The Uganda Poverty Assessment Report 2016

Farms, cities and good fortune : assessing poverty reduction in Uganda from 2006 to 2013

Abridged version

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Background papers

"Beyond Income Poverty: Non-Monetary Dimensions of Poverty in Uganda" by Alvin Etang and Clarence Tsimpo and reviewed by David Newhouse and Carolina Mejia-Mantilla.

"Welfare, Income Growth and Shocks in Uganda" by Ruth Hill and Carolina Mejia-Mantilla and reviewed by Johannes Hoogeveen and Luc Christiaensen. Funding was also provided by GFDRR for the analysis undertaken in this paper.

"Moving Out and Up: Panel Data Evidence on Migration and Poverty in Uganda" by Edouard Mensah and Michael O'Sullivan and reviewed by Joao Montalvao and Francis Mwesigye (Makerere University and EPRC, Uganda).

"Education and Health Services in Uganda: Quality of Inputs, User Satisfaction, and Community Welfare Levels" by Clarence Tsimpo, Alvin Etang, and Quentin Wodon and reviewed by Andrew Dabalen and Christophe Rockmore.

EXECUTIVE SUMMARY

Uganda's progress in reducing poverty over the last two decades is a remarkable story of success. From 1993 to 2006, annual reduction in the national poverty rate of 1.9 percentage points a year resulted from the restoration of peace and stability to much of the country after Yoweri Museveni came into power, the series of economic liberalization reforms that were implemented, and the investments of households and firms that these encouraged.

Poverty reduction has remained impressive since 2006—the period of focus for this report—even though it has fallen more slowly. The national poverty rate fell by 1.6 percentage points per year and the international extreme poverty rate fell by 2.7 percentage points per year, the second fastest reduction in extreme poverty per year in Sub-Saharan Africa during this time.

Uganda's poverty reduction since 2006 has coincided with a period of slower economic growth. Despite this, poor households still experienced consumption growth and poverty fell. Understanding why this was and whether it is sustainable offers lessons for other countries grappling with how to ensure that the poor can still see improvements in their lives, even in the face of a slowing global economy.

However, Uganda's success is not without caveats. In 2013, more than a third of its citizens lived below the international extreme poverty line of US$1.90 a day. What's more, the low national poverty rate of 19.7 percent is based on a poverty line that was set over twenty years ago and is now too low, and not reflective of a reality in which too many Ugandans live today. Vulnerability has also remained high. For every three Ugandans that moved out of poverty, two fell into poverty. Poverty has also become increasingly concentrated in the Northern and Eastern regions of the country.

And, of more concern, it is not clear that the processes that brought about gains in the past will be enough to address the future poverty challenge in Uganda, particularly in the impoverished Northern and Eastern regions.

Acknowledging both the impressive progress and its limitations, however, it is helpful to look at the factors that contributed to Uganda's poverty reduction since 2006 and to examine policies that have worked alongside possible improvements to make progress more sustainable into the future.

Much of Uganda's poverty reduction was built on agricultural income growth that particularly benefited poor households. Peace in northern Uganda, improved regional crop markets, and good weather drove growth in agricultural incomes. Modest gains in education also contributed to growth, as did urbanization.

Uganda's formula for success is one that works especially well when conditions are favorable, particularly in agriculture. And luck has been on Uganda's side in the last decade. Good rainfall and prices can account for two-thirds of the growth in crop income of the bottom 40 percent from 2006 to 2012. Prices reflect not just improvements in marketing efficiency resulting from market liberalization, but also many factors beyond domestic policy control: positive price trends in international markets and increased demand for Ugandan crop exports in regional markets as a result of peace in South Sudan and the Democratic Republic of Congo.

There was little fundamental change in how the households earned their income that benefited poverty reduction—either in agriculture or in other sectors. Most households continue to earn income in informal, low-investment, low-productivity activities such as traditional crop farming and small-scale retail trading, and there has been little change in the proportion of households that count agriculture as their main sector of employment since 2006. In addition, persistently high fertility rates held back poverty reduction. A quarter of Uganda's households are female headed and these households experienced lower productivity largely because of the higher time-burden of childcare that they face. Limited spending on safety nets also resulted in fiscal redistribution having little direct impact on poverty reduction.

Uganda has set out an ambitious agenda for its future; its 2040 Vision foresees a middle-income country with the majority of its citizens living in urban areas, having smaller families, and earning income in non-agricultural sectors. Sustained gains in poverty reduction and the achievement of this vision for Uganda will require a fundamental shift in the nature of production—from low-investment, informal activities to higher-capital, more productive employment and a more rapid reduction in fertility rates.

To make this happen, effective public investment in services such as education, health, agricultural extension, and safety nets will be crucial. Structural change undoubtedly also requires a focus on firm growth and job creation, but for this growth to be inclusive of the poorest households, it must be paired with investments in education, skills, and finance, especially for vulnerable groups such as adolescent girls. The significant increase in primary enrollment rates brought about by the benefits of the Universal Primary Education (UPE) program has yet to translate into substantial improvements in educational outcomes. Primary completion rates were merely 53 percent in 2011, much lower than countries with similar income levels. Pregnancy is the fourth most common reason for dropping out of secondary school: in 2013, 1 in 10 girls report dropping out of secondary school as a result of pregnancy. Public transfers to households are negligible in Uganda—total spending on direct income support to poor households was 0.4 percent of gross domestic product (GDP) compared with 1.1 percent in other low-income countries in Africa.

But for these public investments to be effective, Uganda cannot let implementation gaps and poor service delivery continue. Teacher absenteeism keeps students from learning and achieving, and teachers and health workers often lack the minimum knowledge to properly teach pupils or treat patients. As a consequence, children may go to school, but not master the knowledge that they need to be successful in the labor market. Similarly, public and private spending on health access does not guarantee that people are receiving quality service. All these can have a negative impact on people's skill attainment and health, even more so for the poor as they experience the lowest quality of services. Improving community-based

monitoring and demand-side accountability is an important part of the solution, but more than this will be needed. Poorer communities are more likely to express satisfaction with any services that they are receiving, even though their quality is worse than in better-off communities.

