UGANDA
Strategy Support Program

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI
Supported by the CGIAR

Rural-Urban Transformation in Uganda

Paul Mukwaya, Yazidhi Bamutaze*, Samuel Mugarura**, and Todd Benson****

** Department of Geography, Makerere University, Kampala, Uganda*

*** Strategic Analysis and Knowledge Support System node for Uganda (SAKSS-Uganda), Secretariat of the Plan for Modernisation of Agriculture, Ministry of Agriculture, Animal Industries and Fisheries, Kampala, Uganda*

**** International Food Policy Research Institute, Kampala, Uganda*

This paper was prepared for the joint IFPRI and University of Ghana conference on "Understanding Economic Transformation in Sub-Saharan Africa", held in Accra, Ghana, 10-11 May 2011.

July 2012

UGANDA
Strategy Support Program

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI
Supported by the CGIAR

WORKING PAPER | July 2012

Table of Contents

.

List of Tables

List of Figures

ABSTRACT

Uganda over the last twenty years has maintained high economic growth rates, increasing urbanization and shifting patterns in sectoral contribution to overall development. An increasing proportion of the wealth generated by Uganda's economy is shifting from being a product of agricultural activities to coming out of the service sector of the economy, in particular. However, this shift in the sources of wealth in the economy is not being accompanied by a shift in employment out of agriculture to the other sectors. Rather, what we find is that employment is actually increasing in agriculture, even as its contribution to Uganda's economy is declining. The increasing number of Ugandans engaged in agriculture is more a reflection of the inability of the more modern sectors of the economy to provide adequate employment for the many Ugandans entering the workforce every year.

Given the widely established importance that the concomitant processes of structural transformation of the economy and urbanization play in economic development, this paper on Uganda has two objectives. The first is to systematically document these transformations by looking at both demographic change (urbanization, agglomeration patterns, and migration) and welfare change (rural-urban welfare differences). The second goal is to explain these patterns of transformation, particularly in terms of macroeconomic and sectoral change in the economy. In our concluding section we reflect on recent development strategies of the government of Uganda with regard to how they address, or fail to address, issues of rural-urban transformation

I. INTRODUCTION

Although severely hindered by civil war and poor governance for the first half of the independence era, Uganda – along with Ghana - was one of the first economies in sub-Saharan Africa to adopt far-reaching market-oriented reforms. Like Ghana, Uganda has also managed to maintain impressive economic growth since the onset of reforms, averaging about 3.7 percent per annum since 1987 (in per capita terms), and not recording a single year of economic decline. But despite this strong economic performance, Uganda's economic transformation has been limited. The country remains a predominantly rural society. Only about 15 percent of Uganda's population – 4.7 million out of the 31.8 million Ugandans – lived in urban centers in 2010. Just under three-quarters of Uganda's working population continues to be engaged in agricultural production as their primary livelihood activity. While most agricultural production in Uganda is principally of a subsistence rather than a commercial orientation, agricultural products nevertheless continue to make up the majority of Uganda's exports. But, by some measures, the large agricultural sector is languishing. On the other hand, some aspects of the Ugandan economy are indeed transforming. The country is urbanizing. While the total population growth rate is estimated at 3.4 percent per year, in the last inter-censal period (1991-2002), the urban population growth rate was 5.4 percent per year. Urban-centered economic sectors are those experiencing the most rapid recent economic expansion, particularly in services.

Private investments in rural areas, public investments in rural infrastructure, rural-to-rural population movements, and other elements of rural change all occur to some degree independently of what is happening economically and demographically in Uganda's urban centers. Similarly, social and economic investments in urban areas generally are done with little regard to what their impact will be on rural economic activities or on rural households. Nonetheless, the economic and demographic dynamics in rural areas of Uganda will affect its urban centers and vice versa. From the broader perspective of national economic and social development, it is not very useful to treat the two areas of the country in isolation.

Given the widely established importance that the concomitant processes of structural transformation and urbanization play in economic development (Henderson and Wang 2005), this paper on Uganda has two objectives. The first is to systematically document in Section 2 these transformations in terms of changes by looking at both demographic change (urbanization, agglomeration patterns, and migration) and welfare change (rural-urban welfare differences). A second goal is to explain these patterns of transformation, particularly in terms of macroeconomic and sectoral change in the economy (Section 3). In our concluding section we reflect on recent development strategies with regard to how they address, or fail to address, issues of rural-urban transformation.

II. DEMOGRAPHIC AND ECONOMIC DYNAMICS OF URBAN AND RURAL AREAS OF UGANDA

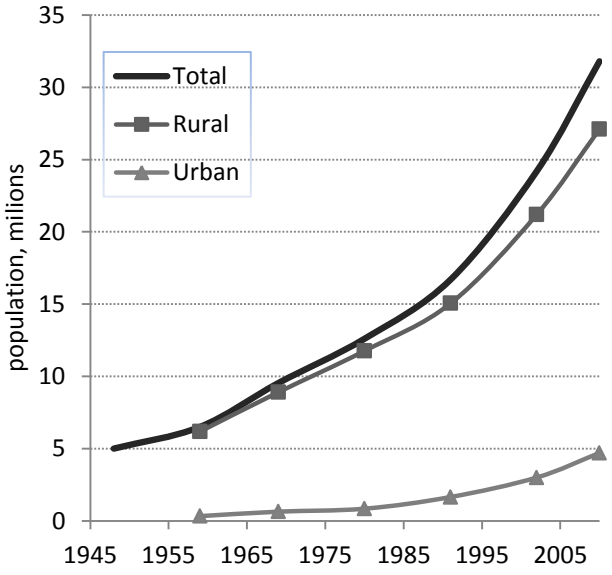
In this section of the paper, we review the changing demographics of rural and urban areas of Uganda, and the changing urban system of the country. Thereafter, we examine more closely a key factor in both the demographic and economic transformation of rural and urban areas of Uganda, migration. Finally, we examine what have been the results for Ugandan households of the demographic and economic transformations in rural and urban Uganda in terms of their welfare and consumption levels, food security, and nutritional status.

The urban system in Uganda has primarily colonial origins (Mukwaya et al. 2010). Prior to the establishment of the British colonial administration, the only population concentrations that could be characterized as urban were the royal capitals of the pre-colonial kingdoms of Buganda (whose capital is Kampala), Bunyoro, Ankole, Toro, and Busoga. The urban function that these pre-colonial centers played was primarily administrative rather than economic. However, given the strong economic imperative of colonial rule, in the decades following the establishment of the British protectorate in 1894, new urban centers formed as centers of commerce and administration. While in their initial years these urban centers primarily were occupied by British administrators and south Asian traders, and these non-African groups had privileged rights of occupancy in them, with the economic growth of the colonial period and the need for labor in the towns, the urban African population grew quickly. By independence in 1962, the total urban population in Uganda was about 450,000 persons or between 5 and 6 percent of Uganda's population.

Population growth

At 3.4 percent annually, Uganda today has one of the fastest growing populations in the world. Average total fertility rates were estimated in 2006 at 6.7 live births per woman, which represents only a slight decline over earlier estimates. Death rates have declined somewhat with improvements in child survival – infant mortality declined from 122 deaths per 1,000 live births in 1991 to 76 in 2006 – and generally improved access to health services. The result is the sharp increases in Uganda's population over the past 20 years shown in Figure 1. Uganda is clearly in a very early stage of a demographic transition to low birth rates and low death rates – death rates have dropped significantly without a corresponding fall in birth rates, resulting in a large increase in population.

Figure 1—Population growth in Uganda, 1948-2010



Sources: UBOS, 2010a; UBOS, 2006; Mukwaya et al., 2010.

While Uganda remains a predominantly rural country, annual growth rates for the urban population have been higher than that of the rural population. As shown in Figure 2, the urban population increased from being 6.7 percent of Uganda's population in 1980 to an estimated 14.8 percent in 2010. Population growth rates for urban areas over the past thirty years have been almost double those for rural areas, as shown in Table 1.

Figure 2—Change in urban proportion of population of Uganda, 1980 to 2010

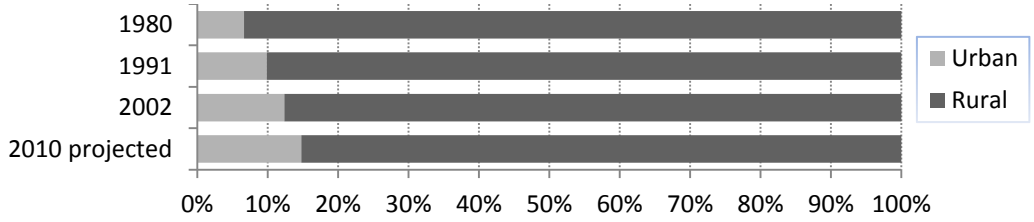


Table 1—Annual inter-censal population growth rates for Uganda by rural and urban, percent

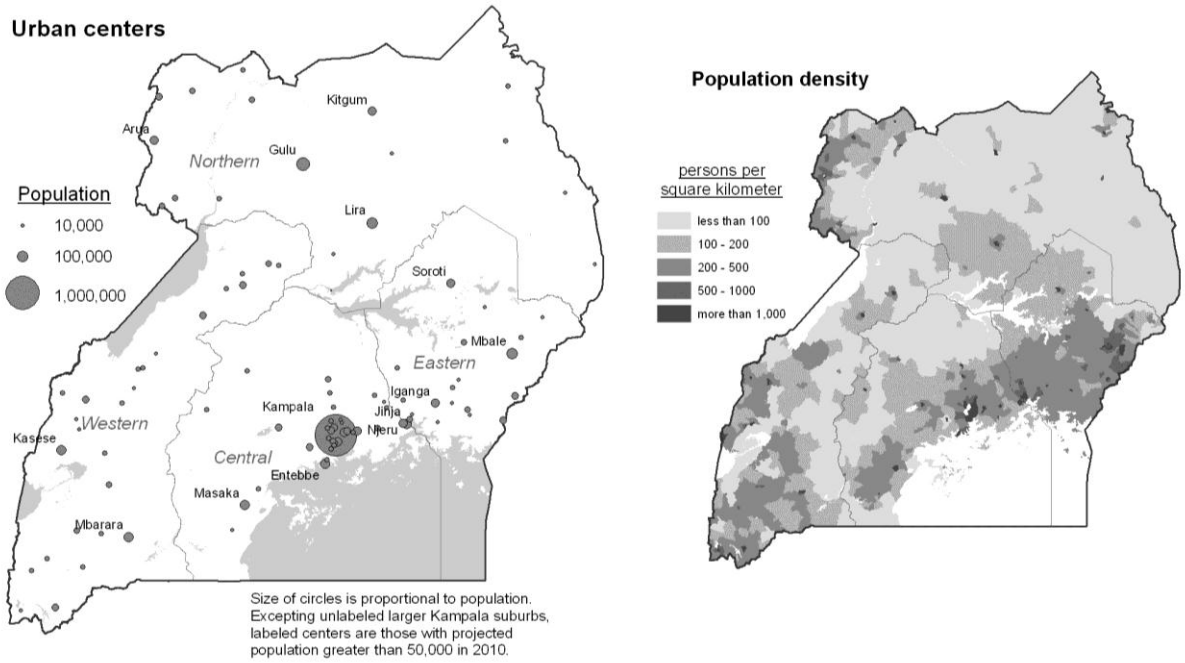
Year	National	Rural	Urban
1980-1991	2.6	2.2	6.1
1991-2002	3.4	3.1	5.4
2002-2010	3.4	3.1	5.6

Note: 2010 population is projected.
Note: 2002 Census definition of 'urban areas' used.

