

## Chapter 5

# Managing the Political Economy of Pro-Poor Agricultural Spending

Some categories of spending that have significant positive effects on productivity and welfare are often underfunded, and others that generally show unfavorable results often capture large shares of the budget. Explaining such discrepancies between impact and prominence in the public budget requires understanding how the public resource allocation process is shaped by agents' incentive structures, the characteristics of the investments, and the broader governance environment in which agents operate. Budget decisions will always be politically influenced, but understanding the sources of bias that are likely to drive inefficient or ineffective policies can help avoid those outcomes.<sup>1</sup>

Many African countries have long pursued policies of implicit or explicit agricultural taxation, creating a pro-urban, anti-agricultural bias (Anderson 2009; Krueger, Schiff, and Valdes 1988). One explanation is that rural populations exhibit greater difficulty of organizing collective action among dispersed populations that lack easy means of communication (Olson 1985). But if the difficulty of organizing collective action can be overcome, there is strength in numbers (Acemoğlu and Robinson 2001). One way to at least partially offset this natural disadvantage of rural populations is to improve the information base of key actors so that they better understand the effects of alternative policy choices. Policy processes exhibit a status quo bias, such that policies that have outlived their usefulness are often not discontinued. Governments may favor the status quo because those who benefit from the current state are usually the ones with the power to have ensured enactment of those policies in the first place. And their political support for current policies is increased by those who have altered their behavior to become beneficiaries after policies were put in place (Coate and Morris 1999).

Different classes of spending influence how politically attractive they are. Types of spending with highly visible results that are easily attributable are attractive. Visible infrastructure investments and direct cash or in-kind transfers are more easily connected to the efforts and spending decisions of

public officials. These can even be conveniently advertised—for example, through labels on the fertilizer voucher ticket indicating who is responsible for subsidizing the fertilizer—thus serving as an effective tool for patronage. In contrast, if a farmer observes that the quality of information provided by a new agricultural extension officer has improved, it may be difficult for her to ascertain whether that is because the agricultural ministry has done a better job in selecting, training, and incentivizing extension officers. The greater visibility (and therefore attributability) of large-scale irrigation schemes has also made them more attractive than small schemes, despite the weaker agricultural performance of the large (Chinsinga 2011; Keefer and Khemani 2005).

Goods and services with a long lag between the time when resources are allocated and the time when the benefits become available are less politically attractive for several reasons. A longer lag tends to break the perceptible link between politicians' decisions and public officials' resource allocations, and politicians may have a short time horizon for their tenure in office. And given the substantial time lag between investing in research and reaping its rewards—usually decades, not years—agricultural research requires a long-term commitment for sufficient sustained funding. Long research cycles rarely coincide with short-term election cycles, shifting political agendas, and changes in government budget allocations. The inability to extract short-term political credit may act as a disincentive for policy makers to commit to long-term agricultural research and development (R&D) investments, thereby jeopardizing future research planning and outputs.

Given low investments by governments, agricultural research in many Sub-Saharan countries is highly dependent on donor funding, which by nature is mostly short-term and ad hoc, and often causes major fluctuations in a country's yearly agricultural investments. In contrast to the long gestation period to realize benefits of investing in research, public spending to subsidize agricultural inputs usually requires a span of only a few months from the time of the investment until the subsidized fertilizer reaches farmers. In Malawi, the time span from the spending being incurred to the fertilizers being received by farmers ranged from one to six months (Chirwa, Matita, and Dorward 2010), and in Ghana, the equivalent time span was about four months (Banful 2011). This is clearly one factor behind the bias toward subsidies in the current policy mix.

The prevalence of corruption tends to increase the share of large capital investment spending in overall spending. Areas of public spending involving large infrastructure or other capital investments create opportunities for public officials to improve the chances of a private agent winning contracts, or to loosen regulatory burdens on the agent, in return for private payments to the official.

For example, incentives for technical staff to properly maintain structures are severely weakened without side payments, given the rents that can be extracted in a context of insecurity about access to functioning irrigation systems (Wade 1982; Walter and Wolff 2002).

Institutional mechanisms to make spending more pro-poor have a mixed record and vary in their strengths and vulnerabilities. In some African countries, the potential benefits of participatory budgeting have been vitiated because the process has been top down and closely managed by the party in power, as in Mozambique (Nylen 2014). The benefit has also been constrained by earmarking transfers from the federal government, as in Kenya and Uganda (Ranis 2012), or high administrative and maintenance costs, as in Uganda (Francis and James 2003). Where spending decisions are decentralized, mechanisms to strengthen electoral accountability need to be put in place, with the objective of prioritizing responsiveness to the needs of individuals over those of elite groups. This must be matched by building local officials' public management capacity and improving citizens' information base on the actions as well as the performance of local governments. The inefficiencies and poor targeting of subsidies can be at least reduced through operational features that improve the clarity and reduce the ambiguity of eligibility criteria, paired with an increase of transparency and information about which localities, and within localities which households, are eligible to receive the transfers.

In Africa, external actors—particularly donors—play a large role in resource provision and potentially in decisions on how to spend the resources. Consultations or negotiations between governments and international partners not only on outcomes and domestic policies but also on aggregate (donor and domestic) public spending in agriculture can be included in packages of assistance. This needs to be accompanied by the continued generation of knowledge and good quality data and tracking of public spending in the sector in a given country, irrespective of the revenue source. Agricultural public spending reviews, increasingly common, can support this. Making commitments to external agents can help governments overcome the problem of policy reforms possibly lacking credibility and therefore not inducing the intended response from the private sector. Such commitments can be made not only—or even primarily—to donors. Commitments to African institutions such as the Comprehensive Africa Agriculture Development Programme (CAADP), through the process of developing national agricultural investment programs and carrying out joint sector reviews, can play this role as well.

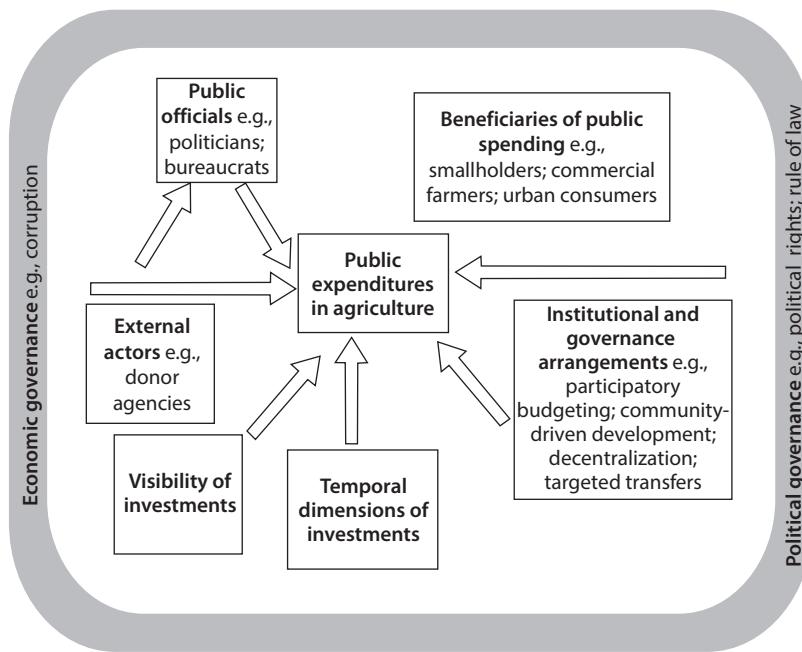
Profound reforms, including in resource spending decisions to support agriculture, will of course face political resistance because of an inherent bias

toward the status quo, and the difficulty of governments in making credible commitments. Lessons related to the tools that can be useful in counteracting these forces emerge from the political economy literature, including improving the knowledge base of the affected parties on the distributional effects of policies, and making use of commitments to external agents. International experience with large-scale reforms in spending programs also offers lessons. Severe budgetary constraints associated with fiscal pressures often disturb the existing political equilibrium and offer windows of opportunity for reforms. On a practical level, reformers need to be ready with evidence and a plan to support reforms should such a circumstance arise. Another lesson is that resistance to reducing inefficient forms of spending can be reduced by some compensation of losers with “spoonfuls of sugar.” This was a crucial component of agriculture reform programs in Mexico, Romania, and Turkey, for instance.