Liberalization of markets has been important to Uganda's success in the past, but some markets are currently failing to work. The low quality of agricultural inputs in domestic markets results in poorer quality outputs and lower earnings. If authentic technologies replaced these low-quality products, average returns for smallholder farmers would be over 50 percent. Increasing the adoption of more modern technologies will entail improving the quality of inputs in local markets through certification (public or private). Improvements in rural financial markets are also needed to increase the access to financial capital that is required for agricultural input purchases, nonfarm employment growth, and rural to urban migration. This will be imperative to ensure consumption growth for poor households regardless of weather variations and regional and international prices.

Although there is an important role for the state in bringing about the change Uganda needs to see, the continued importance of security and liberalized markets cannot be underestimated. Ensuring continued stability in the region and further promoting efficient crop markets and regional exports will be important for future income growth in Uganda. This growth, when paired with an inclusive policy framework and stronger investments in basic services, can lead to more sustainable poverty reduction and improvements in the quality of life of millions of Ugandans.

OVERVIEW

1. **Uganda's progress in reducing poverty from 1993 to 2006 is a remarkable story of success that has been well told.** Annual reductions in the national poverty rate of 1.9 percentage points a year resulted from the restoration of peace and stability to much of the country after Yoweri Museveni came into power in 1986, the series of economic liberalization reforms that were implemented in the 1990s, and the investments of households and firms that these encouraged (see for example, Collier and Reinikka 2003; World Bank 2007).

2. **The narrative of Uganda's continued, albeit slightly slower, progress in reducing poverty since 2006 is less familiar.** Uganda reduced the proportion of people living on less than US$1.90 per person per day by 2.7 percentage points per year, the second fastest percentage point reduction in extreme poverty per year in Sub-Saharan Africa during this period.[1] The national poverty rate continued to fall by 1.6 percentage points per year. However, during this time the national poverty line, set using data from 1993, became an increasingly poor standard against which to measure who was poor.

3. **This was a period in which growth slowed as the gains from reforms years earlier had been fully realized, and weak infrastructure and increasing corruption increasingly constrained private sector competitiveness (World Bank 2015).** How, in this context, was Uganda still able to secure inclusive consumption growth for many of its citizens? Understanding the drivers of recent poverty reduction is important for offering lessons on how to reduce poverty further in the future not only in Uganda, but also for other countries in the region that have not experienced such progress.

4. **This report examines Uganda's progress in reducing poverty, with a specific focus on the period 2006 to 2013.** The report shows that high growth from 2006 to 2010 benefited poverty reduction. Although growth slowed for all households from 2010, poor households were able to maintain above average consumption growth and poverty reduction did not falter. Agricultural income growth particularly benefited poor households aided by peace in northern Uganda, improved regional markets, and good weather. Modest gains in education also appear to have contributed to the growth for poor households, as did urbanization. However there was little fundamental change in the nature of production that benefited poverty reduction—either in agriculture or in other sectors. In addition, persistently high dependency ratios held back poverty reduction, and limited spending on safety nets resulted in fiscal policy contributing to neither poverty reduction nor to improving vulnerability.

1. Uganda reduced the extreme poverty rate by 2.7 percentage points a year, second only to Chad, which reduced the extreme poverty rate by 3.1 percentage points per year. This is using poverty numbers reported in Povcalnet as of January 2016 and using the surveys deemed comparable by World Bank 2016.

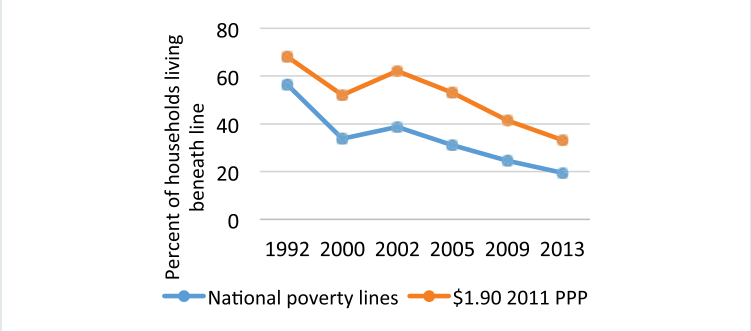
5. **Is Uganda on a path to end extreme poverty?** The benefits of security and liberalized markets for poverty reduction cannot be underestimated and will likely aid future poverty reduction as they have done in the past. However, sustained gains also require a fundamental shift in the nature of production from low-investment, informal activities to higher-capital, more productive employment. This in turn requires effective public investment in services (such as education, health, rural finance, quality of agricultural inputs and extension services), infrastructure (such as regional corridors and electricity), and safety nets. Addressing this requires addressing public investment implementation gaps and improving service delivery.

6. **Before turning in further detail to the key findings of the report, it is important to note that the analysis undertaken in this report is only possible because the Government of Uganda (GoU) has invested in a high quality series of household surveys to document progress in well-being since 1993.** The UBOS has conducted high-quality household surveys every three to four years that have provided a comparable series of data on poverty and other household characteristics for the last twenty years. Uganda is one of the few countries in the region to have achieved this level of comparable, frequent poverty monitoring over time. Without this, it would not be possible to document the lessons Uganda provides.

A RECORD OF PROGRESS

7. **Uganda recorded impressive rates of poverty reduction in the last two decades.** The proportion of the Ugandan population living in poverty—whether measured using the national poverty line or the international poverty line—more than halved from 1993 to 2013 (Figure 1). The proportion of the population living below the national poverty line declined from 56.4 percent in 1993 to 19.7 percent in 2013.[2] The proportion of households living below the international extreme poverty line of US$1.90 a day (2011 prices) fell from 68.1 percent in 1993 to 34.6 percent in 2013. The depth and severity of poverty have also fallen consistently.