Spatial distribution of urban centers

The definition of urban areas in Uganda for statistical purposes has changed in the past. While earlier censuses treated any settlements with a population of more than 1,000 persons as urban areas, for the 2002 census, urban centers were those population centers that were legally gazetted with town, municipal, or city councils. There were 110 such urban councils in 2002, ranging in size from Nakeseke with a population 1,600 to Kampala with a population then of almost 1,190,000. Figure 3 maps the locations of those centers with a projected population in 2010 of more than 10,000 alongside a map of population density at the sub-county level from the 2002 census figures.

Figure 3—Urban centers of Uganda with 2010 projected population of greater than 10,000; population density at sub-county level (2002).



Two aspects of the spatial distribution of urban centers in Uganda are apparent in these maps. First, Kampala is the dominant urban center for the country. Kampala's primacy in economic as well as population terms is extreme, being the location for 80 percent of the country's industrial and service sector firms and generating more than half of the country's GDP (Giddings 2009). The 2010 estimated population of the municipality of Kampala alone, ignoring the broader metropolitan area, was just under 1.6 million. This represents 34 percent of the total urban population of Uganda. The second largest

town, Gulu, has an estimated population of 150,000, less than one-tenth the size of Kampala city. However, in 1992, it was estimated that Kampala made up about 45 percent of the urban population of Uganda, so the dominance of Kampala may be declining as some of the secondary cities expand their economic functions and grow.

Secondly, while there is some correlation between higher rural population density and increased numbers of urban centers in an area, the correlation is not as close as one might expect. The high potential agricultural zones of the slopes of Mount Elgon in the east near Mbale, the northern shores of Lake Victoria, and districts in the southwest and far northwest have high population densities. However, one sees that many of these areas have few and small urban centers. For example in far southwestern Uganda, the total population of Bushenyi, Kabale, Kanungu, Kisoro, and Rukungiri districts is estimated at 2,150,000 persons, of whom only 135,000 live in urban centers. While speculative, the level of economic development and specialization in economic activities may be such that many of the economic functions of urban centers are not required by the generally subsistence-oriented agricultural producing households in these areas, leading to only limited urban development. In contrast, the larger towns seen in relatively more sparsely settled northern Uganda reflect in large part the many rural households who, due to security concerns associated with the Lord's Resistance Army insurgency in this region, moved to these urban centers for safety. With signs of an enduring peace now in place, these northern cities may see a drop in population at the next census in 2012 as many of those who sought refuge in them will have returned to their rural homesteads.

Changes in urban agglomerations, 2002 to 2010

An agglomeration index, rather than using statistical definitions of 'urban areas', uses three indicators to estimate the level of urban concentration in a country or region – population density, the population size of large urban centers, and travel time to the nearest such urban center (Uchida and Nelson 2008). Having set threshold values for each of the three criteria – minimum population density, minimum population size that defines large cities, and maximum travel time to the cities – the population living in the agglomeration area spatially defined by these criteria can be estimated. The agglomeration index is simply the ratio of the population in the agglomeration area to the total population of the country or region of interest.

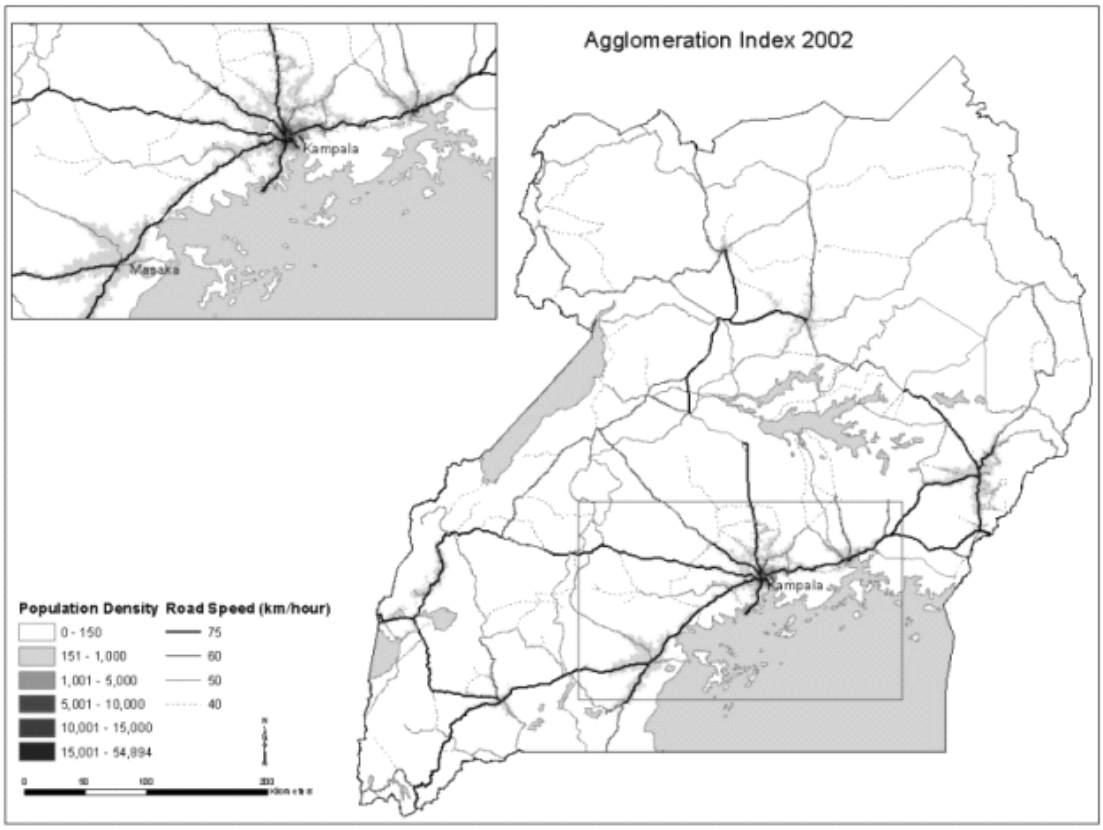
According to this index, Uganda's level of urbanization increased from 22.4 percent in 2002 to 29.3 percent in 2010 (Table 2). As can be seen in Figure 4 where the agglomeration areas of Uganda in 2002 and 2010 are mapped, agglomerations grew in the eastern, northern, and central regions by 11.5, 7.5, and 7.0 percent, respectively, between 2002 and 2010; while the western region had the least amount of urban growth over this period at 2.6 percent. In addition, over this period the population of five urban areas grew above the 50,000 population threshold used for this analysis: Kitgum, Arua, Soroti, Mukono (near Kampala), and Iganga (see Figure 3).

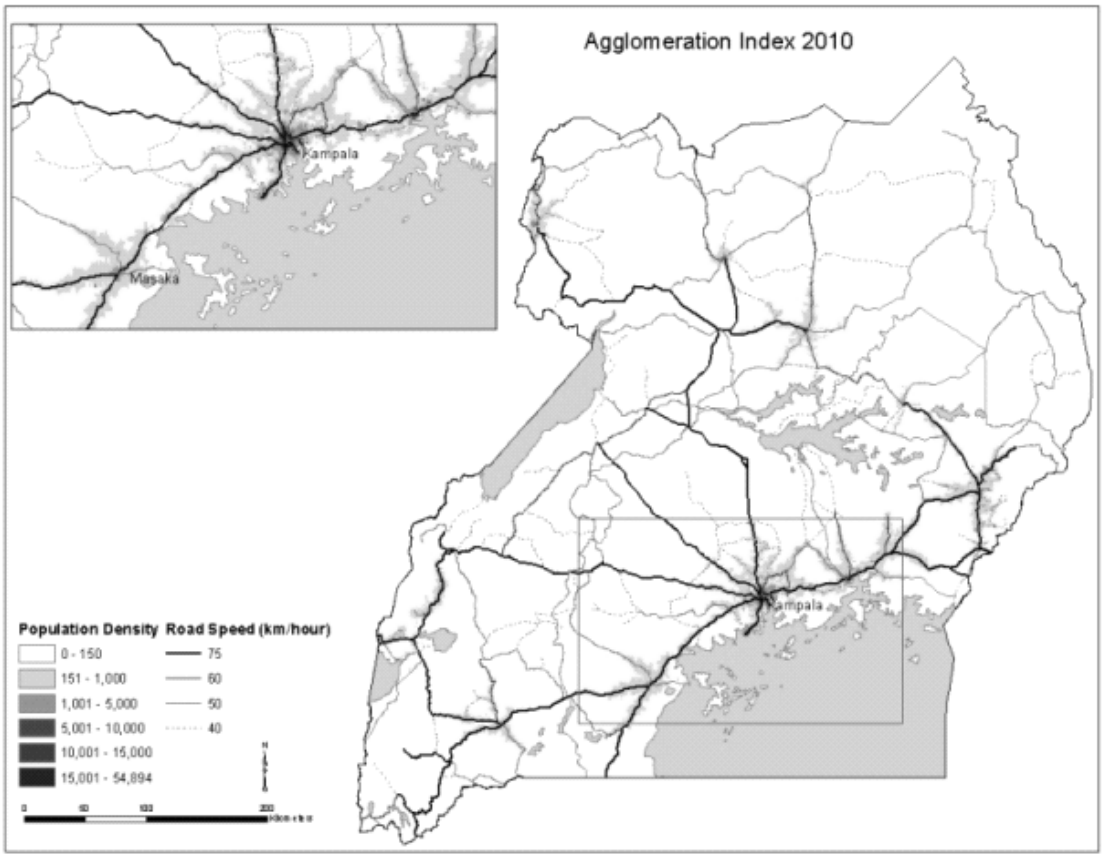
Table 2—Uganda agglomeration indices, national and regional, 2002 and 2010

	2002			2010			
	Total population	Population in agglomerations	Percent in agglomerations	Total population	Population in agglomerations	Percent in agglomerations	difference 2002-10, percent
Central	6,575,000	3,134,000	47.7	7,776,000	4,254,000	54.7	7.0
Eastern	6,205,000	1,352,000	21.8	7,693,000	2,557,000	33.2	11.5
Northern	5,200,000	390,000	7.5	6,652,000	998,000	15.0	7.5
Western	6,298,000	572,000	9.1	7,498,000	874,000	11.7	2.6
UGANDA	**24,278,000**	**5,448,000**	**22.4**	**29,619,000**	**8,683,000**	**29.3**	**6.9**

Note: 2002 data is from the Uganda Population and Housing Census. 2010 population is projected.

