

Structural and Rural Transformation in Africa: Challenges, Opportunities and Implications for Policy and Investments¹

1. Introduction

The dominant narrative about social and economic development in Africa - in recent decades - is one of a fast-transforming continent showing mixed but generally positive performance. Increasing commodity export earnings, fast agricultural growth, better economic policy, improved governance, and more regional integration, have all underpinned rapid economic growth in the turn into the 21st century.

Urbanization is proceeding fast, and so are the linkages with rural areas. As incomes grow and diets diversify, the demand for food generally shifts from basic staples to horticultural and livestock products, calling for a shift in production structure. But evidence suggests that while such a shift is occurring in some countries, it is not yet the norm continent-wide. Agricultural growth, while occurring, is not primarily driven by gains in productivity, not yet diversified, and broad-based.

Overall, growth has not had the expected or desired impact on poverty reduction – average national poverty incidence rates have dropped since the 1990s, but only modestly, from 56% to 43% in 2012. Alarming, during the same period the absolute number of poor people has actually increased, with the most optimistic scenario showing about 330 million poor in 2012, up from about 280 million in 1990 (Beegle et al., 2016). Thus, while the generally optimistic African narrative is justified, it must be tempered by recognition of challenging trends and enduring gaps that threaten progress in sustainably reducing and eliminating poverty and generating shared prosperity.

This paper presents an analysis of structural and rural transformation and links to rural inclusion in Sub-Saharan Africa. It sets out prevailing structural dynamics in African economies (section 2), before exploring key transformations under way (section 3). With reference to this context, section 4 describes the key challenges for promoting inclusive rural and structural transformation in Africa while section 5 summarizes some of the key implications for investment and policy.

2. The Dynamics of structural and rural transformation in Africa

Structural transformation (ST) reflects changes in the relative contributions of agriculture, services, and manufacturing in an economy. Rural transformation (RT) is embedded within structural transformation, as rural people change their occupations, invest, diversify livelihoods, and relate differently to each other within their families, communities, and social institutions. This paper investigates how these two processes are unfolding in Africa today, the role of agriculture within them, and the prospects for inclusive development.

In this analysis structural transformation is defined by the share of non-agriculture in the Gross Domestic Product (GDP), the pace of structural transformation is measured as the average annual percentage change of non-agriculture in GDP over the period 1995-2015. Rural transformation is defined by the level of agricultural labour productivity and its pace measured as the average annual percentage change in agricultural value added per worker. For both, a positive value represents more transformation. Inclusion is defined by the level of poverty headcount and its pace measured as the average annual percentage change in the extreme (\$1.25/day) rural poverty rate. A larger negative value represents a greater reduction in rural poverty or increased inclusion. The analysis uses data ranging from the mid-1990s (circa 1995) to early 2010s (circa 2012).

¹ This paper is based on content of the IFAD 2016 Rural Development Report's Africa Chapter on Inclusive Rural Transformation, by Steven Omamo, Rui Benfica, Karen Brooks and David Suttie.

The analysis uses the relative pace of structural transformation, rural transformation and poverty reduction to test hypothesis such as: (a) are countries experiencing rapid transformation being more inclusive? (b) Are there countries experiencing rapid inclusion without transforming structurally, or rurally?

The performance on these three indicators is tracked for 28 countries in East and Southern Africa (ESA) and West and Central Africa (WCA) from the mid-1990s to early 2010s. Performance in each country is analysed relative to averages across all countries in their respective sub-region. The overwhelming number of countries showing more rapid reduction in rural poverty (15) shows rapid structural transformation (13), rapid rural transformation with slow ST (2), or both rapid ST and RT (6). In no Sub-Saharan African country has rural poverty declined significantly without rapid structural or rural transformation. The overwhelming majority of countries experiencing slow ST, 7 out of 9, experienced slow poverty reduction. Figure 1 summarizes the results. Annex Table 1 presents the list of countries included in this analysis and how they perform with respect to the transformation and inclusion outcomes.

Figure 1. A view of Africa’s transformation and inclusion outcomes

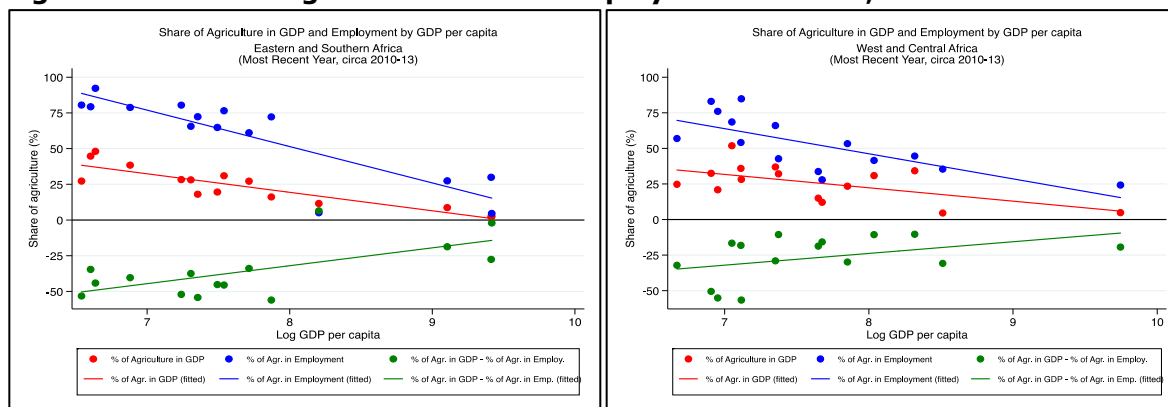


Source: Authors.

