Fostering Inclusive Outcomes in African Agriculture: Improving Agricultural Productivity and Expanding Agribusiness Opportunities through Better Policies and Investments

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1. Introduction

Sub-Saharan African countries have been experiencing significant growth in recent years. Indeed, six of the world's ten fastest growing economies in the 2000s were located on the continent, with several others growing near or above the 7% required level to double economic output within a decade (ACET 2014). The return of growth to Sub-Saharan African economies and a range of emerging internal and external dynamics have important implications for opportunities for African agriculture as a driver of inclusive and sustainable development.

Several factors have contributed to this stellar growth performance. First, macroeconomic reforms and stronger institutions, new technologies such as mobile phones and innovative ICTs, and higher commodity prices have been critical. Second, over the past decade, many African economies have undergone important transitions, mostly driven by a more interconnected, dynamic and complex global environment, and other domestic changes, including increased urbanization and rising urban incomes, and the associated higher demand for food. Looking forward, renewed interest in agriculture from traditional donors as well as new players such as the BRICS (Brazil, Russia, India, China, and South Africa) countries and private investors, bulging youth populations, land scarcity, environmental degradation, and climate change all present new challenges and opportunities for the rural economies and agricultural sector in the continent in the coming decades.

While this new dynamics and sustained economic growth creates opportunities for improving household livelihoods and reduce poverty, they are not sufficient to drive a development process that is inclusive and sustainable. For this to happen rural and structural transformations will be necessary. Unfortunately – despite strong per capita income growth – the structure of Africa's 1 economies has not changed markedly in recent decades. The level of technology used and productivity achieved remains relatively low across economies, and production and exports are still centered on a relatively narrow range of mostly raw agricultural commodities. Furthermore, despite a rapidly growing labor force and urbanizing populations, job growth in rural areas in general, and in non-farm sectors in particular, has been slow, and poverty levels

1 In this note, "Africa" refers to Sub-Saharan Africa, excluding South Africa.
in those areas remain relatively higher than in urban areas. So, the key question becomes: how to generate economic transformations that foster inclusive and sustainable development in rural areas? This is where the role of agriculture is key, given that the overwhelming majority of the population depends on it in most of the continent.

The notion that agricultural development is an integral component and catalyst of wider structural transformation in now widely accepted, and is supported by evidence outlined in the literature from much of Asia and Latin America during the last 40 years (HLPE, 2012). The mechanisms by which agricultural growth promotes transformation in the wider economy includes: (a) Higher agricultural productivity of labor means that labor can be released from agriculture into employment in relatively well remunerated rural and urban non-agricultural sectors; (b) Increased demand for agricultural inputs and services stimulates local production and marketing of inputs such as fertilizer, production tools, and local provision of services; (c) Expanded marketing engagement of smallholder farmers in agricultural value chains stimulates commercial distribution and processing activities at the local level; (d) Increased profits and exports from agricultural production finances imports of key technology and capital which can be invested in other sectors, particularly non-farm sectors; and (e) Higher smallholder incomes raise demand for non-food consumer goods and services that boosts the diversification of the rural economy with all the multiplier effects.

The case for increasing agricultural productivity to accelerate transformation, investment and industrialization, is strongly supported by well-established conceptual frameworks and historical empirical evidence. Notably, the African Center for Economic Transformation (ACET) in its first continental review of progress towards transformation, produced in 2014, states and concludes that raising agricultural productivity has to be a key part of the economic transformation agenda (ACET, 2014).

This background paper is structured in 7 sections including this introduction. Section 2 looks at the importance of, and need to close, productivity gaps in African agriculture. Section 3 discusses the centrality of smallholders in the rural transformation process if it is to be inclusive. Section 4 turns into the issue of linking smallholders with agribusinesses. Section 5 discusses the key programmatic/investment and policy elements to be considered for generating inclusive outcomes through integrated value chains. Section 6 briefly discusses some relevant lessons from China’s experience. The final section identifies some key questions to guide the discussion of the way forward.