Figure 4—Urban agglomerations of Uganda, 2002 and 2010





The government of Uganda recognizes the importance of an improved, efficient road infrastructure system for rural economic development and poverty reduction. Over the last 20 years, deliberate efforts have been taken by the government and its development partners to improve the roads of Uganda, particularly those linking productive rural areas to urban markets. A spatial analysis of general access to urban areas based on population and road infrastructure reveals interesting trends in Uganda over the last decade (Figure 5 and Table).

Figure 5—Travel time to cities at least 50,000 people, 2002 and 2010

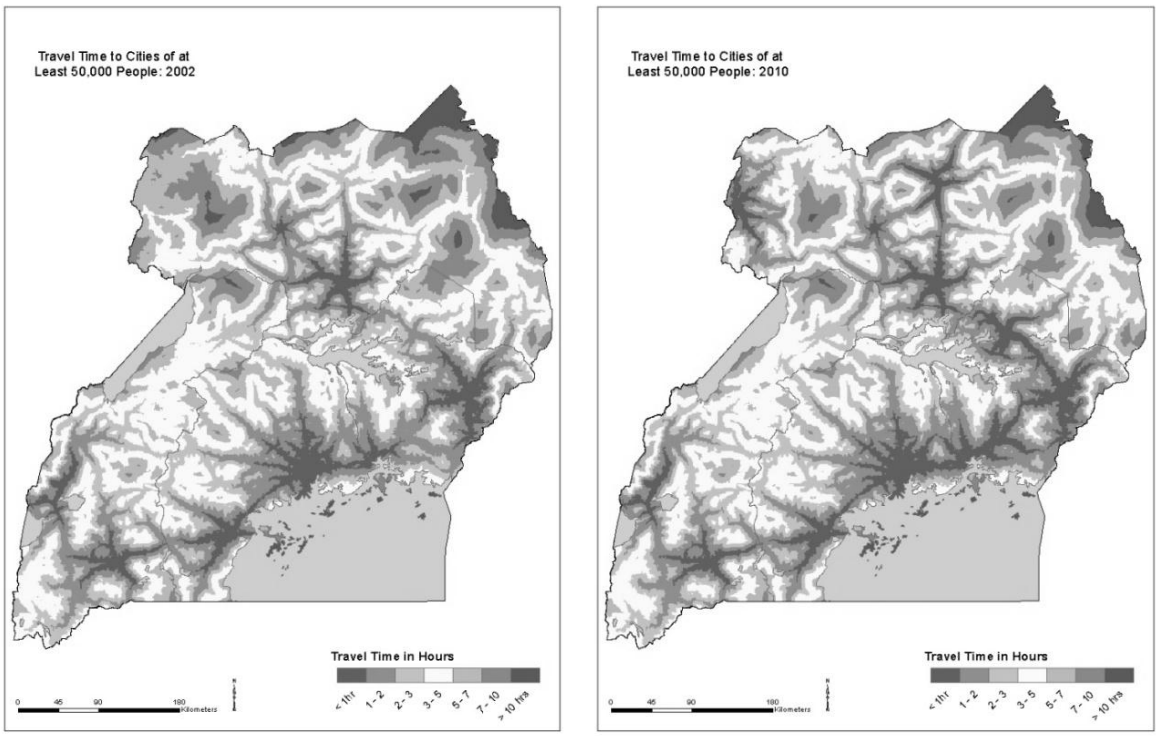


Table 3–Travel time to an urban center of >50,000 people, percent of population, 2002 and 2010

	<1 hr			1-3 hrs			3-5 hrs			5-10 hrs			>10 hrs		
	2002	2010	diff.	2002	2010	diff.	2002	2010	diff.	2002	2010	diff.	2002	2010	diff.
Central	41.1	44.9	3.8	44.7	41.9	-2.8	11.0	10.9	-0.1	2.5	1.4	-1.1	0.7	0.8	0.1
Eastern	20.1	28.7	8.6	60.3	57.3	-3.0	15.0	10.9	-4.1	4.2	2.8	-1.4	0.4	0.4	0.0
Northern	6.4	11.9	5.5	26.2	43.3	17.1	24.0	28.8	4.8	42.5	15.0	-27.5	1.0	1.0	0.0
Western	4.2	4.9	0.7	51.2	50.5	-0.7	37.3	37.4	0.1	7.2	7.2	0.0	-	-	-
UGANDA	18.7	23.2	4.5	46.4	48.4	2.0	21.6	21.6	0.0	12.7	6.3	-6.4	0.5	0.6	0.1

Particularly in the Eastern and Northern regions, but with positive changes seen in all regions of the country, road infrastructure improved between 2002 and 2010. Overall, 4.4 percent more people over this period found themselves within one hour travel time of an urban center with a minimum population of 50,000. Improved road infrastructure is an important component in the growth of the agglomeration areas to the east of Kampala shown in the 2010 map in Figure 4. Given improved road infrastructure, travel time to markets decreased, suggesting that more farmers are now able to bring their produce to larger markets with lower transaction costs. However, roads in remote rural areas in all regions of the country and the connectivity of the populations living on the islands of Lake Victoria have not seen much improvement over the time period, while the population continues to increase in these areas. Thus the proportion of the population facing a travel time of greater than 10 hours to a major city increased by a minimal percentage between 2002 and 2010.

Migration

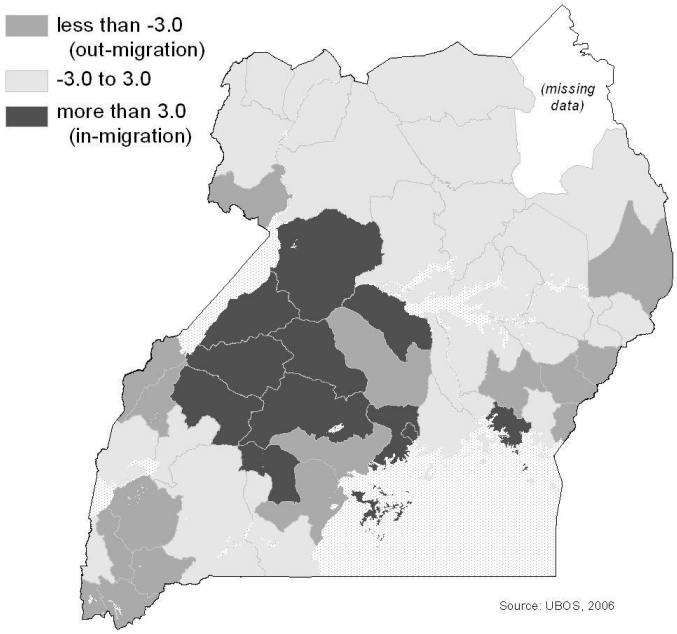
Migration has been an integral part of Uganda's history. Conflicts between pre-colonial states and during the advent of colonial rule resulted in relatively significant population movements, particularly in western Uganda. In the colonial period,

laborers moved from both the northwest and southwest to the sugarcane plantations in central and eastern Uganda (Lyons, 1996). Other migrants, particularly from the southwest, settled as laborers on private coffee farms, especially in Masaka district (Rutabajuka 1989). The colonial government encouraged some rural-to-rural migration – notably a program of resettlement of people from the densely populated southwest corner of Uganda into the Bunyoro area of west-central Uganda. Moreover, the industrialization processes in urban centers and limited employment opportunities in rural settings attracted and continues to attract occasional and seasonal laborers such as brick layers, carpenters, builders, porters, who migrate mainly to Kampala for a specific period of time after which they return to their rural areas (Mulumba and Olema 2009). Since independence, the forms of migration in Uganda have varied within the often rapidly changing social and economic context, fuelled by a somewhat unstable political foundation, at least until the mid-1990s. Indeed, during the periods of political instability in the late 1970s and early 1980s, Uganda experienced significant, if temporary, reverse migration from major towns (Potts, 1997).

Analysis of the 2002/03 Uganda National Household Survey shows that half of Uganda's heads of household had migrated out of their location of birth, and 44 percent of heads of household living in rural areas had migrated at least once (World Bank 2006). However, most of these migrations had taken place long in the past. Only 10 percent of household heads had migrated in the previous five years.

The 2002 census captured information on recent migrants – a person born in and whose previous residence was in Uganda, and who had been resident in their current district for less than five years. 1.3 million persons, or 5.4 percent of the population, fit this category. As information was collected on the district of origin for these individuals, net migration rates for each district could be computed as the gain or loss in a district's population arising out of recent internal migration expressed as a percentage of the population of the district. Figure 6 shows these results, distinguishing between areas of strong out-migration and strong in-migration. High rural population density areas in southwestern and southeastern Uganda, as well as parts of Central region are noteworthy as areas of out-migration. The highest rates of in-migration are found in Kalangala district made up of islands in Lake Victoria, followed by Kampala and adjoining peri-urban Wakiso district. However, a large zone of in-migration is found in the less densely populated and primarily rural districts of western Central region and northern and central Western region.

Figure 6—Net migration rate by district, 2002 census, percent



Whereas the general perception is that the dominant pattern is one of rural to urban migration, whether one-way or seasonally cyclical, the analysis presented in Table 3 shows that this is not necessarily the case. Migration to urban areas is somewhat exceptional in the Northern and Western regions where moves to rural areas in the same region are the most common. Most of the migrants to Kampala come from the surrounding Central region. Most migrants migrate within their region of origin. Nevertheless, the relative neglect of rural areas in terms of social and economic development has resulted in

a continuing flow of migrants towards urban areas – 49.5 percent of the migration events of those surveyed is shown to be to urban areas, whether from rural zones or other urban areas.

