



## The Role of the State in Agricultural Development

**Abstract** This chapter discusses the potential role that the state can play in agricultural development. It does so in three main parts. First, it discusses the role of the state in agricultural development from a theoretical perspective. Second, it explores how the state can use agricultural policies to play this role. Third and lastly, it specifically explores the role that policies on agricultural public spending can play in agricultural development.

**Keywords** Agricultural policies • Agricultural productivity • Agricultural public spending

One strand of literature on the role of the state in macro-level agricultural development views agricultural development as the result of a created supportive economic and policy environment upheld by substantial public spending on agricultural development (Djurfeldt et al., 2005; Hazell, 2009; Henley, 2012; Frankema, 2014). The policy recommendation derived from this work includes for governments to take a leading role in providing necessary technology, an economic and political environment conducive to growth, and substantial public spending on infrastructure, irrigation, and research (Eicher, 1995; Hazell, 2009; Rashid et al., 2013).

The important role of the state is also prominent in the broader debate on the role of agriculture in economic development. For example, Tsakok (2011, pp. 254, 302) argues that the role of governments is essential to

agricultural and economic development. Similarly, Mellor (2017, p. 11) holds that the agricultural sector must modernize in order for an economy to transform, and states must play a central role in this modernization (Mellor, 2017, p. 11). The critique of the state-led interpretation of agricultural development mainly draws on the observation that past state involvement has in no way guaranteed success. Historically, the world has seen much higher levels of state intervention in agriculture in the post-war era, but this may have done more harm than good to global agricultural production (Federico, 2005; Pinilla, 2019).

Views concerning the appropriate role of the state in agricultural development in sub-Saharan Africa (SSA) have varied over the decades. In the 1960s and 1970s, many scholars, donors, and policymakers considered the state to play a large and important role. However, the translation of the large role of the state into successful agricultural development was largely unsuccessful. While many governments (e.g., those of Kenya, Tanzania, Nigeria, and Ethiopia) implemented comprehensive programs for agricultural development, many such programs turned out to be complete failures. However, despite these uneven or disappointing results, the state was seen as central to both agricultural and economic development under this paradigm. It played this role through the implementation of land reforms; investing in agricultural research and development (R&D), irrigation schemes, and rural development programs; and providing access to inputs and credit (Holmén, 2005; De Janvry, 2010; Henley, 2012; Otsuka & Larson, 2013).

With the new paradigm of the 1980s under the Washington Consensus, the role of the state in agricultural development shrunk dramatically. The period's stabilization and adjustment policies reduced the size and functions of the state in agriculture. During this period, public spending on agriculture and aid to the agricultural sector declined sharply, and many public agencies supporting agricultural development were dismantled (De Janvry, 2010). As we know in hindsight, the hopes that the private sector would successfully fill the vacuum left by the public withdrawal went largely unfulfilled. Instead, this void of institutional support for agriculture was only partially—and unsuccessfully—replaced by the private sector and NGOs in the 1990s (Staatz & Eicher, 1998).

However, the last 15 years have seen a strong re-emergence of the role of agriculture in economic development. The period has also seen a rise of attention toward the role of the state in agricultural development, with a

larger role for the state in the theory and, in some cases, practice of agricultural development (Crawford et al., 2003; Coady & Fan, 2008; De Janvry, 2010).

### AGRICULTURAL POLICIES

The return of agriculture, and especially smallholder-based agriculture, to the development agenda since around 2005 is based on the view that smallholders can be efficient producers and that productivity increases among this group lead to both economic growth and poverty reduction. Following this line of thinking, increasing agricultural productivity (especially among smallholders) is a key policy concern (Dorward et al., 2004; Diao et al., 2010). As early stage agricultural development often suffers from various market failures—arising from challenges to economies of scale, access to credit and information, and the inherent climate and market volatility of agricultural production—public policies that support small farmers seek to overcome these challenges (Dorward et al., 2004; Birner & Resnick, 2010). Given this goal, agricultural policies have shifted considerably in the post-2005 era compared to the heavy taxation of the sector in the 1970s and 1980s. Since then, and perhaps especially since the Maputo Declaration of 2003, the discrimination against the agricultural sector has decreased in favor of supporting the sector (Anderson, 2009; Wiggins, 2018).