These results confirm the hypotheses that countries experiencing rapid structural and/or rural change will see rapid reduction of rural poverty, and those with little change in either dimension will not. Given the role of agriculture as a driver of rural transformation – in particular driven by productivity improvements initially and then by broader technical change therein – as well as its role in catalysing structural transformation, a strategic investment focus in the sector, in addition to related rural non-farm sectors emerging as agriculture develops, is justified.

Africa’s structural transformation has similarities to historical transformation processes observed in other regions. The regularity of agriculture’s relative shrinkage as a share of both GDP and labour is well illustrated for a set of Sub-Saharan African countries in Figure 2. At low levels of GDP per capita, agriculture’s share is large, and the proportion of the labour force employed in agriculture is even larger due to low labour productivity. As agricultural productivity and incomes rise, agriculture’s relative share falls, but that of labour falls even faster as farm workers exit and the productivity of those who remain rises. Eventually, at very high levels of GDP per capita, primary agriculture is a small share of the economy although the agrifood industry as a whole is larger, agricultural labour as a share of the work force is small, and those employed on farms have about the same productivity per worker as those employed elsewhere.

Figure 2. Shares of agriculture in total employment and GDP, 2010-2013



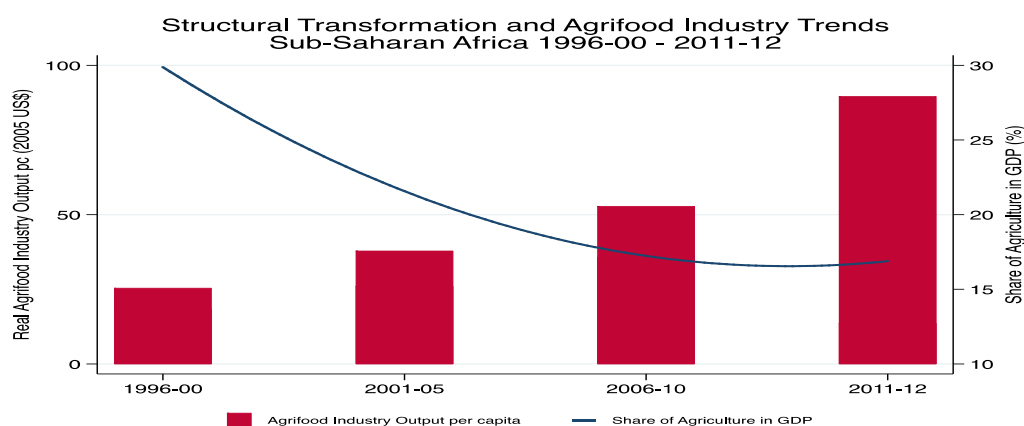
Source: World Development Indicators.

Attracting private investment into agriculture and the rural nonfarm economy in Africa will be critical. However, the current policy and business environment in many parts of the continent actually serve to deter rather than encourage such investment. Reforming the regulations that limit private entry and investment in value chains that serve smallholders must be a priority. Innovation in the information and communications technologies must continue, aiming to deepen access to credit and financial services, and to other information-based resources – in particular among the continent's bulging youth population.

3. Transformative trends and patterns in Africa economy-wide structural shifts

Agriculture is the most important sector in most African countries, with agricultural value added averaging 24 per cent of GDP for the region as a whole. Agro-industry is also predominant in the manufacturing sector, unlike other regions where light and heavy manufacturing are more prominent than food processing. While productivity improvements in agriculture as a whole – and among smallholders in particular – are particularly important at the beginning of structural transformation, as the latter process unfolds the development of agro-industry becomes a key element of industrialization and employment generation. Agro-industry, defined as a component of industrial activity where value is added to agricultural produce through processing and handling operations, is typically a significant component of the emergence of industry. As illustrated in Figure 3, this is demonstrated by the tendency of agribusiness real output per capita, which includes agro-industry and related services, to rise as GDP progresses during structural transformation, only declining later, at much higher levels of development (de Janvry, 2009). The importance of agriculture thus exceeds that of primary production, and is likely to grow with continued transformation of food systems and lagging growth in manufacturing.

Figure 3. Structural Transformation and Agrifood Industry Trends, 1990/00-2011/12



Source: IFAD calculations, based on UNIDO and World Development Indicators.

