Institutional innovations for smallholder farmers' competitiveness in Africa

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In most sub-Saharan African economies, agriculture is the dominant sector and plays an essential role in rural and overall economic development. Paradoxically, sub-Saharan Africa is the sole region in the developing world where per capita food production has remained low for many years. Agricultural growth in the region has been impeded by factors related to production, marketing and institutions, and by macro-economic factors and policies. This paper offers an in-depth analysis of how institutional innovations can enhance smallholder agriculture in the region. Institutional support systems are needed to help integrate smallholders into national economic systems. Smallholder farming has been the institutional structure underpinning some of the most effective contributions of agriculture to economic development. Institutional reforms will play out in five functional areas critical to agricultural growth: contractual arrangements, functioning financial markets, agricultural insurance, public-private partnerships and vibrant producer organizations.

Keywords: institutions; smallholder agriculture; financial markets; public-private partnerships; producer organizations; sub-Saharan Africa reforms

JEL codes: O13; D23; O55

Pour la plupart des économies sub-sahariennes, l'agriculture représente le secteur dominant et joue un rôle essentiel dans le développement économique rural et global. Paradoxalement, l'Afrique sub-saharienne est la seule région des pays en voie de développement où la production alimentaire, par habitant, demeure faible depuis de nombreuses années. Des facteurs liés à la production, au marketing et aux institutions ainsi que des facteurs macroéconomiques et des politiques ont entravé la croissance agricole dans la région. Cet article propose une analyse approfondie qui explique la façon dont les innovations institutionnelles peuvent renforcer l'agriculture des petits fermiers de la région. Les systèmes d'entraide institutionnels sont nécessaires afin d'intégrer les petits exploitants agricoles aux systèmes économiques nationaux. L'agriculture des petits fermiers représente la structure institutionnelle qui a soutenu quelques-unes des contributions les plus efficaces de l'agriculture dans le développement économique. Des réformes institutionnelles auront leur rôle à jouer dans cinq domaines fonctionnels et indispensables à la croissance agricole : dispositions contractuelles, marchés financiers efficaces, assurance agricole, partenariats public-privé et organisations productrices actives.

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1. Introduction

Agriculture continues to play a special role in the developing economies, especially those in the early stages of structural transformation (Byerlee et al., 2005). In most sub-Saharan African economies, agriculture is the dominant sector and plays an essential role in rural and overall economic development. More than 60% of sub-Saharan Africa's active labor force earns a livelihood in the agricultural sector. As a result, the region's future is closely intertwined with the development of its agricultural sector.

Over the last decade, the region's economic growth and development has more than ever become a matter of grave concern to its leaders and the developed world as a whole. The central role that agriculture can play in poverty reduction has elicited a lot of attention. The World Development Report 2008 identifies agriculture as a vital development tool for achieving, by 2015, the Millennium Development Goal of halving the number of people suffering from extreme poverty and hunger (World Bank, 2007).

The Report goes on to identify agriculture as a strong option for spurring growth, overcoming poverty, enhancing food security and stimulating growth in other parts of the economy. Initiatives by the UN Millennium Development Goals and the New Partnership for Africa's Development (NEPAD) have highlighted the need to re-assess the overall agricultural and rural development strategies in Africa. Conversely though, sub-Saharan Africa remains the sole region in the developing world where per capita food production has remained low for many years. Increased agricultural productivity, macroeconomic stability, creation of regional markets, an appropriate private investment climate and reduced natural resource degradation are crucial pre-conditions for sustained economic growth.

2. A brief look at agricultural competitiveness in sub-Saharan Africa

2.1 Importance of agriculture

Agriculture continues to be prominent in its contribution to GDP, export earnings and employment in most sub-Saharan African countries. The sector plays a key role in the region's food security, trade and industrial development. The region's agriculture is characterized by subsistent smallholder production with fluctuating production levels, low productivity and low quality – with the result that most countries in the region have a food deficit and hence have become net importers of food.

