Strategic Assessments and Development Pathways for Agriculture in the Semi-Arid Tropics

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Leveraging Rural Institutions for Collective Action to Improve Markets for the Poor: Lessons and Policy Options

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Economic reforms and rural markets

Market transactions in rural areas of sub-Saharan Africa (SSA) are usually small, because the markets are thin and point-to-point transportation of commodities is difficult. The prices offered are not competitive and volumes traded are usually season dependent. Where market infrastructure is weak and under-developed, liberalization and structural adjustment policies have not been able to improve market access; and the private sector has failed to make the investments needed for proper and effective market coordination.

Nevertheless, the new economic environment has opened a window of opportunity for farmers to harness market opportunities, diversify into tradable products and reduce dependence on subsistence farming. The removal of market barriers increased competition and allowed farmers to choose the buyers of their outputs and the suppliers of key inputs. Despite these positive developments, markets have not been able to spur commercialization of smallholder agriculture that could provide incentives for increased production and investments for managing production risks. Hence, smallholder market participation and marketed surplus remain very limited. High transaction costs and the inability of smallholder farmers to consistently supply quality products remain key impediments to the realization of the benefits of liberalization, while geographical dispersion has limited market development. These factors have deprived farmers of the incentives to produce high value differentiated products with desirable traits.

Based on a review of experiences across SSA and a case study in semi-arid Kenya, this policy brief highlights the role of market institutions and producer marketing groups (PMGs) in enhancing the market opportunities for the poor through better coordination of production and marketing functions, and facilitating contracts with market agents along the value chain. They can provide essential market power to small-scale producers.

The case for rural institutions

Market failure is a situation where markets fail to efficiently organize production and marketing functions to maximize social objectives. The common causes include high transaction costs, lack of information and imperfect property rights. Its effects tend to be magnified in areas where investments in basic infrastructure and market-supporting institutions are lacking, especially in drought-prone regions where climatic variability heightens the associated economic risks. Grain prices fluctuate significantly according to local supply and demand that is amplified by seasonal weather conditions. If the seasonal price trends are predictable, smallholders can potentially benefit from higher prices by bulking their produce and marketing them when prices are high. The associated benefits will depend on the costs of coordinating supply, storage and marketing as well as the opportunity cost of capital held during the season.

For markets to effectively serve smallholder farmers and the rural poor, it is necessary to strengthen supporting institutions that promote competition and establish mechanisms for contract formation and enforcement. Farmer collective action can be an important strategy to strengthen market-supporting institutions in rural areas. Farmer organizations and cooperatives that facilitate business opportunities and market functions are evolving in many African countries (eg, Cameroon, Ethiopia, Ghana, Kenya, Malawi, Mali and Zambia).

Under enabling conditions, the PMGs and similar farmer organizations can facilitate market access to the poor through horizontal and vertical coordination of production and marketing activities. They can help shorten the long and complex marketing channels that prevail in many rural input and output markets by directly linking smallholders with the upper end of the value chain. This can help reduce transaction costs and increase the share of the consumer price reaching small producers. The experiences in semi-arid Kenya highlight several interlinked constraints that call for new approaches and policy interventions to facilitate and support development of rural institutions.

Producer marketing groups in Kenya

While farmer cooperative societies are common across SSA, there is lack of empirical experience about PMGs that deal with food crops and operate in drought-prone areas. In order to evaluate their potentials in improving market access for the rural poor, ICRISAT and partners facilitated the formation of ten PMGs between 2002 and 2003 in two semi-arid districts (Mbeere and Makueni) based on voluntary membership and clear commitments from members. No financial incentives were provided other than access to improved technologies and institutional support for group activities. The PMGs were formally registered as welfare societies as is permitted under Kenyan law. They had well-defined objectives, by-laws, and an elected body that leads the group on behalf of the members. Their objectives go beyond social welfare and include better access to markets, technologies and inputs at affordable prices; better prices for local produce; and development of business skills for commercialization of production.