The service sector is broadly defined and covers much that is “in between” agriculture and industry, including trade and transport, personal services, machinery repair, tailoring, carpentry, social services and activities of the nongovernmental organization (NGO) sector, as well as highly skill-intensive services in finance, insurance, health, and education. Most of the service jobs are unskilled and informal, and employees of those small-scale enterprises are often family members. Entry costs are low. Technical change in transportation, communications, and financial services has allowed productivity to grow. The rise of the service sector suggests that productivity and earnings must be somewhat higher than in agriculture, but probably not by much at the entry level. World Bank Living Standards Measurement Study-Integrated Surveys on Agriculture (LSMS-ISA) data confirm that a positive productivity gradient exists, but it is not very steep (McCullough, 2015).

Developments in food systems

Food systems transformation is a central feature of broader changes. Africa is no exception in that respect, as major changes are underway in the structure and functioning of food systems in many countries. Interlocking networks of relationships for production, processing, distribution, and consumption of food commodities are shifting dramatically. Capacity to meet quality standards is increasingly crucial to access value chains (Reardon and Timmer, 2012; Tschirley et al., 2015a and 2015b).

Comprehensive data are not yet available, but several case studies suggest that African food markets have expanded hugely. Reardon et al. (2015) estimate that between 1970 and 2010, rural-urban food supply chains in Africa moved about five times more food to the emerging proliferating cities, the rural market volume of purchases of food expanded eight times, and the total volume of marketed food expanded six times, with much of the upsurge happening in the 1990s and 2000s.

The number of cities with more than 1 million inhabitants in Africa rose from two in 1950 to 50 in 2010, and is projected to rise to 93 by 2025. Smaller cities are growing even faster. The World Bank (2013) estimates that urban food markets will increase fourfold to exceed US\$400 billion by 2030.

Urbanization and new consumption patterns have fuelled a sharp shift in diets beyond grains into non-grain foods, such as dairy, fish, meat, vegetables, fruit, and tubers, and heavily into processed foods. Despite the persistence of poverty, average incomes have risen and a middle class is emerging in several countries, further stimulating demand growth and diversification. The share of Africa's population in the middle class (with an income of \$2-\$20 a day in 2005 purchasing power parity, PPP, terms) rose from 24 per cent in 1990 to 33 per cent in 2008. As the population growth of sub-Saharan Africa over the period, from 495 million in 1990 to 822 million in 2010, this suggests an expansion of the middle class from 119 million to 271 million—a more than doubling in two decades (Ncube, Lufumpa, and Kayizzi-Mugerwa, 2011).

As a result of the fact that women are increasingly working outside the home and have less time to shop for and prepare food, while men often work far from home, the food-processing sector and fast-food segment have grown quickly. Evidence suggests that even the rural poor are buying processed foods. In East and Southern Africa, they spend 29 per cent of their food expenditures on that food.

Private investment in food systems is expanding quickly (World Bank, 2013). What Reardon (2015) calls the “quiet revolution” in food supply chains spans retail, wholesale, first- and second-stage processing, packaging, branding, and logistics. Also targeted for investment is the full range of product transformation functions— trucking, processing, storage, and wholesaling. These transformations in food systems are very uneven among and within countries, with sharp differences in opportunity based on proximity to cities and access to key assets. Nevertheless, evidence suggests that farmers who are linked to growing urban and regional markets are investing in soil conservation, building organic matter in their soils, using productivity-enhancing seeds, breeds, and fertilizers, and investing in irrigation systems and even sometimes agricultural machinery (WFP, 2015; World Bank, 2013).

Productivity in African agriculture

Despite recent improvements in African agriculture (Wiggins, 2014), in part driven by new market opportunities, generally limited shift in production structure and supply response has limited African farmers' potential to benefit from opportunities emerging from food system transformations. This is reflected in relatively flat growth on several measures of agricultural sector performance. Table 1 report for SSA, GDP and agricultural growth, and four measures of rural transformation: total factor productivity (TFP); labour productivity; land productivity; and crop diversification. All four are slower in Africa than in the Rest of the World (ROW), further affirming the still low levels of productivity and diversification from basic staples. With a largely poor and relatively quickly growing population dependent on staples in both production and consumption, agricultural transformation in Africa is still at a relatively early stage.

Table 1. Characteristics of rural transformation in Africa and rest of the world

Average Annual Change (%)	Sub-Saharan Africa (SSA)			
	East and Southern Africa (ESA)	West and Central Africa (WCA)	All SSA Countries	Rest of the World (ROW)
	Average annual change (%)			
Economic Growth				
GDP per capita	1.57	1.06	1.28	2.66
Agricultural GDP	2.78	3.68	3.26	2.71
Rural Transformation				
Crop diversification (% non-cereals)	0.04	0.05	0.04	0.12
Total Factor Productivity (TFP)	1.20	0.97	1.07	1.75
Labor Productivity	0.51	1.71	1.09	2.04
Land Productivity (cereal yield)	1.01	1.10	1.06	1.76
Extreme rural poverty and inequality				
Extreme rural poverty (\$1.25/pc/day)	-0.64	-0.91	-0.78	-1.24
Rural Gini coefficient	-0.14	-0.11	-0.13	-0.33

Source: IFAD calculations based on World Development Indicators and USDA.