2. The need to close productivity gaps in African agriculture

Given the context, it is not surprising that interest in the issue of agricultural productivity gaps within the continent and between Africa and other developing regions has intensified in recent years (Lobell et al., 2009; Neumann et al., 2010; and van Ittersum et al., 2013). To illustrate the scope of the issue, consider that in West Africa, farmer yields from rain-fed crops are reported to be typically below one half of their potential (Nin Pratt et al., 2011). ACET (2014) estimates cereal yields across Sub-Saharan Africa to be significantly lower than the yields of benchmark of comparator early transforming countries from Asia and Latin America (see Figure 1).²

² Early transforming countries in this analysis comprise Brazil, Chile, Indonesia, Malaysia, Singapore, South Korea, Thailand and Vietnam.
Low productivity and yield gaps are one of the main constraints facing small and medium scale farmers as well as agribusiness in Africa. In most African countries, low levels of productivity have contributed to low and – in some cases - even decreasing levels of competitiveness. Low smallholder yields and returns to labor is largely due to the lack of use of productivity enhancing inputs such as modern seeds and fertilizers, and has important implications for household food security and nutrition. More broadly, slow productivity growth limits the ability of countries to increase their share in international trade and reap the benefits. This is reflected in the fact that Africa's share of global agricultural exports has declined, with many individual fast-transforming countries, such as Brazil, Indonesia and Thailand, each exporting a significantly larger value of agricultural products than all of Sub-Saharan African countries combined (World Bank 2013) (see Figure 2).

Despite these gaps and the sub-optimal performance of agribusiness and smallholder agriculture in Africa to date, the potential is significant. In particular, rising incomes and urbanization across the continent are creating new opportunities for the commercialization of agriculture, with opportunities for growth in both downstream and upstream business activities. Indeed, African agriculture and agribusiness were estimated to be a US$ 1 trillion industry by 2030 (World Bank 2013). The growth of an inclusive agribusiness sector can play a key role in catalyzing an economic transformation that brings decent employment and rising incomes among groups who have traditionally been left behind by non-inclusive growth processes. In order for this to happen, the role of smallholders will have to be central, and the focus of attention of policies and interventions.

3. **The Central role of Smallholders in agricultural transformation**

Smallholder family farmers dominate the agricultural landscape in Sub-Saharan Africa. Smallholder units represent an estimated 80 per cent of farms in the region and contribute up to 90 per cent of food production in some African countries (Wiggins and Keats 2013). The contribution smallholders are already making to food production across Africa is significant despite the enormous limitations they face in accessing and using new technologies, inputs and technical support, and accessing to output market opportunities. The potential returns of addressing these limitations and fostering a rural business environment where smallholders are linked with larger agribusinesses can therefore be expected to be significant, both for improving food security, boosting rural incomes and the profitability of agri-businesses.
Empirical evidence, as well as the historical record of the achievements of smallholders as key drivers in economic transformations in Asia during the Green Revolution, underpins the importance of smallholders for sustainable agricultural growth and rural development. Despite the generally disappointing rates of agricultural productivity growth in Africa referred to above, Wiggins (2009) notes that thirteen countries doubled their production in two decades since the 1980s, although some start from a very low base. On the one hand, countries where smallholder farmers largely dominate the agricultural sector – e.g., such as Burkina Faso, Ghana, Niger, and Mali - have been among the strongest performers of this group. On the other hand, countries with a relatively smaller share of small farms – e.g., Namibia, South Africa and Zimbabwe – have performed much more modestly. It is also noteworthy that a strong body of research covering a wide variety of countries and timeframes demonstrates the comparative advantage of smallholder family farmers in terms of land productivity performance. Thus, there are robust reasons to suggest that the role of smallholders in linking with agribusinesses to promote inclusive and transformative outcomes in African agriculture will potentially be an important factor.

4. Linking agribusinesses with smallholders for win-win outcomes

High and rising demand for agricultural products, both domestically and internationally, creates opportunities for agribusinesses along entire agricultural value chains. Given the predominance of smallholder family farming in African agriculture, linking agribusiness operators with smallholders will surely be a key aspect of realizing these opportunities. And the potential benefits – profits, increased incomes, inclusive growth and sustainable and inclusive transformation – of creating these linkages are multiple.