## **Framework for Analysis and Summary of Key Findings**

This chapter is concerned with political economy determinants of agricultural public spending allocation. It does not examine determinants of total public spending or budgets (often used as a proxy for the size of government, and as such a different topic). It is also “partial equilibrium” in that it is mainly focused on the expenditure side of public finance—for example, it acknowledges that even when public spending on agriculture is relatively high, there may be net taxation of the sector. But the primary interest remains in the determinants on the spending side of public sector activity. It is, however, outside the scope of this chapter to explore the range of drivers of public spending allocation that are not directly related to political economy factors, such as public resource allocation in agriculture based on agroclimatic factors, public spending in reaction to macroeconomic phenomena, or the influence of private investment on public investment.<sup>2</sup>

This survey of theory and evidence on this topic structures the discussion into three thematic areas (figure 5.1). The first area is agent-centric, analyzing agents’ incentive structure, constraints, and interface with each other. The second area is investment-centric, analyzing the features of publicly provided goods and services and how these features make it more or less likely that these goods and services would be invested in. The third area is the broader governance environment, analyzing the countrywide political and economic governance environment for agents to allocate public resources to goods and services. In sum, then, the first examination is of political economy factors—organized into the three elements of agent-centric, investment-centric, and broad governance-related determinants—that can affect how public resources are allocated.

**Figure 5.1** Framework for Political Economy Determinants of Agricultural Public Spending

Source: Mogues and Erman 2016.

Within the broader discussion of governance, this chapter considers institutional arrangements for distributing publicly provided resources that are intended to make public spending more pro-poor. The evidence is laid out on the extent of success—or failure—in these arrangements' ability to achieve the goal of improving the way spending is allocated. In particular, we assess the extent to which public resources and the goods, services, and infrastructure they produce have become more oriented to benefit the livelihoods and economic potential of the poor. The four prominent ones are participatory budgeting, community-driven development programs, decentralization, and targeted transfers.

Clearly, the framework for this review is highly simplified. For example, there are multiple types of actors within each broad actor category that we discuss, and the channels that represent or influence public spending are diverse. The elements of the framework are also not in reality always sharply delineated—for example, characteristics of investments can matter through the way they interface with actors' incentives. And the institutional reforms and types of

interventions discussed are not always designed with political economy and governance factors in mind; for example, transfers targeted to households can in some contexts be devised without attention to the ways that local power dynamics thwart the objectives of channeling the transfers to the poor. The illustration instead simply serves to frame the literature in broad strokes, with the particularities discussed in the subsequent sections.

Table 5.1 focuses on the political economy determinants of public spending compositions and allocations, and table 5.2 on the institutional arrangements to make public spending more pro-poor. As the first summary shows, direct decision makers in resource allocation are strongly driven by a range of incentives in making spending decisions, and how funds are spent is often an equilibrium result of the interactions between diverse types of decision makers—for example, politicians and bureaucrats—with their respective and

**Table 5.1 Evidence on Political Economy Determinants of Public Spending**

Elements of the framework	Selected key findings from the literature
<i>Agents' incentives and constraints</i>	
<b>Direct decision makers in resource allocation</b>	<p>Model of unencumbered, benevolent social planner may not be a realistic view of resource allocation process</p> <p>Decision makers' direct economic incentives, as well as their political incentives, are dominant forces in their spending behavior</p> <p>Divergent maximization problems of politicians vs. bureaucrats can lead to different public good provision equilibria</p>
<b>Beneficiaries of resource allocation</b>	<p>Collective action is facilitated by small group size, effective information and education endowment, access to transport and communication infrastructure, and financial endowment. Collective action enables effective advocacy for public spending favorable to the group</p> <p>Groups in some cases invest in the information endowment of their membership, both for better evaluating merits of alternative investments, and to influence politicians' knowledge</p>
	<p>Large group size can be an advantage in attracting investments to benefit the group, if the high coordination costs inherent in larger groups are outweighed by factors that create "strength in numbers"</p>
	<p>Status quo bias, favoring continued pursuit of existing spending patterns, is driven by preexisting political clout of the beneficiaries of these patterns, as well as their growth over time as behavior changes to take advantage of opportunities created by policy</p>
<b>External actors</b>	<p>Donor-supported adjustment policies have led to a decline in public spending shares, while productivity-centered investments have not fallen or even increased. But within the latter category, agricultural spending's share fell</p>
	<p>But influence of international development assistance on public spending is checked by significant cases of aid fungibility, especially in the case of aid for agriculture</p>

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**Table 5.1 (continued)**

Elements of the framework	Selected key findings from the literature
<i>Investment characteristics</i>	
<b>Visibility of investments</b>	The greater the ease with which citizens can attribute a type of public investment to the effort and actions of the policy makers who were responsible for it, the greater the likelihood that this type of investment will be undertaken
	The visibility of publicly provided goods and services greatly increases this attributability. But since the most visible goods are not necessarily the most beneficial ones, this phenomenon may lead to a distortion of resource allocation
<b>Temporal and distributional characteristics</b>	Longer time lags between when spending takes place and the goods or services funded materialize, the less likely that these investments will be undertaken
	This is because a longer lag will make the attributability problem worse, increase the chance that the politician will no longer be in office when the provided services materialize, and increase uncertainty about the returns to the investment
	Inefficient forms of spending can prevail over less inefficient ones, such that entrenched interests in support of more inefficient subsidies grow larger and more powerful over time
<i>Governance environment</i>	
<b>Corruption's impact on resource allocation</b>	Corruption-prone environments induce policy makers to undertake more capital spending that may lend itself more easily to extraction of bribes than does recurrent spending
	This holds more in poor countries than in higher-income countries: in the latter, in settings that are more corruption-prone, capital spending goes down, precisely to ward off opportunities for leakages to take place
<b>Regime type and political contestation</b>	Results are mixed: some cross-country analysis finds no effect of broader political governance on spending allocation, while other work shows that younger democracies spend more on targeted goods than more mature democracies
	Country-level analysis gives more unambiguous evidence that political contestation improves the quality of public goods provision
	In the context of agriculture, there is consistent evidence of a nonlinear relationship between political governance and support to agriculture: improvements in political rights from a low level initially increase support to agriculture. But further political governance improvements do not affect or can lead to a mild decrease in agricultural support

often differing incentives. Beneficiaries of publicly provided goods and services can, even if they are not direct decision makers, have significant influence on how public spending is allocated, while donor agencies' influence can be compromised due to the fungibility of funds, especially prevalent in agriculture. The characteristics of different public investments themselves, as well as the overall governance environment, determine the likelihood of these investments taking place.