FIGURE 1: Headcount poverty rate, national and international poverty line, 1993 to 2013

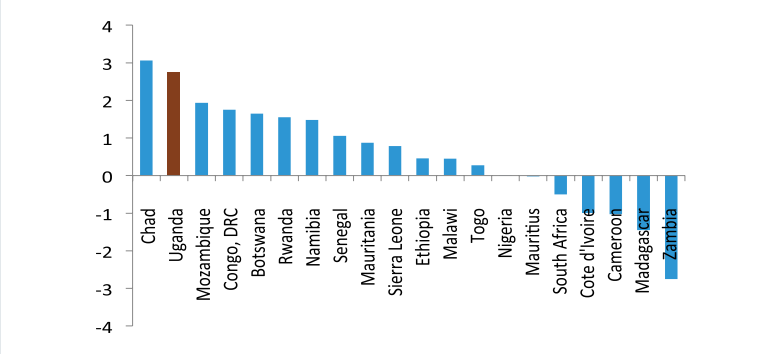


Source: Uganda National Household Survey (UNHS) 2006–2013.

2. The national poverty line ranges from US$0.88 to US$1.04 2005 PPP per capita depending on the region. Poverty in Uganda is calculated using a cost-of-basic-needs approach. Consumption expenditure data is collected on food and non-food items through the UNHS conducted every three to four years. The poverty line was set in 1993 by calculating the cost of consuming 3,000 calories per adult equivalent and then adding an amount (the amount depending on the region) to capture non-food expenditures. The poverty line has only been updated for the cost of inflation since then and is low by international standards.

8. **Progress in the period of focus for this report, 2006 to 2013, has been a little slower but still very fast by regional standards.** The international extreme poverty rate—the proportion of households living on less than US$1.90 purchasing power parity (PPP) per day—fell by 2.7 percentage points per year since 2003. Although this was slower than the rate of progress in earlier years, it was still the second fastest percentage point reduction in poverty per year in Sub-Saharan Africa (Figure 2). The high percentage point reduction is in part due to the fact Uganda started with a high poverty rate. However, even considering the percentage reduction in poverty, Uganda's performance has been impressive—the fifth fastest in the region during this time. The national poverty rate fell by 1.6 percentage points a year during this period, only slightly slower than the 1.9 percentage point reduction recorded from 1993 to 2006. However, the national poverty line has not been updated since 1993, causing this to become an increasingly poor measure of who is poor in Uganda today.

FIGURE 2: Annual reduction of poverty headcount at international poverty line, selected sub-saharan africa countries (2003-2013)



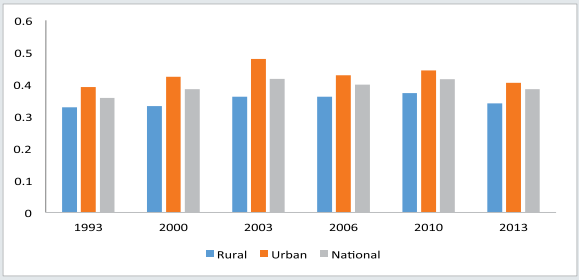
Source: Staff calculations using Povcalnet.

9. **Recent gains in poverty reduction have occurred during a period in which growth started to slow.** Although growth slowed for all households, poor households still experienced consumption growth and poverty fell. Peace in northern Uganda and agricultural income growth aided consumption growth for poorer rural households, even though better-off urban households did not fare as well. As a result, the period from 2010 to 2013 was the only period in the last twenty years in which consumption growth was higher among the bottom 40 percent (2.3 percent per year) than among the top 60 percent (1.6 percent per year).

10. **In general, growth brought rising inequality as well as rising consumption but the increase has been marginal and inequality fell from 2010 to 2013.** Inequality increased in rural and urban Uganda from 1993 to 2010, by any measure. National inequality, as measured by the Gini index, increased from 0.36 in 1993 to 0.42 in 2010 (Figure 3). This finding holds when looking at other measures of inequality such as the Theil index with the parameter $\alpha=-1$ which emphasizes inequality for lower incomes, and the absolute and relative difference between the bottom 10 percent and the top 90 percent. However, the increase has been marginal and Uganda has a moderately low rate of inequality compared to other countries in the region (Figure 4). Inequality fell from 41.5 percent in 2010 to 38.5 percent in 2013, a reduction of 1 percentage point in the Gini per year.

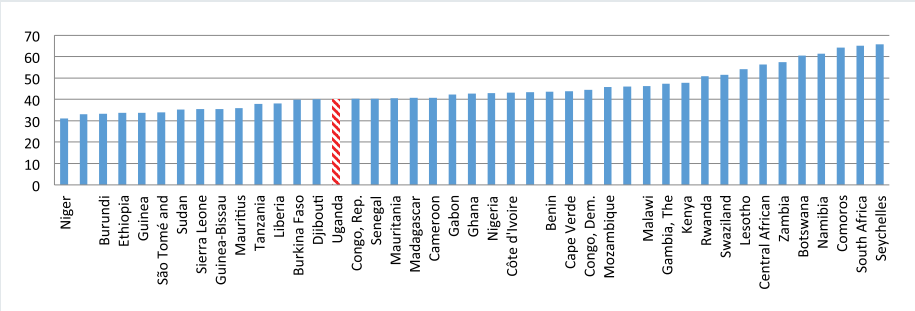
11. **Trends in non-monetary well-being also point to improvements in the well-being of Ugandan households.** Infant mortality dropped from 88 in 2001 to 76 in 2006 and 54 in 2011. Under-five mortality stood at 90 in 2011, having declined from 152 in 2001 to 137 in 2006.[3] Between 2001 and 2011, under-five mortality dropped by 5.6 annually in Uganda. This was a considerable improvement in comparison to regional and global averages. For example, between 2001 and 2011, under-five mortality dropped by 5.2 annually for Sub-Saharan African countries and by only 2.4 for the world. Education outcomes have also improved over time, for example the primary net enrollment rate increased from 84 percent in 2006 to 86 percent in 2013. In addition, ownership of modern assets such as telephones and motorcycles increased, while ownership of traditional assets, such as bicycles, fell.

FIGURE 3: Rising inequality: the Gini coefficient from 1993–2013



Source: UNHS 1993–2013.

FIGURE 4: Inequality is increasing, but remains moderate compared to the region (percent, latest survey year)



Source: World Development Indicators (WDI).