So the agricultural sector is growing rapidly, but still has weak fundamentals that limit the needed reductions in poverty and inequality. Extreme poverty and inequality declined more slowly in Africa than in the ROW in recent decades. Evidence suggests that poverty remained concentrated in rural areas in 2010 (IFAD, 2016). In both ESA and WCA rural poverty in 1990 was close to 60 per cent, but declined only slowly over the following 20 years, and was still at 56.7 per cent in WCA and 52.8 per cent in ESA.

The contribution of technical change to Africa's recent agricultural growth, while greater than in the late 20th century, is now generally less than in other global regions, particularly during periods of rapid growth in those regions. Most of Africa's agricultural growth can still be attributed to expansion of land and labour and shifts in the composition of output.

Where agriculture is growing and absorbing labour while TFP is rising, job opportunities grow. Shifts to better technology could bring even faster growth. There is no inherent trade-off between TFP growth and job creation as long as demand is strong. Current developments in food systems point to rapid growth of such demand in the coming years.

Dynamics in the rural non-farm economy

The rural nonfarm economy plays a decisive role in the pace and quality of change in Sub-Saharan Africa. Rural diversification associated with movement into the rural nonfarm economy and secondary towns in Africa reduces poverty more than does rural-to-urban migration, complementing the finding that agricultural growth reduces poverty more than does non-agricultural growth (Dorosh and Thurlow, 2014).

As is the case with much of Africa's rapidly changing food systems, comprehensive data on Africa's rural nonfarm economy are still lacking. But case studies and recent analysis of LSMS-

ISA data point to growth that is widespread yet constrained by a range of structural, physical and institutional factors.

Faced with such risks, and a range of market imperfections, many African households are increasingly diversifying income sources to reduce farming risk through nonfarm entrepreneurship (Nagler and Naude, 2014). However, productivity varies hugely among rural non-farm enterprises. Businesses in transport, hospitality, and professional services are more productive than agri- or sales businesses, but the former have high sunk costs that act as barriers to entry. Women, often more burdened by household tasks, may be additionally constrained. Moreover, these types of activities tend to be riskier and would not therefore attract the large majority of rural households that join the nonfarm enterprise sector to minimize their agricultural risks. Nonfarm enterprises in rural areas are also less likely than those in urban areas to operate year-round, and are almost twice as likely to cease operations owing to death or illness.

The rural nonfarm business environment has many difficulties including lack of basic infrastructure, inadequate credit and insurance markets, poor tenure security, and ethnic and gender disparities. Concerns that the push into rural nonfarm activity may merely add the equivalent of subsistence-level nonfarm activity to a risky and poor agricultural income base are valid. Even if the nonfarm household enterprise sector can offer an escape from poverty in the best-case scenario, it may only be able to offer low-paying vulnerable employment.² If Africa's budding rural nonfarm sector is to offer a ladder to more rewarding work in the local economy, it must also become a more reliable source of regular liquidity (Barrett et al., 2015).

4. Challenges for inclusive structural and rural transformation

Inclusion has many dimensions—gender, race, ethnicity, disability, religion, sexual orientation, and occupation. Exclusion from economic opportunity along any of these lines can be costly for society and painful for individuals. Exclusion correlates closely with poverty. Each dimension is relevant in most parts of Africa.

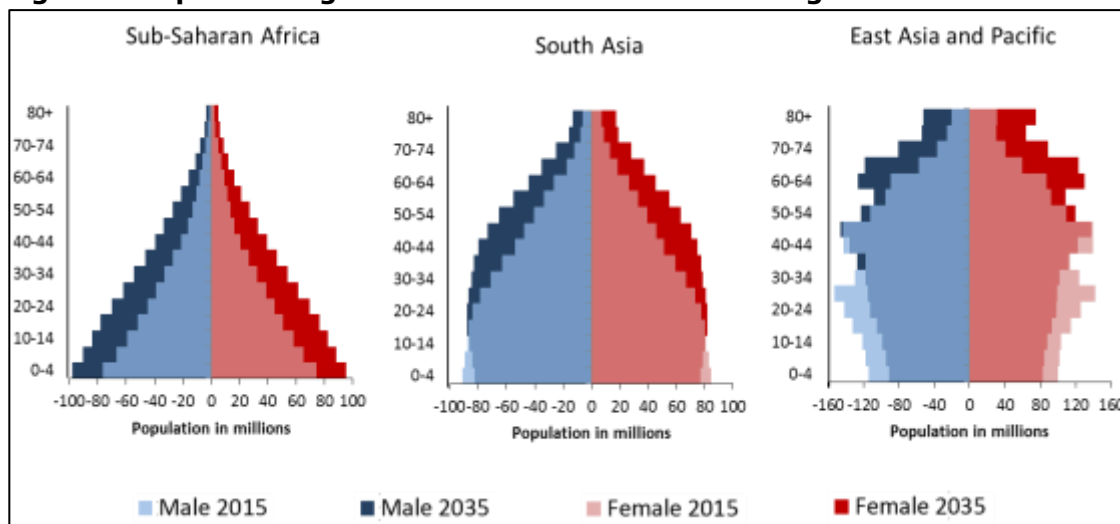
This section addresses three urgent challenges. One is unique to Africa: coping with the “youth bulge.” The other two are features of all structural and rural transformation processes but have peculiarly African dimensions, given the continent's overall early stage of transformation: coping with small and declining manufacturing sectors, and overcoming deeply entrenched constraints on factor mobility. Cutting across all three challenges is Africa's urgent need for stable and remunerative rural jobs.