Bearing this context in mind, it is encouraging that the scope for working with smallholders is promising. First, new technologies have the potential to reducing the costs of doing business with smallholders and creating opportunities to increase their productivity and incomes. Second, there is strong support among the public sector, donors and development agencies for inclusive agribusiness practices that prioritize integrating smallholders into value chains. Finally, the expansion of business partnerships with smallholders and their organizations in recent years has led to much insight and knowledge sharing in the area of engaging with smallholders and promoting inclusive food value chains. As a result, a relatively rich literature of lessons learned and advice on this topic is now widely available.

However, multiple challenges exist. First, functioning, mutually dependent partnerships between agribusiness operators and smallholders depend upon the support of a broader inclusive business environment – infrastructure, institutions, training and access to functional and fair markets for both inputs and outputs are all prerequisites. Unfortunately, in the rural areas of Africa, these elements are rarely all in place. Second, building trust between agribusinesses and smallholders is not always straightforward. Smallholders may question whether agribusinesses will honor price and purchasing commitments, while companies are concerned about farmers’ ability to meet volume and stringent quality standards or the possibility of side selling where monopsony agreements characterize the relationships. In order to overcome challenges and foster inclusive, win-win outcomes appropriate policies and investments must take into account a range of interrelated considerations.

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3 For example, see: FAO & OECD, 2012; Wiggins, 2009; Lipton, 2006; and Sen, 1966.
5. Generating inclusive outcomes through integrated value chains

Opportunities for agribusiness to benefit from interacting with smallholders exist across several agricultural value chains – from the sale of inputs, such as seeds and chemical inputs, to the procurement of output for processing or marketing into domestic or external markets. Indeed, in seeking to realize opportunities, agribusinesses are frequently participating in multiple stages, or even playing a role throughout entire value chains through vertical coordination arrangements. Furthermore, as consumer awareness around social and environmental dimensions of global value chains is increasing - and national, regional and global trade standards are requiring transparency at each stage and established relationships - the need for value chains to be inclusive, fair and responsive to the needs of smallholders is greater than ever before. The next sub-sections discuss the key elements to foster inclusive outcomes through integrated value chains.

5.1. Strengthening value chain links

Fostering stronger connections between the different nodes in agricultural value chains will expand agribusiness opportunities and lead to inclusive outcomes for smallholders and other players. A range of approaches is available to agribusiness operators to achieve this. At the input supply stage, training and employing people as input vendors in distribution networks is an effective means of promoting inclusivity. These activities can be linked to providing training; improved seeds and finance to smallholders to enable this group to sustainably meet expected quotas and quality standards in their marketing commitments.

At the processing and marketing stages, upgrading storage facilities, the use of modern technology to distribute timely information, and addressing infrastructure challenges (in partnership with other public and private actors if possible) all help foster inclusive and tightly linked value chains.

These approaches can build mutually beneficial and synergistic knock-on gains. For example, when smallholders have access to attractive markets for their products, they are better placed to invest in improving their productivity. This enables agribusiness companies to profitably sell production factors such as machinery, improved seeds, fertilizers and irrigation systems. This potential is particularly growing in Sub-Saharan Africa, where input markets are estimated to increase from around US$8 billion a year in 2010 to US$ 35 billion by 2030 (Sanghvi et al 2011, cited by GIZ 2012).

5.2. Building partnerships

As agricultural market opportunities in Africa expand, the dynamics surrounding production and consumption change, and the interest in the sector widens among a range of public and private actors, new alliances and new forms of partnership are required. Equitable, fair and transparent partnerships across the different stages of value chains can produce win-win outcomes for agribusiness companies and smallholders. When this happens, inclusive outcomes are more likely to be achieved: economic empowerment for smallholders, sustainable business models for agribusinesses, contributing to inclusive and transformative economic processes. A range of different types of partnerships and conditions are required to bring this reality into being.

Farmers' cooperatives have played a notable role in mitigating the risks involved in partnerships between smallholders and agribusiness companies. From the smallholder side, these
organizations have empowered members to deal with larger private actors on an even footing, enabling them to safeguard their rights and effectively bargain for their interests. From the agribusiness side, working with farmers whose produce is aggregated, rather than multiple diverse farming units, provides greater security and sustainability as scale and quality can be better achieved. From a society-wide perspective, partnerships that are based on fair and transparent conditions between agribusiness operators and smallholders and their organization promote sustainable rural livelihoods and food security. Ultimately, they form the basis of long-term viable business relationships, which create incentives for preserving natural resources and adopting longer-term sustainable models of agricultural development.

