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# Beyond Liberalisation: “Developmental Coordination” Policies for African Smallholder Agriculture

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## 1 Introduction

This article argues for a fresh approach to agricultural policy in Africa, to exploit the strengths of both state-led and market-led development approaches pursued over the last 50 years, while avoiding their respective weaknesses and addressing the particular challenges and opportunities facing agricultural development in the early twenty-first century. Following a brief review of agricultural development policy, we describe the coordination problems in agricultural development and suggest an inclusive policy goal of “developmental coordination”.

## 2 Agricultural policies in Africa

At independence, most developing country governments were very aware of the importance of agriculture to their development aspirations. Some saw it as a long-term driver of growth in their fledgling economies, others saw it more as a foreign exchange earner with a large reserve of unutilised labour, ripe to be taxed to fund the development of industries on which to build a modern economy. Either way, rapid increases in agricultural productivity were needed. The private sector, however, was generally considered too weak to take on this role: it lacked organisational capacity, access to capital and human resources and incentives to make large, risky and unattractive investments in rural areas, partly because simultaneous investments were needed in communications infrastructure, input and output trading, research and extension, and in farmers’ input purchases and production. The private sector was also not trusted by nationalist leaders with socialist leanings, who associated it

with exploitation by colonial or local Élites. State intervention, on the other hand, was considered an effective and willing instrument for development, well placed to access public sector finance sources and to invest in organisational and human resource development, as well as in infrastructure and in the coordinated delivery of research, extension, financial and input and output marketing services.

As a result, the second half of the twentieth century saw massive government investments in agriculture around the world. Models of intervention have varied widely across region, crop and time period, involving: (a) price interventions in the form of input and finance subsidies and produce price stabilisation and support (often within import-export parity price bands), and (b) organisational interventions (parastatals, state-sponsored cooperatives, and agricultural finance organisations), which went well beyond what was necessary purely to administer price interventions (Dorward *et al.* 2004a).

The results of this state activism were mixed. In some (mainly Asian countries) they were spectacularly successful, and were associated with the most dramatic and widespread processes of agricultural growth and poverty reduction in history. In other (mainly African) countries, however, large government expenditures and activity in agricultural development led to very little agricultural growth and were a major drain on government budgets. As a result, donor support waned and during the early 1980s there was hostility towards the whole state-led development approach.<sup>1</sup> Government intervention was then seen as causing inefficient distortions in the economy (by protecting inefficient local industries); depressing efficiency by

limiting local competition and private sector development; corrupt; an expensive drain on already overspent government budgets, and giving farmers poor services.

The outcomes of the market liberalisation and structural adjustment policies that were subsequently introduced were, however, equally mixed. These “market-led” policies appear to have successfully stimulated growth in poor countries with dense populations, good infrastructure and a diversified agriculture and rural economy (e.g. Bangladesh). They also appear to have benefited lower-middle income countries where staples production is no longer the basis of the livelihoods of most of the poor. In most of Africa, however, the record is not so bright: these policies have not been generally successful in “getting agriculture moving”. Despite some benefits – such as reduced food prices for processed staples for poor consumers in Southern Africa (see Jayne and Jones 1997) and positive impacts in the supply chains for some cash crops in some countries (see Poulton *et al.* 2004 for a discussion of cotton) – there has been a notable lack of success in developing input, output and financial markets offering attractively priced, timely and reliable services that are critical for food crop intensification. The agricultural sector in Least Developed Countries (LDCs) over the last 30 years shows low rates of growth in the 1980s and 1990s, and indeed negative rates are recorded for value added *per capita* over most of the period (Dorward and Morrison 2000). LDC performance (with a preponderance of sub-Saharan African countries) contrasts with Asian performance where agricultural growth advanced ahead of population growth, with continuing increases in both land and labour productivity in agriculture. Sub-Saharan Africa also increased its area under cereals dramatically at the expense of other crops, reduced its rate of fertiliser use, and achieved more than 70 per cent of its limited increased cereal production from area (as opposed to yield) increases (World Bank 2000; FAO 2000).

While few would argue that the pre-liberalisation situation could or should have been sustained, it is widely recognised that liberalisation has not delivered the substantial agricultural growth needed to drive rural poverty reduction and increased food security. We therefore have to ask why both state and market led development approaches appear to have generally failed in Africa, whereas both have worked in parts of Asia.