Coping with the youth bulge

As a result of demographic trends in Africa, a focus on the inclusion of young people is warranted. The size of Africa's cohort of young adults—aged 15-24 and 25-34—is unprecedented (Figure 4). Further, the youth population will continue to rise in Sub-Saharan Africa throughout the 21st century, even though it is projected to decline in other regions (see Figure 5).

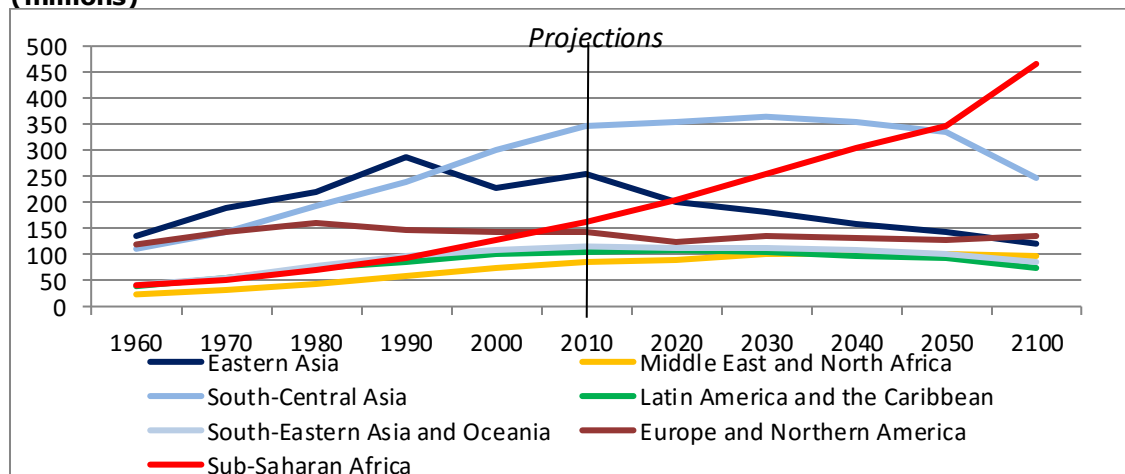
² The WDI on vulnerable employment defines this as unpaid family work and own-account work.

Figure 4. Population age structure in Africa and other regions



Source: Filmer and Fox 2014, based on United Nations, 2011.

Figure 5. Youth Population (15-24) trends and projections to 2100 in key regions (millions)



Source: United Nations, 2011.

Agriculture and related activities in agri-food systems present important entrepreneurial opportunities for youth populations, which are particularly important to address in regions experiencing rural youth population growth. However, within smallholder farming communities and households, young people often face multiple constraints in accessing markets and engaging profitably in them. These result from age-related barriers in accessing land and other assets, lack of relevant training and capacity development initiatives and services, and difficulties in accessing financing for investment, for instance due to lack of adequate hard collateral and of business experience. All these specific constraints need to be addressed to enable rural youth to access remunerative market opportunities today and in the decades ahead.

For young Africans who exit agriculture, the issue is employability and entrepreneurial capacity. Neither is assured. Basic skills are needed to create opportunities, along with capabilities to make the right decisions for seizing opportunities and achieving greater access to credit, financial services, and other resources. The solution for the skills of future young adults is to raise the quality of education of those now in school while maintaining and raising enrolment rates. Efforts oriented to technical and vocational training – job skills and business development - shaped to respond to emerging opportunities and market demand will be critical. It is worth noting that demand for labour services is essential for absorbing new

entrants to the workforce, but such a shift in demand can be achieved only by a dynamic change in economic structure as transformation proceeds.