Support from the state is vital to underpin partnerships. Providing and maintaining vital infrastructure – either directly or through partnerships with private actors and development agencies – is indispensable to enable smallholders to effectively and profitably access input and output markets, information and training, energy and finance. Government co-financing and guarantee arrangements in many cases are needed to reduce the risks involved for agribusiness operators – particularly when upfront investment requirements are large and timeframes are lengthy. Stable macroeconomic policies, property rights and contract enforcement, as well as transparency are also needed to create the institutional environment where agribusiness companies are encouraged to do business with smallholders.

5.3. **Upgrading smallholder skills and knowledge**

In order for agribusinesses and smallholders to work together to leverage emerging opportunities and address challenges, the adoption of modern, knowledge-intensive and entrepreneurial-oriented models of farming are required. This implies the need for smallholders in particular to acquire a set of skills and competencies that have not always been readily available in rural education and vocational training programs. Unfortunately, in many African countries this is not yet happening and it is striking that – given the potential returns of enhancing agricultural productivity – education and technical/vocational training that is relevant to farming livelihoods in many cases remains absent, inaccessible or significantly inadequate.

Vocational training systems must target smallholders and be tailored to the realities and challenges they face in the contexts where they operate. Ensuring effective two-way channels for information to flow from smallholders to research and extension organizations will be a key element in the process. To facilitate this, supporting and interacting with farmer organizations is an important entry-point, as is facilitating stronger linkages between extension services and research. This calls for innovative, inclusive and participatory approaches. In this context, models such as Farmer Field Schools (FFS) have shown some success, though questions remain over the cost-effectiveness and potential for scaling-up. The importance of facilitating the provision of soft skills such as negotiating, business management, marketing and communication has also been highlighted, as has addressing gender dimensions related to agricultural production and marketing, access to productive resources and inputs, and land rights.

5.4. **Enabling institutional arrangements**

Institutional and risk-sharing arrangements in some contexts are providing agribusinesses and smallholders with opportunities to overcome constraints to working together, such as missing or inefficient inputs and output markets. A prominent example is contract farming, which can provide smallholders with the means to access market opportunities, as well as access to
finance, inputs, technology, information and training. For agribusinesses, these arrangements offer more predictable supply as well as mitigation of risks such as the diversion of production to other buyers when enforcement can be insured.

Specific measures are needed to ensure inclusive benefits from contract farming arrangements and various policies and strategies should be prioritized with this in mind. Certainly, it would be regrettable if involvement in contracts were biased towards larger-scale and generally wealthier farmers, who may be perceived as having lower average costs and being more reliable suppliers. The potential livelihood impact of this scenario could be serious where knock-on effects of increased spending and demand in local economies led to higher food and input prices, making farmers excluded from contracts and increasing the likelihood of falling into poverty. Further, in many instances agribusiness operators may be significantly large to adopt a position in local markets that give them excessive market power. This may result in low prices offered to farmers that lead to benefits of contract arrangements being skewed away from local people.

To promote inclusive outcomes, there are two main roles that must be played by the public sector. The first relates to ensuring that agribusiness companies do not abuse their market power. In this regard, suitable anti-trust legislation preventing aggressive pricing by firms holding dominant market positions is required. Most developed countries have this type of legislation in place and it is encouraging that more developing countries are following suit. The second role to be played by public actors involves enabling smallholders to increase their suitability for contract selection. A key element of this is supporting the rights of farmers' organizations to bargain for their interests and support their members' business activities with appropriate institutional, regulatory and fiscal policies. The involvement of public actors and development agencies in brokering contracts has also been effective in terms of promoting inclusive benefits.

Furthermore, while contract farming is a promising institutional arrangement that helps overcome some of the key challenges faced by smallholders and agri-businesses, not all crops are suited to it. Several crop-specific factors that affect transaction costs at different stages dictate the adequacy of the model to specific crops. Those factors include (1) a commodity’s production characteristics, such as i) labor intensity, ii) economies of scale in production; and iii) high returns to inputs and complex production management; and (2) commodity’s marketing/processing characteristics, such as i) high quality standards/specificity; ii) high perishability; iii) high value to weight/volume; iv) low value to weight/volume; v) export market orientation; vi) many potential buyers of farm production; and viii) processing requirement before sale. How these factors affect transaction costs in specific value chains will ultimately determine the suitability of contract farming to specific crop sub-sectors (Benfica, 2012; Benfica et al., 2002; Delgado, 1999).