**Table 5.2 Summary of the Impact of Four Institutional Arrangements***Ordered from most to least explicit design focus on participation of the poor*

From intermediate to further-reaching outcomes					
	Level of intervention	Political targeting	Corruption	Local capture	Responsiveness of public spending/ services to needs of the poor
<b>Participatory budgeting</b>	Local administrative unit	Prevalent when civil society is weak; important in African context	Assumed benefit—more research needed	Some evidence suggesting overrepresentation of local elites in PB	Increased responsiveness when civil society is strong
<b>Community-driven development</b>	Communities/groups of individuals	Important in African context	Assumed benefit—more research needed	Especially in unequal societies	Especially in Africa
<b>Decentralization</b>	Local administrative unit (for example, district)	Splitting subnational units for political gain	Effect of decreasing corruption	Especially in unequal societies	Sensitive to local context
<b>Targeted transfers</b>	Individuals/households	Vote-buying Rewarding supporters	Can be targeted Substantial in agricultural transfers	Both when targeting administration is centralized and decentralized	Depending on the nature of the transfer

Note: PB = participatory budgeting.

As table 5.2 shows, the success of various institutional arrangements that seek to improve the responsiveness of public spending to the needs of the poor population is mixed. Targeting of spending based on the political affiliation of beneficiaries has been identified as an important determinant of spending in governance arrangements. Spending programs in more unequal societies are particularly vulnerable to capture. Elite capture and political targeting were identified in almost all analyzed agricultural input transfer programs in Africa. Mechanisms such as participatory budgeting and CDD are assumed to make spending more transparent; but evidence is not conclusive in this case. In actual effects on responsiveness and pro-poor resource allocation, evidence is scarce but cautiously optimistic about participatory budgeting, CDD, and decentralization.

## **Agents' Incentives and Constraints**

### **Direct Decision Makers in Public Spending Allocation**

Public decision makers' incentives influence public spending allocation process.<sup>3</sup> For example, Besley, Pande, and Rao (2012) detect greater public resource allocation of the *gram panchayats* (GP) in India (an administrative unit that is a collection of villages) to the village from where the GP head originates compared with other villages in the GP.<sup>4</sup> This is a variant of the elite capture literature, one in which the local elite is not merely a socially or economically higher-status person, but also carries the function of a public official. Allocation of public money has been examined as an outcome of the interaction between politicians and the bureaucracy. Bureaucrats have been modeled as "professionals" who evaluate public spending proposals based on their technical quality or merits (Ting 2012), as budget maximizers who seek to have public goods supplied in large quantity (Niskanen 1971), or as agents who seek to maximize the difference between the quantity of public goods claimed to have been provided and that actually have, retaining this difference as private income (Blackburn, Bose, and Haque 2011).

Analysis has identified spatial and temporal resource allocation outcomes that emerge from interaction among politicians, and has compared the choices of different types of hypothetical decision makers (social planner versus politician). For example, extensive research continues to be undertaken to model in detail the spatial allocation outcomes as a result of legislative bargaining approaches taking place under different political systems, such as the many variations on parliamentary and presidential systems. Usually, these studies would consider specific systems of particular countries, typically from among those with advanced democracies, even in cases of theoretical analysis (see Persson and Tabellini [2000] for a review).

Spatial allocation is more often the subject of study than temporal allocation. But there are interesting examples of the latter, such as recent theoretical modeling of intergenerational conflict over how much to spend, save, and invest over time. This study concludes, seemingly counterintuitively, that a social planner whose aim is to make resource allocation decisions so as to maximize the discounted utility of all generations would produce outcomes economically worse in the aggregate and long run than fiscal decisions of agents subject to short-term electoral calculus (Song, Storesletten, and Zilibotti 2012). This analysis is based on a model of small open economies, each consisting of young citizens (who supply labor), and old citizens (who live off their savings), and public goods provision (that can be financed by debt through borrowing from other countries or by domestic taxes on labor). Under conditions of sufficiently low borrowing interest rates, the social planner, who seeks to maximize citizens' welfare, discounting future citizens' utility, may overtax the labor of the young to supply public goods benefiting the old, in a manner that leads to long-run declines in aggregate welfare. In contrast, under the same conditions, an agent facing political constraints from both young and old citizens will provide fewer public goods to the old and incur lower debt, to the benefit of younger generations and of aggregate, intertemporal welfare.

### **Beneficiaries of Public Resource Allocations**

While agricultural protection policies have consistently been applied in developed nations, several developing countries have pursued policies of agricultural taxation (Bale and Lutz 1981; De Gorter and Swinnen 2002; Krueger, Schiff, and Valdes 1988; Lindert 1991). A rich body of evidence has also pointed to the ways in which agricultural policies in developing countries have favored larger-scale farmers, few in number, even when these policies were intended to specifically target the masses of smallholders. There are similarly many instances in developing countries in which public investments and other measures have benefited urban populations at the expense of rural dwellers—and in particular agricultural households.

These phenomena have been explained as an outcome of the way the characteristics of interest groups—here, this means individuals or producers sharing similar livelihoods or economic interests—affect their ability to press for public policies, including investments, subsidies, and other public interventions that are favorable to them (Becker 1983). Interest groups can supply an adequate quantity of the local (or group-specific) public good of advocating on behalf of the public resource decisions preferred by their members if they can avoid the collective action problems in large groups well known in public goods provision (Anderson and Hayami 1986; Bates 1987).

One factor facilitating collective action is the spatial concentration of group members, enabling coordination and mutual monitoring of actions

(Olson 1985). Agriculture is strongly characterized by spatial dispersion of farmers, in contrast to the relative physical proximity of urban citizens to each other. Similarly, access to transportation and communication infrastructure facilitates intragroup coordination and organization, inferior in rural as compared with urban areas in developing regions.

Third, a critical element in collective action is group size. For any level of spatial concentration and access to transport and communication infrastructure, it is harder to coordinate among larger than among smaller groups. In most developing countries, the agricultural and rural populations are substantially larger than urban populations, resulting in another inherent disadvantage among the former in organizing to appeal for pro-agriculture policies. Group size also matters in a second respect: the same resources allocated to a purpose preferred by a large group versus that preferred by a small group will invariably result in greater gains for individual members of the small group than of the large group. This situation often results in greater incentives for members of a smaller group to engage in (and incur the costs of) lobbying for their preferred spending policies.

Later research highlights, implicitly, the way an inverse relationship between group size and group effectiveness in influencing resource allocation directly hinges on the coordination cost argument. This research suggests that if the effectiveness of collective action is held constant, as well as per capita characteristics such as member incomes, larger groups may be able to wield more political clout (for example, through their greater aggregate income resources and their greater combined voting power) (Acemoğlu and Robinson 2001). Implicit is the argument that collective action failures in large groups often more than offset other potential benefits of “strength in numbers.”

Explanations of the patterns of public investment in economies such as China; the Republic of Korea; Malaysia; and Taiwan, China lean on another potential advantage held by large groups at the lower economic levels. These Asian countries undertook expansive public investments in smallholder agriculture and other rural services benefiting small farmers, as well as extensive land reforms, because of the looming threat of unrest among the rural masses fueled by economic neglect, which had brought down regimes in neighboring countries (Doner, Ritchie, and Slater 2005).

Such reaction of public investments to a possible threat from rural areas has been less prevalent in Africa. Leaders’ goals for agricultural or agro-industrial production could simply not be met by antismallholder policies, causing leaders to recognize that working with small farmers’ incentives is the more successful path to achieving their agricultural strategy objectives. Examples of this go back to when colonial authorities abandoned forced agricultural labor in Burkina Faso’s cotton sector: instead, they promoted high-yielding cotton varieties to more effectively obtain the production levels

required for exporting the crop for processing in the French textile industry (Bassett 2001).