Table 3—Migration by region of origin and destination between 1998 and 2002, percent

	Destination								
	Central		Eastern		Northern		Western		All
Origin	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	
Column percentages									
Central	73.9	79.6	13.9	19.6	13.1	14.2	14.8	20.2	55.6
Eastern	7.4	6.8	76.3	76.9	7.3	9.9	1.3	1.7	13.9
Northern	2.8	1.6	8.3	1.6	79.6	75.9	3.0	7.7	7.6
Western	16.0	12.0	1.4	1.9	0.0	0.0	80.8	70.3	23.0
UGANDA	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Row percentages									
Central	34.7	55.3	1.3	2.1	1.2	0.4	3.8	1.2	100.0
Eastern	13.9	18.9	28.3	33.5	2.6	1.0	1.4	0.4	100.0
Northern	9.6	8.0	5.7	1.3	51.5	14.8	5.8	3.4	100.0
Western	18.1	20.2	0.3	0.5	21.3	6.4	50.6	10.3	100.0
UGANDA	26.1	38.6	5.1	6.0	4.9	1.5	14.4	3.4	100.0

Source: World Bank, 2006. Analysis of 2002/03 Uganda National Household Survey.
Migration refers to most recent move from another region by the household head between 1998 and 2002. Moves abroad and moves within district are excluded. The survey does not capture information from internally displaced persons.

With specific attention to migration to Kampala through time, Table 4 shows that Kampala has historically and is continuing to accept significant numbers of migrants. The proportion of residents who were born in the city is a bit less than half, with this proportion remaining quite constant over the past 30 years. However, the largest group of migrants originated from the Buganda cultural area of central Uganda, of which Kampala is the traditional center.

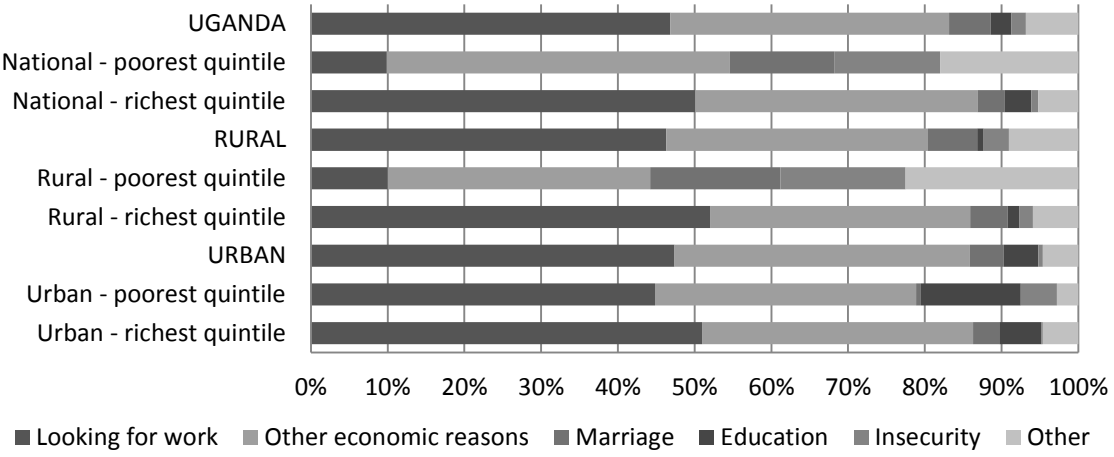
Table 4—Population of Kampala by migration history, percent

				Outside Uganda		
Year	Born in Kampala	From Buganda	Outside Buganda	African	Non-African	Total population
1969	22.4	48.2	13.6	15.7	0.0	330,700
1980	45.4	39.3	14.7	0.5	0.1	458,500
1991	40.8	32.9	23.6	1.8	0.8	774,200
2002	46.4	27.1	23.6	1.4	1.3	1,208,500

Source: Nyakaana, et al. (2007)

The major reasons given for migration by household heads are depicted in Figure 7. Economic motivations – whether looking for work or undefined 'other economic reasons' – account for the migration decisions for most migrants. The principal exception in this regard is heads of the poorest rural households, for whom marriage and insecurity considerations are almost as important as economic motivations. That this analysis found the principal motivations for the migration decisions of household heads in the richest quintile are economic implies that migration is an important element in the pathways from poverty pursued by many Ugandan households. For all migrant households, those in the richest quintile were more likely than those in the poorest quintile to report a recent migration. However, what is not clear is whether the decision to migrate was made because a household was already relatively well-off and could manage the risks associated with the move, or whether an improvement in welfare status resulted from the move.

Figure 7—Reasons for migrating, 1998-2002



Source: World Bank, 2006. Analysis of 2002/03 Uganda National Household Survey.
Migration refers to most recent move from another region by the household head between 1998 and 2002. Moves abroad and moves within district are excluded. The survey does not capture information from internally displaced

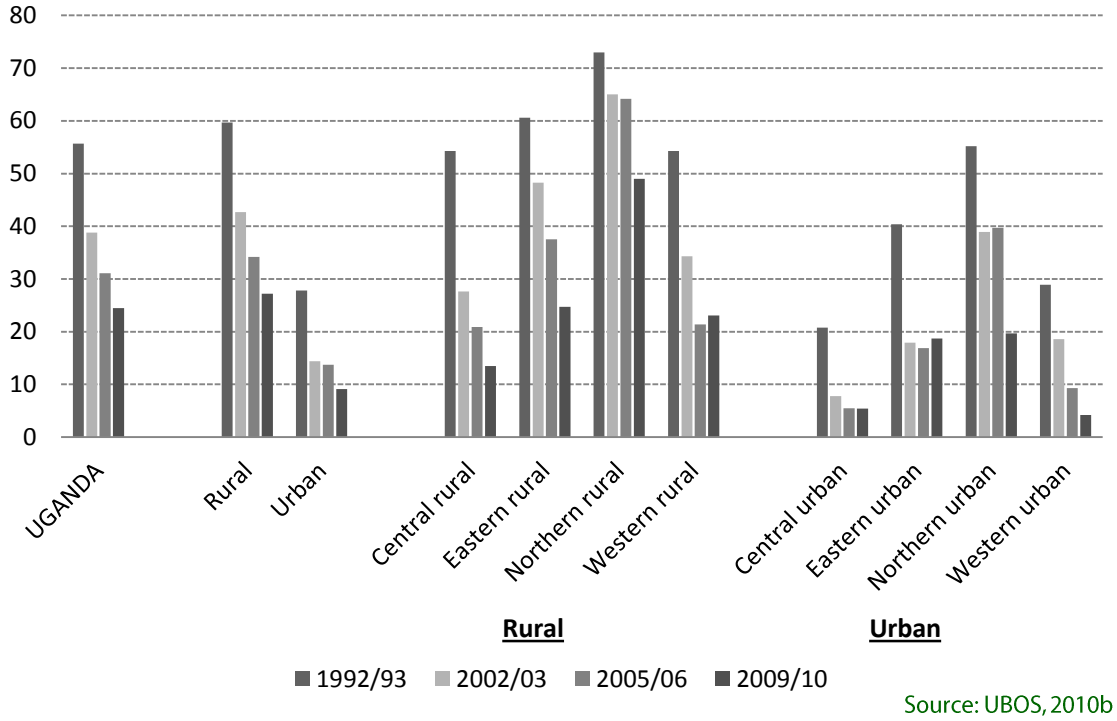
Whereas seeking improved welfare is implicated as the major motivation for rural-urban migration, a closer analysis by Herrin et al. (2008) of the same data set used for Table 3 and Figure 7 highlights the complexity of decisions to migrate in Uganda and also casts some doubt on whether improvements in welfare are realized consistently by migrants in Uganda. Their analysis found that those household heads that moved in search of employment achieved less wealth accumulation than non-migrants and that those who moved further, i.e., to a different region, generally realized even less subsequent wealth accumulation. Moreover, male headed households were found to be less likely to move than those headed by women, which the researchers suggest reflect differences between the sexes in customary property ownership rights. However, when they only considered migration in search of employment, male-headed households are more likely to move than those headed by women.

Welfare trends in rural and urban Uganda

Rural Ugandans are more likely to be poor than those who live in urban centers. This is a common pattern found in most, if not all, countries worldwide. The fact that Uganda's agriculture employs around 70 percent of all workers in Uganda while only generating about 20 percent of the economic output of the country would suggest that those engaged in agricultural pursuits, who are primarily in rural areas, will have a lower standard of living than those working in other sectors of the economy. This is what we find. In this sub-section, we examine household welfare in terms of consumption, food security, and nutritional status to gain further insights on the economic opportunities and challenges facing households in rural and urban Uganda.

Figure 8 presents a graph of trends in poverty headcounts at four different points in time over the past 20 years, disaggregated by rural and urban and by rural and urban within regions. Uganda has made strong and regular progress in reducing poverty. Nationally over this period the poverty headcount has decreased at a rate of 1.8 percentage points per year. This annual rate of decline has been maintained relatively consistently over the entire period. Disaggregating the poverty reduction trends by rural and urban, the annual rate of reduction in the poverty headcount for rural households has been much higher than that of urban households, but the rural population started from a much higher level of poverty. On a percentage basis – that is, by what percent of the poverty headcount at the start of the year the headcount fell on average each year – the poverty headcount for urban Uganda fell on average by just under 4 percent annually, while for rural Uganda it fell by 3.3 percent. As such, strong improvements in household welfare over time are seen in both areas of the country. However, the mechanisms resulting in urban poverty reduction apparently operate somewhat more strongly than those operating in rural Uganda. The patterns across the regions are somewhat more complex. Rural Central region has seen the most dramatic reductions in poverty, while rural Northern region has lagged.

Figure 8—Rural and urban poverty headcount trends, national and regional, 1992-1993 to 2009-2010, percent



Source: UBOS, 2010b

The last poverty analysis was done on the 2009/10 Uganda National Household Survey (UBOS 2010b). In Table 5 is presented the results of the analysis done on the sources of poverty in Uganda by rural/urban and region. Three poverty measures are examined – the poverty headcount (p0), the depth of poverty measure (p1), and the severity of poverty measure (p2). The first measure, p0, simply indicates what proportion of the population has a level of consumption below the poverty line. The p1 measure gives an indication of how far below the poverty line, on average, poor people in Uganda are, while the p2 measure provides some indication of just how poor the poorest are. The decomposition of these measures gives some insights on where the poor and the poorest of those poor are found.

What we see in the decompositions in Table 5 is that 94.4 percent of Uganda's poor are found in rural areas and that the rural poor are somewhat poorer than the urban poor. This can be judged from the following pattern: While the rural poor contribute 94.4 percent of the value of the national p0 (poverty headcount) measure, they contribute just under 96 percent of the p1 measure, and just under 97 percent of the p2 measure, due to the overall lower consumption levels of the rural poor households relative to urban poor households in Uganda. The particular population group that drives this pattern is rural households in the Northern region. When looking at the patterns of decomposition across the three poverty measures at the regional level by rural and urban, it is only Northern rural that shows increases in the value with higher poverty measures. The poorest of the poor in Uganda are found in rural areas of northern Uganda. Any efforts to reduce poverty in the country must prioritize this population.