5.5. Including disadvantaged groups

One of the most effective means of ensuring inclusive outcomes from growth and transformation processes is in creating decent jobs for rural people, including minorities and disadvantaged groups. This need is particularly pressing in Africa where it is projected that, by the year 2025, 25 million young people will enter the labor force annually (World Bank 2013). Indeed, poor progress in job creation despite relatively strong and sustained economic growth

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4 For example, the Government of Malawi has long-established guidelines for dispute resolution in agricultural contracts, with an officer from the Minister of Labour available for mediation.
has been cited as a major reason why growth and rising per capita incomes in many of the Least Developed Countries (LDCs) – including those in Africa – has often not led to significant reductions in poverty (UNCTAD 2013). This has important implications for the role of agribusinesses. Providing incentives for agribusiness companies, which create decent jobs for local people, is critical as is ensuring the provision of suitable and high-quality education and training in rural areas. Effective labor legislation and transparent inspection frameworks, along with working with agribusinesses to sensitize and build capacities on the issue of decent employment, should also be prioritized.

Specific – and in many cases entrenched - gender gaps in rural areas with respect to household work distribution, and access to productivity-enhancing resources, services and training means that rural women are less likely to enjoy the benefits of doing business with agribusinesses.\(^5\) As a result, empowering rural women so they can enhance their bargaining power and participate in decision-making processes and economic opportunities is a matter of priority. In turn, this will enhance their ability to access productive resources (particularly land), knowledge, and modern jobs and entrepreneurship or management skills, thus better positioning them to participate in business activities with agribusiness companies as employees or as small businesses through backward or forward linkages. Evidence demonstrates that when women are empowered, this has significant benefits for the nutritional and educational outcomes of children. Efforts to strengthen rural people's organizations and ensure women, and other minorities and dis-advantaged groups, are involved in decision-making processes is an important element of this that has already shown significant success.

Other avenues of ensuring that local communities benefit from the activities of agribusiness operators include: fair land rental payment by companies that engage in direct production; agribusiness investment in local infrastructure, schools and health facilities through Social Responsibility Programs (SRP); and the generation of local tax revenues that can help in local community development.

6. Relevant lessons from China's experience

The growth and transformation achieved by China in its agricultural sector since the 1980s could be instructive for Africa in a number of ways. The stagnant decades of the 1950s, 1960s and 1970s in China look remarkably similar to Africa's lost decades of the 1980s and 1990s, with poor land rights, weak incentives, incomplete markets and inappropriate investment portfolios among the constraints holding back agricultural growth (Huang and Rozelle 2014). Given the return of growth to many African economies, it may be possible to draw certain lessons from China’s experience with respect to turning growth into poverty reducing rural transformation.

The first obvious lesson is that investments in agriculture are central to inclusive growth processes. This fact may be regarded as unsurprising to the extent that it has already been observed in much of the development literature.\(^6\) In this respect the Chinese experience can be held up as further confirmation of the importance of agricultural growth to inclusive, pro-poor development. Total fiscal expenditure on agriculture has grown significantly in China since the 1980s: by an average of 10.7 per cent during the period 1978-1998; 9.7 per cent between 1999-

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\(^5\) Benfica (2012) reports that women are significantly less likely than men to access contract farming opportunities in tobacco and cotton, and when accessing earn lower returns.

In general, net investment in agriculture has been an observed feature in early transforming countries generally, including China's East Asian neighbors - South Korea and Japan - who invested heavily in agriculture prior to achieving industrial status.

Regarding the role of the government, China's experience suggests this should be focused on providing an enabling business environment for smallholder commercialization and value chain integration. This means investing in the necessary infrastructure, including rural roads, irrigation and communication systems, at the same time as ensuring that local and regional governments do not impede the free flow of labor, goods and services. It also means investing in agricultural research and development (R&D) to enhance productivity. Total public investment in agricultural R&D doubled from 2001 to 2008, reaching 14.0 billion yuan (US$ 4 billion). By 2008, government research agencies accounted for 84 per cent of public funds for agricultural R&D in 2008, while the remaining 16 per cent were directed to the higher education sector. That same year, the public sector employed some 43,000 full-time equivalent agricultural researchers (Chen et al. 2012).

