Urbanization and linkages to smallholderfarming in sub-Saharan Africa: implications for foodsecurity

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ABSTRACT

The article reviews urbanization trends and consequences for the smallholder farming sector and rural food security in sub-Saharan Africa. Urban growth is less rapid than assumed, with rural areas and smallholder agriculture likely to be central to livelihoods for the foreseeable future. Commercial linkages between smallholders and urban consumers are limited by low urban incomes, increasing food imports and changing procurement systems. Economic insecurity in rural and urban areas is handled through family networks and involves temporary mobility and transfers of food and money between rural and urban areas. Rural areas close to urban centres will benefit most from new markets tied to urban growth, while food security based on local self-sufficiency must be the priority for marginal areas.

Key words: urbanization, sub-Saharan Africa, smallholders, rural urban linkages, food security

INTRODUCTION

Radical shifts in food systems have characterized the post-World War II period. Growing global populations alongside changes in dietary patterns and energy consumption have increased demand for agricultural products as food, animal feed and biofuel feedstock (Mitchell 2008). Such long term trends were augmented by short-term influences on food prices in 2008, when a series of droughts, an abrupt increase in diversion of maize for biofuel use, export bans on rice and speculative behaviour in grain markets broke four decades of declining food commodity prices. The subsequent reaction to food price increases in countries as diverse as Haiti, Egypt and Mexico pointed starkly to the globalized nature of food systems.

The food price crisis also reflected an increasingly liberalised global trade regime which has gradually reduced the agricultural trade surplus in developing countries and recast these countries as net importers (Pingali 2007). For the least developed countries in particular, the agricultural trade deficit is forecast to widen over the next couple of decades (Pingali 2010).

Tied to shifts in global patterns of demand are also increasingly globalised structures of procurement and food retailing as well as changing consumer preferences in developing countries. Growing foreign direct investment in agriculture and food processing, the increasing role of supermarkets and a Westernization of dietary preferences interact to shape the process of the nutrition transition among increasingly urbanized populations, while also affecting rural smallholder producers through new demands for consistent quality and supply (McCullough, et al. 2008; Reardon 2007). Meanwhile the vulnerability of small producers to climate change effects is forecast as particularly problematic, especially in sub-Saharan Africa (SSA) (Annez, et al. 2010).

Patterns of urban population growth and their implications for smallholder farming are likely to be shaped both by the global influences outlined above as well as more localized aspects. Economic dynamics have perhaps received the most attention in the literature and concern the forward and backward linkages between agriculture and the nonfarm sector, as economies move through the process of structural transformation. This understanding needs to be complemented by an analysis of urbanization processes, the types of agricultural production systems found in rural areas and how these are influenced by proximity to urban areas.

While growing urban populations, rising global food prices and a low yield domestic agriculture constitute a potentially combustive mix in SSA, the available evidence on urbanization trends and the possible consequences of such changes for smallholder farmers have not been evaluated. The following study contributes to addressing this research gap by reviewing the social science literature on the subject in three ways. Firstly, the theoretical linkages between urbanization and smallholder based agriculture are examined. Secondly, recent empirical data on urbanization processes in SSA are analysed. Finally, the potential impact of these processes on smallholder agriculture and rural food security are considered.

SITUATING URBANIZATION AND SMALLHOLDER AGRICULTURE IN THE THEORETICAL LITERATURE

Farm- nonfarm linkages and urbanization

A large body of literature within the field of economics documents urbanization as the spatial and demographic outcome of a broader process of structural transformation (Timmer 2009). Movement of capital and labour from agriculture to manufacturing and services, largely

found within urban areas, reduces the share of agriculture both in total value added and in the labour force as the economy expands (Chenery and Syrquin 1975; Timmer 2009). Globally this process has been underway for some time, with agriculture at present employing a third of the global labour force and producing a share of value added of 2-3% (Satterthwaite, et al. 2010).

Standard structural transformation models focus on the interplay between rural and urban labour markets as drivers of urbanization: increasing agricultural productivity expands food availability and gradually allows rural people to enter nonfarm employment. In the Asian case, the Green Revolution was matched by the attraction of labour into an emergent industrial sector (Gollin, et al. 2012).