In many cases, however, postcolonial African countries structured their public investments to support an “agricultural modernization” strategy, which typically meant the promotion of and investments in large state farms. Even where there was a serious debate between such state farm-led production versus significant investments to strengthen smallholder farming, the types of investments made were often inappropriate to the needs of small farmers. An example is Zambia, where smallholder supportive policy took the form of cooperative mechanization for maize. But the tractors promoted were not the suitable technology given farmers’ small land sizes, and the resultant levels of maize output were disappointing, leading to an abandonment of policies to support smallholder production (Bowman 2011).

Aside from factors that facilitate collective action among group members, members’ financial endowments affect groups’ abilities to exert influence on behalf of policies benefiting them—for example, through expending resources for favorable policy outcomes. This is another area where smallholder agricultural populations will usually be at a disadvantage. Similarly, a group with greater educational endowments and access to information can more accurately assess the consequences and relative merits of different policies—for example, the provision of fertilizer subsidies versus investments in rural roads—and thus is better equipped to push for those policies that make its members better off (Binswanger and Deininger 1997). Access to information and transparency about the actions of policy makers not only provides a strong basis for citizens and groups to advocate on behalf of policies that would improve their welfare, but also strengthens political institutions and governance more broadly (Khemani et al. 2016).

The ability to discern the outcomes of alternative public investments and other policies may be used not only by an interest group to inform itself and its members but also to provide knowledge to policy makers, who often operate in an environment of imperfect information about the welfare and distributional outcomes of their policies. The effectiveness of interest groups in undertaking such informational lobbying is based on whether such information provision is costless (“cheap talk”) or costly; on the intensity with which the group holds a preference over the policy the effects of which it seeks to provide information on; and on the presence or absence of multiple interest groups, either on the same or opposite side of the policy position (Grossman and Helpman 2001).

An interesting phenomenon in policy processes is a seeming status quo bias among policy makers, such that policies that have outlived their usefulness often fail to be discontinued. Dynamics of policy persistence are quite familiar in agriculture. For example, agricultural input subsidies are not

removed even after they have begun to outlive their initial efficiency-enhancing objectives, or after they have served, or have been observed to have failed to serve, equity and poverty reduction goals. Those who benefit from the current state are usually the ones with the requisite power to have ensured policy enactment in the first place. Thus, the constituency for the maintenance of the existing policy is likely to be more powerful and influential than the constituency that prefers an alternative (not yet enacted) policy (Fernandez and Rodrik 1991).

The aggregate willingness to advocate for the continuation of an existing policy is greater than the willingness to pressure politicians to institute the policy before its enactment, because once a policy is in existence, agents undertake actions that position them to benefit from these policies (Coate and Morris 1999). As a consequence, the total constituency (or overall intensity of preference) for an existing policy is larger than that for the same policy before its enactment. Examples in African agriculture of this phenomenon abound. In Uganda, as the fisheries sector experienced a fast growth in the early 2000s, with it grew the number of fishermen, who made investments in boats and gear that were illegal (Kjaer 2015). Fishermen enlisted army officers to protect them in the process of lucrative smuggling of fisheries products into neighboring countries. When the government wanted to take action against both illegal fishing and smuggling, the constituencies that benefited from these actions had grown in both numbers and importance, leading to a failure to enact policies to control the fishing process, and with it the government's ability to meet international standards for export fish.

An analytical tool that seeks to summarize how the workings of various interest groups result in a set of policies, and in a particular distribution of public resources, is the political preference function (PPF) (Bullock 1994). The PPF has some similarities to the well-established social welfare function in welfare economics, in that it expresses a policy maker's utility function over different entities' welfare—with weights placed on different types of agents, and with the policy maker choosing policies to maximize the value of the function. But unlike in the individualistic social welfare function, the elements of which are individuals, the PPF contains as elements different groups within society, such as smallholders, large farmers, urban consumers, and taxpayers.

The PPF is used, for example, to explain the effects of specific agricultural policies on groups. A study in India examines the determinants of wheat and rice policies, and estimates the size of the weights in the PPF that are associated with the various pressure groups (Abler and Sukhatme 1998). The results suggest that agricultural policies are designed to significantly favor consumers of wheat and rice in urban areas, and policy preferences indicate that wheat producers enjoy more power than rice producers.<sup>5</sup>

## **External Actors—Donors Allocating Resources and Influencing Others’ Allocations**

Beyond the domestic interest groups of a developing country (whether decision makers or beneficiaries of public spending allocations), there is also a strong influence that lies outside a country’s borders: the external agencies that provide aid to enable public spending for development. The importance of donor assistance in developing countries’ economies can be overwhelmingly large, especially in small economies or in countries in or emerging from conflict. For example, in 2008/09, net development assistance as a percentage of gross national income reached as high as 78 percent in Liberia, 46 percent in Afghanistan, and 41 percent in Burundi (World Bank 2015). In large, fast-growing, and mineral- or oil-rich developing countries, the share of development aid in income can be dwindlingly low, constituting, for example, less than one-third of 1 percent in Brazil, China, Islamic Republic of Iran, Mexico, and República Bolivariana de Venezuela.

There have been several cases of developing country governments, breaking with the external development community to avoid external scrutiny and accountability of public resource allocation. But there are also a few interesting and prominent examples of poor countries that extricated themselves from aid dependence because of the latter’s detrimental effect on sustained food security. For example, when the grain harvests of 1966 and 1967 failed in India and the government was forced to rely on food aid from the United States to avoid famine, a turning point was reached. Thanks to research and innovation on agricultural development undertaken in the public and private sectors during this time, high-yield varieties of rice and wheat were introduced in the 1970s. These varieties, coupled with irrigation systems and fertilizer use, enabled India to dramatically increase its output of cereals over the subsequent decades. And with this increase in productivity, India was able to reduce the influence not only of food aid but also of external development aid more generally.

When it comes to the impact of external development aid on public spending in developing countries, another long-standing concern has not been that it directs spending policy too much toward donor preferences, but that those preferences have too little impact. Simply put, governments can bypass donors’ wishes that their aid increase investments in specific sectors, since donors are not able to tell whether a given amount of investment in a sector, program, or project would have been made (or partially made) in the absence of the aid.

The empirical evidence on how much development aid, including aid geared toward the agricultural sector, displaces other public spending in the same sector is not encouraging. Analysis on the Dominican Republic, for example, identifies agriculture as among the sectors with pronounced aid fungibility (Pack and Pack 1993). Based on estimates of the influence of

sector-specific aid flows on public spending in the various sectors, the study finds that although on average one-third of sector-specific development assistance to the country is intended for agriculture, the increase in agricultural spending resulting from this agricultural aid is only 1.5 percent. Pack and Pack (1990) employ a similar methodology for Indonesia, but do not find aid fungibility in this context, including in the agriculture and irrigation category. The cross-country panel analysis by Feyzioglu, Swaroop, and Zhu (1998) estimates a fungibility parameter that can identify the fiscal response of different sectorial spending to sectorial aid as having full, partial, or no fungibility. The results show that agriculture is the only examined sector with full fungibility (when considering both total agricultural spending and just agricultural capital spending separately).

Strong fungibility in aid is also found in a country contrasting starkly with the Dominican Republic in size—namely, India. Swaroop, Jha, and Rajkumar (2000) examine central government spending behavior as a consequence of aid flows, in the context of India's federal structure. When government spending is categorized into development uses (such as health, education, agriculture) and nondevelopment uses (for example, general administration, defense, and interest and principal payments of debt), an estimation of the impact of development assistance on both finds that it increases nondevelopment spending by a statistically significant amount, while not affecting aggregate development-related government spending. The rise in the former is primarily due to shifts of public resources into general administration uses. Development aid's lack of impact on development-related spending holds also when disaggregating this category. Aid does not lead to an increase in public spending on agriculture, irrigation, energy, or other sectors, with the only exception being public spending on social sector expenditures (which respond positively and in a statistically significant manner to increases in aid).