With respect to direct involvement of government in markets, the Chinese experience suggests the role of the government should be best kept to a minimum. If key infrastructure and suitable institutions are in place to promote the free flow of goods and services, value chain links tend to tighten, market opportunities widen and pro-poor opportunities emerge (Huang and Rozelle 2014). More importantly, the capacity of the government to carry out its role to the optimum is dependent upon a range of political incentives, including tying promotion to past performance as well as linking it to education.7 Eliminating entrenched bureaucracies through systems of promoting young people and rotating leaders between regions and between bureaucracies/ministries has proven to be an effective means of promoting flexibility (Huang and Rozelle 2014).

Reducing rural-urban inequalities emerges as another key lesson from the Chinese experience. This means that investments are needed in rural health, nutrition and education. This is particularly important in order to build the human capacity necessary to enable a country to transform and shift the structure of its economy and achieve higher-productivity in all sectors, more technically focused approaches to development, and higher-return activities. In this context, it is notable that major education and health reforms implemented in China during the 2000s focused on improving the accessibility and quality of services in rural areas. More broadly, it is notable that once countries initially reach higher levels of income, growth has been observed to naturally slow in conditions where excessive inequality is in place.

Historical, environmental and cultural differences between China and Africa point to the need for caution in drawing strong conclusions on the extent to which the Chinese experience is replicable in the extremely diverse African conditions. However, considering the similarities in observed constraints to transformation that were successfully overcome in China prior to the 1990s compared to many African economies today, it is reasonable to suggest that key lessons relating to prioritization of agriculture, rural infrastructure investment and closing rural-urban gaps with respect to access to health and education opportunities, can be expected to provide inclusive outcomes in many African contexts. Certainly these lessons provide useful guidance in discussions around inclusive economic transformation in Africa.

7 In China, this had the effect of encouraging many officials to undertake further education programmes, thus enhancing technical capacity.
7. Key questions for the way forward

The analysis above presents important aspects that are crucial for fostering inclusive outcomes in African agriculture that ensures improving agricultural productivity, and other challenges faced by smallholders and expanding agribusiness opportunities. It highlights the Chinese experience and its relevance to Africa, including government policies and investments.

The discussion of the issues in this note can better inform the way forward if placed in the context of sharing specific experiences and challenges faced by African countries, and the policies, interventions, and particular public and private investments attempted or planned to support smallholders and agribusinesses. Experiences of past and current engagements of China in Africa -- with respect to the issue of smallholders and agribusinesses -- can also be helpful to the discussion.

The discussion can be guided by the following questions:

1. What role is envisaged for smallholders in inclusive economic growth and transformation processes?
2. What key policy and technical issues need to be addressed to enable smallholder farmers and traders to benefit from the growing demand for food from domestic, regional and international markets?
3. How can the uptake of new technologies be increased? What experiences stand out, and what lessons can be highlighted?
4. What is needed to foster private and public investments in the agricultural value chains that are inclusive of smallholder farmers?
5. What role should the government play in facilitating mutually beneficial business relationships between agribusinesses and smallholders?
6. What are the knowledge and skills gaps that need to be overcome for smallholders to work productively with agribusinesses? What roles can governments and other private and public actors play in closing these gaps, in particular related to productivity?
7. What approaches are needed to ensure growth and transformation processes generate decent jobs in rural sectors, and that traditionally marginal groups are able to access these jobs?
8. How to ensure that women, minorities and other disadvantaged groups are not left behind?
9. How can new forms of institutional arrangements contribute to rural transformation and enable smallholders and agribusinesses to work together? What are the risks associated with these arrangements?
10. What kind of investments and approaches are needed to build R&D systems in Africa that are linked to the needs of smallholders, and help catalyze agricultural productivity growth and commercialization?
11. What lessons can be learned from China’s experience?
12. What kind of South-South partnerships and tools are needed to concretely support this agenda?
References