Table 5—Decomposition of poverty measures by rural/urban and region

	Population share, %	Poverty headcount (p0), %	Depth of poverty (p1)	Severity of poverty (p2)	Contribu-tion to national p0, %	Contribu-tion to national p1, %	Contribu-tion to national p2, %
UGANDA	100.0	24.5	0.068	0.028	100.0	100.0	100.0
Rural	85.0	27.2	0.076	0.031	94.4	95.9	96.8
Urban	15.0	9.1	0.018	0.006	5.6	4.1	3.2
Central rural	17.3	13.5	0.032	0.011	9.6	8.2	6.8
Eastern rural	27.3	24.7	0.060	0.021	28.0	24.1	21.2
Northern rural	18.1	49.0	0.166	0.078	36.0	44.5	51.3
Western rural	22.3	23.1	0.058	0.022	21.0	19.1	17.4
Central urban	9.1	5.4	0.010	0.003	2.0	1.3	0.8
Eastern urban	2.3	18.7	0.032	0.010	1.7	1.1	0.8
Northern urban	1.9	19.7	0.051	0.019	1.5	1.5	1.3
Western urban	1.7	4.2	0.010	0.004	0.3	0.3	0.3

Source: UBOS, 2010b

The poverty analyses of the 2005/06 and the 2009/10 UNHSs also generated poverty measures by major source of income. These results are presented in Table 6. What we see is a decline in poverty prevalence in recent years for households whose main source of income is from agriculture. However, for the three main principal sources of income for Ugandan households, it is those households that engage in agriculture that are the poorest. This is confirmed by the depth and severity of poverty measures – poor agricultural households are shown to be poorer than households below the poverty line who obtain their income from wage employment or non-agricultural enterprises. Agriculture, as the principal source of income for rural households in Uganda, is not as effective in boosting the welfare levels those engaged in the sector above the poverty line as does engagement in wage employment or non-agricultural enterprises, types of work generally pursued in urban areas.

Table 6—Poverty measures by main source of income, 2005/06 and 2009/10

	Poverty headcount (p0), %		Depth of poverty (p1)		Severity of poverty (p2)	
	2005/06	2009/10	2005/06	2009/10	2005/06	2009/10
Agriculture	34.7	28.6	0.094	0.077	0.037	0.030
Wage employment	23.3	17.1	0.064	0.043	0.025	0.017
Non-agricultural enterprise	20.4	22.1	0.053	0.066	0.021	0.031

Source: UBOS, 2010b

With regards to inequality between households in their consumption, commonly one finds that urban areas have higher levels of inequality than rural zones. Households with extremely high levels of consumption tend to be working within the most dynamic areas of an economy in manufacturing or services, which generally are located in urban areas. At the same time, urban areas also contain significant numbers of poor people, if not necessarily as poor as the rural poor. The degree of this contrast between the extremely wealthy in the cities and the poor is what drives most measures of national consumption inequality. As shown in Table 7, this is what we find for Uganda, also. Within rural areas, Central region has the highest level of inequality. This can be partly explained by the economic effects of Kampala on its surrounding districts, providing a significantly larger set of economic activities in which rural households might engage leading to increased differentiation in consumption levels between households. We also see an increase in inequality in Central rural over the last inter-survey period, a process which also may find be linked to urban expansion in the region.

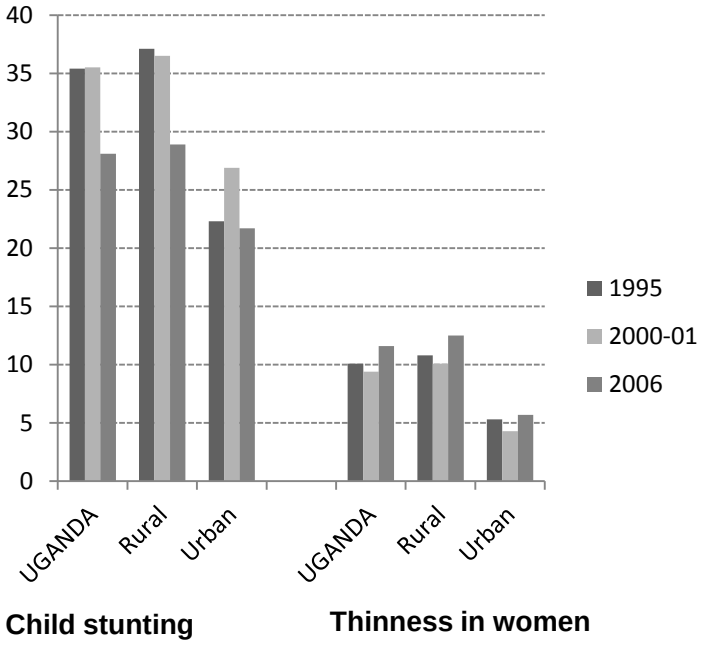
Table 7—Consumption inequality, Gini coefficients by rural/urban and region, 2002-2003 to 2009-2010

	UGANDA	Rural	Urban	Central rural	Eastern rural	Northern rural	Western rural	Central urban	Eastern urban	Northern urban	Western urban
2002/03	0.428	0.363	0.483	0.372	0.338	0.326	0.333	0.480	0.403	0.434	0.448
2005/06	0.408	0.363	0.432	0.376	0.326	0.300	0.319	0.392	0.441	0.381	0.421
2009/10	0.426	0.375	0.447	0.414	0.304	0.347	0.352	0.427	0.393	0.372	0.443

Source: UBOS, 2010b

We now consider the food security and nutritional status of Ugandans as an indicator of their well-being. The mean caloric intake per person per day increased from 2,066 kcal in 2002/03 to 2,190 kcal in 2005/06 (UBOS 2010a). In spite of the high agro-ecological potential for food production in Uganda, this average intake is still less than the WHO recommended daily intake of 2,300 per adult per day. Overall 62.1 percent of households were unable to meet their recommended caloric intake in 2005/06. Calorie-deficient households are more prevalent in urban areas, even though the incidence of consumption poverty is generally higher in rural areas – 72.7 percent of urban households are calorie deficient versus 60.0 percent of rural households. Nevertheless, the majority of food-insecure persons reside in rural areas (UBOS 2010a).

Figure 9—Trends in stunting in children under three years of age and thinness in women aged 15 to 49 years, percent



Source: UBOS & Macro, 2007

The determinants of child nutritional status results from both the quantity and quality of the child's diet, access to health care, access to safe water and sanitation, and the quality of nutritional and health care that the child receives. Given the range of factors that must be in place for a child to grow and thrive, the nutritional status of child is not necessarily directly linked to the economic well-being of the household of which he or she is a part. Figure 9 present trends in the prevalence of children under three years of age who are stunted in their growth – low height-for-age, an indicator of chronic malnutrition. What we find is that child stunting rates remain very high in Uganda, in spite of the significant reduction in poverty in the country over the past two decades. Rural children consistently tend to have a poorer nutritional status than urban children. This will in part reflect poorer access to health care and education for caregivers on proper nutritional care for young children in rural areas, but no doubt also will reflect deficiencies in the quality of the food rural children receive.

Figure 9 also shows trends in maternal nutritional status through the prevalence of women of childbearing age who are very thin with a low Body Mass Index of less than 18.5 kg/m^2. Whether due to poor quality or insufficient diets, excessive workloads, poor knowledge on and access to health care, or too frequent or too early pregnancies, rural women are more likely to be malnourished and thin than their urban peers. At the other end of the maternal nutritional spectrum, 12.2 percent of urban women in this age group were found to be obese (BMI ≥ 30.0) in 2006. Only 2.4 percent of rural women fell into this category.

In general, the welfare of rural households and individuals in Uganda is significantly worse off than that of their urban counterparts. The economic reasons for this are complex, but certainly include the lagging agricultural sector and the fact that significant economic and demographic transformation in rural Uganda, while it is getting underway, has still not occurred to such an extent that there is any degree of convergence in the economic conditions of rural households with that of their fellow citizens living in the urban centers of Uganda.

III. ECONOMIC ELEMENTS OF RURAL-URBAN TRANSFORMATION IN UGANDA

In this section, the focus is on the economic context within which rural and urban areas of Uganda are changing. The broader macroeconomic context is considered first, followed by a more detailed examination of the performance of the agricultural sector of the economy and the importance of non-farm employment for Ugandan households.

Uganda's macro-economic performance

Over the last 25 years, Uganda has undergone significant economic transformations. Real economic growth averaged approximately 7.8 percent between 2001 and 2009 (Table 8). A stable macroeconomic environment, strong export growth, high foreign direct investment, and increased private investment contributed to this growth.

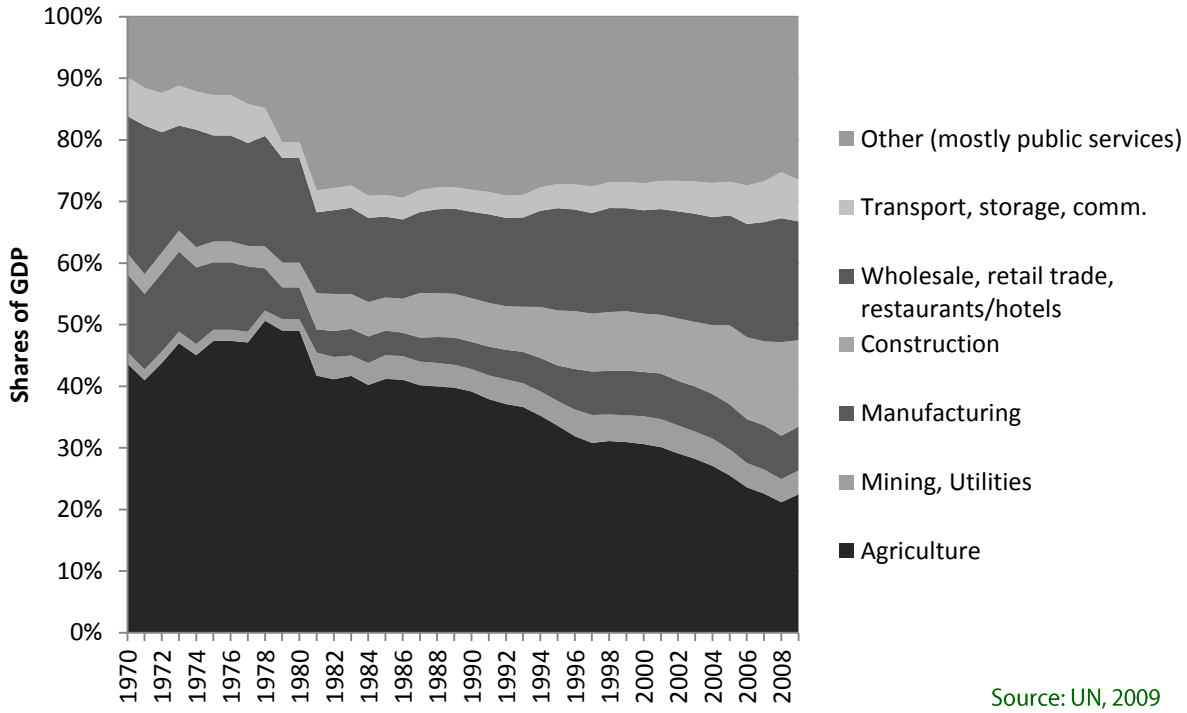
Table 8: Summary of Gross Domestic Product (GDP) at market prices, 2000 – 2009