BUT MANY CHALLENGES REMAIN

12. **However, despite the substantial progress that has been sustained over two decades, Uganda remains a very poor country.** In 1993, Uganda was one of the poorest countries in the world, so, even after two decades of progress, poverty is still widespread. In 2013, more than a third of its citizens live below the international extreme poverty line of US$1.90 a day.

13. **The low national poverty rate of 19.7 percent reflects a poverty line that is too low and not a reality in which only a fifth of Ugandans are unable to meet their basic needs.** When the national poverty lines are converted into 2011 PPP they vary from 72 percent to 82 percent of the international extreme poverty line of US$1.90. The international extreme poverty line is

3. *Infant mortality and under-five mortality are per 1,000 children*

designed to capture the average national poverty line among the world's poorest countries, so the fact that Uganda's poverty lines are much lower, suggests that the poverty lines used in Uganda are too low.

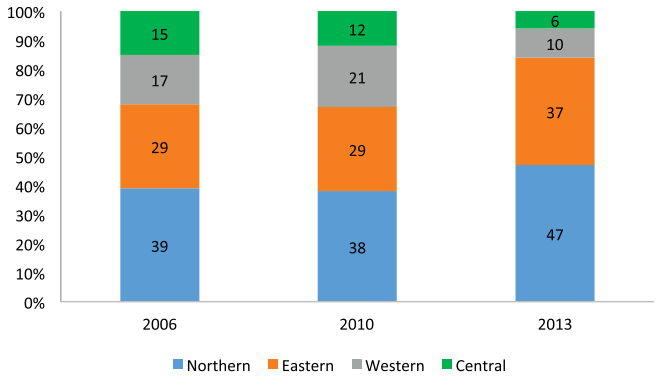
14. **An updated national poverty line that reflects the changes in consumption patterns of Ugandan households since 1993 suggests a poverty rate in the range of 33 to 35 percent.** The national poverty lines were set using data from 1993 and have not been updated to reflect the real price increases of some foods that poor households consume and the changing nature of food and non-food consumption in Uganda. Poverty lines that are 25 percent to 30 percent higher would reflect the changes in consumption over the last 15 years and would bring the lines closer to the standard used by other low-income countries.

15. **Although there was improvement in the non-monetary dimension of well-being, the country still faces widespread deprivation.** Despite improvement over the last decade, access to basic infrastructure services remains abysmally low, particularly for the poor. Access to improved sanitation facilities remains very low by regional and international standards. Less than a third of households (31.3 percent) have adequate sanitation and a quarter of poor households have no toilet facility at all. Access to electricity in Uganda is one of the lowest in the world. Only 14 percent of households in Uganda use electricity for lighting.

16. **In addition, vulnerability to poverty in Uganda is high.** Between 2005 and 2009, for every three Ugandans who were lifted out of poverty, two fell back into poverty, illustrating the fragility of the gains realized by the poorest households (Ssewanyana and Kasirye 2012). Uganda's success in reducing poverty has resulted in many households that are living just out of poverty who remain vulnerable to falling back in to poverty in the face of a negative shock.

17. **Poverty has become increasingly concentrated in the Northern and Eastern regions of Uganda as the Central and Western regions have experienced more rapid poverty reduction.** There are large and increasing regional variations in poverty with most of the poor concentrated in the north and the east. In 2006, approximately 68 percent of the poor lived in the northern and eastern

FIGURE 5: Share of poor population in each region, 2006–2013



Source: UNHS 2006–2013.

parts of the country. Seven years later, this proportion increased to 84 percent. Poverty has fallen in all regions, but gains have been slower in the poorer Northern and Eastern regions (Figure 5). The annual percent reduction in poverty has been almost twice as high in the Central and Western regions (7.4 and 7.9 percent respectively) than in the Northern and Eastern regions (3.1 and 4.7 percent respectively).

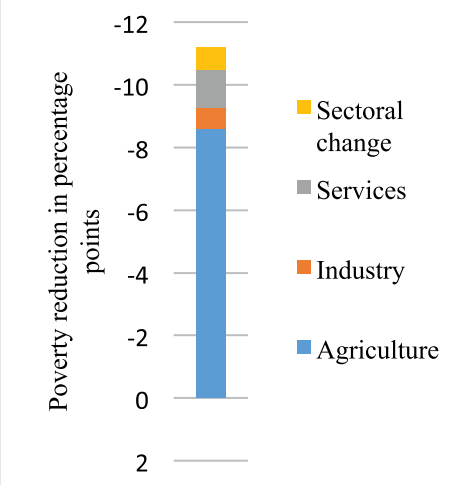
18. **High fertility rates and widespread acceptance of discriminatory attitudes to women hold back the participation of women in Uganda's development, despite impressive gains in primary female enrollment, maternal mortality, and poverty reduction among female-headed households.** Although, on average, female-headed households are no poorer than male-headed households, some groups of female-headed households are particularly vulnerable to poverty. Female widows are almost twice as likely to be poor compared to male widowers. Maternal mortality rates have been falling but are still high and given each woman goes through six births on average, having children still poses a significant risk to women. High pregnancy rates, particularly among teenage girls, also jeopardize educational attainment. Pregnancy is the fourth most common reason for dropping out of secondary school: in 2013, 1 in 10 girls report dropping out of secondary school as a result of pregnancy. Lower rates of agricultural productivity among female-headed households can largely be accounted for by the higher childcare demands they face (Ali et al. 2015). Perceptions also limit Uganda's progress in reducing gender inequalities: perceptions of gender appropriate economic roles have been found to account for lower female earnings (Campo et al. 2015), and worryingly, nearly four in every five Ugandan women accept domestic violence—the second highest acceptance of domestic violence in Sub-Saharan Africa (World Bank 2016a).

THE DRIVERS OF PROGRESS: AGRICULTURE, URBANIZATION, AND EDUCATION

AGRICULTURE

19. **Poverty reduction among households in agriculture accounts for 79 percent of national poverty reduction from 2006 to 2013 (Figure 6).** To some extent this is to be expected as the agricultural sector is the main sector of employment for households in Uganda, particularly so for poorer households. Although the agricultural sector is the main sector of employment, half of those engaged in agriculture have additional sources of income from non-agricultural activities. However, poverty fell just as fast for agricultural households that were solely engaged in agriculture as for those with diversified income sources, suggesting that growth in agricultural incomes drove poverty reduction.