Starting from the premise that donors are likely to want to see a substantial share of their funds go toward capital formation (whether in social, infrastructure, or other sectors), Feeny and McGillivray (2010) explore in Papua New Guinea the extent to which aid instead triggers increases in consumption spending. They find that high shares of aid (directly or indirectly) finance government consumption. For example, 90 percent of increases in aid loans, three-quarters of increases in aid in the form of grants, and 70 percent of additional budget all finance recurrent spending. The general qualitative features of these findings are consistent with cross-country evidence. In the analysis by Feyzioglu, Swaroop, and Zhu (1998), based on panel data of selected developing countries, a US\$1 increase in overall official development assistance (ODA) results in an increase of recurrent spending by \$0.72 and \$1.22, respectively. In contrast, the equivalent increase in capital spending is only \$0.29 and \$0.27, respectively. The impact of concessionary

loans on recurrent spending suggests that this form of aid may, in fact, be leveraging additional recurrent spending from other external or domestic revenue sources.

## **Features of Public Spending and the Goods and Services It Creates**

Even for a given configuration of actors and their characteristics, particular attributes of different types of public spending—and of the public and private goods and assets they create—can influence how much weight these spending types are given in resource allocation decisions, and how they are substituted or complemented with other spending. One of the salient features considered here is attributability—the ease or difficulty with which citizens can assess to what extent a policy maker was responsible for an investment, and for its outcomes. Another defining feature of spending is the temporal lag between the time when an outlay is incurred and the time when intermediate outputs or final outcomes are realized. A third feature concerns the benefit incidence, or distributional properties, of public spending. We discuss how these features affect the incentives of policy makers to embark on a given investment, subsidy, or transfer.

### **Visibility of Public Investments**

The previous section elaborated on the value of access to information and of the ability of beneficiaries of spending to undertake the necessary analysis to understand how different policies translate into outcomes. The informational challenge, however, may exist further up the policy chain. Even if citizens know which policies and investments would be best for their welfare, it is often difficult to attribute to policy makers' actions the creation or improvement of certain services. Various factors may result in improved services, only one of which may be the efforts or spending undertaken by politicians. For example, if a farmer observes that the quality of information provided to her by a new agricultural extension officer has improved, it may be difficult for her to ascertain whether that is because the new extensionist is simply more motivated by nature, or whether the agricultural ministry has done a better job in selecting, training, or incentivizing extension officers.

Incorrect or imperfect attribution dampens policy makers' incentives to work to improve services and infrastructure, and influences which investments are prioritized. This stems from the basic phenomenon that public officials will want to maximize credit for improvements and increases in investments (especially those popular with residents), minimize attribution for inappropriate or deteriorating services, and give less weight to services for

which they are unable to effectively signal their contribution toward providing these services.

The attribution challenge is affected by various characteristics of public investments and services. Visible infrastructure investments and direct cash or in-kind transfers (such as fertilizer vouchers) are relatively more easily connected to the efforts and spending decisions of public officials, and thus can serve as an effective tool for patronage. In fact, these can also be conveniently advertised, indicating who is responsible for subsidizing the fertilizer. In contrast, in the example given previously, the quality improvement in agricultural extension is harder to claim in this way. The greater visibility (and therefore attributability) of large-scale irrigation schemes have made them more attractive than small schemes for public officials to invest in, despite the weaker agricultural performance of the former (Mogues and do Rosario 2015). The positive impact of visibility of a good or service on public spending to provide it increases with increasing levels of democracy from a low base, but only up to an intermediate level of democratic development (Mani and Mukand 2007).

### **Temporal and Distributional Features of Public Investments**

Another characteristic that affects the ease of correct attribution is the extent to which there is a lag between the time when resources are allocated to provide a good or service, and the time when the good or service is created. The longer this temporal gap, the harder it is to trace the service back to decisions made by politicians.

Investments in agricultural research are known for at least two characteristics. A wide range of studies has pointed to the substantial agricultural productivity and broader welfare benefits derived from investment in agricultural research in developing countries. But another well-known attribute of agricultural research is that there is a long temporal lag between these public investments and welfare outcomes, or even intermediate outcomes such as developing and adopting new agricultural technology. We will thus address the issues arising from lag times by using agricultural research as an example.

A long lag might make it less attractive for public officials to undertake an investment than if the time span between investment and outcomes were shorter. This is so for three reasons. First, a long lag further breaks the perceptible link between politicians' decisions and public officials' resource allocations, as mentioned above in the discussion of attribution of services to politicians' efforts.<sup>6</sup> Second, even if the attribution problem did not exist, in systems where political decision makers do not have reason to believe that they will stay in power for a prolonged period of time, they perceive the probability that they will be able to gain politically from beneficial investments in agricultural research and development to be small, and thus have lowered incentives to undertake these investments. This is

especially because they will come at the expense of other public provisions that may have a shorter turnaround time in welfare effects for the population.

Third, a long span of time from the initiation of an investment until the gains materialize also opens up opportunities for things to go wrong. For example, relevant agricultural technologies may be developed through others' investments, such as international research organizations or those of other countries, rendering the incurred costs less valuable, to the extent that technologies developed by others can be copied or adapted. Or prices for crops for which the R&D investments are undertaken may see a medium- or long-term drop that was not anticipated when the research activities began.

The temporal element of the policy process, in particular the effects of the limited longevity of politicians in office, also comes into play in a somewhat different way to determine which types of policies are chosen for implementation. Groups may have a clear preference for certain types of public financial support over others. For example, agricultural interests in developed countries may prefer government spending to subsidize them through price and output controls, rather than through forms of direct income transfer of equivalent size, although the former may be a more inefficient form of subsidy.

The government's bargaining position in relation to the interest groups receiving the subsidies or transfers is stronger when the form of provision is subsidies rather than transfers (Drazen and Limão 2008). The government can demand more lobby goods (provisions the interest groups make to the government in return for receiving subsidies or transfers) for the same amount of public spending for the groups' benefit when these resources are in the form of inefficient subsidies (rather than in the form of more efficient transfers). With both the interest groups and the policy makers understanding this, the interest groups appreciate that the government will need to be paid more highly for incurring the (political) cost of making a more inefficient form of subsidy. Thus, in a first stage, and before engaging the interest groups, the policy-making entity imposes constraints (for example, legislative restrictions) on its ability to undertake transfers using the less inefficient instrument. Then in the second stage, with mostly or only inefficient options available, it has gained a stronger bargaining position in relation to the interest groups than if it had not imposed the restriction in the first stage.

But particular features of public and private goods may also explain why spending on one can bring about more spending on the other, rendering them complementary. Agricultural research benefits agriculture as well as nonagriculture, but the benefits for one sector may be larger than those accruing to the other. This may induce greater subsidy spending by governments seeking to maximize political support, since this spending counteracts the distributional effect of agricultural research investments and thus mitigates potential political opposition to the research investments.