2.2 Factors that have contributed to low productivity and competitiveness

At the 2006 FAO regional conference in Bamako, Mali, three broad categories of factors affecting the competitiveness of agriculture in sub-Saharan Africa were discussed: production factors, marketing and institutional factors, and macroeconomic factors (FAO, 2006).

Production factors

Unexploited irrigation opportunities. Only 4% of the region's arable land is irrigated and less than 3% of its water resources are used (FAO, 2005), as against 42% and 18% respectively in Asia. The current over-dependence on rainfed agriculture and inadequate irrigation and use of water harvesting technologies results in low and unreliable agricultural output that is vulnerable to the recurrent droughts common in sub-Saharan Africa. The result has been low productivity and therefore profitability, limited diversification opportunities and un-competitiveness of the agricultural sector. Currently, the global warming crisis is exacerbating the situation, with smallholder farmers characterized by low asset base and high vulnerability being worst hit.

Low input use. The low use of fertilizers, improved seeds and other farm inputs has resulted in low productivity and persistently declining commodity prices have adversely affected input use profitability. Some of the concerns raised by smallholders as hindering input use are high seed and fertilizer prices, substandard inputs in the markets and unscrupulous input dealers. With highly differentiated market conditions in sub-Saharan Africa, many smallholders are unable to cushion themselves against market risks in acquiring standard inputs.

Under-utilization of the prevailing farm resources. The subsistence crop production and extensive livestock management systems found in most sub-Saharan African countries could be intensified through improved farm management practices. Studies have shown, however, that up to 40% of the low yields experienced by smallholder producers are attributed to untimely farm operations, inter alia late planting and weeding, poor land preparation, inappropriate harvesting techniques, and poor housing and feeding regimes for livestock.

Unsustainable natural resource management. Land degradation due to wind and water erosion, especially human-induced, is the most important environmental problem in sub-Saharan Africa – a major challenge that cuts across issues of poverty, household incomes, environmental sustainability and economic growth, with up to two thirds of the region's arable land area being affected.

Poor physical infrastructure. The improvement of physical infrastructure, such as roads, railways, seaports and airports, and the related trade facilitation arrangements is critical if agriculture in the region is to become more competitive.

Post-harvest management. Competitiveness in agriculture could be improved by good post-harvest management practices. Various studies in the region have reported crop yield losses of between 20 and 40% due to poor post-harvest handling, including storage facilities. Impacts of post-harvest loss are most felt with perishables such as garden and dairy produce, and fresh produce such as bananas and root crops. Lack of storage and processing facilities has limited farmers' potential to add value to their produce to boost competitiveness.

Marketing and institutional factors

Land tenure insecurity. The weak land tenure arrangements have led to under-investments in land. Limited land access and tenure security, especially for women, have discouraged farmers from making long-term, ecologically beneficial investments in their land.

Weak research and extension capacity. National research institutions are weak due to inadequate funding and lack of qualified and motivated postgraduate professionals. This has led to a low rate of technology generation in response to globalization trends. In addition, average public spending on agricultural research has declined drastically. For instance in Kenya this currently stands at about 6% of the public expenditure. Similarly, private sector support in agricultural research is negligible in many sub-Saharan African countries compared with efforts made elsewhere. Extension services are also inaccessible to more than 80% of the farming population in many of these countries. Reduced government expenditure on extension and agricultural training has reduced the availability to farmers of technologies and market information. However, new channels for agricultural information flows, through NGOs and farmers' organizations, have stepped up extension and training activities. In addition, the private sector's role in providing technical and market information about commercial crop and livestock production, through arrangements such as contract farming, is expected to increase.

Poor access to financial services. Sub-Saharan Africa continues to display low farm capitalization and investments. The low asset base of producers has inhibited them from accessing financial services. Use of farm credit has been declining, partly due to poor access to financial services, high costs in borrowing and high risks linked to agricultural credit.