### 3 State, market and coordination failures

There are three main explanations for liberalisation failures: partial liberalisation, weak institutions and coordination failures. The first two explanations are broadly supportive of the liberalisation agenda but critical of its implementation. The main thrust of the “partial liberalisation” argument is that partial rather than complete withdrawal of the state, together with real or perceived threats of policy reversals and continued price controls and competitive advantages for parastatals, have depressed returns and increased risks to private sector investment (Kherallah *et al.* 2000; Jayne *et al.* 2002). The “weak institutions” argument adds a further explanation for slow market development in terms of weak institutional support to market and private sector development (World Bank 2002) with cultural, political and legal factors undermining clear property rights and hence private investment incentives. Here the liberalisation agenda that tried to escape the problem of state failure in market interventions has run up against different problems of serious state failure, now in delivering public goods – the institutions and infrastructure needed for privatised competitive markets to operate in the challenging conditions where poverty is most intractable.

Coordination failure arguments, on the other hand, are more critical of liberalisation’s conceptualisation of markets as efficient and effective exchange mechanisms in poor rural areas. We emphasise two related arguments here: first that markets face particular challenges in coordinating exchange for agricultural development in poor rural areas, and second, that the liberalisation agenda has not placed enough emphasis on the importance of firms and organisations in the development and operation of market economies.

#### 3.1 Market coordination challenges in poor rural areas

Poor rural areas face a daunting set of generic and often mutually reinforcing problems, which include:

- poor roads and telecommunications
- poor human health
- lack of a well-developed and diversified monetary economy
- thin markets for agricultural inputs, outputs and finance, despite significant direct and indirect

dependence of the economy of these areas on agriculture

- a (particularly agricultural) business environment characterised by weak information (on prices, new technologies, and other potential market players), difficult and weak contract enforcement, high risks (in production and prices, but also in access to inputs and markets and in enforcing contracts) and high transactions costs.<sup>2</sup>
- further challenges specific to small-scale farming include long production and sales cycles (exacerbating risks); community-wide seasonality in labour use, cash flow, food availability, prices and risks; technical progress and land pressure increasing farmers' needs for small-scale, transaction cost-intensive input purchases, which in turn require seasonal finance and risk mitigation systems which pose particular challenges in subsistence crop production; technical choices involving discontinuous switches between technologies and crops across threshold prices which simultaneously affect significant numbers of farmers' demand and supply of services and/or commodities; and land tenure arrangements which limit incentives for land improvement and farmers' ability to borrow, to expand or to exit agriculture with a lump sum.

Input supply system development poses particular off-farm challenges. Key inputs such as fertiliser are purchased by farmers in fairly narrow time windows, with their uncertain input demands depending upon assessment of input profitability (affected by relative input and output prices and by unfolding climatic and pest behaviour during the season) and upon their ability to finance purchases (depending on their individual wealth and income status, their vulnerability to shocks affecting incomes and expenditure, their access to credit, etc.). However, if stockists are left with excess inventory, then this often cannot be disposed of for another year and it deteriorates in storage. Stockists therefore face incentives to be very cautious in stocking and to cover their risks with high margins.

The challenges to greater input supply are related to challenges in delivery of financial services to farmers to support input purchases – small-scale lending to dispersed farmers with uncertain credit demand and engagement in risky enterprises leads to high transaction costs for lenders and high risks

of default. These must be covered by high interest rates, which make borrowing more risky for farmers and hence both depress demand (reducing the scale of lending) and increase incentives to default – further increasing the costs of lending (Binswanger and Rosenzweig 1986).

As problems in input supply and financial service delivery to small-scale farmers in poor rural areas are mutually reinforcing, so they can also have negative effects on output market development. Without greater use of purchased inputs and seasonal finance, farmers' marketed surpluses will be relatively small, leading to higher transaction costs and risks for output buyers. Moreover, surpluses tend to fluctuate considerably from year to year in response to climatic variations, raising buyers' search costs. This requires higher trading margins and these, with low profits depressing investment and competition, depress farm gate prices, further reducing farmers' demand for inputs and seasonal finance.

