national agricultural policy deliberations and in decisions on the allocation of agricultural research expenditures. Administrative and political decentralization that puts spending decisions closer to local government or community organizations can increase transparency and accountability. Still, the challenge is to avoid elite capture. So far, the evidence on the effect of decentralization on quality of public expenditures is mixed.

Political support for reform can be created by increasing transparency about the distributional effects of such policies, by moving gradually to targeted subsidies, and by packaging and sequencing reforms in ways that reduce opposition. The lack of a formal program of expenditure evaluations—combined with a lack of access to public information on expenditures and their beneficiaries—reduces the effectiveness of any formal accountability mechanisms that might be provided by political checks and balances, a free press, or well-intentioned civil society organizations. Rigorous evaluations, their wide dissemination, and increasing transparency could reduce this information gap.

This policy brief has been extracted from the World Bank's 2008 World Development Report, *Agriculture for Development*. Further information and detailed sources are available in the Report. The Report uses a simple typology of countries based on the contribution of agriculture to overall growth, 1990–2005 and the share of rural poor in the total number of poor (2002 US\$2-a-day level). In agriculture-based countries (mostly Africa), agriculture contributes a significant (>20%) share of overall growth. In transforming countries (mostly in Asia), nonagricultural sectors dominate growth but a great majority of the poor are in rural areas. In urbanized countries (mostly in Latin America and Europe and Central Asia), the largest number of poor people are in urban areas, although poverty rates are often highest in rural areas.