As suggested by Hazell, et al. (2007), particular push and pull factors and their outcomes are influenced by regional characteristics: where access to productive assets within agriculture is relatively equal and initial production potential is high, rising agricultural labour productivity produces a food surplus which enables family members to leave agriculture for work in the nonfarm sector. Demand for rural services intensifies with the upgrading of agriculture, resulting in stronger linkages to small rural towns. In turn, urbanization increases demand for agricultural products. Eventually the nonfarm economy evolves towards higher return activities and agriculture loses its role as the primary driver of the regional economy. Small towns through their direct links to surrounding rural areas take on a special role in early transformation processes (Tiffen 2003; von Braun 2007). In marginal areas, by contrast, falling agricultural productivity pushes people into labour intensive, poorly remunerated, nonfarm livelihoods, with urban areas functioning largely as outlets for sale of products from these activities (Hazell, et al. 2007).

Urban bias perspectives, mobility and multi-locality

While the perspectives outlined above have an essentially optimistic view of urbanization, negative perceptions of rural urban interaction can be found in literature from the same period. The most influential contribution in this respect is Michael Lipton's (1977) classic work *Why Poor People Stay Poor* and its "urban bias thesis" (UBT). Lipton's (1977) argument centres on the inequitable and inefficient distribution of resources between rural and urban areas. The concentration of organizational and political power in urban centres, leads to policy biases that retard human capital formation in rural areas. Urban bias is amplified by government policies of industrialization aimed at import substitution. Together with regulated producer prices this tilts the rural urban terms of trade to the disadvantage of rural areas.

In a recent contribution, Jones and Corbridge (2010) re-evaluate the UBT in the light of structural adjustment policies that have to some extent redressed the rural urban terms of trade. As urban population growth continues, poverty is also increasingly urbanized while the globalised economy means that urban poverty is tied to rising global food prices (see also Bezemer and Headey 2008). The distinction between rural and urban is blurred by increasing mobility and livelihoods that span a number of different places in what are called multi-local livelihoods (Andersson Djurfeldt 2012; Andersson Djurfeldt 2014; Foeken and Owuor 2008; Mberu, et al. 2013; Potts 2010; Tacoli 2008).

Linking smallholder agriculture and urbanization

The linkages between rural and urban areas and the role of these linkages vary greatly depending on the tenure structure and size of farm units. Perspectives stressing the potential of broad based agricultural growth within African family farming tend to focus on the

relatively egalitarian tenure structure of the smallholder sector (Hazell, et al. 2010). The case is often made that the Asian Green revolution, and the more recent experiences of India and China, point to the potential of pro-poor agricultural growth in unimodal tenure systems (Ravallion and Datt 2002; Ravallion and Chen 2004). By contrast, in Latin America, where land distribution is bimodal, new technology and commercial opportunities within agriculture, have benefited large scale mechanized farms, rather than smallholders.

Spatial perspectives showing how uneven development processes enhance regional differences, and inter household disparities can also be found in the literature (Andersson Djurfeldt 2013; Andersson Djurfeldt, et al. 2013; Parnwell 1996). Satterthwaite and Tacoli (2003) consider small and intermediate sized urban centres in particular, and their potential role in rural and regional development and poverty reduction. Through a number of case studies, the authors demonstrate the weak linkages between large scale agricultural production geared directly towards global markets and lower level urban development. By contrast, poverty reducing, local level growth - in both rural and urban areas - is connected to high value, intensive production on relatively equitably distributed land (Hardoy and Satterthwaite 1986; Satterthwaite and Tacoli 2003). Rural hinterland development, therefore, is connected to macro level policies and processes. Although patterns of mutual dependence can emerge between small towns and their rural surroundings, the nature of this contact is not necessarily favourable to smallholder farmers. The *dynamic* interaction between smallholders and lower level urban centres therefore requires the prior integration of rural producers into national and international value chains (Hinderink and Titus 2002).