## **Broader Economic and Political Governance Environment**

After a discussion on the way various actors' incentives and interactions shape the resource allocation process, and on how salient attributes of different types of public spending (and the assets and public and private goods they create) determine the allocation of this spending, this section explores the governance environment's influence on resource allocation decisions. It first considers a particular aspect of economic and political governance—corruption. There seems to be relatively broad consensus that the prevalence of corruption increases the share of capital investment spending in overall spending. The other governance consideration—the wider political governance environment—shows much less uniformity in its effects or other capital investments are undertaken lend themselves to rent-seeking by public officials. Since these investments commonly involve large, discrete contracts, they create opportunities for public officials to improve the chances of a private agent winning contracts, or to loosen regulatory burdens on the agent, in return for private payments to the official. In contrast, public spending on activities that involve mostly salary payments to service providers—and contain a relatively small share of outlays on capital creation or procurement—provide fewer openings for rent seeking.<sup>7</sup>

The maturity of democracies also has consequences for resource allocation. Public investment spending and expenditures on the central government wage bill—proxies of targeted spending—tend to be lower in younger democracies than in older ones, given that in the former, it is harder for politicians to make credible promises of spending to the population as a whole rather than targeted groups of citizens.<sup>8</sup>

Power contests affect the composition of public spending. In China, the presence of electoral mechanisms to freely choose village leaders leads to a higher share of public investment in the total public spending of village governments, compared with villages where the leader is appointed (Zhang et al. 2004). And in Kenya, democratic governance can eliminate the detrimental effects of ethnic favoritism on public infrastructure spending and the creation of the infrastructure itself (Burgess et al. 2015). In India, local leaders of villages who have clientelistic arrangements are less likely to allocate resources to pro-poor programs (Anderson, Francois, and Kotwal 2015).

Political governance can affect whether citizens who are not already supporters of the ruling party are more likely to be punished by withholding public funds, or wooed with more public spending. In Tanzania, government channels funds to areas giving it the greatest electoral support (Weinstein 2011). In Uganda, the government invested heavily in the dairy sector by, among other things, rehabilitating cooling facilities, maintaining roads in areas where dairy production was concentrated (in the southwest of the

country), and establishing milk collection centers. These actions were motivated by the ruling party's need to win the population's support in the southwest area, which had in the past supported the leader of a different political party (Kjaer 2015).

Features of political institutions may exercise different levels of influence on the extent to which governments enact policies that favor the agricultural sector through subsidies, investments, and nonfiscal policies. One feature is the degree of political accountability to which politicians are exposed. The relationship between political governance and government support for agricultural producers can be complex and nonlinear. In a highly autocratic system with political control centralized in one individual or a narrow elite, there may be no scope for agricultural producer groups to press for subsidies or investments that would benefit the sector. Thus, a moderate political change from a strongly autocratic to a milder form of authoritarianism somewhat opens up the political space for agricultural groups to exert influence on public policy. But when considering a further, more dramatic change toward a democratic system with effective governance institutions, policy makers must consider that the options for seeking protection through subsidies geared to one sector are checked by accountability systems and by interest groups with diverse policy priorities.

A recent study takes another angle on political governance factors, exploring the effects not of the locus of a country on the democracy-autocracy spectrum in cross-country samples, but rather of the effects of transitions to democracy or to autocracy in individual countries over time. Here, Olper, Falkowski, and Swinnen (2014) find that transitions to democracy increase the protection and decrease the taxation of the agricultural sector. These cross-country results are influenced by the developing countries, which have a greater prevalence of farmers among the poor population, and thus experienced more political transitions, than the developed countries. Therefore, the results, while not a direct test of the median-voter model, are consistent with it.<sup>9</sup>

One may, in a refinement, also distinguish between the quality of the political climate in general, and the quality of specific institutions that would be expected to affect the ability of agricultural and other interest groups to lobby for public spending and investments to benefit their sector. As discussed previously, the extent to which interest groups are able to participate in the political process, but also the extent to which their power to influence public policy is checked through governance systems. But other elements may be just as pertinent to the ability of agricultural producers (and other economic groups) to lobby for investments and subsidies to benefit their sector. These elements include the extent to which property rights are protected, contractual rights honored, and public goods delivered in a

relatively efficient manner, which depends on a reasonably well-functioning bureaucracy. While measures of political rights and pluralism may affect the ability of agricultural producers to participate in the political process and influence policy, property rights and bureaucratic functioning may affect the transaction costs of doing so. And these governance attributes may mildly correlate with, but are not very well defined by, indexes that proxy for political freedom (box 5.1).

### **BOX 5.1**

#### **Areas for Future Research**

The political economy of the CAADP process in general, and how it affected funding flows to agriculture in Africa in particular, deserves closer analytical scrutiny. Another area is the use of appropriate analytical tools to understand how resource allocation may be distorted between the point of budget establishment and the stage at which public resources reach the ground. The public expenditure tracking survey (PETS) methodology has so far been employed almost exclusively to analyze public spending allocations in the education and health sectors. To the best of our knowledge, there exists no rigorous analysis using PETS in the agricultural sector, and only one such work in general (World Bank 2010). But PETS could be an invaluable analytical tool for the agricultural sector. For example, it can be used for tracking the allocation of spending for agricultural R&D. Irrigation may be an investment activity requiring even greater analytical attention through spending tracking, due to the pervasive problems with resources being siphoned off, as alluded to in this chapter.

Quantitative (micro) analysis could shed light on how the choices in spending on agricultural public goods and services manifest themselves in concrete, locally realized ways, directly linking this to behavioral predictions about public agents. Moreover, a strong complement to observational data-based enquiries on how political economy phenomena shape outcomes on public spending configurations would be field experimental evidence. Promising new endeavors to examine how political governance shapes economic phenomena (reviewed by Moehler 2010) can provide guidance on applications to public spending in and for the agricultural sector.

Finally, theoretical work that seeks to explain public spending allocation is motivated and developed around institutional phenomena most relevant to advanced democratic economies. For many developing countries, with either highly imperfect democratic arrangements or some form of authoritarian political decision making, many well-established models from political science are not pertinent, and have much room to develop.

## Institutional Arrangements to Make Public Spending Pro-Poor

To what extent have institutional reforms, programs, interventions, and projects been cognizant of these political economy dynamics that can influence public resource allocation? More specifically, what institutions have been designed with these dynamics to orient the composition of public spending toward the poor? And how have such arrangements affected spending flows to the agricultural sector? These are broad questions, and there are many interventions that, to a greater or lesser extent do—or at least attempt—the above. We focus here on four reforms and intervention types that have been widespread in development, and have particular relevance for agriculture, on which there is research evidence on how they affected the direction of publicly provided goods and services.

The institutional arrangements we focus on are (a) participatory budgeting; (b) community-driven development; (c) decentralization; and (d) targeted transfers (table 5.3). This review synthesizes the existing knowledge on the extent to which it has successfully made public spending more favorable to the poor, on how agricultural spending has been influenced in the context of these arrangements, and how able these institutions have been in overcoming political economy pitfalls in the quality of public spending in agriculture and other sectors. As will be shown, there are both encouraging indications of success in achieving these goals, as well as, unfortunately, several examples of an inability of the design of these institutions to mitigate capture of resources by the better-off or more politically connected.

### Participatory Budgeting

A review of participatory budgeting experiences in Sub-Saharan African countries includes seven countries that have both institutionalized and noninstitutionalized processes (table 5.4) (Shall 2007). In Mozambique and Zambia, there are no formal mechanisms of participatory budgeting. But in both countries

**Table 5.3 Institutional Arrangements to Make Public Spending More Pro-Poor, and Key Mediating Factors**

Institutional arrangements	Factors affecting spending under different arrangements	Outcome
• Participatory budgeting	• Political targeting	Responsiveness of public spending and services to needs of the poor
• Community-driven development	• Corruption	
• Decentralization	• Local capture	
• Targeted transfers		

**Table 5.4** Participatory Budgeting in Sub-Saharan Africa

<b>Kenya</b>	Participation is used as a condition to receive funds from LATF
<b>Mozambique</b>	No formal mechanism in place (but some initiatives exist)
<b>South Africa</b>	Both on-the-ground initiatives and broad institutional PB
<b>Tanzania</b>	PB required for annual public and planning processes
<b>Uganda</b>	Several mechanisms are in place
<b>Zambia</b>	No formal mechanism in place (but some initiatives exist)
<b>Zimbabwe</b>	Several mechanisms are in place

Source: Mogues and Erman 2016, elaboration of Shall 2007.

