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Agricultural Commercialization, Rural Transformation and Poverty Reduction: What have we Learned about How to Achieve This?

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Abstract:

“Smallholder commercialization” for the purposes of this symposium refers to a virtuous cycle in which farmers intensify their use of productivity-enhancing technologies on their farms, achieve greater output per unit of land and labor expended, produce greater farm surpluses (or transition from deficit to surplus producers), expand their participation in markets, and ultimately raise their incomes and living standards. This is the vision of commercialization explored in this paper and conference.

Smallholder commercialization is a crucial feature of the structural transformation process considered by most development economists to be the major pathway from a semi-subsistence agrarian society to a more diversified and food secure economy with higher general living standards. Johnston and Kilby (1975) and Mellor (1976) first documented the structural transformation process in the regions of Asia where the Green Revolution later bloomed. The structural transformation process starts with broad-based agricultural growth, causing a build-up of purchasing power by millions of small farmers. These millions of farmers subsequently re-spend and re-cycle more money through the economy, fueling demand and employment growth in non-farm sectors, which in turn increases the demand for food and other farm products in a virtuous cycle in which the rural and urban labor force provide a market for each other. Over time, broad-based income growth causes the share of food in overall consumption to fall, leaving increased disposable income to fuel the development of non-farm sectors. As the demand for non-farm goods and services rise, the labor force responds by shifting gradually from the farm to non-farm sectors, the demand for education and job skills rise, and the economy becomes increasingly diversified and urban. Family sizes decline as migration off the farm reduces the need for farm labor. Farmers are “pulled” off the farm into viable non-farm activities, not “pushed” off the farm into low-paying desperation jobs in the towns due to the inability of local agriculture to provide a reasonable standard of living. The main starting point of structural transformation is broad based smallholder-led agricultural growth and commercialization.

Keywords : Public Investment, Markets, Grades,

MAIN CONSTRAINTS IN AGRICULTURE SECTOR AND FARM FAMILY

From farmers’ perspectives, some problems relating to their farming and livelihood system as well as problem associated with government policy and regulation system have been identified.

The most responses were obtained for the following problems considered of most importance, in ranked order of frequency of response (highest to lowest):

1. Affected by Disaster (Flood, Drought)/ Low Productivity
2. Lack of Agricultural Land (Paddy Land)
3. Lack of Capital/ Money/ Fund
4. Crops Destroyed (Diseases, Insects etc.)
5. Insufficient Food (Specially Paddy)
6. Lack of Irrigation

These are the most indicative problems that farmers identify their current constraints. Either no solution for these problems has identified in order to solve the problems. Furthermore, the following is the list of indicative government policy and regulatory problems and their importance for farm family households. In total, 18 different types of problems were identified by households. Of these problems, the ones that had the highest number of responses indicating a “large problem were (in descending order):

1. Lack of Capital/ Issues
2. Lack of Irrigation
3. Lack of Electricity
4. Poor Households/ Poverty/ Poor Situation of Villagers
5. Lack of Agricultural Technology/ Low Productivity

The results indicate that for the majority of the major problems the respondents did not have a viable solution other than to ask the government to help. For the lack of capital and the lack of irrigation the only other solutions advocated by a large number of persons was to provide a fund for credit with a low interest rate and to provide irrigation systems respectively.

MAIN IMPLICATIONS FOR PUBLIC INVESTMENTS AND POLICIES TOWARD THE AGRICULTURAL SECTOR

1. PRIORITY PUBLIC INVESTMENT OPTIONS: Training Programs for Farmers to Provide Them with Knowledge and Strategies for Marketing Their Crops While new technologies, crop diversification, and cooperative marketing arrangements may provide farmers with the tools to move from being price-takers to price-seekers, few of these options are successfully exploited by farmers. For example, while the majority of farmers now own or have access to a mobile phone, few feel that owning a mobile phone helps them to find a better price

for their maize. Instead, the majority of farmers use their phones to notify a buyer that they have maize to sell, not to negotiate a price, or to search for price differences between buyers. This passive approach to marketing is the result of a common belief among farmers that private buyers collude to set prices and price negotiation is futile.

2. Programmes to Encourage the Adoption of Grades and Standards: The maize value chain studies in Malawi and Kenya indicate a widespread use of improper weights for paying farmers. This is farmers' Number 1 complaint about private traders. Based on our measurements of gorogoro in Salgaa, Nakuru District, and Kapkwen, Bomet District in Kenya, three different sizes of gorogoro were identified, with sizes changing as maize moves up and down the value chain. The tins used to buy maize from farmers held 3 kg of maize, the tins used by wholesalers to sell maize to retailers held 2.25 kg, and the tins used by retailers to sell to consumers held 2 kg. Obviously these weights will change based on the moisture content of maize, but the relative difference will hold constant.