EMPIRICAL TENDENCIES IN AFRICAN URBANIZATION

Measuring urbanization

Urban growth is driven by natural increase and rural to urban migration, with the combination of the two varying regionally and nationally (McGranahan, et al. 2009). Moreover, when urban areas expand physically, or rural population densities increase, rural areas are reclassified as urban, as boundaries move or the population thresholds for fulfilling urban definitions are reached (Beauchemin and Bocquier 2004).

Since urbanization involves the redistribution of population over time, consistent definitions are crucial to international comparability. Unfortunately, definitions of urban areas – which tend to rest on a combination of population size and functional criteria - vary widely among countries. In populous countries, as pointed out by Satterthwaite (2007; 2010) a change in the urban census criteria would alter global levels of urbanization. Shifts in urban thresholds in regionally important countries such as Nigeria or Brazil, would change the size of the urban population in Africa and South America, respectively. Comparability is further confounded by a general lack of census data, especially in SSA. Population data as well as urban classifications carry political implications as they may determine electoral constituencies, access to government resources or have effects on industrial location (Potts 2012a).

Despite these shortcomings, most cross-country analyses of urbanization levels, urban population growth and urbanization rates are based on the *World Urbanization Prospects* published by the United Nations Population Division since the mid-1970s. These are calculated based on census data from individual countries, which are used as baselines in population projections (Satterthwaite 2010). Since comparability of data is limited several attempts have been made to construct universal indices based on combining geospatial data with census data (Balk, et al. 2005; Chomitz, et al. 2005; E-geopolis no date; Uchida and

Nelson 2010; World Bank 2009). These indices enable comparison among countries, but the lack of time-series data still means that the *World Urbanization Prospects* to date is the only global, longitudinal dataset covering urbanization tendencies.

African urbanization trends

On the basis of the *World Urbanization Prospects* (United Nations 2012) [1], Sub-Saharan Africa as a whole had an urbanization level of 36.7 % in 2011, the second lowest regional figure in the world, with South Asia's figure being the lowest. As suggested by table 1, the regional variation in urbanization is large, with Southern Africa diverting positively and Eastern Africa negatively from this level. The explanation for this pattern lies in the historical fabric of regional migrant labour systems characteristic of Southern Africa especially.

Table 1: Urban and rural population (thousands) and urbanization levels in Sub-Saharan Africa, by region, 2011

Region	Urban	Rural	Total	Percentage urban
Sub-Saharan Africa	309 463	533 786	843 249	36.7
Eastern Africa	81 172	261 679	342 850	23.7
Middle Africa	53 881	76 101	129 981	41.5
Southern Africa	34 287	23 925	58 212	58.9
Western Africa	140 124	172 081	312 205	44.9

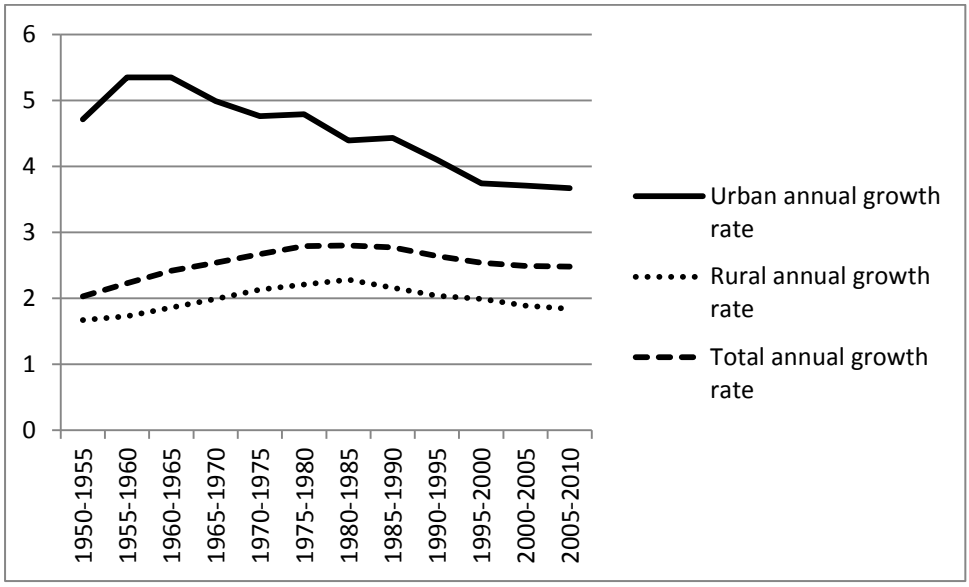
Source: United Nations, Department of Economic and Social Affairs, Population Division (2012), World Urbanization Prospects, the 2011 revision