Coping with a small and shrinking manufacturing base

Countries undergoing structural transformation in the 21st century face a context that is quite different from the 19th or 20th centuries. Change has often been initiated by productivity gains in agriculture that reduces costs of production, raises farm incomes, and releases resources to other activities. A further driver enters when the non-agricultural sector boosts labour productivity and creates demand for new workers. Labour moves to higher productivity sectors in response to higher wages and, in the process, raises aggregate productivity and growth even more. A transformation that depends not only (or primarily) on productivity growth within a sector, but also on migration of labour to sectors with higher productivity, yields rapid change (Rodrik, 2013).

Historically, labour-intensive manufacturing sectors have been the most important destination of rural-urban migration. The manufacturing sector can achieve high levels of productivity even if other sectors are lagging. As a latecomer to industrialization, Africa has a very small manufacturing base. Even if it grew quickly, the impact on overall employment would be relatively small.

Although manufacturing should stay a priority for development in Africa, the fast-growing rural labour force will have to find jobs in agriculture, the rural nonfarm sector, and services. The challenges of rapid labour force growth and manufacturing's weak capacity to absorb labour lead to tight constraints on inclusive structural and rural transformation.

During the transformation process, whether the growth can be sustained as resources shift depends on how buoyant demand is in the sectors experiencing the productivity improvement. If demand is constrained, the supply response will dampen prices, thereby attenuating new demand for labour, but the innovation will still create jobs in the more dynamic sectors.

Demand does not appear to be constraining Africa's agricultural growth, however: food systems are changing rapidly to meet the rising demand and shifting preferences of middle-class urban consumers. The opportunity to produce and sell into growing local and regional markets is increasing. Continued rapid growth of imports shows that space is available for local farmers if they can produce competitively. Byerlee et al. (2014) estimate that urban food markets in Africa are set to increase fourfold to exceed US\$400 billion by 2030, with especially rapid growth in demand for rice, feed grains, poultry, dairy, vegetable oils, horticulture, and processed foods, all of which are (or could be) produced locally.

The ability to sidestep any demand constraints will depend on the competitiveness of local production. Successful competition with imports will require attention to the logistical and policy gaps that reduce the performance of food processing, retailing, and exports. Morris et al. (2009) find that in the vast area of Africa's Guinea Savannah—agro-climatically similar to Brazil's Cerrado zone—primary agricultural production is competitive, but competitiveness is lost after the farm gate. Uncompetitive production will be blocked by high costs, or alternatively poor quality. Bypassing demand constraints thus comes back to more rapid technical change in primary production, coupled with investment in infrastructure for logistics and policy and regulatory reform in food processing.

Overcoming barriers to factor mobility

When innovation disrupts the established factor proportions in different sectors, whether they move depends on the costs of mobility. Factors can move within a sector, if technical change creates opportunities for internal adjustment, or between sectors in response to gradients in productivity and returns. The critical resources are land, labour (and the skills embodied in labour), and capital. The mobility of these resources determines whether change occurs, and their ownership and accessibility determines its inclusiveness.

Land is especially important, given the central importance of agriculture to inclusive transformations. Farm operators who already have land can introduce new technologies and management to increase productivity. This is common when land is very expensive or markets function poorly and access to new land is blocked. With sufficient capital and good skills, small, intensively worked farms can be efficient and profitable, as many studies have shown.

Less well publicized, but perhaps of greater importance than foreign land purchases, is the rapid consolidation of landholding and the transfer of ownership from traditional tenure to individual freehold by nationals, rather than outsiders. Jayne et al. (2014) studied land transactions in detail in Ghana, Kenya, and Zambia. They found that in each country, the area recently acquired and now controlled by national medium-sized farmers (with holdings of 5-100 hectares) is roughly twice that of the large-scale foreign acquisitions. At the same time, the number of farm households with the smallest holdings has increased in each country: in Kenya, the number of households with less than 1 hectare doubled from 1 million to 2 million between 1994 and 2006. Farm structure is changing fast, with growth at both tails of the size distribution. The number of operators is growing at the lower tail, and cultivated area is shifting to the higher tail.

The increasing number of very small farms is caused by fragmentation of family holdings as young adults reach working age and start their families. In contrast, those acquiring medium-sized and larger farms do so through purchase, although some also started with larger-than-average holdings and have added to them. One could conclude that the emerging farm ownership structure in many countries is not inclusive of young people and does not promote technical change. The smallest farms are more numerous and are unviable, except as part-time farms. The large farms could be commercially viable and offer opportunities for waged employment, but the way they are managed casts doubt on this. Owners of large and medium-sized tracts could rent out the portions they do not cultivate themselves, and thereby create opportunities for young people to enter farming through rental agreements. Working with LSMS data, Deininger et al. (2015) find that 10-20 per cent of farm operators rent in at least some land, and that this is most prevalent among those with very small landholdings. Idle area on medium-sized and large holdings where rental markets function reasonably well suggests that land markets are not moving land into more productive use. Land markets are failing because many potential participants have limited access, and because gains to speculative landholdings are greater than the costs of managing rental contracts. In the presence of these failures, large areas are already converted and more conversion is likely.