Marketing and distribution systems. For the domestic market, the marketing facilities that exist are poorly managed or underutilized, partly due to the low volumes (about 10 to 20%) of fresh produce marketed through the formal channels. Smallholder farmers' share of traded volume is often insignificant due to poor access to marketing facilities. Poorly organized marketing systems and low marketed volumes mean that transaction costs are high, and only limited economies of scale from bulking are currently being gained from farmer associations. Small-scale traders and other service providers receive only limited support.

Poor access to international markets. Sub-Saharan African countries face difficulties in meeting the ever-rising international quality and safety standards required in the developed country markets. Also worth noting are the observed trends and changes in demand for agricultural commodities, especially in Europe and America, through demographic changes and consumer preferences. Countries in the region have not been able to adjust their production to meet new consumer demands.

Macroeconomic factors

A favorable macroeconomic environment will promote agricultural growth. Macroeconomic factors and policies that negatively affect the competitiveness of agriculture include:

- high interest rates on agricultural loans and poor access;
- tariffs on imports of agricultural inputs;

- unmanaged trade liberalization strategies;
- poor implementation and support to national, regional and international trade policies; and
- absence of subsidies on local production vis-à-vis subsidies in advanced economies.

3. Institutional perspective on boosting smallholder competitiveness

Analyzing institutional failures in African food markets, Hoeffler (2006) observes that:

> food value chains in Africa are facing numerous challenges, namely: market failures (including monopolies, asymmetric information and inadequate infrastructure), policy failures (including lack of appropriate legal and regulatory frameworks, incentive mechanisms and favorable business environment) and more than often, massive capacity problems (of farmers and farmer organizations, the private and public sector actors) … Whilst traditional cash crops in many countries seem to have established fairly organized supply chains, many still suffer from excessive government intervention (depending on the degree of market liberalization). Newly emerging export crops on the other hand are often driven by foreign private companies and have managed to develop fairly integrated chain structures that sometimes tend to exclude poorer smallholder farmers (e.g. cut flowers). As for domestic food crops, they are yet to be taken seriously and yet they are projected to constitute the biggest future market for African agricultural producers due to increasing population and urbanization.
>
> Other problems abound: Markets for farm inputs often fail and the farther a farm is from an urban centre, the less likely is adequate access, availability or affordability of farm inputs; scattered smallholder farms, limited storage facilities and poor infrastructure affect quality and marketable quantities of the produce; the market value of most produce is subject to very limited negotiation, given that many farmers limit themselves to price-takers while selling individually to middlemen at the farm gate; the absence of standards, regulation and competition for some products increases the potential for fraud and results in significant mistrust between farmers and traders; fresh food marketplaces often turn out to be rather chaotic spot markets characterized by terrifying hygienic conditions, which account for significant post-harvest losses.

Over the past decade the economic and institutional context of agriculture and other rural activities has undergone profound changes, ranging from state withdrawal from agricultural support and privatization and market liberalization and democratization of public life to administrative decentralization. From a general perspective, the reforms have had a profound effect on farmers' production conditions and, further, the conditions of smallholder farmers, who constitute the largest group of the farming community.

According to WDR 2008, incomplete markets and institutional gaps impose huge costs in foregone growth and welfare losses for smallholders, threatening their competitiveness and in

many cases their survival. The Report acknowledges the efforts that have been made in the past 10 years in institutional innovations to make good the deficits in land markets, financial services, input markets and producer organizations. However, it notes that, though significant progress has been made, institutional reconstruction of agriculture is still incomplete, particularly for smallholders and the more marginalized areas.