	GDP				Per capita GDP	
Year	Current (UShs billion)	Current (US dollars million)	Constant (2002 UShs billion)	Growth rate (2002 UShs)	Constant (2002 UShs)	Growth rate (2002 UShs)
2000	10,030	*n/a*	10,297	-	448,860	-
2001	11,132	*n/a*	11,199	8.8	472,816	5.3
2002	11,990	*n/a*	11,990	7.1	490,190	3.7
2003	13,843	*n/a*	12,728	6.2	503,980	2.8
2004	15,271	*n/a*	13,467	5.8	516,420	2.5
2005	17,878	$ 9,223	14,814	10.0	550,193	6.5
2006	20,166	$ 9,957	15,859	7.0	570,410	3.7
2007	23,351	$ 11,916	17,138	8.1	596,979	4.7
2008	28,176	$ 14,440	18,924	10.4	638,443	6.9
2009	34,166	$ 15,736	19,918	5.2	650,773	1.9

Source: UBOS, 2010a

The high performance of the economy since the beginning of the 1990s has been accompanied by structural change, with a steadily declining share of agriculture and increasing shares of industry and services. The annual sectoral contribution to GDP over the past 30 years is shown in Figure 10, while average annual growth rates across sectors for the last two decades are shown in Table 9. Although agriculture remains the largest employer of the Ugandan population and is an important source of new exports (non-traditional exports) such as, fish, flowers and other horticultural products, its contribution to Uganda economic growth and transformation in real terms is declining, now providing less than 20 percent of the nation's economic output as measured by GDP.

Figure 10—Sectoral share of GDP, 1970-2009



Source: UN, 2009

Table 9—Average annual growth by sector, 1990s and 2000s, percent

	Agriculture	Mining, Utilities	Manufacturing	Construction
Share of GDP, 1990	40.7	3.8	4.6	7.3
Growth, 1990-99	4.3	10.9	12.4	10.4
Growth, 2000-09	3.2	5.9	6.3	10.8
	Wholesale, retail trade, restaurants	**Transport, storage, communications**	**Other (mostly government)**	**Total GDP**
Share of GDP, 1990	14.6	3.7	29.2	100.0
Growth, 1990-99	9.1	9.1	6.6	7.2
Growth, 2000-09	8.1	11.8	6.4	6.8

Source: UN 2009

The construction sub-sector and services sector compensated for the lower growth of agriculture in fueling continued growth of the Ugandan economy. Expansion in construction and services is attributed to foreign direct investment, particularly in communications services, and remittances from Ugandans overseas. However, much of this growth has been directed to meet domestic demand rather than exports. In consequence, in spite of the economic growth registered, Uganda's annual balance of payment deficit has hovered around 10 percent of GDP over the past several years. Moreover, the growth in services has had muted economic implications for rural households, since the services sector is largely concentrated in urban areas.

Building on the strong economic growth over the past 20 years, Uganda's economy can be expected to experience even sharper changes in the coming 30 years with the coming into production of oil reserves found in the Lake Albert basin of western Uganda. At peak production starting around 2017, oil output will range from 120,000 to 140,000 barrels per day, with a production period spanning 30 years. During the years of peak production, it is estimated that the Ugandan government will earn revenue equal to between 10 and 15 percent of GDP. This revenue stream has the potential to provide a significant positive shock to the Ugandan economy and enable the government of Uganda to be better able to make public investments to more effectively address its development objectives. However, careful management of these oil revenues will be required in order to avoid a sudden influx of foreign exchange into the economy and a subsequent loss of competitiveness for Ugandan farmers and the rural economy as a whole (Matovu et al. 2011). Regardless of how the revenues are

used, the structure and size of the Ugandan economy and the nature and drivers of urbanization processes that we will observe in ten years are likely to be significantly different from what we see today.

The agricultural sector

In spite of its declining share of GDP, agriculture continues to be an important economic sector for Uganda, providing 73 percent of employment by industry. Since about 85 percent of the population lives in rural areas where agriculture is the main source of their livelihood, the sector has been recognized as central to the country's efforts to reduce poverty. According to UBOS (2007), 4.2 million households or 79 percent of households in the country are engaged in agriculture. Northern Uganda has seen a reduction in the numbers of agricultural households because of prolonged insecurity, but many of these may now be returning to the land with the establishment of peace in the region since 2008. The Central region has the most non-agricultural households because of its high urban population engaged in other sectors of the economy.

Uganda's agriculture is characterized by smallholder farming with the hand hoe as the major tool of production. Ugandan farmers produce a diversified set of commodities, most of which are for own or local consumption and not extensively traded. The food crops smallholders produce include cooking banana, maize, finger millet, sorghum, cassava, sweet potato, Irish potato, and rice as staples, with a range of pulses, fruits, and vegetables as non-staples. However, yields are uniformly low across all of these commodities. The Ministry of Agriculture estimates average yields in recent years to be between 1.5 and 1.8 metric tonnes per hectare for maize, between 5.5 and 6.0 mt/ha for cooking banana, and less than 1.0 mt/ha for most pulses. The yield gap between average farm yields and research yields indicates the immense potential for improvements in crop productivity – on the order of sevenfold increases for maize, fivefold for beans, and threefold for banana. Small farmers produce most of the coffee in Uganda, the country's principal export, as well as cotton, tobacco, and some newer cash crops, such as cocoa. Uganda has one of the larger national livestock herds in Africa – cattle, goats, and poultry, most notably. Most of these animals are raised under extensive management using unimproved animal breeds. Most households engaged in agriculture, whether crop farmers, livestock keepers, or engaged in mixed farming, have small landholdings upon which they work using household labor, basic tools, and few modern inputs. There are few large-scale agricultural enterprises – in 2009, UBOS enumerated only 65 agri-businesses nationally with monthly turnover greater than 10 million shillings (approximately US $5,000), accounting for less than one percent of businesses in this size category nationally (UBOS 2010a).

As noted, in spite of its relatively poor performance in recent decades, the agricultural sector is important for Uganda's international trade. Agricultural products accounted for 52 percent of the value of total exports between 2005 and 2008. Coffee remains the most important export. However, growth in other agricultural exports, including tea, tobacco, and beans, has been significant in recent years. While the value of coffee exports has increased by about 50 percent in the past seven years, the value of non-coffee agricultural exports has increased by about 120 percent. Uganda is also an important source of food for regional markets, regularly supplying maize and beans to the Kenyan market, in particular.

While Uganda has traditionally been seen as a country with unutilized arable land and increases in crop production over the past several decades have principally been obtained through expansion of cropped area rather than improved yields on existing cropped land, land pressures are mounting. The size of the average agricultural household land holding had declined to 0.9 hectares by 2005. In most of the country, access to land generally is obtained through customary means whereby long-term use rights in land are granted by traditional local authorities. In parts of central and eastern Uganda long-term tenancy arrangements were put in place by large landholders during the colonial period. Some leasehold and freehold titled land tenure arrangements are also used. Nonetheless, access to land governed through customary mechanisms is the dominant means of land acquisition by Ugandan farmers. However, Uganda's rapid increase in population and parallel increase in the numbers of agricultural households has increased land pressure, reducing the size of landholdings per farming household and challenging their security of tenure under customary land administration. The size of the land and the security of use-rights of a household influence their investments on the land. Crops of a perennial nature and long-term land management investments can only be done when there is security of tenure. This trend underpins the need in Uganda for a reform of its land tenure systems and general land use policies to promote intensive farming methods if sustainable higher agricultural productivity levels are to be achieved.

Most Ugandan farmers do not have reliable access to knowledge on improved farming methods. The 2005/06 UNHS found that only 7.3 percent of farmers indicated having been visited by an agricultural extension agent during the previous 12 months. The 2002 UNHS showed that the use of extension services is more common among richer households with double

the number of farming households in the richest quintile that in the poorest quintile reported having interacted with agricultural extension agents. However, generally those farmers with access to extension services do benefit. An early assessment of the National Agricultural Advisory Services (NAADS), the principal agricultural extension program in Uganda, showed that the program increased the value of agricultural production and farmers' incomes in the districts where the program was initially rolled out, relative to other districts in Uganda (Benin, et al. 2007). The value of crop production per hectare was about 27 percent higher and per capita income 41 percent higher in the sub-counties initially implementing the NAADS programme (although one should recognize that the program was not begun in a random manner across the country). However, the roll-out of the NAADS program throughout Uganda has faced considerable challenges, principally of an administrative and institutional nature, in addressing the needs of its intended beneficiaries. If these challenges can be overcome, more and wider benefits for overall agricultural productivity and smallholder incomes should be realized.

According to the 2005/06 UNHS, less than 10 percent of the parcels cropped by farmers in Uganda received some kind of improved inputs – improved seed, organic or inorganic fertilizer, or pesticides. The use of non-labor inputs on parcels by region is shown in Table 10. The poor economics of input use on most crops – high input costs, many of which are imported, and low prices for the crop outputs – is the principal reason for low uptake. Similarly, few farming households in Uganda use any labor obtained from outside the household. The analysis of the 2005/06 UNHS estimated that only 9.4 percent of agricultural labor hours nationally are done by hired employees, the rest being done using family labor. This low use of improved or commercial inputs can be expected to keep productivity low and thereby slow down a transition in Uganda from subsistence-oriented agriculture to sustainable production of crop surpluses for the market.