Note: LATF = local authority transfer fund; PB = participatory budgeting.

there is independent implementation of participatory budgeting by local officials. Participatory budgeting has been institutionalized in other African countries in a number of ways. For example, in Tanzania, it is a required element of the local governmental planning process, and in Kenya, it is used as a condition to obtain funds from the local authority transfer fund (LATF) meant to incentivize local authorities to improve service delivery and strengthen financial management.

While country case studies provide valuable lessons on where participatory budgeting has worked, cross-country evidence may tell us more about the conditions under which it works. In a cross-country study, Bräutigam (2004) identified two complementary factors needed for participatory budgeting to have a pro-poor effect on public spending: the presence of a committed left-leaning party or social movement supporting pro-poor spending, and an informed and active civil society.

Bräutigam's (2004) finding turns out to be particularly useful for understanding the outcome of cases of participatory budgeting in Africa. In Maputo, Mozambique, participatory budgeting was introduced as a top-down initiative by the ruling party in a context of intraparty competition. The process was used as an instrument for the local governor to connect to majority party neighborhoods and their leaders to build and maintain alliances. Every step of the participatory process was designed to keep the process confined to party members; from the partisan micro-institutions in charge of neighborhood-level recruitment, to the administrative and supervising teams. Opposition parties, nongovernmental organizations (NGOs), and civil society were virtually absent from the process (Nylen 2014). A similar story played out in Morocco, where the participatory process was introduced and sustained mainly as an arena for state control (Bergh 2010).

In addition, the potential of participatory budgeting in many developing countries is undermined by the large degree of earmarking of intergovernmental transfers to local government in developing countries. In Uganda,

about 85 percent of transfers received by local governments are earmarked (conditioned); in Kenya, about 92 percent (Ranis 2012). Conditional transfer systems limit the resources that can be subject to participatory budgeting, since these transfers can be spent only within a predetermined and often rigid framework. In Uganda, where participation is a mandatory part of local decision making, most funds allocated to participatory budgeting get absorbed by the administrative and maintenance costs of the process itself. Participatory budgeting is locally seen as an obligation imposed by the central government rather than a tool for civic engagement (Francis and James 2003).

### **Community-Driven Development Programs**

In rural CDD projects, agricultural services play an important role. Seed multiplication and communal farming were the most represented in CDD projects in Sierra Leone, for instance, making up 26 percent of all investments selected by communities (Casey, Glennerster, and Miguel 2012). Evidence on the impact of CDD investments showed that in Senegal, villages that chose relatively more income-generating agricultural projects had a significantly larger reduction of poverty than other villages (Arcand and Bassole 2007). An assessment of the focus of activities of community-based organizations (CBO) in Burkina Faso and Senegal found that government-supported CBOs tended to be more focused on agriculture than CBOs sponsored by donors or private actors (Arcand and Fafchamps 2012).

Unless properly designed and implemented, the CDD approach can be sensitive to elite capture. If local individuals with elevated socioeconomic status are more able to take part in the participatory process due to better access to information, time, and influence, they may skew the project selection to better reflect their interests at the expense of pro-poor spending. Evidence of elite capture was found in Jamaica, where the participatory social fund implemented was highly elite-driven and spending showed few linkages with expressed demands (Rao and Ibanez 2005). The risk of capture seems to be more prominent in contexts of high inequality. Evidence from Ecuador found that higher community inequality made project selection less likely to benefit the poor (Araujo et al. 2008). Community inequality was found to be associated with less democratic forms of group decision-making in Tanzania (La Ferrara 2002). In contrast, no evidence of elite capture in CDD programs was found in Indonesia (Dasgupta and Beard 2007) or in the Philippines (Labonne and Chase 2009).

In Africa, political affiliation rather than belonging to an economic higher status group seems to be a stronger determinant of resource allocation in CDD projects. Political patronage was identified in the evaluation of pro-poor spending of CDD projects in Senegal, Tanzania, and Zambia.

In Senegal, having a member of the majority party of the rural council residing in the village increased the probability for a village to receive funds for projects (Arcand and Bassole 2007). In Tanzania, the political affiliation of participatory council representatives affected the chances of receiving funds (Wong 2012). In Zambia, the households and villages targeted in the CDD project, while being among the poorest, were also more likely to be politically active and affiliated with the incumbent politician. Projects were exchanged for political support and vice versa (De Janvry, Nakagawa, and Sadoulet 2009).

### **Decentralization**

Experiences of decentralization in Africa vary across countries. During the latest decentralization trend in Africa, large federal states such as Ethiopia, Nigeria, and South Africa were the first to introduce reforms in the mid-1990s. Other countries followed suit. The pace and extent of the decentralization process differ substantially between countries. Table 5.5 compares decentralization data from Kenya and Uganda. While local governments spend 30 percent of all government spending in Uganda, they spend only about 5 percent of government budget in Kenya. Decentralization in developing countries is characterized by a system of delegation where new responsibilities are accompanied by fiscal transfers from central to local governments. Local governments in Kenya finance most of their relatively low level of spending with local taxes, whereas in Uganda they are highly dependent on intergovernmental transfers to finance service delivery (Ranis 2012).

The trend toward decentralization has had important implications for the agriculture sector in Africa. In Ethiopia, decentralization reforms were used, among other purposes, to increase coverage of extension services with the goal of increasing input use and agricultural production. Consequently, in four regions in Ethiopia, districts were given the responsibility to provide rural services, including extension services and drinking water. In Ghana, extension service management was decentralized to district agricultural offices who answer to

**Table 5.5** Decentralization in Kenya and Uganda

Year	Expenditure decentralization ratio		Financial autonomy ratio	
	Kenya	Uganda	Kenya	Uganda
2003/04	0.04	0.3	0.94	0.1
2004/05	0.05	0.3	0.64	0.1
2005/06	0.04	0.3	0.67	0
2006/07	0.05	0.3	0.61	0

Source: Ranis 2012.

regional units of the Ministry of Food and Agriculture. Research and Extension Linkage Committees have also been set up at the regional level to promote exchanges between extension services and agricultural research.

Uganda illustrates some challenges related to decentralization of agricultural service delivery, especially in intergovernmental coordination. While social sectors such as education and health benefited from decentralization, confusion among different tiers of government on responsibilities over management and operation funding of agricultural services led to underprioritization of resource allocation to local governments (Bashaasha, Najjingo Mangheni, and Nkonya 2011). A review of selected district budgets from 2003 found that the part of resources dedicated to production and marketing (including agricultural services) was between 1 and 3.5 percent (Francis and James 2003). In the absence of proper management, extension agents were left without guidance or supervision and the population complained about service quality. In Nigeria, one of the main challenges identified in agricultural service delivery and decentralization is related to the lack of clearly defined roles and responsibilities (that is, financial, provisional, or standard-setting of each government tier in service delivery) (Mogues et al. 2012).

The trade-off between local accountability and elite capture results in a net effect of decentralization on outcomes for the “nonelites” that is presumptively ambiguous depending on the institutional context. The hypothesis of greater elite capture in a context of decentralization relies on the notion that higher status individuals in a given locality are more empowered to influence local politicians than national politicians. Capture of public resources on the part of well-off groups can be found throughout government, but larger competition among elites and other interest groups at the central level will decrease the relative influence of any given elite interest and mitigate the risk of capture.