3 Programs to Encourage the Use of Adequate Maize Grading: Buying of wet maize by assemblers raises storage losses in the system. It also partially segments the maize market, because large commercial millers prohibit moisture content >13%, which forces assemblers/wholesalers to channel wet maize to other types of informal buyers, or take steps to mix wet maize with drier maize. In fact, however, some wholesalers are able to bribe their way past grain inspectors of large milling companies. The mill management are aware of these problems and aim to put pressure on inspectors but in one case said, "There is not much we can do about it." Identifying strategies for encouraging a wider use of maize grading would reduce storage losses and probably encourage incentive for seasonal storage.

4 Invest in Rural Feeder Roads to Reduce Marketing Costs: Abundant evidence indicates that the highest per kilometer costs are incurred between the farm gate and the nearest motorable road. The marketing costs associated with moving grain or fertilizer 25 km on a dirt path by bicycle trader is about the same as that charged to move the same product 500 km along a tarmac road. While traders appear in most cases to be moving to the farm gate to buy product, they charge farmers for this service, which is a function of the costs associated with transporting grain from the farm to the place where a large truck is able to bulk up supplies. Efforts to improve road networks linking district towns to farming villages could be a cost-effective way of improving smallholders' competitive position vis a vis traders and would reduce costs for all manner of commerce, not simply grain trading.

5. More Generally, Find Strategies for Encouraging Governments to Re-Allocate Their Own Resources to Prioritize Investment in Agriculture-Supportive Public Goods Synthesis Report: What Have We Learned? Page 22 Donor resources generally are dwarfed by the size African governments' own budgets. Identifying strategies to leverage donor funds so as to positive influence the allocation of government resources may have high payoffs. Governments could make a major contribution to the welfare of their rural and urban populations by

prioritizing investments in crop science, effective extension programs, irrigation, and physical infrastructure. Many agricultural market failure problems in Africa reflect an under-provision of public goods investments to drive down the costs of marketing and contracting. Ameliorating market failure is likely to require increased commitment to investing in public goods (e.g., road, rail and port infrastructure, R&D, agricultural extension systems, market information systems) and institutional change to promote the functioning of market-oriented trading systems. Unfortunately, the large share of government expenditures devoted to food and input marketing operations represents a high opportunity cost in terms of foregone public goods investments to promote the functioning of viable food markets.

6. Coming to Grips with the Likelihood That a Large Fraction of the Smallholder Population Will Not be Surplus Food Producers until Land and Resource Constraints Are Addressed Given the existing distribution of landholdings within the small farm sectors of eastern and southern Africa, strategies to improve rural households' access to land may need to be on the agenda. Farmer organization can help to some extent to overcome dis-economies of scale associated with small farmers' attempts to acquire inputs and marketing output. However, the evidence suggests that as the land frontier closes in many parts of the region, mean smallholder farm size continues to gradually decline even with very low rural population growth. The bottom 25% of rural agricultural households is virtually landless, having access to 0.50 hectares per capita or less in each country examined. Even farmers in the second land quartile have less than 1.2 hectares. Without major productivity growth or shifts to higher-return activities, at least 50% of the smallholder households in the region are unlikely to produce any significant food surplus or escape from poverty directly through agriculture. In this context, the main issue is not how to ensure that smallholders can participate in evolving modern supply chains.

POLICY ACTIONS TO PROMOTE THE DEVELOPMENT OF MARKETS

A complicating factor in supporting the development of food marketing systems to promote small farmer productivity growth is that food markets are politically sensitive. Elections can be won or lost through policy tools to reward some farmers with higher prices and reward others with lower prices; however, this is hardly unique to developing countries (Bates and Krueger 1993; Bratton and Mattes 2003; Sahley et al. 2005). The issue of how to stabilize food markets is transcended by issues of governance. The transition to multi-party electoral processes over the past decade may have intensified the politicized nature of food prices in some cases as political parties compete to show how they will deliver benefits to the public in times of need (Toye 1992; Sahley et al. 2005). Given that governments are likely to continue intervening in food markets, there are several guidelines that might be followed to improve overall market performance:

1. Follow Clearly-Defined and Transparent Rules for Triggering Government Intervention. Governments and private trading firms strategically interact in staple food markets – they respond to each other's actions and anticipated actions. Effective coordination between the

private and public sector will require greater consultation and transparency between the private and public marketing agents, especially with regard to changes in marketing board purchase and sale prices, import and export decisions, and stock release triggers. Interviews with bank managers in the region demonstrate that policy risk continues to prevent the full achievement of government's aim of promoting private capital investment in value chains that link smallholder farmers into markets.

2. Institute Regular Periodic Government-Private Sector Consultations to Coordinate Decision Making. This will help to nurture trust and cooperation and avoid surprises.