There are many areas in which the state can intervene in the agricultural sector. These include policies on the ownership of production factors, public spending on general public goods (health, information, etc.), agricultural public spending, transfers from farmers (taxation), interventions in the domestic market of agricultural products and factors, and interventions in the international trade of agricultural products (Federico, 2005, p. 187). Among these, the role of agricultural public spending may be of particular importance. Such importance of agricultural spending is in line with the importance that has been assigned to agricultural public spending in previous agricultural transformations (Johnson et al., 2003; Wiggins, 2014; Mogues et al., 2015) and the renewed emphasis on its centrality to agricultural development in SSA, especially following the Maputo Declaration of 2003 (Diao et al., 2008; AGRA, 2018; De Janvry & Sadoulet, 2019). Agricultural public spending is also the main channel of state involvement in agricultural development in Ethiopia. Indeed,

agricultural public spending is one of the key policies for agricultural development outlined in the government's agricultural development-led industrialization (ADLI) strategy (MOFED, 2002).

### *Public Spending on Economic and Agricultural Development*

Historically, the theory and practice concerning the role of public spending in development have fluctuated widely. Many nineteenth-century economists viewed public spending as a vital instrument for economic development. Fueled by the expanded military during the World Wars, the New Deal-type welfare programs, the policy approach of Keynesianism, and, somewhat later, the important role of public spending in East Asian countries' rapid industrialization, this remained a dominant theoretical perspective until around the 1970s (Lee, 2007). However, the global economic slowdown and rise of the Reagan–Thatcher era challenged the Keynesian theoretical support for public spending; the laissez-faire school, arguing that public expenditure crowded out private investment, gained ground (Little, 1982; Rodrik, 1999). In light of the general “lost decades” in the wake of small public spending in the 1980s and 1990s, the theoretical position on public spending has softened, and there is a broader recognition of the essential role public spending can play in complementing private sector investments. More recent discussions have emphasized states' capability in executing effective public spending and have broadened the theoretical understanding of public expenditure to include institutional and capacity aspects (Coady & Fan, 2008; Tijani et al., 2015). This theoretical re-orientation away from the “small state” paradigm of the 1980s is also reflected in practice, as Yu et al. (2015) find that public spending increased significantly from 1980 to 2010 for the 147 countries in their study.

The main theoretical rationale for public spending is two-fold, including both efficiency considerations and equity considerations. According to the efficiency consideration, the government is superior at providing public goods, which private actors will underprovide. This, in turn, enhances market efficiency and remedies market failures caused by public good issues, risks, externalities, information asymmetries, regulation and coordination issues, and other factors (Myles, 1995; Hindriks & Myles, 2006; Coady & Fan, 2008; Mogues et al., 2015). Accordingly, this school of thought argues that public spending on public goods usually pays off, while public spending on private goods usually does not. Second, the

equity rationale concerns the distribution of goods and services in terms of its effect on the welfare of the poorest segments of the population and on the gap between the best- and worst-off segments of the society (Mogues et al., 2015).

The efficiency and equity rationales are also central to the theoretical discussion of agricultural public spending in particular. Although agriculture is a largely private activity, its success is conditioned by public goods such as human capacity, infrastructure, and R&D; as such, the efficiency consideration is theoretically applicable (Tijani et al., 2015; Mellor, 2017). The equity rationale is also frequently evoked in the discussion on agricultural public spending, as the agricultural sector is often home to the most impoverished segments of a population.

Taken together, the efficiency and equity rationales for public spending suggest a rather optimistic view of what governments can achieve via public spending. These theoretical notions position governments as “benevolent social spenders” that act benevolently and efficiently. However, a large political economy literature suggests that this view must be tempered, as government officials act in accordance with other incentives and constraints rather than purely economic ones (e.g., those provided by citizens, voters, government officials, and lobby groups) (Mogues et al., 2015).

The previous research on the relationship between agricultural public spending and economic development has not established a causal connection (Easterly & Rebelo, 1993; Milbourne et al., 2003; Mogues, 2011), but instead suggests that this relationship depends on the spending’s functional type. The main types of agricultural public spending are (1) spending allocated toward increased agricultural productivity, such as irrigation, rural infrastructure, agricultural R&D, or extension (farmer education to disseminate modern practices and inputs) and (2) supportive functions for the agricultural sector such as rural safety nets and input subsidies. These spending types can have very different effects on the agricultural sector. Overall, the large body of evidence on the allocation of agricultural public spending suggests that investing in both physical and human public goods can have positive effects on agricultural growth. Investment in private goods seems to have a more limited effect on growth, although it may contribute to rural welfare (for useful summaries, see Mogues et al., 2012, 2015).

While increased agricultural productivity is a cornerstone of the agriculture-for-development perspective, most observers recognize that not all farmers can “grow themselves out of poverty” (World Bank, 2007).