Table 10—Use of farming inputs on cropped parcels by region, percent of all parcels

	Central	Eastern	Northern	Western	UGANDA
Improved seed	5.5	11.9	7.6	2.2	6.3
Manure	8.7	4.1	0.5	9.6	6.8
Inorganic fertilizer	1.3	1.1	0.7	0.6	1.0
Pesticide	4.8	4.7	2.6	1.5	3.4

Source: UBOS, 2007

However, while diversified subsistence production is the dominant focus for most farming households, all engage with the market to some degree. A common pattern is that farming households will sell some of their product just after harvest to meet immediate household cash needs, such as school fees, and often return to the market later to purchase food as their own produced stocks are depleted before the next harvest. An analysis of the 2005/06 Uganda National Household Survey found that on the basis of the value of market transactions in staple foods, about 39 percent of all rural farming households obtain more than 25 percent of their staple foods from the market and the value of their purchases of staples is more than 50 percent greater than the value of their sales of the staple foods that they produce (Benson et al. 2008). In contrast, 31 percent of rural households were found to be significant net sellers of staple foods in the market and generally able to self-provision, selling their surplus. The same study showed that, with regards to calorie consumption, 56 percent of calories consumed by rural households in Uganda were obtained from their own agricultural production, the rest principally being obtained from the market. As such, while it is correct to state that most Ugandan farmers are engaged in small-scale production principally to meet their household's subsistence, few are able to exclusively rely on their own production to meet those needs. Conditions are developing in Uganda to promote an increased commercial orientation to agricultural production by its small famers.

The non-farm economy

The distribution of the working population by occupation is given in Table 11, showing an increase in the working population involved in agriculture between 2002/03 and 2005/06. The trend goes counter to the sectoral growth data presented earlier where one would expect labor to be moving away from agriculture to the more strongly performing service and industry sectors. Labor absorption in the other sectors apparently is so far inadequate to employ any growth in the population of workers in Uganda, leading to an increase in the proportion of the population working in agriculture.

Table 11—Distribution of working population by occupation (%)

Occupation	2002/03	2005/06
Agriculture and fishery workers	63.4	70.0
Service workers and shop and market workers	15.7	9.3
Elementary occupation	9.4	9.6
Crafts and related workers	4.5	3.5
Legislators, managers, professionals and associate professionals	3.6	3.6
Plant and machinery operators	1.9	2.2
Others	1.4	1.1

Source: UBOS, 2010a

Data from the 1999/2000 Uganda National Household Survey (UNHS) illustrates the rural-urban divide in non-farm based activities, with only 12 percent of rural households primarily engaged in non-farm enterprise or employment, in contrast with 83 percent of urban households (UBOS 2001). Whilst these statistics provide a stark picture of rural-urban occupational difference, they partially mask the true extent of diverse rural employment patterns by omitting secondary employment figures. An analysis of trends in secondary employment over the period 1992/93 to 1996/97 showed increases in the participation of household heads in non-agricultural self-employment (petty trade, motorcycle taxi (*boda-boda*) transportation, porters, and mason in construction, and so on) as a secondary activity increased from 14 to 38 percent for women and from 16 to 28 percent for men (Newman and Canagarajah, 1999). The ability to complement agricultural incomes with non-agricultural enterprise activity is important for households to reduce their exposure to economic risk (Reardon and Taylor 1996) and to facilitate more efficient use of family labor during agricultural slack periods (Lanjouw and Lanjouw 2001).

A review of sources of income provides a clear picture of the relative importance of non-farm employment. While 85 percent of rural households are engaged in crop farming as the major activity, it only provides 46 percent of household income, the remainder coming from other household enterprises (21 percent) salaries and wages (12 percent), and transfers and other benefits (15 percent). Unsurprisingly, 95 percent of urban household income comes from non-agricultural sources. While rural household income increased 35 percent between 1996/97 and 1999/2000, urban household income rose by 60 percent over the same period (UBOS 2001). Thus, while non-farm sources of income are clearly crucial to rural households, the benefits accruing to urban households appeared to be greater. In both rural and urban areas, service-based activities constituted the highest proportion of non-farm employment, with 75 percent of urban households and 67 percent of rural households engaged in this sector. Within the rural economy, trade has been identified as the most common non-farm activity (Deininger and Okidi 2000).

IV. THE POLICY CONTEXT FOR RURAL – URBAN TRANSFORMATION IN UGANDA

This section focuses on the rural and urban development plans of the government of Uganda in recent years. Both the policy statements of government and its allocation of financial resources through the annual budget process are considered to gain insights into the relative priority given to rural and urban development in the public sector.

The trajectory of Uganda's development priorities

The sequence of Uganda's development planning frameworks over the first 25 years of independence from 1962, just like for many other African countries, shows a strong urban bias. A deliberate effort was made to promote industrialization and other development interventions in urban areas, with a much more limited focus to rural development. According to Epstein and Jezeph (2001), this development paradigm was premised on the belief by newly independent governments that the appropriate development path should be based on western economic development models. In Uganda, rural areas were considered as places for supply of raw materials; hence efforts were made in the 1960s and 1970s to develop and promote farmer cooperatives for different commodities with the goal of mobilizing continued supply of raw materials for Uganda's industries and especially for export. However, these early efforts at urban-focused economic development came to an end with the overthrow of the first Obote government by Amin in 1971.

The following sixteen years were generally characterized by political instability and economic disintegration that only ended with the seizing of power in early 1986 by the National Resistance Army operating under the leadership of the current president, Yoweri Museveni. The National Resistance Movement (NRM) has been in power since then and has been responsible for the significant liberalization of the Ugandan economy that has led to significant economic growth. The sequence and range of policies formulated by the successive NRM governments listed in Table 12 have had a strong bearing on rural and urban transformation over the past 25 years.

Table 12—Key policies and interventions with implication on rural and urban transformation

Period	Policy Action	Impact
1987-1991	Economic Recovery Programme, 1987/88-1991/92	First economic program following the coming to power of the NRM government. Strong focus on tight macroeconomic management to stabilize the economy, bring about a resumption of growth and attain a sustainable balance of payments position. Included significant public-sector reforms, market and price reforms and exchange rate reforms and trade liberalization. Slight recovery of industries and job creation in urban centres arising out of the focus on inflation reduction, rehabilitation of productive capacities, restoration of infrastructure and social services, and reduction of imports.
1997-2008	Poverty Eradication Action Plan (PEAP)	First published in 1997, the PEAP underwent two revisions in 2000 and 2004. Served as Uganda's Poverty Reduction Strategy Paper. Policy shift from economic recovery to sustainable, broad-based growth and structural transformation. Greater emphasis on private sector and sharper focus on agriculture through the Plan for Modernisation of Agriculture. The PEAP had five pillars: (i) economic management; (ii) production, competitiveness and incomes; (iii) security, conflict resolution and disaster management; (iv) governance; and (v) human development.
2000-2010	Plan for Modernisation of Agriculture (PMA)	Cross-sectoral development plan for rural and agricultural development. Characterized as the action plan for the PEAP. Overall objectives were (i) increased production and productivity; (ii) increased household incomes; (iii) household food security; and (iv) employment creation in rural areas. Sought the transformation of subsistence agriculture to commercial agriculture for poverty reduction. Prioritized commercialization of agricultural production, including providing raw materials for industries. Seven pillars: (i) agricultural research and technology development; (ii) agricultural advisory services; (iii) rural financial services; (iv) rural infrastructure; (v) marketing and agro-processing; (vi) agricultural education; and (vii) natural resource management.
2007-2011	Prosperity for All (PFA)	PFA seeks to identify and support economic enterprises that will enable households to earn daily, periodic and long-term income, with a target of UShs 20 million per household per year. Heavily premised on the agriculture sector with the major intervention being low-interest loans to rural communities organized in Savings and Credit Cooperative Societies (SACCOs) to propel production and incomes. It is envisaged that through market linkages and value chains, PFA will transform rural settings with emergence of small scale agro-industries, value additions and improved commercialization. New programs are not to be brought in under the PFA. Rather, it seeks to establish more effective coordination of existing government programs with a common vision and target.
2010-2015	National Development Plan (NDP)	Vision is to transform Ugandan society from a peasant society to a modern and prosperous country within 30 years. Replaces the PEAP. Eight objectives: (i) increase household incomes and promote equity; (ii) enhance employment; (iii) improve economic infrastructure; (iv) Increase access to social services; (v) promote science, technology, and innovation to enhance competitiveness; (vi) enhance human capital development; (vii) strengthen governance, defense, and security; and (viii) sustainable population and use of natural resources. The NDP attempts to link short-term priorities with long-term goals, integrate sector plans within a coherent overall strategy, and identify concrete programmes to be implemented. Although the NDP recognizes development issues in urban areas, the key areas of investment and focus seem to prioritize rural areas.

Period	Policy Action	Impact
2010-2014	Agricultural Sector Develop-ment Strategy and Investment Plan (DSIP), 2010/11-2014/15	Replaces the PMA. Identifies four challenges facing the agricultural sector: low production and productivity; low value addition and limited market access; weak implementation of agricultural policies; and weak public agricultural institutions. Four investment programs designed to address these constraints: (i) increasing agricultural production and productivity; (ii) increasing access to markets and value addition; (iii) creating an enabling environment for the private sector in agriculture; and (iv) strengthening agricultural institutions at the center and in local governments.

As can be seen, stated government priorities have strongly focused on rural development. The transformation of the population from a largely peasant society to a middle income society has been at the center of the development vision of the political leaders of Uganda, particularly at the presidential level. However, the implementation of these policies has not resulted in quite the level of success intended. There are a number of factors that account for the relatively poor impact of these policies on Uganda's agricultural sector. The public agricultural sector was reformed over the past 20 years, with several of the core functions of the Ministry of Agriculture being shifted to new semi-autonomous public agencies – most notably agricultural extension services to the National Agricultural Advisory Services agency and agricultural research to the National Agricultural Research Organisation. The remaining functions of the Ministry of Agriculture have been in regulation and planning. In consequence, the human capacity and budgetary resource absorption capacity of the public agricultural sector in Uganda has been inadequate for the effective implementation of the strong agricultural and rural development content of the sequence of master development frameworks developed under the NRM government. The agricultural sector in Uganda has not transformed itself to the degree envisioned.

Public sector investment in Uganda

Over the years, public expenditures have reflected the identified priorities of the Poverty Eradication Action Plan and now the new National Development Plan. However, it is clear that resources allocated to agricultural development have not been at the level that the policy statements of the government of Uganda would lead one to expect. Trends in sectoral annual government budget allocations between 2002/03 and 2009/10 are shown in Table 13. The public administration (civil service) and an ill-defined category of economic services generally between them have the largest budgetary allocation accounting on average for over 37 percent of all budgetary allocations over the period in question, while agriculture, the major employer in the country has received on average only just over 5 percent of the budget over the same period, with considerably less than that in recent years.