The result of these difficulties facing rural economic activities is widespread "transaction failure" which can lead to a "low-level equilibrium trap" (Dorward *et al.* 2005), where constraints, lack of investment incentives and a stagnant rural economy reinforce each other. Fundamentally, transaction failures arise because the returns from these transactions do not justify the costs and risks involved. Four main classes of cost, each with associated risks of failure, need to be considered:

1. Costs of production
2. Costs of limiting (and meeting) demands for "rents" (legitimate and illegitimate taxes, duties and bribes demanded by government officials, criminals, etc.)
3. Costs of coordination<sup>3</sup> (searching and screening and investing in relationships with potential investors in complementary activities in the supply chain)
4. Costs of limiting opportunism (establishing mechanisms and relationships for protection against opportunistic behaviour by monopolistic or monopsonistic partners in the supply chain) (Dorward *et al.* 2004b).

Coordination and opportunism are particularly problematic causes of transaction failure where technical change requires significant and enterprise specific investments at a number of different points

along a supply chain (e.g. in delivery of seasonal finance, input and output services to farmers) for that supply chain to function. The central coordination challenge facing smallholder agricultural development is, therefore, how to develop supply chain systems that provide smallholders with access to the *range* of pre-harvest services that they require *at the same time* as enhancing their access to remunerative output market opportunities. This requires non-market coordination (sometimes, but not necessarily, led by the state) to deal with risks that inhibit complementary and mutually dependent investments along a supply chain, where these investments are held back by thin markets and by high costs in controlling opportunism (e.g. in produce grading and in seasonal finance).

### 3.2 The importance of firms in market economies

Firms of varying sizes play a critical role in advanced market economies both as major players in markets and as entities within which significant volumes of non-market transactions occur. In poor rural economies in Africa there are few large firms but large numbers of small market participants, with markets playing a greater allocative role. Fafchamps (2004) observes that the grain trade in the USA has many fewer intermediaries between producer and consumer than liberalised markets in Africa. The grain trade in Africa therefore makes more use of market transactions, with less economic exchange and coordination within firms. Yet market exchange in Africa is generally ‘*costly, cumbersome, time-consuming, and unpredictable*’ (Fafchamps 2004). There are a number of explanations for this but for Fafchamps, the plethora of market participants and the lack of medium and large firms are critical sources of weakness.

### 3.3 Coordination failures and Africa’s agricultural development performance

The coordination failure arguments presented above provide a robust explanation of the Asian and African experiences with state- and market-led development. Dorward *et al.* (2004a) argue that state-led development policies in successful Green Revolutions “kick-started markets” by overcoming coordination failures, and stimulated activity by large organisations in poor rural areas where basic necessary conditions for rapid growth had already been established

(communications and irrigation infrastructure, productive and potentially profitable technologies). Later liberalisation occurred once markets were sufficiently developed (as regards volumes and the development of large firms) to have escaped the low-level equilibrium trap. In Africa, on the other hand, state-led attempts to kick-start markets and develop large organisations largely failed because the prior conditions had not been established. Subsequent liberalisation reduced the wastage of resources consumed by these ineffective policies but, without prior escape from the low-level equilibrium trap, did not stimulate market development. Liberalisation of some cash crop markets was successful, however, because these offered sufficient profits to attract investments by large firms which can lower marketing costs and, under particular conditions, also develop institutional arrangements to overcome coordination failures (Poulton *et al.* 2004).

## 4 Beyond liberalisation

Different explanations for the disappointing performance of market liberalisation policies in poor rural areas lead to some common and some divergent policy prescriptions. “Partial liberalisation” and “weak institutions” critiques place particular emphasis on policies aimed at promoting the development of competitive markets in agricultural supply chains and smallholder farmers’ access to these markets. These include:

- promoting small agribusiness development through training, financing, and linkages with wholesale input suppliers and produce buyers
- supporting farmer organisations
- investments in market information systems and market infrastructure development
- reduction of business establishment costs
- further liberalisation, with transparent commitment to complete withdrawal of the state from market interventions.

The first four of these policies are also generally supported by the “coordination failure” critique of liberalisation. By contrast, the last policy would be heavily qualified, with recognition of its appropriateness in some circumstances and of the dangers of state interventions, but also of situations where the disadvantages of competition outweigh the benefits and/or where non-market coordination mechanisms are needed.