An ICRISAT study of smallholder marketing in these districts conducted in 2005 found that 45% of the grain traded volume and 36% of the transactions occur at the farm-gate. About 90% of the grain sold by farmers is transacted at the farm-gate or village markets (less than 5 km off farm-gate). The study indicates that grain prices are unlikely to improve significantly within the range of 5 km from the farm-gate. Farmer prices tend to increase slightly as distance increases beyond 5 km, but the marginal increment (estimated at Ksh 3/km per 90 kg bag) is unlikely to create incentives for farmers to transport grain over large distances. The study also found that rural wholesalers and brokers/assemblers jointly control over 80% of the grain sold by farmers. About 75% of the grain was sold immediately after harvest when local supply is high and prices are low. The rural buyers do not pay any premium for superior quality, which undermines the incentive for farmers to supply diverse and quality products. Quality however tends to become important when the traders sell the grain to larger urban traders and processors.

The challenge, therefore, is to enhance the participation of PMGs to increase the market power of small producers and provide alternative marketing channels that offer better prices. The experiences in semi-arid Kenya show that this is indeed feasible. The PMGs have offered attractive marketing outlets for small producers – on average, they pay about Ksh 6/kg above the price paid by brokers and middlemen. The prices paid by the PMGs to the member farmers after covering their costs are about 22 to 24% higher than the prices paid by brokers and middlemen (Table 1).

Table 1. The effect of PMGs on pigeonpea prices in eastern Kenya.

Buyer	Season	Point of sale	Price (Ksh/kg)	PMG price advantage (%)
PMG	Immediately after harvest	Farmgate	29.81	24.00
Broker	,,	,,	24.04	
PMG	Immediately after harvest	5 km	29.93	23.88
Broker	,,	5 km	24.16	
PMG	4–5 months after harvest	Farmgate	31.16	22.72
Broker	,,	,,	25.39	
PMG	4–5 months after harvest	5 km	31.29	22.62
Broker	,,	5 km	25.52	

The PMGs were able to bulk the grain and sell it to buyers beyond the village at better prices. However, this promising opportunity is hindered by several impediments to collective marketing that limit their competitiveness and market share. Their potential is unlikely to be realized until these constraints are addressed.

Constraints to PMG functions

The PMGs are evolving institutional arrangements for enhancing market opportunities for smallholder farmers. Like any other new institutional innovation, they face several challenges in their operations.

Legal framework: Like in many SSA countries, the existing legal framework in Kenya is inadequate for the development of PMGs and their transition to cooperative societies. Their status as 'welfare groups' prevents the PMGs from accessing essential business services. There is a lack of mandated agencies and supporting institutions for the advancement of PMGs. The nascent PMGs are weak and cannot successfully operate within the provisions of the existing legal and regulatory framework of the cooperatives.

Capital and credit: The PMGs are operating on small funds raised from the membership. They face capital constraints to access essential services and engage into marketing functions. They also lack the necessary capital to pay farmers at the time of delivery. The PMGs take about 35 days to sell the grain and pay the farmer while other buyers often pay immediately or take a maximum of 2 days (Figure 1). This makes the PMGs less attractive to cash-constrained farmers. The challenge is to establish alternative strategies that would enable access to affordable financial services.

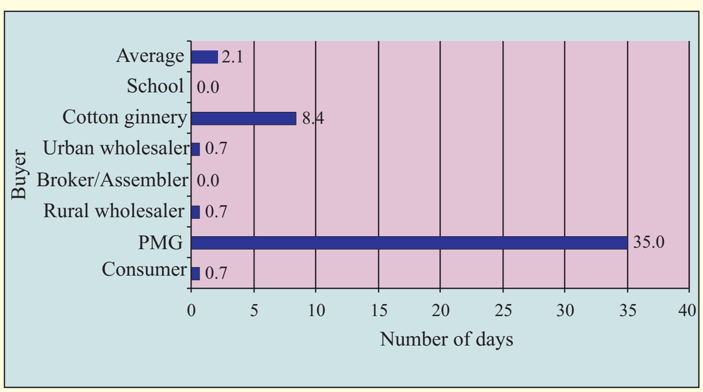

Figure 1. Time taken to pay farmers after selling (days).