Against this background, there appears to be a growing concern about resource-poor farmers' access to institutional support services such as credit, extension, and especially the entrance of these small farmers to agricultural markets (both input and output) from which they have been barred for too long. The need to provide institutional support systems to facilitate their integration into national economic systems cannot be overemphasized. Smallholder farming has been the institutional structure underpinning some of the most effective contributions of agriculture to economic development. Yet the competitiveness and economic survival of this particular social structure are under threat with the rapid progress of globalization, trade liberalization, technological innovation, and the development of integrated value chains for food commodities. This paper explores some of the innovative institutions that can make smallholders more competitive. The innovations discussed here are considered key in resolving some of the constraints to agricultural productivity listed above.

3.1 Contract farming

In the wake of globalization, contract farming has the potential to link farmers to markets, give them access to credit, technologies and inputs, and to stimulate agricultural production. RELMA (Regional Land Management) observes that 'Embedded in CAADP's [Comprehensive Africa Agriculture Development Programme's] priority investments is contract farming, a business model that links production to markets by enabling smallholders to practice high-value agriculture and reach markets at all levels – national, regional and international' (RELMA, n.d.).

Contract farming has become an increasingly popular means of supplying agricultural products in many developing countries, particularly where missing markets or imperfect markets (e.g. credit, market information, and technical production knowledge) do not permit a reliable supply of produce in large quantities or of good quality. The requirement of standard compliance, particularly for exports to Europe, has also played a role in the expansion of contract farming and will continue to do so. Well-functioning contractual arrangements can be the main solution to the production, marketing and institutional problems that have been discussed above, particularly with respect to irrigation, input use, farming practices, infrastructure, post-harvest losses, research and development, financial services and market problems.

Contract farming along the value chain

Contract farming can reduce the cost of cultivation for both firms and farmers, since it can provide access to better inputs and more efficient production methods. For instance, an arrangement that has proved to be vital in Kenya is the Horticultural Crop Development Association's overseeing and facilitating of contractual arrangements between exporters and farmers. Sometimes the exporters provide the farmers with farm inputs such as fertilizer, seeds and pesticides well before planting. This has enabled farmers to plant at the right times, hence maximizing output.

Sometimes it is the exporter who suggests to a farmer which enterprise to engage in, based on an identified target market, and therefore the decision is market driven as opposed to production driven. The inputs are advanced to the farmer and a contract signed, and the exporter recovers the cost after the produce is grown, harvested and sold. In this way the farmer is assured a market for his produce. This provision of credit in the form of farm inputs before or during production considers future harvest as the collateral. Activities such as production, marketing and payments are defined in a contract between the two parties.

Some supermarket chains in Kenya offer contracts to large and medium sized farms that have irrigation potential for fresh produce in order to allow them to provide a year-round supply. For instance, Uchumi Supermarket negotiated with sellers of seed for better prices on behalf of farmers who supply it with fresh produce. Such arrangements result in reduced production costs and are thus an incentive to farmers. A study by Vermeulen et al. (2006), in the fresh fruit and vegetable sector found that most of the raw material (79%) is sourced through some type of contracting arrangement.

Another example of where contract farming has proved effective in integrating smallholder farmers into commercial agriculture in Africa is Mozambique, where most of the more than 400,000 producers who benefit from contract farming are smallholders with less than one hectare of land. These producers pool resources and their farm produce to cut production costs and reduce marketing risks. Collectively, they find it easier to get inputs, credit, technical advice and services such as processing and transport. The marketing of produce is also done by the contracting firms, thereby reducing market risks that farmers would otherwise be exposed to.

Case studies of contract farming effectiveness in sub-Saharan Africa

Masakure and Henson (2005) have explored the motivations behind small-scale producers' decisions to grow non-traditional vegetables under contract for export. On the basis of a survey of smallholders in Zimbabwe (in 2001–2002), they found four factors motivating contracting, namely market uncertainty, indirect benefits (e.g. knowledge acquisitions), income benefits and intangible benefits (e.g. status).

Case studies from countries such as Kenya (tea, sugar, tobacco), Zambia (paprika, tobacco, cotton), Zimbabwe, Malawi, Nigeria and South Africa have provided evidence that the benefits of contract farming include, among others, improved farmer access to local and international markets and agro-processing firms, increased farmer incomes, improved farmer linkages to other services including access to credit and inputs, reduction in per unit cost of transport through pooling of products, increased access to extension and research services, and better risk management.