Table 13—National government development expenditure by sector, as a percent of total expenditure

	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10*	avg.
General public administration	17.5	17.2	17.4	23.1	16.1	18.4	9.8	11.0	16.3
Economic services	9.8	8.4	2.1	12.9	43.0	36.2	30.1	34.9	22.2
Community & social services	4.6	3.5	7.9	10.7	6.0	8.9	3.8	3.4	6.1
Defense	2.7	3.6	3.6	2.4	2.0	3.7	3.2	1.9	2.9
Public order & safety affairs	5.5	5.8	5.1	6.2	4.0	4.4	3.5	4.4	4.9
Water	6.2	6.4	5.3	3.5	2.9	4.4	2.9	2.8	4.3
Roads	26.4	28.1	39.1	22.4	12.0	8.9	34.1	31.2	25.3
Education	10.4	9.3	8.7	5.0	4.6	6.9	4.7	3.8	6.7
Health	7.7	11.4	7.2	6.6	5.9	4.4	4.4	3.0	6.3
Agriculture	9.3	6.3	3.7	7.2	3.5	3.8	3.6	3.6	5.1
All sectors	100	100	100	100	100	100	100	100	100
Nominal expenditure (UShs billions)	456.7	474.1	489.7	445.6	728.4	669.5	1,055.3	1,702.6	--

*Approved budget
Source: UBOS, 2010a and other annual statistical abstracts.

The government identifies infrastructure as a key driver of economic growth and in recent years has allocated a large, if variable, portion of the national budget to road works. Improving roads is a seen a key ingredient for increasing incomes of the rural poor through increasing their direct linkages to markets. Budgetary allocations for roads averaged at about a quarter of the total development budget over the 2002/03 to 2009/10 period. However, budgetary absorption capacity in the roads sector has been quite weak. The Uganda National Roads Authority has been unable to utilize all of the funding allocated to it over the past several years, being forced to return significant amounts of funding to the Treasury at the end of

the fiscal year. This raises questions about the efficiency in planning and execution of government projects and how this can further drive the transformation of the national economy. As such, the policy implementation constraints experienced in the public agriculture sector in Uganda are not unique to the agricultural sector alone.

V. SUMMARY AND POLICY IMPLICATIONS

Uganda over the last twenty years has maintained high economic growth rates, increasing urbanization and shifting patterns in sectoral contribution to overall development. This transformation is dominated by an increasing proportion of the wealth generated by Uganda's economy shifting from being a product of agricultural activities to coming out of the service sector of the economy, in particular. However, this shift in the sources of wealth in the economy is not being accompanied by a shift in employment out of agriculture to the other sectors. Rather, what we find is that employment is actually increasing in agriculture, even as its contribution to Uganda's economy is declining. The high population growth rate of Uganda poses an immense challenge for Uganda's economic development. The increasing number of Ugandans engaged in agriculture is more a reflection of the inability of the more modern sectors of the economy to provide adequate employment for the many Ugandans entering the workforce every year. In consequence, relying on customary mechanisms for obtaining access to farmland, many Ugandans continue to rely on agriculture for their livelihoods, consuming much of what they produce. Specialized agricultural production for the market is still not as common as one would expect if we are to see significant transformation in Uganda's rural economy.

The current government of Uganda has consistently prioritized agricultural and rural development in all of its master development strategies since coming to power. It has in recent years provided significant resources for road construction to better link rural Ugandans to urban market centers. The coming on line of oil production in Uganda in the next five years is likely to bring about quite significant changes in the manner in which government invests in rural areas and in agricultural development. However, the ability of government to effectively implement programs to attain its priorities for agriculture and rural development is less than is desired. Without close attention to putting in place effective public service delivery, the additional revenue from the oil that government can use is unlikely to lead to the progress desired in rural areas by government.

The persistent inequalities that exist between rural and urban areas continue to reduce the impact of Uganda's sustained economic growth on rural poverty reduction. At the level of the household, poverty is strongly related to rural residence. These strong rural-urban inequalities have further fuelled increasing migration from rural areas to towns. There is a strong belief that urbanization is an integral part of creating structural transformation in nation states and the share of the population in Uganda that is becoming urban is increasing. Therefore current divisions of rural and urban areas need to be replaced with a strong policy framework that recognizes the integration of rural and urban development interventions to reinforce existing interactions and activities between the two areas.

REFERENCES

Benin, S., E. Nkonya, G. Okecho, J. Pender, S. Nahdy, S. Mugarura, and G. Kayobyo. 2007. *Assessing the impact of the National Agricultural Advisory Services (NAADS) in the Uganda rural livelihoods*. IFPRI Discussion Paper no. 724. Washington, DC: International Food Policy Research Institute.

Benson, T., S. Mugarura, and K. Wanda. 2008. *An assessment of the likely impact on Ugandan households of rising global food prices*. International Food Policy Research Institute – Uganda Strategy Support Program Background Paper no. 1. Kampala: IFPRI-Kampala.

Deininger, K., and J. Okidi. 2001. Rural households: Incomes, productivity and non-farm enterprises. In *Uganda's recovery: The role of farms, firms, and government*, ed. P. Collier and R. Reinikka. Washington, DC: World Bank.

Epstein, T.S., and D. Jezeph. 2001. Development--There is another way: A rural-urban partnership development paradigm. *World Development*. 29 (8): 1443-1454.

Giddings, S.W. 2009. *The land market in Kampala, Uganda and its effect on settlement patterns*. Washington DC: International Housing Coalition.

Henderson, J.V., and H.G. Wang. 2005. Aspects of the rural-urban transformation of countries. *Journal of Economic Geography*. 5 (1): 23-42.

Herrin W., Knight, J. and Balihuta, A. (2009). Migration and wealth accumulation in Uganda. *Journal of Real Estate Finance Economics*. 39 (2): 165-179.

Lanjouw, J. O. and P. Lanjouw. 2001. The rural non-farm sector: Issues and evidence from developing countries. *Agricultural Economics*. 26: 1-23.

Lyons, M. 1996 'Foreign Bodies': The history of labour migration as a threat to public health in Uganda. In *African boundaries: Barriers, conduits and opportunities*, ed. P. Nugent and A. I. Asiwaju. London: Pinter

Matovu, J.M.; K. Pauw, E. Twimukye, and M. Wiebelt. 2011. Managing future oil revenues in Uganda for agricultural development and poverty reduction: A CGE analysis of challenges and options. Kampala: IFPRI-Kampala. Draft research report.

Mukwaya, P.I.; H. Sengendo; and S. Lwasa. 2010. Urban development transitions and their implications for poverty reduction and policy planning in Uganda. *Urban Forum*. 21: 267-281.

Mulumba D. and W.M. Olema. 2009. *Policy analysis report: Mapping migration in Uganda*. Project report for IMMIS – African migration and gender in global context: Implementing migration studies. Kampala: Makerere University.

Newman, C. and Canagarajah, S. 1999. *Gender, poverty and non-farm employment in Ghana and Uganda*. Policy Research Working Paper 2367. Washington DC: World Bank.

Nyakaana, J.B., H. Sengendo, and S. Lwasa. 2007. Population, urban development, and the environment in Uganda: The case of Kampala city and its environs. Department of Geography, Makerere University. Mimeo.

Potts, D. 1997. Urban lives: adopting new strategies and adapting rural links. In *The Urban Challenge in Africa: Growth and Management of its Large Cities*, ed. C. Rakodi. Tokyo: United Nations University Press.

Reardon, T.; and J.E. Taylor. 1996. Agroclimatic shock, income inequality and poverty: Evidence from Burkina Faso. *World Development*. 24 (5): 901-914.

Rutabajuka, S. 1989. *The conditions of migrant labor in Masaka District 1900-1962: The case of coffee shamba laborers*. Centre for Basic Research (CBR) Working Paper no. 7. Kampala: CBR.

Uchida, H. and A. Nelson. 2008. *Agglomeration index: Towards a new measure of urban concentration*. Background paper to World Development Report 2009: Reshaping economic geography. Washington, DC: World Bank.

Uganda Bureau of Statistics (UBOS). 2006. *2002 Uganda Population and Housing Census: Analytical report (abridged version)*. Kampala: UBOS.

Uganda Bureau of Statistics (UBOS). 2007. *Uganda National Household Survey 2005/06: Report on the agricultural module*. Kampala: UBOS.

Uganda Bureau of Statistics (UBOS). 2010a. *Statistical Abstract 2010*. Kampala: UBOS.

Uganda Bureau of Statistics (UBOS). 2010b. *Uganda National Household Survey 2009/10: Socio-economic module (abridged report)*. Kampala: UBOS.

Uganda Bureau of Statistics (UBOS) and Macro International Inc. 2007. *Uganda Demographic and Health Survey 2006*. Calverton, Maryland, USA: UBOS and Macro International Inc.

United Nations (UN). 2009. *National accounts main aggregates database*. Geneva: United Nations. http://unstats.un.org/unsd/snaama/

World Bank. 2006. *Uganda poverty and vulnerability assessment report*. Report no. 36996-UG Poverty Reduction and Economic Management, Southern Africa, Africa Region. Washington, DC: World Bank.

World Bank. 2007. *Uganda - Moving beyond recovery: Investment and behavior change for growth, Volume II*. Country Economic Memorandum, Report No. 39221-UG. Washington, DC: World Bank.

About the Authors

Paul Mukwaya and **Yazidhi Bamutaze** both are lecturers in the Department of Geography at Makerere University in Kampala, Uganda. **Samuel Mugarura** is a technical analyst in the Strategic Analysis and Knowledge Support System node for Uganda (SAKSS-Uganda), which is housed in the Secretariat for the Plan for Modernisation of Agriculture, a semi-autonomous agency of the Ministry of Agriculture, Animal Industries and Fisheries Secretariat. **Todd Benson** is a Senior Research Fellow in the Development Strategy and Governance Division of the International Food Policy Research Institute, managing IFPRI's Uganda Strategy Support Program.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

2033 K Street, NW | Washington, DC 20006-1002 USA | T+1.202.862.5600 | F+1.202.457.4439 | Skype: ifprihomeoffice | ifpri@cgiar.org

IFPRI-KAMPALA
Plot 15, East Naguru Road | P.O. Box 28565 | Kampala , Uganda | T: +256-414-285-060/064 | Fax: +256-414-285079
ifpri-kampala@cgiar.org | ussp.ifpri.info

This Working Paper has been prepared as an output for the Uganda Strategy Support Program and has not been independently peer reviewed. Any opinions stated herein are those of the authors and do not necessarily reflect the policies or opinions of IFPRI.