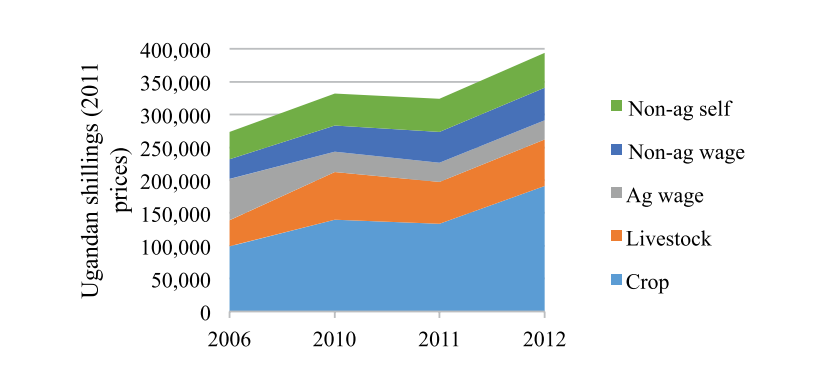
FIGURE 6: Sectoral contribution to poverty reduction, 2006 to 2013, main source of income



Source: UNHS 2006–2013.

20. **High rates of agricultural income growth were observed from 2006 to 2012, particularly for the poorest.** Figure 7 shows how different sources of income have grown for households in the bottom 40 percent from 2006 to 2012. Agricultural income grew at 6 percent per capita per year. Agricultural income growth is also found to be more strongly correlated with consumption growth than other sources of income growth, particularly for the bottom 40 percent.

FIGURE 7: Real income per capita by source of income, bottom 40 percent



Source: Uganda National Panel Survey (UNPS) 2006–2012

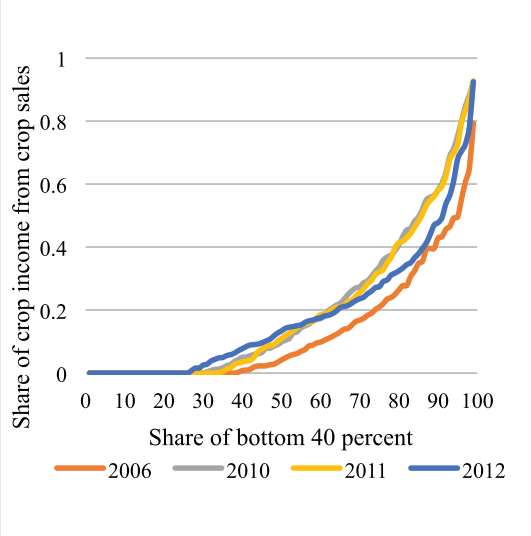
21. **Agricultural incomes grew because the government got right some key fundamentals that provided the incentives to invest time in agricultural production and engage in agricultural markets.** Conflict with the Lord's Resistance Army in the Northern region of Uganda was stabilized in 2008 and this had a positive impact on crop income. Establishing peace was associated with a doubling (a 112 percent growth) in crop income in affected areas. In addition, markets, particularly in the north and east, have been improving since 2006 because of infrastructure investments, new export markets opening up in South Sudan, DRC and in Kenya, better market information for farmers and traders (because of the development of a well-functioning information and communication technology [ICT] sector), and growth in trade services, which improved marketing efficiency. This has contributed to real relative price increases for agricultural commodities that poor farmers grow and sell.

22. **Luck was also on Uganda's side: good weather benefited many households and positive price trends in international and regional markets aided real crop price increases.** Prices reflect not just improvements in marketing efficiency, but also favorable changes in supply and demand conditions within and outside of Uganda. Peace in South Sudan and the Democratic Republic of Congo provided new sources of demand for Ugandan food production. Good rainfall and prices account for 51 percent of the improvement in crop income for all households and 66 percent of the improvement in crop income for the bottom 40 percent. A 10 percent increase in water sufficiency increases crop income by 9.9 percent. A 10 percent increase in the price of maize or beans increases crop income by 4.5 and 9.2 percent, respectively.

23. **The importance of regional and domestic markets in contributing to agricultural growth is confirmed by the fact that the share of household income coming from crop sales increased from 2006 to 2012.** The share of households in the bottom 40 percent that are selling crops increased from 60 percent in 2006 to 72 percent in 2012 (Figure 8). It is crops that are produced for domestic and regional consumption that dominate crop income. Coffee is important for some households, but does not comprise more than 10 percent of crop income in any region. This is consistent with the export data that shows that coffee fell from comprising three-quarters of exports at the beginning of the 1990s to a third of exports by 2005 (World Bank 2007) and that 41 percent of exports now go to Uganda's four regional neighbors (in order of importance): South Sudan, the Democratic Republic of Congo, Kenya, and Rwanda (World Bank 2016b).

24. **Agricultural growth was not driven by technology adoption or change in the nature of production.** When extension services were provided crop income was 20 percent higher, but few households received extension services. Extension services expanded from 8 percent of households in 2006 to 12 percent of households in 2013. There was very little growth in the use of improved inputs and as a result modernization of agricultural practices contributed very little to crop income growth. Understanding why farmers did not adopt agricultural technologies during this time of high prices and designing policies that help farmers overcome these constraints needs to be a key area of action going forward. Recent research suggests that poor quality of inputs, limited access to credit, and lack of knowledge are binding constraints. The high prevalence of low-quality inputs in domestic input markets results in negative returns on average, even though prices are high. If authentic technologies replaced these low-quality products, average returns for smallholder farmers would be over 50 percent.