Mobility of labour depends largely on the workers' skills. Young Africans of this generation have spent more years in school than their older relatives. The doubling and tripling of primary school completion rates since 1990 is a remarkable achievement. The *quality* of education, however, has not improved commensurately; with the result that even those who complete school may have learned little that they can use to better their lives. Problems of quantity and quality of schooling in rural areas are more severe than in urban areas: about 60 per cent of those under 35 in rural areas have incomplete primary school and many struggle with basic literacy and numeracy (Filmer and Fox, 2014). The least educated remain in agriculture, and those with slightly better skills gravitate towards nonfarm employment. *Capital* is sufficiently mobile between sectors and over national boundaries. Thanks to developments in the banking sector and the advent of technological solutions, capital mobility is not a major constraint to transformation in many countries. The difficulties that poor people face in accessing banking services are well known: distance to branches, high costs of small transactions, absence of collateral, asymmetries of information, relatively less access to emerging ICT solutions and more. All of these difficulties are greater for young people. Recent developments in branchless banking, electronic fund transfers, biometric identification, and communications provide technical fixes. A number of NGOs and aid agencies (including IFAD) have piloted approaches to financial inclusion that are relevant for young people, such as bundling of financial services and skills mentorship, credit and self-help groups, partial guarantees, and other instruments. Careful monitoring of the success of different approaches will help identify those that can be scaled up.

5. Implications for investment and policy

Unlike other regions, Africa's trajectory of successful long-term structural transformation will start from agriculture and move through *services* and then to a more diversified manufacturing sector, thereafter reverting to expansion of highly skilled services. If expansion of the already small manufacturing sector is blocked by infrastructure gaps and regulatory interference, transformation driven by that sector will likely stall as the service sector reaches its expansion limit. In any scenario, however, agriculture will continue to play a greater role than elsewhere, because factor proportions and comparative advantage favour it. But how well the sector can realize its potential will depend largely on efforts to accelerate technical innovation.

Comprehensive rural transformation in agriculturally dependent countries is constrained when not led by technical dynamism. With few exceptions, such dynamism is weak in African agriculture despite recent acceleration. In addition, mobility of factors (especially land) among alternative uses constrains rural transformation. So growth has not been as effective in reducing poverty, as it would have been had agricultural productivity grown faster. The impediments to structural and rural transformation are particularly hard on the young people who are, and will continue, entering the labour force in record numbers.

Public policy and investment must focus on two elements: leveraging burgeoning demand emanating from urbanization and dietary diversification to deepen employment in the rural nonfarm economy, and developing inclusive food supply chains to provision ever-increasing numbers of consumers. Rural suppliers need to sell to sources of dynamic, growing demand, especially to domestic urban markets.

Broad objectives and priorities for policy and investment include improving market performance and meeting new demands, enhancing access to land and tenure security for smallholders and investors, financing agribusiness, upgrading infrastructure, using public-private partnerships where possible, building skills and entrepreneurship, particularly among young people, and making agribusiness inclusive by integrating market-oriented smallholders and rural communities into dynamic value chains. The many measures required have been well set out in several recent publications, notably in World Bank (2013), Yumkella et al. (2011), the African Centre for Economic Transformation (ACET 2014), UNCTAD (2015), and the UK Department for International Development (DFID 2015).

In summary, attracting private investment into agriculture and the rural nonfarm economy is vital. But many agricultural regulations in Africa actually serve to deter rather than encourage such investment (AGRA 2012). Reforming the rules that limit private entry and investment in value chains that serve smallholders must be a priority, while innovation in the communications technologies favoured by youth must continue and deepen.

References

- ACET (African Center for Economic Transformation). 2014. *2014 African Transformation Report: Growth with Depth*. Accra: African Center for Economic Transformation.
- AGRA (Alliance for a Green Revolution in Africa). 2012. *Assessment of Agricultural Policy and Regulatory Constraints to Agribusiness Investment in Burkina Faso, Ethiopia, Ghana, Nigeria and Tanzania*. Nairobi: Alliance for a Green Revolution in Africa.
- Barrett, C., L. Christiaensen, M. Sheahan, and A. Shimeles. 2015. "The Structural Transformation of Rural Africa: On the Current State of African Food Systems and Rural Nonfarm Economies." Paper Prepared for the African Economic Research Consortium's Biannual Research Workshop, held in Addis Ababa, Ethiopia.