For farmers in marginal areas (in terms of market access or agro-ecological conditions), stimulating the agricultural sector may not spur poverty reduction. Moreover, some studies find that increased commercialization is not linked to improvements in food security (Andersson Djurfeldt, 2017). As such, spending on safety nets and cash transfers may be a better use of rural and agricultural public spending, than only spending on agricultural productivity enhancement (Masters et al., 2013). Such social protection may increase multiplier effects and encourage local food consumption in the rural economy (Wiggins et al., 2018). However, while the link between increased agricultural productivity and poverty reduction is not direct in all contexts, virtually all instances of mass poverty reduction in modern history have been ignited by increased productivity among small farms (Lipton, 2005).

As a concluding remark in the discussion of the role of the state in agricultural development, this book operates under the assumption that the state matters—and it matters what a government does or does not do. This is reflective of a Hirschmanian view of development: development is the result of what actors in a country do and the results of these actions (Hirschman, 1971; Cramer et al., 2020). While we should acknowledge the weight of history, choices about development must be made in the present, and governments are one important actor making such choices.

## REFERENCES

- AGRA. (2018). *Africa Agriculture Status Report: Catalyzing Government Capacity to Drive Agricultural Transformation*. Issue 6. Alliance for a Green Revolution in Africa (AGRA).
- Anderson, K. (2009). *Distortions to Agricultural Incentives: A Global Perspective, 1955–2007*. World Bank and Palgrave Macmillan.
- Andersson Djurfeldt, A. (2017). *Food Security, Nutrition and Commercialisation in Sub-Saharan Africa – A Synthesis of AFRINT Findings*. APRA Working Paper 2, Future Agricultures Consortium.
- Birner, R., & Resnick, D. (2010). The Political Economy of Policies for Smallholder Agriculture. *World Development*, 38(10), 1442–1452.
- Coady, D., & Fan, S. (2008). Introduction. In S. Fan (Ed.), *Public Expenditures, Growth, and Poverty*. Johns Hopkins University Press.
- Cramer, C., Sender, J., & Oqubay, A. (2020). *African Economic Development: Evidence, Theory, Policy*. Oxford University Press.
- Crawford, E., Kelly, V., Jayne, T., & Howard, J. (2003). Input Use and Market Development in Sub-Saharan Africa: An Overview. *Food Policy*, 28, 277–292.

- De Janvry, A. (2010). Agriculture for Development: New Paradigm and Options for Success. *Agricultural Economics*, 41(s1), 17–36.
- De Janvry, A., & Sadoulet, E. (2019). *Transforming Developing Country Agriculture: Removing Adoption Constraints and Promoting Inclusive Value Chain Development*. HAL Id: hal-02287668. <https://hal.archives-ouvertes.fr/hal-02287668>
- Diao, X., Headey, D., & Johnson, M. (2008). Toward a Green Revolution in Africa: What Would It Achieve, and What Would It Require? *Agricultural Economics*, 39, 539–550.
- Diao, X., Hazell, P., & Thurlow, J. (2010). The Role of Agriculture in African Development. *World Development*, 38(10), 1375–1383.
- Djurfeldt, G., Holmén, H., Jirstrom, M., & Larsson, R. (2005). African Food Crisis – The Relevance of Asian Experiences. In G. Djurfeldt, H. Holmén, M. Jirstrom, & R. Larsson (Eds.), *The African Food Crisis: Lessons from the Asian Green Revolution*. CABI Publishing.
- Dorward, A., Fan, S., Kydd, J., Lofgren, H., Morrison, J., Poulton, C., et al. (2004). Institutions and Policies for Pro-poor Agricultural Growth. *Development Policy Review*, 2(6), 611–622.
- Easterly, W., & Rebelo, S. (1993). Fiscal Policy and Economic Growth: An Empirical Investigation. *Journal of Monetary Economics*, 32(2), 417–458.
- Eicher, C. (1995). Zimbabwe's Maize-Based GR: Preconditions for Replication. *World Development*, 23(5), 805–818.
- Federico, G. (2005). *Feeding the World: An Economic History of Agriculture, 1800–2000*. Princeton University Press.
- Frankema, E. (2014). Africa and the Green Revolution A Global Historical Perspective. *NJAS – Wageningen Journal of Life Sciences*, 70–71, 17–24.
- Hazell, P. (2009). *The Asian Green Revolution*. IFPRI Discussion Paper. International Food Policy Research Institute, Washington DC.
- Henley, D. (2012). The Agrarian Roots of Industrial Growth: Rural Development in South-East Asia and Sub-Saharan Africa. *Development Policy Review*, 30, s25–s47.
- Hindriks, J., & Myles, G. D. (2006). *Intermediate Public Economics*. MIT Press.
- Hirschman, A. (1971). *A Bias for Hope: Essays on Development and Latin America*. Yale University Press.
- Holmén, H. (2005). The State and Agricultural Intensification in Sub-Saharan Africa. In G. Djurfeldt, H. Holmén, M. Jirstrom, & R. Larsson (Eds.), *The African Food Crisis: Lessons from the Asian Green Revolution*. CABI Publishing.
- Johnson, M., Hazell, P., & Gulati, A. (2003). The Role of Intermediate Factor Markets in Asia's Green Revolution: Lessons for Africa? *American Journal of Agricultural Economics*, 85(5), 1211–1216.
- Lee, S. (2007). Public Spending. In M. Bevir, & T. Gale (Eds.), *Encyclopedia of Governance*. Sage Publications: Thousand Oaks, California.