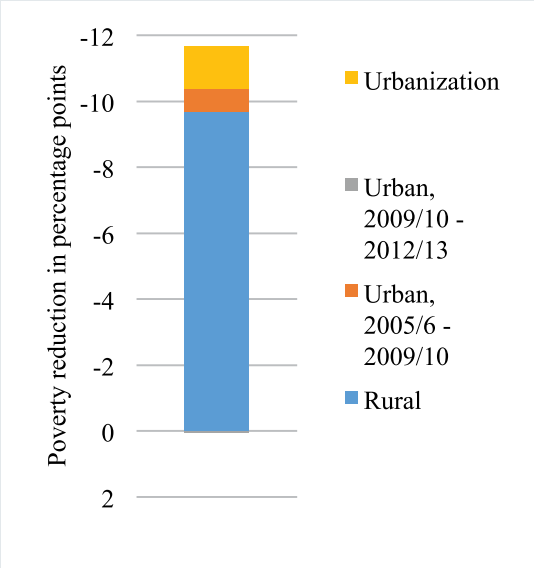
FIGURE 8: Share of crop income derived from crop sales, bottom 40 percent, 2006–2012



Source: Staff calculations using rural income-generating activities (RIGA) income aggregates calculated from UNPS 2006–2012

25. **Urbanization can account for one-tenth of the poverty reduction that took place from 2006 to 2013, accounting for the movement of 180,000 people out of poverty.** While the bulk of Uganda's 35 million inhabitants live in rural areas, the country is urbanizing at a considerable pace. Between 2002 and 2014 the share of Uganda's population living in urban areas increased by more than 50 percent, from 12.1 percent to 18.4 percent (UBOS 2014b). Urbanization has been an important driver of poverty reduction from 2006 to 2013 (Figure 9). Migration, in addition to demographics and redistricting, contributes to urbanization.

FIGURE 9: Locational contribution to poverty reduction



Source: Staff calculations using UNHS 2006–2013

26. **Careful analysis on the impact of migration suggests it results in consumption growth that is 14.6 percent higher per year for migrants compared to those who do not migrate.** Migration has a large and positive impact, both for those who move to rural destinations and those who move to urban destinations, but the impact of migration is larger when it entails moving to an urban area. Annual consumption growth is 16.3 percent higher for those who migrate to urban destinations and 14 percent higher for those who migrate to rural destinations. Migration can bring about welfare gains if individuals are able to move from areas where the return to labor is low to areas where the return to labor is higher because of better market opportunities.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PRESSURE

This appears to have been the case for both rural-urban migration and rural-rural migration in which migrants often came from remote, conflict affected rural areas. Migration can also aid poverty reduction through the remittances that it allows. Currently little is known about the role of remittances in bringing about poverty reduction in Uganda.

27. **Urban migration is facilitated by education and access to finance and hindered by remoteness and lack of access to social networks in urban areas.** Those who are more educated are more likely to migrate and more likely to send household members to migrate. Even once controlling for other factors, a one-year increase in schooling leads to 0.1 percent increase in the incidence of out-migration. Having a formal loan and a savings account increases the likelihood of becoming a migrant-sending household by 3 and 6 percentage points, respectively, controlling for other factors. Access to finance can also help overcome the costs associated with migrating from a remote area to a distant urban center. There is also some evidence that access to mobile phones helps overcome barriers associated with limited social networks in urban areas.

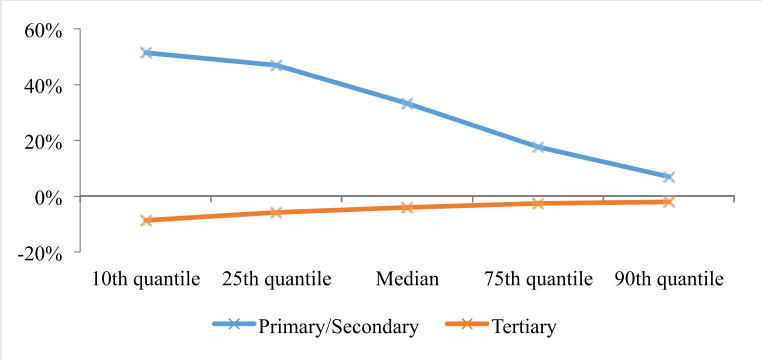
28. **Some migration—both rural and urban—is the result of experiencing loss of income, assets, or security.** Young, working age individuals from areas with higher levels of conflict-related fatalities were more likely to migrate and migrated to rural areas. Young, working age individuals from areas with high levels of rainfall-induced harvest losses were more likely to migrate to urban areas. Losing assets and having no network to rely on in a time of need also encouraged migration. While migration helped increase the welfare of these individuals in the face of shocks, it is not clear whether migration is the optimal instrument to manage risk. Reducing exposure to risk and increasing access to other tools with which to manage shocks when they do occur may prove more beneficial in the long term.

EDUCATION

29. **Although progress on education has been slow, progress has aided poverty reduction, accounting for half of the consumption growth experienced by poor households.** Households with higher levels of education have higher agricultural incomes and more productive nonfarm enterprises. Education also enables migration and helps households gain more productive wage employment. The estimated returns to education in Uganda range from 4.5–8.3 percent (Lekfuangfu et al. 2012). Over the last decade, there was slow improvement in human capital outcomes but the slight increase of the share of households with secondary education aided consumption growth. Decomposition analysis suggests this improvement can account for half of the consumption growth of households at the bottom of the consumption distribution (Figure 10). The strong positive correlation of secondary education and consumption growth is particularly important for poor households.

30. **Higher educational outcomes contribute to growth in wage employment income and migration and enables households to diversify in the face of shocks.** Panel data analysis shows that as households have increased the level of education of household members they are more likely to see growth in wage income and in migration, particularly to urban areas. Having some secondary education implies a 1.4 percent reduction in the intensity of a weather shock for households in the bottom 40 percent. More education facilitates diversification by enabling increased participation in the labor market. Productivity in agriculture is also higher for those with higher levels of education.

FIGURE 10: Contribution of education to consumption growth



Source: Staff calculations using UNHS 2006–2013.