- Byerlee, Derek, Andres F. Garcia, Asa Giertz, and Vincent Palmade. 2014. *Growing Africa: Unlocking the Potential of Agribusiness*. Washington, DC: World Bank.
- Deininger, K., F. Xia, and S. Savastano. 2015. Smallholders' Land Ownership and Access in sub-Saharan Africa: A New Landscape? Policy Research Working Paper 7285. Washington, DC: World Bank.
- De Janvery, A. 2009. Agriculture for development: Implications for agro-industries. In: *Agro-industries for development*. Rome: CAB International and FAO.
- DFID (Department for International Development). 2015. *DFID's Conceptual Framework on Agriculture*. London: Department for International Development.
- Dorosh, P., and J. Thurlow. 2014. Beyond Agriculture versus Non-Agriculture: Decomposing Sectoral Growth-Poverty Linkages in Five African Countries. Draft Paper. Washington, DC: International Food Policy Research Institute.
- Filmer, D., and L. Fox. 2014. *Youth Employment in sub-Saharan Africa*. Washington, DC: World Bank.
- Jayne, T., A. Chapoto, N. Sitko, C. Nkonde, M. Muyanga, and J. Chamberlain. 2014. Is the Scramble for Land in Africa Foreclosing a Smallholder Agricultural Expansion Strategy? *Journal of International Affairs* 67:35-53.
- McCullough, E. 2015. Labour Productivity and Employment Gaps in sub-Saharan Africa. Policy Research Working Paper 7234. Washington, DC: World Bank.
- Morris, M., H. Binswanger, and D. Byerlee. 2009. *Awakening Africa's Sleeping Giant: Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond*. Washington, DC: World Bank.
- Nagler, P., and W. Naude. 2014. "Performance and Survival of Nonfarm Entrepreneurship in Rural Africa: Evidence from the LSMS-ISA Surveys." Paper prepared for the Annual Bank Conference on Africa/Harnessing Africa's Growth for Faster Poverty Reduction, Paris.
- Ncube, M., C. L. Lufumpa, and S. Kayizzi-Mugerwa. 2011. The Middle of the Pyramid: Dynamics of the Middle Class in Africa. ADB Market Brief. Tunis: African Development Bank.
- Reardon, T. 2015. The Hidden Middle: The Quiet Revolution in the Midstream of Agrifood Value Chains in Developing Countries. *Oxford Review of Economic Policy* 31(1).
- Reardon, T., D. Tschirley, B. Minten, S. Haggblade, et al. 2015. Transformation of African Agrifood Systems in the New Era of Rapid Urbanization and the Emergence of a Middle Class. In Badiane and Makombe (eds), *Beyond a Middle Income Africa: Transforming African Economies for Sustained Growth with Rising Employment and Incomes*. Washington, DC: International Food Policy Research Institute (IFPRI).
- Reardon, T., and C. Timmer. 2012. The Economics of the Food System Revolution. *Annual Review of Resource Economics* 14:225-264.
- Rodrik, D. 2013. The Past, Present, and Future of Economic Growth. Working Paper 1, Global Citizen Foundation.
- Tschirley, D., J. Snyder, M. Dolislager, T. Reardon, S. Haggblade, J. Goeb, L. Traub, F. Ejobi, F. Meyer. 2015a. Africa's Unfolding Diet Transformation: Implications for Agrifood System Employment. *Journal of Agribusiness in Developing and Emerging Economies* 5(2), September (online).
- Tschirley, D., T. Reardon, M. Dolislager, and J. Snyder. 2015b. The Rise of a Middle Class in Urban and Rural East and Southern Africa: Implications for Food System Transformation. *Journal of International Development* 27(5), June.
- United Nations. 2011. World Population Prospects: The 2010 Revision. New York: Department of Economic and Social Affairs, Population Division. <http://esa.un.org/wpp/Excel-Data/population.htm>
- United Nations Conference on Trade and Development (UNCTAD). 2016. UNCTADSTAT. <http://unctadstat.unctad.org/wds/TableView/tableView.aspx>

UNCTAD. 2015. *Transforming Rural Economies*. UNCTAD LDC Report for 2015. Geneva: UNCTAD.

Yumkella, K., P. Kormawa, T. Roepstorff, and A. Hawkins. 2011. *Agribusiness for Africa's Prosperity*. Vienna: UNIDO.

WFP. 2015. Purchase for Progress (P4P): Reflections on the Pilot. Rome: UN World Food Programme. <http://www.wfp.org/content/purchase-progress-p4p-reflections-pilot>

Wiggin, S. 2014. African agricultural development: Lessons and challenges. *JAE*, Vol. 53 (3).

World Bank. 2013. *Growing Africa: Unlocking the Potential of Agribusiness*. Washington, DC: World Bank.

Annex Table 1: Distribution of countries' outcomes for transformation and inclusion

Speed of ST and RT		Rural Poverty reduction	
		Fast	Slow
Fast ST	Fast RT	Ethiopia	Nigeria
		Malawi	Congo, Rep. of
		Tanzania	
		South Africa *	
		Cape Verde	
		Cameroon	
	Slow RT	Namibia *	Botswana *
		Burundi	Lesotho
		Uganda	Zambia
		Guinea	Mauritania
		Burkina Faso	
		Mali *	
		Senegal	
Slow ST	Fast RT	Rwanda	Swaziland
		Mozambique	Benin
	Slow RT		Kenya
			Madagascar
			Togo
			Sierra Leone Central African Republic

Source: IFAD

July 4, 2016