Where elite groups are marginalized within a district, it is likely that such groups want to create their own subnational government to gain more control over public funds. The division of subnational entities into smaller units is becoming an increasingly common phenomenon in Africa. Half of the countries in Sub-Saharan Africa increased their number of administrative units by more than 20 percent since the mid-1990s. While seemingly in line with the process and objectives of decentralization—bringing people closer to their political authorities—local government proliferation is largely politically motivated. It can hurt pro-poor spending by diverting funds that could have been used for service provision toward the fixed costs associated with the establishment and maintenance of new local governments. In addition, allowing for the creation of smaller units can lead to a recentralization of responsibilities, since smaller subnational units have less capacity and are more dependent on support from the central government.

## **Targeted Transfers**

Given the resurgence of input subsidy programs (ISPs) in recent years (chapter 3), it is important to understand the factors affecting quality of targeting, and thus the extent to which the subsidies are pro-poor in their distribution. Better-off households gained more from the ISPs than the poor in virtually all countries. On average, relatively large farmers receive more inputs, even though the objectives of the input programs are to support the “productive poor” in Malawi and the “vulnerable but viable” smallholder farmers in Zambia, to name a few examples (Lunduka, Ricker-Gilbert, and Fisher 2013; Mason and Jayne 2013). In Zambia, households with 2 to 5 hectares of land are 21 percent of the country’s poor smallholders. Yet they received 41 percent of the fertilizer distributed through the program. Households with 0.5 to 1 hectare, by contrast, received only 13 percent of the subsidies, despite being 26 percent of the country’s poor smallholders and making up 24 percent of all households.

For decentralization and even participatory budgeting, another prominent factor in resource allocation is targeting based on political affiliation. This is a recurring phenomenon in weak democracies and affects pro-poor allocations. Political factors were significant determinants in the distribution of input subsidies in five country cases, but had various effects on spending. In Malawi, Zambia, Nigeria, and Ethiopia, findings indicate that political rewarding or punishment strategies were observed. For example, targeting was biased toward districts where the ruling party had political support (Mason and Ricker-Gilbert 2013), toward individuals who lived closer to the locality of origin of political leaders (Takeshima and Liverpool-Tasie 2015), or against individuals suspected of having voted for the opposition party (Adem 2012).

There are also cases in which incumbent leaders direct transfers to areas where they received less support to secure their position in the next election. In such cases, politicians try to buy votes by using transfers to selectively “win over” households in areas where political support is weak. This tendency was found in Kenya—distribution of transfers to districts was positively related to the support that the opposition received in the previous election. A similar tendency was found in Ghana, where vouchers of a fertilizer subsidy program were targeted to districts that the ruling party had lost in the previous election. The larger the ruling party’s loss, the more the vouchers targeted the district (Banful 2011).

These factors are important because political targeting may undermine pro-poor prioritization in public spending and reduce the efficiency of the program. In places where specific targeting of services or transfers in exchange for political support (vote buying) is more likely to be reported, the provision of broader public service that caters to mostly poor people is less likely to be prioritized.

Whether decentralizing the administration of the targeting could make allocation of these transfers more pro-poor is not encouraging. In Tanzania, the decentralized input voucher transfer program failed to target the intended group. Of the selected beneficiaries, 60 percent were families with members in the village council in charge of determining eligibility of families. This significantly reduced the program's targeting performance. This effect was stronger in unequal and relatively distant districts (Pan and Christiaensen 2012). Maybe not too surprisingly, the local socioeconomic and political context plays a key role for the outcome of decentralizing the targeting process.

Another important factor affecting how targeted transfers are directed is corruption, which could lead to the diversion of resources before the benefits reach the targeted or nontargeted groups. As discussed in chapter 3, corruption is a widespread problem in ISPs in African countries. Diversion, measured as the difference between what was supposed to be allocated and what was received by the targeted population, is estimated at between 25 and 42 percent in Malawi (Lunduka, Ricker-Gilbert, and Fisher 2013), about 38 percent in Zambia (Mason and Jayne 2013), and up to 50 percent in Nigeria (Liverpool-Tasie and Takeshima 2013). The leaked subsidies primarily end up being sold on commercial markets. Since the targeted groups of these transfers are small-scale farmers, this level of corruption has a huge impact on aggregate pro-poor spending as well as pro-agriculture spending, when compared with the counterfactual of these targeted transfers without significant corruption nor elite capture.

## **Overcoming the Inertia in Policy Making**

Too often, countries fail to adopt and implement policies that are known to be necessary for sustained economic development. In addition, for reasons described earlier, there is significant inertia in policy making. How, then, can change occur?

### **Be Ready to Take Advantage of Opportunities for Reform**

Major reform programs in the past have been necessitated by the realization that more of the same is not fiscally sustainable. External (that is, oil and other commodity) price shocks and debt crises have exposed inefficient and unsustainable policies (World Bank 2008). Much of the restructuring and privatizing of marketing boards in Africa came about when they became fiscally unsustainable, partially because of movements in the international prices of the commodities (Akiyama et al. 2001). Severe budgetary constraints have often disturbed the political equilibria that had supported those policies and

opened space for reforms, often with the strategic and financial support of external actors such as international financial institutions. These reforms involved profound changes in agricultural policies, including major shifts in public spending programs. Among them was a reduction in input subsidies, common in the 1980s and 1990s. Nevertheless, after the crises subsided and economic recovery progressed, some of the same programs and policies (including input subsidies) reemerged, albeit in improved versions, because they remained politically attractive (Jayne et al. 2015). The lesson here is not that reforms must always await the advent of shocks, but rather that reformers ought to be ready with a plan and evidence to influence reforms and alert for opportunities that may arise.

## Notes

1. Much of this chapter is based on Mogues and Erman (2016) and Mogues (2015).
2. The extent to which private and public investment in agriculture act as complements or substitutes is discussed in Mogues, Fan, and Benin (2015).
3. Other distinct branches have developed within this rational choice literature, including those that depart from the notion of an unencumbered policy maker. Tridimas (2001) presents a blended model of the benevolent social planner maximizing a social welfare function, but also maximizing electoral support by factoring in voters' preferences over different types of public spending.
4. This study does not capture actual public spending, but creates a composite index from information about the presence or absence of various public goods and services outputs such as electricity and irrigation facilities.
5. The PPF does have its limits, partly because it is a reduced-form approach and assumes that policy makers maximize a PPF. Von Cramon-Taubadel (1992) argues that this is just a stretching, not a transformation, of social planner models. Second, it assumes that extant policies reflect an equilibrium of economic and political forces (Johnson 1995). It also assumes that policies and public resources are already Pareto-efficient, and studies using this approach essentially measure marginal rates of transformation along the Pareto frontier (Bullock 1994). The accumulation of these strong assumptions can be easily challenged against realities of policy and political constellations, as much of the other literature reviewed in this chapter suggests.
6. The attribution meant here is that rural populations may (rightly or wrongly) make a connection between improvements they experience and investments or policies the government undertook.
7. Harstad and Svensson (2011) study lobbying activities and corruptive activities in a joint framework. They distinguish these two in that corruptive behavior seeks to bend the rules, while lobbying behavior seeks to change the rules. Both types of activities are subsumed under rent-seeking activities.
8. It is disputable whether public investment spending is a useful measure of targeted spending. This is explicitly discussed in the study.

9. Most of the analyses discussed in this chapter are, however, better contextualized by probabilistic voter theories than by the median voter theory, as the analyses for the most part imply that citizens—for a range of reasons—prefer policy outcomes in a nondeterministic way. “Better,” however, does not mean “perfectly.” Both the probabilistic voting and the median voter theory presuppose functional democracies with competitive electoral systems, and these are not the relevant context in the case of agricultural (and other) public spending choices in many developing countries.

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