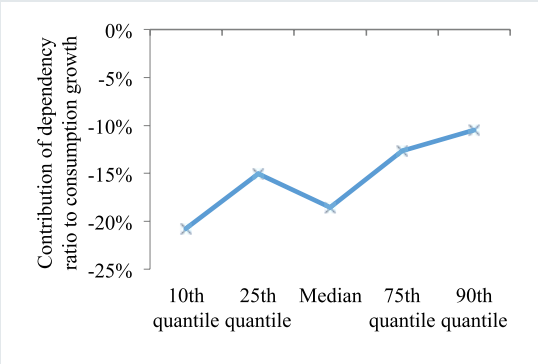
WHAT DID NOT CONTRIBUTE? DEMOGRAPHICS, STRUCTURAL CHANGE, AND REDISTRIBUTIVE FISCAL POLICY

DEMOGRAPHICS

31. **Uganda has one of the youngest and most rapidly growing populations in the world.** About half (48.7 percent) of Uganda's population is younger than 15, well above Sub-Saharan Africa's average of 43.2 percent and world average of 26.8 percent. The country's population growth rate, currently at 3.3 percent, is also above Africa's average.

32. **An increasing dependency ratio held back consumption growth from 2006 to 2013, reducing the consumption growth of the poorest households by 15 percent to 20 percent.** Although the fertility rate is high, it has been slowly falling over the last two decades. However, the drop in fertility rates in recent years has yet to substantially change the demographic composition of Ugandan households. The dependency ratio has been increasing, particularly for poorer households. This increase held back consumption growth from 2006 to 2013 (Figure 11). Reducing the dependency ratio will benefit consumption growth, particularly for poorer households.

FIGURE 11: Higher dependency ratios held back consumption growth, especially for the poorest



Source: Staff calculations using UNHS 2006–2013

STRUCTURAL CHANGE

33. **There has been little change in the proportion of households that count agriculture as their main sector of employment since 2006.** This is despite high growth rates in services and manufacturing during this period. Additionally few households have diversified into nonfarm activities. From 1993 to 2006, many households stayed in agriculture, but diversified their sources of income by taking additional income activities in non-agricultural sectors (Fox and Pimhidzai 2011). This trend has not been observed since 2006. The high rates of growth in non-agricultural sectors resulted in job creation keeping pace with growth in the working age population, but not outpacing growth.

34. **Structural change and diversification was not a major driver of poverty reduction since 2006, although growth in nonfarm incomes helped some households.** Although diversification may have driven poverty reduction before 2006, when diversification was rapidly increasing, it was not a major driver of progress from 2006 to 2013. Poverty reduction was just as fast for those solely in agriculture as it was for those with diversified income sources. However, some households did experience growth in non-agricultural incomes and this aided improvements in consumption and reductions in poverty.

35. **Diversification has increased the resilience of households to shocks by making them less vulnerable to the impact of bad weather.** Weather has a smaller impact on consumption than it does on crop income because households are able to increase income from non-agricultural activities (Table 1). If agricultural income is affected by climate shocks, households can offset this with increased nonfarm income. As a result, a lot of movement in and out of nonfarm activities by agricultural households is observed.

TABLE 1: Impact of weather on diversification

Impact of 10 percent reduction in rainfall on…	Crop income	Non-agricultural wage income	Nonfarm self-employment income	Consumption
All households	18.9***	−36.3***	−28.0***	4.8***
Bottom 40 percent	24.2***	−43.7***	−33.3***	4.0**

Source: Staff calculations using UNPS 2006–2012.

*Note: Significance levels are reported as follows: *p < 0.10, ** p < 0.05, *** p < 0.01.*

36. **Unhelpful gender norms, low levels of education, and lack of access to infrastructure and finance has limited the degree to which households move out of agriculture.** Low education, lack of access to financial instruments (both savings and credit), and lack of access to requisite infrastructure (such as electricity) has constrained non-agricultural income growth for many households. In addition, strong gender norms have constrained non-agricultural income growth for many women during this period. Female adolescents are likely to give birth and get married young, limiting their income earning potential (Bandiera et al. 2015). Gender norms influence the type of activities women engage in, causing them to go into lower productive sectors (Campo et al. 2015).


MTU KILA UPA

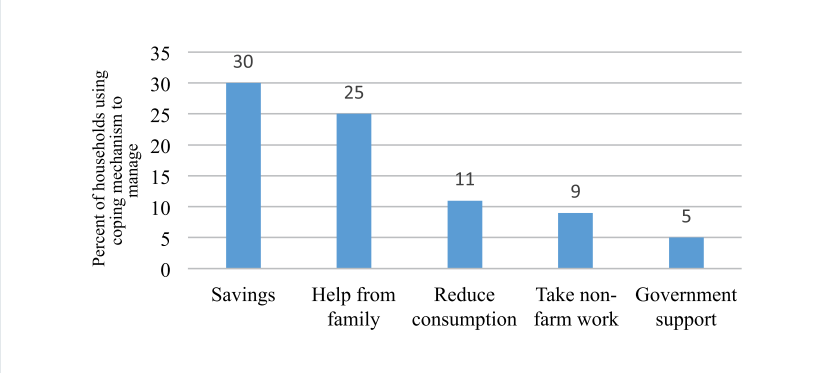
37. **Limited firm growth and job creation has also resulted in structural change contributing little to poverty reduction.** While an analysis of the constraints to firm growth is beyond the scope of this report, and have been discussed elsewhere (for example, World Bank 2015), the results of the analysis undertaken show that the limited growth of non-agricultural jobs for the bottom 40 percent has been a missed opportunity for Uganda. Structural change could have contributed to poverty reduction more had this been present.

REDISTRIBUTIVE FISCAL POLICY

38. **Growth, not redistribution, drives poverty reduction in Uganda reflecting a limited use of fiscal policy to redistribute incomes in comparison to other countries in the region.** Public transfers to households are negligible in Uganda. The proportion of poor households receiving any kind of transfer is 5 percent. Uganda's total spending on social security in 2013 was 1 percent of GDP compared to an average of 2.8 percent for other countries in Africa. Of that 1 percent, only 0.4 percent was spent on direct income support to poor households, compared with 1.1 percent in other low-income countries in Africa (World Bank 2015).