Low initial levels of urbanization in combination with overestimated projections of future urban growth has led to alarmist claims pointing to the unprecedented pace of African urbanization (Commission for Africa 2005; UN-Habitat 2008).

Recently, the narrative of rapid urbanization has been questioned by various commentators who nonetheless highlight *other* distinctive characteristics of African population growth and migration processes. Potts (2012a) argues that overestimations of African urbanization rates stem from projections based on urban growth patterns from the 1960s, when post-Independence investment in social infrastructure and industrialization, together with the lifting of colonial mobility controls attracted large numbers of migrants to many capital cities. This interpretation is illustrated in Figure 1, which shows the peaking of the urban annual growth rate in the 1960s.

[1] Given the questionable validity of urbanization projections in the World Urbanization Prospects database, only historical urbanization data will be used in this discussion.

Figure 1: Urban, rural and total annual population growth rate (%) for Sub-Saharan Africa 1950-2010



Source: United Nations, Department of Economic and Social Affairs, Population Division (2012), World Urbanization Prospects, the 2011 revision

More sluggish urban growth, especially from the 1990s onwards, is shown in figure 1 and is also reflected in the data on share of urban population from the *World Urbanization Prospects*. Whereas the share of the urban population for sub-Saharan Africa as a whole increased by 4.6 pp. and 4.4 pp. in the 1960s and 1970s respectively, this increase had dropped to 4 pp. for the 1990s and only rose slightly to 4.1 pp. in the first decade of the 2000s (see table 2).

Table 2: Share of urban population in total population 1950-2010 by region

Region	1950	1960	1970	1980	1990	2000	2010
Sub-Saharan Africa	11.2	14.9	19.5	23.9	28.2	32.2	36.3
Eastern Africa	5.5	7.4	10.4	14.5	17.7	20.6	23.3
Middle Africa	14.0	17.7	24.9	29.0	32.4	36.2	40.9
Southern Africa	37.7	42.0	43.7	44.7	48.8	53.7	58.5
Western Africa	9.7	15.1	21.3	27.1	33.2	38.5	44.3

Source: United Nations, Department of Economic and Social Affairs, Population Division (2012), World Urbanization Prospects, the 2011 revision

Numerous studies confirm the decline of urban growth rates in the 1980s and 1990s (Beauchemin and Bocquier 2004; Bocquier and Traoré 2000). Potts (2005; 2009; 2012a; 2012b), using recent censuses and survey data points to slowing urbanization rates also since then: counter-urbanization has occurred in a handful of countries, while others have experienced very slow urbanization (1% or less) in the intercensal periods. A comparison of

West Africa's official levels of urbanization and urban growth rates with the Africapolis dataset (part of the E-Geopolis research project), shows a general overestimation of both levels and rates of urbanization (Africapolis 2011; 2012). In the case of Africa's most populous country Nigeria, the Africapolis data shows that four out of five major towns actually had lower population growth rates than the country as a whole (Potts 2012a).

Although a number of studies point to the slowing of African urbanization rates or even counter-urbanization in some countries, it is important to note that Africa as a whole *is* experiencing urban growth. While Africa is one of the last continents to experience the urban transition, the African rate of urbanization is not exceptional, however (Montgomery 2008).