In Madagascar, one of the poorest countries in the world, Minten et al. (2006) measured the impact of small contract farmers. The study looked at farmers in the highlands of Madagascar who produce vegetables for supermarkets in Europe. These farmers' micro-contracts are combined with extensive farm assistance and supervision programs to fulfill the complex quality requirements and phyto-sanitary standards of supermarkets. Their study found that the farmers who participate in these contracts have higher welfare, more income stability and shorter lean periods.

In Egypt, a study commissioned by IFAD in 2006 found that contract farming could be an effective way of including smallholders in the effort to supply the horticultural export value chain, particularly if farmers are organized into farmer associations. The study revealed that smallholder families could increase their incomes by as much as 63% by contracting to supply organic horticultural produce and by 43% for conventional export crops (IFAD, 2006).

The contracting problem in African agricultural markets

According to Kirsten et al. (2008), many sub-Saharan African traders in the liberalized agricultural markets operate in a context where prices are not publicly announced, goods are highly differentiated with no formal standardization and classification system, contracts are oral and non-standardized, and there is little inspection or certification and virtually no recourse to legal means of contract enforcement. All these factors make both producers and traders highly vulnerable to being cheated with respect to market prices, the quantity and quality of the delivered good, as well as other contractual terms such as the timing of delivery, and product spoilage or loss during transport.

Other problems that have been cited in the literature include (NEPAD, 2006):

- Promoters bearing high transaction costs because of poor infrastructure and dealing with individual farmers scattered over large areas.
- Weak farmer organizations with most lacking managerial, leadership and production skills.
- International trade agreements that put up barriers to trade and deny agricultural products from Africa fair access to world markets.
- High production risks due to crop failure, resulting in insufficient volumes, or products that do not meet the standards.
- Farmers' inability to predict prices or factor in unfavorable exchange rates and other marketing risks, which sometimes leads to buyers ending contracts prematurely.
- Promoters who take advantage of farmers' weak bargaining position to exploit them.

3.2 Producer organizations

Producer organizations in sub-Saharan Africa have been in existence for decades now. They take various legal forms, such as cooperatives, associations and societies. Most of the farmer organizations have been functioning, albeit with many institutional difficulties. According to Jones and Sanyang (2007), they remain generally weak and farmers continue to be poorly represented in the mainstream agricultural development initiatives. By contrast, farmers and their organizations remain the main if not the only producers of food for the increasing populations, in both rural and urban settings. Recent studies have shown that many farmers and farmer organizations are diversifying and becoming active in several components of the agri-business chain, not only producing but also processing and marketing commodities. For instance, many European importers have begun to exclude smallholders who supply exporters independently

because of the logistical difficulty in administering GlobalGAP auditing among thousands of small producers dispersed over large areas, but experience in Kenya shows that smallholders will be accepted if they are organized into farmer associations that function as individual production units and are GlobalGAP certified.

Role of producer organizations along the value chain

The importance of producer organizations goes hand in hand with the increasing attention being paid to the value chains (or supply chains) that connect farmers with consumers. These organizations are considered instrumental in increasing the value generated throughout the chain, for example by ensuring that the quality of products is in line with the standard demanded. They ensure that farmers access good inputs so as to increase their outputs. For instance, in Kenya the Kenya Tea Development Agency (KTDA) supplies fertilizer on credit to smallholder tea farmers and then deducts the cost plus interest from their deliveries of tea, which is sold by KTDA on their behalf.

Producer organizations also mobilize support from other stakeholders and help farmers negotiate a fair share of the total profit generated. A good case scenario where producer organizations come into play is in the recent growth of supermarkets as major outlets for food products. This has led to the restructuring of supply chains, because supermarkets tend to work with preferred suppliers who can offer them products at high volume and of consistent quality. As individual producers are hardly ever large enough to supply all the stores in a supermarket chain, there is a need for organizations to collect, sort, grade and perform quality control of products from different producers.