3. Eliminate Export Bans and Import Tariffs on Trade among COMESA and SADC Member States. This will accelerate the development of both regional and domestic marketing systems and promote access to markets for smallholder farmers, both on the selling and buying side.

4. Streamline Border and Custom Clearing Processes and Removing Controls on the Issuing of Import and Export Permits. This would promote the interests of both producers and consumers over the long run.

5. Support the Development of Commodity Exchanges and other Market Risk Shifting Mechanisms Market risk-shifting tools (such as warehouse receipt systems, commodity exchanges offering spot, forward, and option contracts where possible) are an important part of the tool kit to help stabilize food markets in the region. However, self-sustaining market-oriented risk transfer mechanisms are unlikely to develop in an environment where one actor (e.g., the government) has the power and proclivity to influence price levels in a discretionary way, as this would mean that certain actors would have an information advantage that they could benefit from at the expense of other traders.

Strategies to Overcome Market Failures

1. Performance Contracts with International Seed Companies Chronic underinvestment in agricultural technologies and seed breeding programs appropriate for semi-arid lands results from the limited financial payoffs for private companies to develop programs in such areas. Yet the social payoffs to improved agricultural technologies in such areas (i.e., improvements in crop yields, food security and poverty reduction) may be very high. Donor agencies can help overcome this kind of market failure by working with national and regional agricultural organizations to develop improved crop seed technology relevant for the semi-arid areas that characterize much of eastern and southern Africa (Lipton 2005; Bhagwati 2005). Strategies attempting to link African farmers to markets must take account of how low crop productivity and inequality in productive assets constrain most smallholders' ability to participate in markets. Performance contracts with international seed companies would mobilize the needed expertise to expand the potential for surplus production in semi-arid areas and stimulate investment in assembly markets to improve smallholder farmers' access to markets.

2 Missing markets for lime and other inputs A similar gap in social returns vs. private returns may exist in regions where smallholder soil conditions are highly acidic and where lime application may be high, but where private firms perceive little demand for the product. This is partially a public extension problem; farmer demand for viable inputs would be higher if they were aware of the inputs' benefit to them. However, an infant industry argument can be made for lime and perhaps other inputs that are relatively unknown to small-scale farmers. After a few years of subsidized public distribution (e.g., include lime in the input subsidy programme packs in regions where soil acidity is a problem), the demonstration effect should raise the commercial demand for lime and hence provide incentives for supply chain development by private firms. Herbicide may be another such input – very few farmers know how to use it, but research indicates potentially high payoffs to maize productivity (e.g.,

CONCLUDING REMARKS

History suggests the necessity of productivity increases in smallholder agriculture. Except for a handful of city-states, there are virtually no examples of mass poverty reduction since 1700 that did not start with sharp rises in employment and self-employment income due to higher productivity in small family farms (Lipton 2005). Making markets work for smallholder farmers will require actions from many different actors, both private and public, as well as from international financial and donor organizations. Our premise, however, is that the public sector role is decisive. If public sector policy choices do not reduce the currently high levels of risk and uncertainty in African agricultural markets, and if governments use their scarce resources in ways that do not provide greater investment incentives for the private sector, then there will be limited scope for private investment to provide smallholder farmers with the access to markets that they need. Financial markets will also stay away from African agriculture if the risks of investment remain very high relative to the returns. On the other hand, if African governments define their roles clearly, implement these roles transparently and consistently, and invest their scarce resources in ways that make the greatest contribution to agricultural growth and poverty reduction, then this approach is likely to leverage even greater private investment in support of smallholder agriculture. When the conditions are created for profitable and stable private investment, the private sector has in other parts of the world grown and responded as seen in much of Asia, and there is little reason to believe Africa is different. Hence, private sector investment patterns and the supply of bank financing for private investment, are largely outcomes of public sector behavior – its policy choices, integrity of its institutions, and the ways it spends its funds through the treasury. For these reasons, we conclude that there is no single or deterministic “future” of the small farm in Africa. The decisions made by governments primarily and international organizations secondarily will largely determine the future of smallholder agriculture in the region. Without renewed attention to sustained agricultural productivity growth, most small farms in Africa will become increasingly unviable economic and social units. Sustained agricultural productivity growth and poverty reduction will require progress on a number of fronts, most importantly increased public goods investments to agriculture, a policy

environment that supports private investment in input, output and financial markets and provision of key support services, a more level global trade policy environment, supportive donor programs, and improved governance. Subsidies, if they are focused, well conceived and implemented, and temporary, can play a complementary role but should not – based on both the Asian and African evidence presented here – be seen as the primary engine. Most of these challenges can be met. Meaningful progress will start when the political will is mobilized to adopt the policies and public investments which substantial evidence shows have the greatest chances of driving sustainable pro-poor agricultural growth.

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