While the pace of urban growth, therefore is not unprecedented, African urbanization processes and migration patterns are distinctive in other respects. McGranahan, et al. (2009) show that in contrast to Asia, African urban growth, is predominantly driven by natural increase being the effect of generally high fertility rates (Vimard 2008). This confirms results from an earlier UN study (Chen, et al. 1998), which attributed as much as 75 % of urban growth in the 1980s to natural increase. Such figures contrast strongly with trends from the 1960s and 1970s when 40 % of urban growth was related to rural to urban migration, directed mainly towards large cities (Tacoli 2001).

The informalization of livelihoods in the wake of structural adjustment programmes and trade liberalisation, falling urban living standards, rising urban poverty and a narrowing rural urban income gap, explain the tapering off of rural migration streams to urban areas (Bryceson 2006; Locatelli and Nugent 2009; Mabogunje 2007; White, et al. 2008; Zulu, et al. 2006). The decline in migration as a source of urbanization also reflects longstanding patterns of permanent migration being replaced by circular or seasonal migration, as one of many ways of handling urban uncertainty (Andersson 2002; Potts 2010; Simon, et al. 2004).

A tendency towards declining natural increase in urban areas is also noted in the literature. While urban death rates have been lower than in rural areas for a long time, the rural urban gap in fertility rates has been shrinking more slowly. The assumption has been that the youthful profile of migrants and their rural background has maintained rural reproductive behaviour. Beauchemin and Bocquier (2004) challenge this assumption, and show the fall of urban fertility rates in a number of African cities in the 1980s and 1990s, as a result of movement in itself as well as the adaptation to urban fertility regimes. Signs of falling urban fertility rates are confirmed on a cross-country basis in more recent Demographic Health Surveys (Potts 2009; 2012b). The distribution of the urban population has shifted towards larger urban areas over the past few decades and this is also likely to affect fertility behaviour over time, as smaller urban areas maintain fertility rates and child mortality rates closer to those of rural areas (Montgomery 2008; Tacoli 2012).

Urbanization needs to be considered also in the context of more general influences on population growth, where a number of aspects stand out that affect fertility rates strongly. Education, especially women's education, delays child bearing, raises the awareness of family planning and leads to a preference for fewer but more well-educated children. The influence on education as a determinant of fertility rates is universal and so strong that Lutz and Samir (2010) suggest that it should be included as a factor in general population projections. Increasing priority given to girls' education, if sustained, is likely to influence fertility, while also encouraging movement to urban areas, where education is more easily accessible (Eloundou-Enyegue and Giroux 2012). The empowerment of women, and their

entrance into the labour force as part of the urban transition, is likely to reduce fertility over time (Skeldon 2008; Tacoli 2012).

Slowing rates of urban in-migration, decreases in urban fertility, and precarious urban employment and living conditions, suggest that rural areas and smallholder agriculture will continue to play a central role in African livelihoods for the foreseeable future.

EFFECTS OF URBANIZATION ON AGRICULTURE, FOOD SECURITY AND NUTRITION IN RURAL AREAS

Historical experiences of structural transformation point to the positive outcome of the twin processes of rising smallholder productivity and industrialization. By contrast, African urbanization occurs in the context of a low productive family farming sector, unable even to feed itself, let alone an increasing urban population. In the case of the Asian Green Revolution, urbanization was tied to the emergence of the manufacturing industry, but in SSA urbanization is linked to the export of primary goods, resulting in weaker growth linkages and poorly diversified urban economies (Bryceson and Potts 2006; Fafchamps 2003; Gollin, et al. 2012; McGranahan, et al. 2009). Liberalised trade regimes in the meantime have globalised food systems and consumer preferences. The linkages between smallholder agriculture and urbanization are therefore likely to evolve in ways which are quite different from earlier structural transformation experiences.

Rural livelihoods, agriculture and urbanization

Urban food insecurity and rural poverty are handled by households through multi-local livelihoods that rely on the extended family as the main provider of social and economic support. With respect to agriculture this reliance is translated into a range of self-provisioning arrangements that link rural and urban areas directly as well as indirectly.