Drought: The volume of grain that is handled by the PMGs is low even in good years and gets severely diminished in bad years. Recurrent droughts in semi-arid areas regularly push smallholders into poverty and undermine the ability to produce for markets. Low trade volumes increase transaction costs, making it difficult for the PMGs to take advantage of economies of scale. Future strategies should emphasize interventions that improve productivity, mitigate the effects of droughts and allow better coordination of small supplies through large-scale bulking and joint marketing.

Price variability: This refers to the volatility of commodity prices in a given year. Prices are influenced by cropping and harvesting regimes, rainfall distribution, and recurrent droughts. Owing to unpredictable prices, the farmers and the PMGs are facing difficulties in storing grain and in planning production activities. Future opportunities to enhance the PMG functions need to emphasize options that mitigate the price risk.

Market intelligence: Market intelligence is the process of acquiring and analyzing relevant information in order to understand the market, to determine current and future needs and preferences, and to assess changes in the business environment that may affect future opportunities. Lack of adequate information on alternative marketing channels and value chains prevents the PMGs from taking advantage of available markets. The challenge is to identify mechanisms through which access to market information can be improved.

Governance: Efficient coordination (vertical and horizontal) of production and marketing functions relies on good PMG governance and organization. Ensuring consistent supply of quality products requires ability to monitor and enforce standards, and create transparent incentive systems. The policy and legal environment should support enforcement of such internal rules that enhance governance and efficiency. Internal group laws need to be flexible, and they should facilitate good participatory governance and also allow for effective interaction with the private sector.

Policy options and strategies

While multiple strategies could be pursued to strengthen rural institutions and facilitate the development of PMGs, the following focal interventions may address the bottlenecks in collective marketing:

In the short-term, governments should institute legal and policy frameworks that recognize PMGs as legal entities and facilitate their transition into commercially viable enterprises. This would call for legal and policy mechanisms at a pre-cooperative stage. In many cases, this is a pre-requisite that determines the success of subsequent policies. In addition, Grameen type group lending schemes could be devised for enhancing access to credit services to legally recognized PMGs. Credit linked to grain reserves (inventory credit) could allow the PMGs to pay farmers a proportion of the value of grain at the time of delivery. The field evidence from semi-arid Kenya has shown that farmers are often willing and able to defer sales by several weeks if they can be paid a third of the grain value upfront. This would strengthen incentives for collective action while also allowing farmers get better prices for their produce.

In the medium-term, because of the absence of financial institutions, governments and other agencies should launch credit guarantee schemes that could encourage private sector lenders to enter rural markets. Such schemes may be complemented by micro-saving and financing options that facilitate farmer investment in profitable technologies.

In the medium to long-term, strategies that improve productivity and reduce vulnerability to drought are needed to foster sustainable growth in marketable surplus from less favourable areas. Integrated solutions that combine improved crop and livestock technologies, soil and water management; and strengthening of institutions at the farm, community and landscape level have proven to be useful in drought-prone areas of South Asia (eg, India).

Governments also have important roles in enhancing the capacity of farmer groups to promote market functions in rural areas. This would include provision of public goods to improve market performance and facilitating investments in communication to support information flow and adoption of improved agricultural technologies. In addition, strengthening rural institutions and farmer marketing groups would require public sector resources and action plans to address the specific needs and constraints faced by the PMGs and similar organizations. Such support is justified given the livelihood benefits to the rural poor and the growth linkages derived from improved commercialization of agriculture.

Conclusions

- Market liberalization has opened opportunities for smallholder farmers to diversify production and better target existing and emerging markets. But pervasive rural market imperfections impede farmer responses to economic reforms and limit their ability to exploit market opportunities.
- The PMGs can provide effective institutional arrangements to improve markets for the poor. Collective action is the key to reduce transaction costs and for small-scale producers to access essential agricultural services. Many such groups however face multiple challenges such as lack of credit, low volumes, price volatility and inadequate legal frameworks.
- In addition to provision of essential infrastructure and public goods, governments also have roles in supporting the emergence and development of rural institutions. This would include good legal and policy frameworks that facilitate and support farmer-marketing groups to develop into effective agri-business enterprises.
- The social benefits and positive role that farmer marketing groups can play in bridging market failures and improving rural livelihoods may also justify targeted subsidies and incentive systems that stimulate and support their development.

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