- Lipton, M. (2005). *The Family Farm in a Globalizing World: The Role of Crop Science in Alleviating Poverty*. 2020 Vision Discussion Papers 40. International Food Policy Research Institute, Washington, DC.
- Little, I. (1982). *Economic Development*. Basic Books.
- Masters, W. A., Andersson Djurfeldt, A., De Haan, C., Hazell, P., Jayne, T., Jirström, M., & Reardon, T. (2013). Urbanization and Farm Size in Asia and Africa: Implications for Food Security and Agricultural Research. *Global Food Security*, 2(3), 156–165.
- Mellor, J. (2017). *Agricultural Development and Economic Transformation: Promoting Growth with Poverty Reduction*. Palgrave Macmillan.
- Milbourne, R., Otto, G., & Voss, G. (2003). Public Investment and Economic Growth. *Applied Economics*, 35(5), 527–540.
- MOFED (Ministry of Finance and Economic Development). (2002). *Sustainable Development and Poverty Reduction Program*. Federal Democratic Republic of Ethiopia.
- Mogues, T. (2011). The Bang for the Birr: Public Expenditures and Rural Welfare in Ethiopia. *Journal of Development Studies*, 47(5), 735–752.
- Mogues, T., Yu, B., Fan, S., & McBride, L. (2012). *The Impacts of Public Investment in and for Agriculture. Synthesis of the Existing Evidence*. ESA Working paper No. 12-07. Agricultural Development Economics Division, Food and Agriculture Organization of the United Nations.
- Mogues, T., Benin, A., & Fan, S. (2015). Public Investments in and for Agriculture. *European Journal of Development Research*, 27(3), 337–352.
- Myles, G. D. (1995). *Public Economics*. Cambridge University Press.
- Otsuka, K., & Larson, D. (Eds.). (2013). *An African Green Revolution. Finding Ways to Boost Productivity on Small Farms*. Springer.
- Pinilla, V. (2019). Agriciometrics and Agricultural Change in the Nineteenth and Twentieth Centuries. In C. Diebolt & M. Hauptert (Eds.), *Handbook of Cliometrics* (pp. 1203–1235). Springer.
- Rashid, S., Dorosh, P., Malek, M., & Lemma, S. (2013). Modern Input Promotion in Sub-Saharan Africa: Insights from Asian Green Revolution. *Agricultural Economics*, 44, 705–721.
- Rodrik, D. (1999). Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses. *Journal of Economic Growth*, 4(4), 385–112.
- Staatz, J. M., & Eicher, C. K. (1998). Agricultural Development Ideas in Historical Perspective. In C. K. Eicher & J. M. Staatz (Eds.), *International Agricultural Development*. Johns Hopkins University Press.
- Tijani, A., Oluwasola, O., & Baruwa, O. (2015). Public Sector Expenditure in Agriculture and Economic Growth in Nigeria: An Empirical Investigation. *Agrekon*, 54(2), 76–92.
- Tsakok, I. (2011). *Success in Agricultural Transformation. What It Means and What Makes It Happen*. Cambridge University Press.



- Wiggins, S. (2014). African Agricultural Development: Lessons and Challenges. *Journal of Agricultural Economics*, 65(3), 529–556.
- Wiggins, S. (2018). *Agricultural Growth Trends in Africa*. APRA Working Paper 13, Future Agricultures Consortium.
- Wiggins, S., Sabates-Wheeler, R., & Yaro, J. (2018). *Rural Transitions, Economics and Rural–Urban Links*. APRA Working Paper 11, Future Agricultures Consortium.
- World Bank. (2007). *World Development Report 2008: Agriculture for Development*. The World Bank.
- Yu, B., Fan, S., & Magalhaes, E. (2015). Trends and Composition of Public Expenditures: A Global and Regional Perspective. *European Journal of Development Research*, 27, 353–370.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