While urban households may be engaged in rural food production, (Andersson 2002; Foeken and Owuor 2008; Frayne 2005), multi-local livelihoods are also tied together across space by family networks based on temporary mobility, cash remittances and food transfers from rural to urban areas. Food transfers from rural to urban areas are especially important to the poorest households (Frayne 2010) and as such are crucial for alleviating urban food insecurity for individual households. While transfers can encourage the production of additional food for sending to family members, these transfers may also undermine the already weak role of many urban areas as sources of commercial demand for rural produce.

For rural household members, effects of food transfers on the food security for remitting households have been shown to be predominantly negative. Using data from nine African countries, Andersson Djurfeldt (2014) shows that roughly 40 % of smallholder households transferred maize to relatives either in rural or urban areas, with the share of remitting households varying with the level of urbanization in the countries. The effect of transfers on the food security of the rural household was the most severe among the lowest income quintile. Only in the top income quintile did transfers not compromise the food security of the sending household. Food transfers could be reciprocated through cash remittances from urban relatives, but this was not the case, and there is little evidence of this relationship in the literature, despite its intuitive logic. The same data set shows that cash remittances on average comprised only 4.2% of cash income for households that reported earning any cash income (Djurfeldt, et al. 2011).

Apart from multi-local food sharing arrangements, rural and urban areas are linked also through temporary migration and cash transfers from urban to rural areas. Theoretical perspectives on rural income diversification stress the importance of cash remittances and the indirect role of migration in tightening rural labour markets (Haggblade 2007). Empirical studies of rural to urban migration focus largely on cash remittances from urban to rural areas, with migration generally considered to have a positive effect on rural household incomes (Collinson, et al. 2007; Collinson, et al. 2006; Zulu, et al. 2006).

Studies of the *direct* linkages between cash remittances and farm investments are less common. Tiffen (2003) notes the importance of cash remittances for making investments in improved technology among smallholders in West Africa. The share of remittances in rural cash incomes is generally small in SSA, however, and tied to historical patterns of mobility. Cash remittances therefore do not constitute a likely source of capital for a general upgrading of smallholder technology.

Multi-local livelihoods and seasonal migration are identified as symptoms, as well as strategies of adaption, to the growing economic pressure placed on both rural and urban livelihoods (Ellis 2006; Ellis and Freeman 2004), but it is difficult to assess whether they are recent phenomena. Movement to small urban centres in the agricultural off season has been historically tied to droughts and other types of environmental stress (McGranahan, et al. 2009), while migrant labour systems and regionalized trade patterns have encouraged multi-local livelihoods for many decades (Stichter 1982). The role of temporary urban to rural migration in cushioning urban hardship is also documented in a number of studies (Potts 2005; Sarpong and Asuming-Brempong 2004).

While studies of multi-local livelihoods stress the role of rural urban linkages in dealing with economic adversity, it is also important to consider the potential for *improved* rural livelihoods that urbanization, and higher urban incomes, may bring through new commercial opportunities.

Changes in urban demand and shifts in rural production systems

Urbanization has been historically connected to what is known as the nutrition transition during which diets shift towards higher energy and fat density. The first step of the nutrition transition involves increased consumption of vegetable oils, later followed by sweeteners and animal source foods (Drewnowski and Popkin, 1997; Popkin 1999). The difference between rural and urban diets is tied to higher urban incomes as well as the rising opportunity cost for female labour, as women increasingly take on employment outside the home (Elder and Schmidt 2004; Ruel, et al. 2008; Stage, et al. 2010).

Romanik (2007) presents data from Mozambique, Malawi and Burundi, showing the greater role of meat and fish in urban diets, compared with rural patterns of food consumption. While a growing reliance on meat is cause for concern for a number of reasons, the literature also points to the emergence of other food markets as a result of urbanization and higher urban incomes. Examples of these include fresh fruits and vegetables, vegetable oils and sweeteners as well as secondary demand for soybeans as a result of growing urban demand for livestock and dairy products.

Linking smallholders to global markets is sometimes put forth as a policy priority, but Tacoli (2008) argues that domestic urban markets provide more stability and points to evidence from West Africa showing how diversification to meet local urban demand has resulted in production increases (Tiffen 2003; Toulmin and Gueye 2003). In Kenya, for instance, as much as 94% of horticultural goods are estimated to be consumed domestically (Nyoro, et al.