Kydd and Dorward (2004) and Dorward *et al.* (2004b) use the analysis of production, rent, coordination and opportunism costs described earlier to integrate the different analytical and policy perspectives outlined above. They suggest that smallholder agricultural development problems may be addressed by:

- technical, price or institutional changes that dramatically raise returns to private, commercial investments in agricultural supply chains by cutting costs, reducing “rents” and opportunism, or raising revenues – thereby making it easier to cross thresholds of coordination failure
- large-scale investments by governments or donors which may improve returns to private, commercial investors and, where coordination failure is a problem, “pump prime” the supply chain to make it easier for private, commercial investments to take supply chains across critical investment thresholds
- explicit development of coordination mechanisms to reduce transaction costs and risks of opportunism and coordination.

Coordination mechanisms may be characterised as endogenous or exogenous, local or extensive, soft or hard, and vertical or horizontal. Endogenous “local” coordination mechanisms may develop either through vertical integration (effectively larger-scale commercial farms) or through local relations linking agents interested in investing in different activities in the supply chain, for example through farmer groups or interlocking arrangements by (generally powerful) traders. In staple crops, where total supply chain profits are likely to be more limited than in cash crops, progress in local investment is likely to be slow (as low returns weaken both the incentives to set up coordinating institutions and the penalties for defection). Eventually, if there is sufficient growth in local coordination mechanisms these may in aggregate reach the threshold level of total investment in the supply chain, enabling a transition into a market-based growth path. Left to itself this process is, however, likely to be slow and fragile, highly path-dependent and susceptible to political economy processes of rent-seeking and to shocks affecting the total investment threshold.

Alternatives to slow and fragile endogenous local coordination processes are (a) externally assisted “soft” coordination processes (e.g. involving state or NGO support for the development of farmer

organisations, trader associations, or contract grower, nucleus/outgrower and other interlocking systems) or (b) more extensive “hard” coordination where a strong central coordinating body with a mandate from the state ensures investments across the supply chain with highly credible coordinated commitments. This could be implemented in a variety of ways, but a return to old parastatal models is unlikely to work in most situations.

We conclude by suggesting a set of broad and related issues, which must be recognised in policy development and implementation in African agriculture. Attention needs to be paid to:

- stages of market and economy development which demand different types of policy and institutional development (Adelman and Morris 1997; Dorward *et al.* 2004a)
- diversity of constraints to and needs in development – between different areas, over time and between different crops
- political economy considerations which prevent governments from completely “letting go” of, for example, staple food markets or which cause particular interest groups to block change
- the variety of coordination mechanisms which may need support in different contexts (e.g. regulated monopolies, franchises, trader and farmer associations)
- in certain circumstances, price interventions such as price guarantees, price support or input/output/credit subsidies may be needed – but these must be approached with great caution to avoid the mistakes and failures of the past, with rigorous design and governance;
- managing transitions – for example, from food deficit to food surplus economies, or from one form of coordination or market structure to another
- transparency, accountability (to farmers, traders and consumers), consistency and flexibility in both policy-making and implementation
- focusing on *how* things are done as much as on *what* is done (Omamo 2003).

Taken together, these issues go beyond what has become an unhelpful, increasingly artificial and obsolete, but persistent divide between state- and market-led development approaches between “market fundamentalists” and “market sceptics”, to suggest the need for a common, inclusive, pragmatic pursuit of “developmental coordination”.

## Notes

1. The Berg report (World Bank 1981), for example, marked a watershed in the development of the Washington Consensus on economic policies in Africa.
2. Transaction costs (notoriously difficult to define) are distinguished from transformation costs, the costs of making or growing things or physically providing services, including transport services. We consider here transaction costs that buyers and sellers incur in protecting themselves against risks of a transaction failing (due to the absence of suppliers or buyers) by searching for and screening potential suppliers or buyers, negotiating and contracting with them, and monitoring and enforcing their adherence to the contract. However transaction costs also involve costs incurred to protect a contracting counter-party against transaction failure (to induce them to enter a contract) and costs incurred in meeting licensing or other requirements of bureaucratic and rent-seeking government agencies and officials. Reducing this last type of transaction cost is an important focus of market liberalisation policies, which we discuss later.
3. Coordination is ‘a process in which players within a supply chain are encouraged to take common or complementary actions necessary to achieve individual goals’ (adapted from Poulton *et al.* 2004). Coordination failure is then defined in terms of its direct effects on individual investors, as ‘the failure to make an investment due to a possible absence of complementary investments by other players at different stages in the supply chain’ (modified from Dorward and Kydd 2004).

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