WDR 2008 has made the case for producer organizations as key actors in agricultural development. The Report argues that they are a major part of institutional reconstruction, one that uses collective action to strengthen the position of smallholders in the markets for farm inputs and outputs. By reducing transaction costs, strengthening bargaining power and giving smallholders a voice in the policy process, producer organizations are a fundamental building block of the agriculture for development agenda (Mercoiret & Mfou'ou 2006). Better product quality is key for getting market access in modern chains. Producer organizations can help their members achieve this by:

- providing information to farmers about customers' quality requirements, particularly in the case of international chains, where this includes assessing the many options for international certification schemes;

- implementing quality control systems;

- organizing and facilitating innovation processes targeted at reaching higher product quality by, for instance, providing technical assistance to improve on-farm production methods; and

- going beyond facilitating the production and marketing process and taking on the processing and marketing functions themselves.

The principal marketing benefit that farmer organizations offer to farmers is the bulking up of the individual input purchases and produce sales so that they are able to engage in markets with much larger transactions. Since small transactions are a major source of increased costs for both farmers and traders in smallholder agriculture, the bulking up offered by farmer organizations is often a fundamental prerequisite of other marketing system innovations. Bulk transactions then offer the possibility of lower transport costs, more reliable relationships with larger traders, and sometimes better prices and access to financial services.

Examples of producer organizations' effectiveness in value addition

Producer organizations have acted as market agents for their members. For instance, the National Smallholder Farmer Organization of Malawi (NASFAM) has become the voice of the smallholder farmers in policy circles in Malawi's capital, Lilongwe. It was originally set up to promote smallholder production of Burley tobacco (which had previously been reserved exclusively for estates). NASFAM has encouraged diversification by promoting commercial production of a range of crops, including coffee, chillies, rice, soya and cotton. It also facilitates the provision of credit to smallholder associations (from a large number of providers), provides extension and training through devolved field officers, uses economies of scale to reduce transport costs and explores overseas markets for its members' produce.

As another example, African Agriculture reported in May 2007 that

> Undaunted by the poor coffee prices over the last two months, Kenya's Othaya Farmers cooperative society coffee producers [were planning] to invest in a 20 million Shillings ($300,000) milling plant. The farmers, who [had recently been] granted licenses for milling and marketing by the Coffee Board of Kenya, [were] borrowing a leaf from their Mathira counterparts, who early [that] year set up a Sh70 million ($1 million) commercial milling plant. Apart from creating employment for the local people, the farmers hope[d] to save on milling and transport costs, which constitute[d] up to three per cent of the society's total expenditure. (African Agriculture, 2007)

3.3 Financial services

Access to financial services is very important for agricultural growth and development. As pointed out in WDR 2008, an economy's financial service determines the ability of agricultural enterprises and rural households to invest for the long term and make calculated decisions for risky and time-patterned income flows. The agriculture sector and especially smallholder farming has been badly neglected in terms of access to financial services. Less than 10% of the population currently enjoys access to financial services and few financial products are available to finance small-scale farming (Grimm & Richter, 2006). Broadening and deepening the variety of private sector financial services available to finance small-scale farming carries great potential for increasing smallholder competitiveness.

Access to financial services can help support investments needed to improve competitiveness and spread the benefits of competition across communities. There have been calls for strengthening and increasing the outreach of various financial intermediaries, both formal and

informal. Innovations are required to permit more flexible forms of lending while guaranteeing that borrowers repay loans.

Role of financial services along the value chain

The smallholder agricultural sector plays an essential role in ensuring food security, economic growth and employment creation. Therefore financing smallholder farmers becomes an important undertaking for poverty reduction in developing countries, especially those in sub-Saharan Africa.