2004), suggesting the strong market potential for vegetables. Although production of perishables for urban markets has spatial limits, especially in areas with poor infrastructure, the dietary shift towards vegetable oils and sweeteners as part of the nutrition transition, may contain prospects for widening smallholder involvement, also in less well-connected areas. Production of palm oil, soybean and sugar cane for instance, are crops that are less sensitive to transportation and can be refined for urban consumption.

As suggested by Reardon et al. (2009) the effects on smallholders of changing dietary patterns is conditioned also by changes in procurement systems, with a shift towards "modernized procurement systems" involving a centralization of procurement, vertical coordination and a move away from public or lacking standards to private standards for food safety. Meeting standards involves increased expenditure on technology and post-harvest treatment, while the preference among companies for dealing with a limited number of suppliers can lead to the exclusion of small farmers. Coordination through cooperatives may compensate for these aspects in some settings, however. In the context of SSA, largely unimodal land tenure systems may enable eluding the general pattern of smallholder exclusion in scale dualistic settings, while the indirect effects on rural labour markets may also be positive as noted by Neven et al. (2009).

Spatial aspects of urbanization are important, however: rural areas close to urban centres or to infrastructure leading to towns and cities, are likely to benefit most from urbanization (Stifel and Minten 2008). Differences in land tenure systems, based on gender and ethnicity, also mean that prospects for inclusivity vary locally (Andersson Djurfeldt 2013; Andersson Djurfeldt, et al. 2014). The effects of urbanization hence are likely to be very different in dynamic, well-connected areas when compared with marginal areas, with spatial polarization being the probable outcome over time, unless institutional, physical or technological changes are made to mitigate such tendencies.

CONCLUSIONS

The data and literature on urbanization processes in SSA point to less rapid urban growth than often assumed, while African urbanization unlike earlier historical experiences is not based primarily on industrial growth. The prospects for increased employment and rising incomes in towns and cities are therefore limited when compared with the South East Asian case. African urbanization processes also need to be situated in relation to food imports and poor infrastructure which hamper already weak consumption linkages from urban areas. The features of African urbanization as well as a generally problematic smallholder environment point to the vital role of public investment in rural areas and the family farm sector where the brunt of Africa's poor still make a living.

The data and literature on urbanization also underscore the need for spatial contextualization, however. The positive effects of urban growth are likely to be felt close to large cities where the concentration of higher incomes and the nutrition transition affects dietary patterns and demand size as well as composition. Encouraging high value, intensive cropping in dynamic, well-connected, densely populated rural settings makes sense.

Policies for less dynamic rural areas need to be fine-tuned to often precarious local conditions. In the most marginal, densely populated areas, households trapped in Malthusian situations characterized by a poor resource base, high dependence on external inputs, poor accessibility, relatively rapid land fragmentation and limited skills and education are likely to be untouched by urbanization. The policy solutions in such regions must rest primarily on

basic measures to improve food security through raising yields of staple crops and drought resistant varieties, rather than meeting potential urban demand. Crops demanded by growing urban populations, for instance soybeans may have a secondary role to play also in these systems, however. In more sparsely populated marginal regions, farm size constraints may be relatively unimportant, while intensification of land use is prevented by lack of labour. In both types of marginal areas, raising productivity in staple crops, primarily to deal with household food insecurity should be the priority, however.

To the extent that generalizations can be made, the literature points to the existence of a variety of household based linkages that connect rural and urban areas through food transfers, and seasonal- and rural return migration. The consequences for food security and agriculture of these linkages differ by region and by wealth group. It is crucial that policies are adapted to address poverty and food insecurity in ways that can deal with this type of multi-locality.

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A short, popularized description of African urbanization and its implications for *urban* agriculture, which draws in part on the background paper, can be found in Andersson Djurfeldt, A., 2014. African urbanisation trends and implications for urban agriculture, in Magnusson, U. (ed.) *Urban and Peri-urban Agriculture for Food Security in Low-income Countries*: 6, SLU Global Report 2014:4, Swedish University of Agricultural Sciences.

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