More investment is required to make smallholder farmers more productive, thereby improving food security and raising the income and ultimately the standard of living of the rural population. This calls for financing of programs that directly benefit smallholder farmers. Access to finances will ensure they access the right kind of inputs at affordable prices. In addition, providing credit facilities that recognize the problems they have in obtaining collateral will greatly boost production, and access to financial resources will also ensure they adopt the right kinds of technologies.

The situation of smallholder farmers is further exacerbated by poor infrastructure, namely poor access roads, lack of market information, poor transport and poor storage facilities (resulting in post-harvest losses). It is estimated that up to 15% of production in sub-Saharan Africa is lost between the farm gate and the consumer, owing to poor roads and storage facilities; all this means low incomes for smallholder farmers. Adequate finances will ensure the development of supportive infrastructure, such as feeder roads, to make it easier to market produce. Besides this infrastructure, smallholder farmers need help in setting up appropriate marketing information systems to give them access to market information about prices, market demand and other external information. Emphasis on quality of produce and products should be a source of sustainable competitive advantage for these farmers in the long run.

3.4 Other forms of institutional innovation

Insurance

Agricultural insurance, as noted in WDR 2008, can assist farmers in taking more risks in production and prevent shocks from depleting their assets. The USDA Risk Management Agency explains that

> Management of yield or price risk through the purchase of crop and/or livestock insurance transfers risk from you to others for a price which is stated as an insurance premium. Crop insurance is an example of a risk management tool that not only protects against losses but also offers the opportunity for more consistent gains. When used with a sound marketing program, crop insurance can stabilize revenues and potentially increase average annual profits. Insurance provides two important benefits. … It ensures a reliable level of cash flow and allows more flexibility in your marketing plans. If you can insure some part of your expected production, that level of production can be forward-priced with greater certainty, creating a more predictable level of revenue. (USDA-RMA, 2005)

Similarly, the Micro Insurance Agency states that:

> In the face of the world food crisis, managing agricultural risk and providing protection for smallholder farmers has taken on an even greater significance. The Micro Insurance Agency is technical advisor to the World Bank on crop insurance in a number of countries in southern and east Africa. Since 2005 it has been developing and implementing indexed crop insurance products in Malawi aimed at providing a safety net for poor farmers in case of severe drought and as a means to stimulate rural economic development, and is well positioned to take a leading role in extending these products into Rwanda and other sub-Saharan countries. (MIA, 2007)

A recent institutional innovation in Kenya, the grain-for loan concept

The grain-for-loan concept has begun to take root in Kenya. So far this concept has helped farmers obtain financial resources to manage their farming activities. The concept aims 'at affording un-banked farmers leeway in accessing loans'. It allows them to deposit their produce with the organization until such time as the prices are right. This cushions them against exploitation by middlemen. Farmers deposit their grain with the grain organization which in turn stores the produce in strategic national grain reserves. The organization then advances a loan to the farmer, an amount commensurate with the quantity of grain deposited. The deposited grain acts as collateral against which the loan has been advanced (KCDF, 2009).

Public-private partnerships

As a form of institutional innovation, public-private partnerships are viewed as a governance strategy designed to minimize transactions costs, or the costs associated with forming and sustaining relationships – contracting, coordinating, and enforcing a relationship – between actors engaged in the production of some good or service (Williamson, 1979, 1985). Central to this approach is the identification of a common interest space (see Figure 1), within which activities follow from objectives shared by both partners (Hartwich et al., 2003). A good example is in Kenya where the Alliance for a Green Revolution in Africa (AGRA), in partnership with Equity Bank Limited, the International Fund for Agricultural Development (IFAD) and the Ministry of Agriculture, signed an agreement for a loan facility of US$50 million (3 billion Kenyan shillings) to facilitate access to affordable financing. The initiative, which was launched in 2008, is set to benefit about 2.5 million farmers and 15,000 agricultural value chain members such as rural input shops, fertilizers and seed wholesalers and importers, grain traders and food processors.

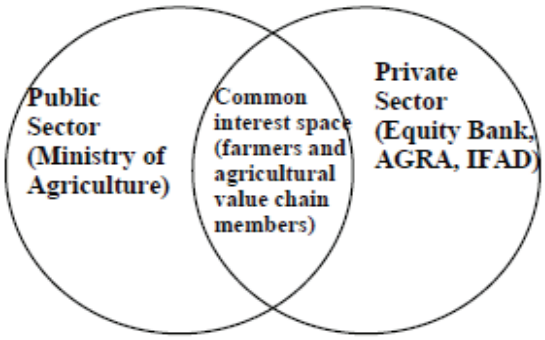

Figure 1: Common interest space (Kenyan case)

Table 1: Summary of institutional innovations in agricultural competitiveness

Forms of innovations	Roles	Examples	Problems
Contract farming	- improve farmers' access to inputs - make production methods more efficient - reduce marketing risks - reduce production costs - link farmers to markets - provide financial services	- supermarket chains in Kenya offering contracts to large- and medium-sized farms	- can contribute to a loss of autonomy and control over firm enterprise - production risks if technology available is inadequate - exclusive purchase rights by firms can depress producer prices or lead to late or partial payments - contract conditions can be easily manipulated - side marketing by producers e.g. selling fertilizer or selling produce post-harvest - widely dispersed smallholder population increases transaction costs
Producer organizations	- help reduce risks faced by producers - provide platform for farmers to express their dissatisfaction - mobilize resources for their members	- Kenya Tea Development Agency (KTDA) supplies fertilizer on credit to smallholder tea farmers - National Smallholder Farmer Organization of Malawi (NASFAM) has become the voice of smallholder farmers in policy circles in Malawi's capital, Lilongwe	- lack of management capacity - struggles to achieve coherence among a diverse membership - subject to elite capture - problems related to trade-off between equity and efficiency
Financial services	- support investments needed to improve competitiveness - boost production using the right technology - provide supportive infrastructure for processing and marketing produce - ensure adoption of right kind of technology in production - improve efficiency in production	- Agricultural Finance Corporation in Kenya finances agricultural producers	- lack of collateral impedes access to financial services - few service providers vis-à-vis the proportion of farmers requiring the services - agricultural risks make the enterprise unattractive to service providers
Insurance	- help farmers take more risks in	- crop insurance in Malawi	- underdeveloped agricultural

	production and prevent shocks from depleting their assets	implemented by Micro Insurance Agency	insurance markets - limited knowledge about agricultural insurance
Public-private partnerships	- minimize transaction costs, or the costs associated with forming and sustaining relationships - contracting, coordinating - enforcing a relationship between actors engaged in the production of some good or service	- in Kenya, the Alliance for a Green Revolution in Africa (AGRA), in partnership with Equity Bank Limited, the International Fund for Agricultural Development (IFAD) and the Ministry of Agriculture, signed an agreement for a loan facility of US$50 million (3 billion Kenyan shillings) to facilitate access to affordable financing	- problems with practicing coherent planning of how to attain the common objective

4. Conclusions

This paper has explored some of the institutional innovations that can make smallholder farmers more competitive. Faced with ever-changing market conditions, these farmers have to maintain the frontier if they are to remain relevant in the supply chain. The paper hypothesizes that increased productivity, which is the basic engine of agricultural growth, depends on an appropriate incentive-based environment that generates the profits so desired by farmers. However, for this to be realized will depend on farmers receiving better prices and access to investment resources, which in turn depends on more efficient output, input and financial markets. Thus there are five areas critical to agricultural growth within which institutional reforms will play out: contractual arrangements, functioning financial markets, agricultural insurance, public-private partnerships and vibrant producer organizations. There are questions of how to organize efficient flows of services in each of these areas and then how to provide them in an integrated package that motivates sustained investment by farmers in improved productivity and competitiveness.

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