39. **There is also limited government support available to households to manage shocks to welfare.** Figure 12 indicates that households rely on savings (35 percent) and help from family (25 percent) to mitigate the impact of shocks. Very few report receiving support from the government, highlighting the absence of reliable official safety net programs. Safety nets provided by savings, family, and friends are of paramount importance in the absence of official safety net programs. In a context in which income volatility is high, limited formal safety nets result in considerable vulnerability to poverty. Savings cannot help mitigate large shocks and reliance on families and friends in the absence of formal safety nets is not always ideal. If all are affected by the same bad event (for example, poor rains or low cash crop prices), they are unable to provide help. Not only does the lack of formal safety nets result in households falling into poverty when setbacks occur, it also limits consumption growth for poor and vulnerable households. These households avoid investing in risky production activities even when returns are high. In addition, excessive reliance on informal networks can result in individuals hiding or foregoing income to avoid the risk of this type of informal taxation in the future (Fafchamps and Hill 2015; Jakiela and Ozier 2015).

FIGURE 12: Self-reported coping mechanism

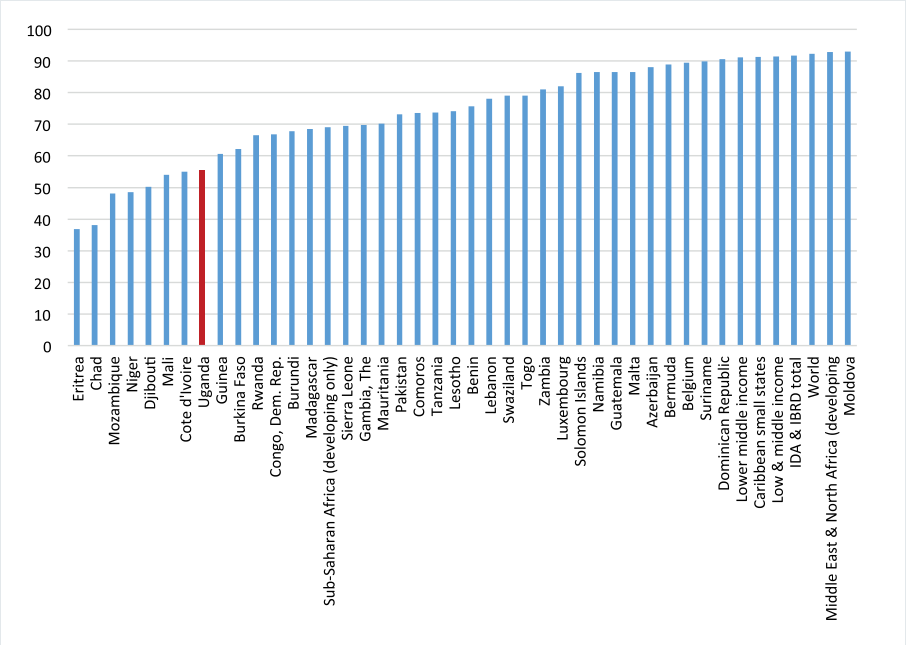


Source: Nikolaski et al. (2015) using UNPS 2011.

40. **Although fiscal policy does not play an important role in directly redistributing income to reduce poverty, public spending can provide an important role in facilitating poverty reduction through the provision of basic services.** However, the share of public spending on education and health services is low in Uganda, in comparison to regional peers. In 2013, public spending on health accounted for only 24 percent of the total expenditure on health. In contrast, this share was 37 percent among low-income countries and almost 44 percent among developing economies in Sub-Saharan Africa (World Bank 2015). This is compounded by the fact that overall public spending is low because of limited tax revenue generation. Because of low levels of spending, out-of-pocket payments are generally higher in Uganda than those in other countries in the region and in countries with similar levels of GDP per capita. Public investment in education also remains low, averaging about 3.2 percent of GDP annually. It is also here that the implementation gap that has been increasing in recent years has limited the effectiveness of government.

41. **The significant increase in primary enrollment rates has yet to translate into substantial improvements in educational outcomes.** The high primary school enrollment rates among both poor and rich children reflect the benefits of the UPE program that was introduced by the GoU in 1997. However, primary completion rates are lower than expected, and the trends show that the completion rate fell as more children were enrolled in school. Uganda's gross primary completion rate was 53 percent in 2011. When compared with its peers, Uganda's primary completion rate is low (Figure 13). As a consequence, the out-of-school rate for lower secondary is much higher than its income peers.

FIGURE 13: Primary completion rate is among the lowest in the world



Source: WDI.


Save the Children
In Uganda
"Rewrite the Future Programme

42. **More and better health and education inputs seem to be available in better-off locations, as expected. Consider, for example, the number of pupils per classroom.** These ratios are much higher for the poorest quintile of communities than the richest. A typical classroom in the poorest quintile has 116 pupils, while the corresponding figure for the richest quintile is 58 pupils. Teacher absenteeism rates at the level of schools or classrooms are also negatively correlated with welfare.[4] For communities in the poorest quintile, about four out of ten teachers are absent from school. Teachers are more likely to be absent in poorer areas. Unlike in the education sector, there is no apparent correlation between health workers' absenteeism and the welfare level of communities. However, there is a clear correlation between patient caseload and community welfare.[5] A health worker in the poorest quintile provides consultations to six outpatients per day (median value) versus three for staff in facilities in the richest quintile of communities. Sick people in poor areas are more likely to face overcrowding and long queues while visiting their health centers.

43. **The low quality of inputs negatively affects service delivery outcomes, especially in poor areas.** Teacher's absenteeism constitutes a barrier to pupil's achievement. Similarly, teachers and health workers often lack the minimum knowledge to properly teach or treat patients. Evidence suggests that workers knowledge is lower in poor communities. As a consequence, children may go to school, but not master the necessary knowledge that they need to be successful on the labor market. Similarly, public and private spending on health will not guarantee value for money. All these have the potential to have a negative impact on human capital accumulation, even more so for the poor, as they experienced the lowest quality of services.

44. **Poorer communities are more likely to be satisfied with the services that they are receiving, even though it is clear from the analysis that the level of inputs and their quality is higher in better-off communities.** The perceived quality of service is negatively correlated with community welfare. The likely explanation is that poor communities are so deprived that their expectations are low. This leads them to be more rapidly satisfied with the services they get. By contrast, better-off communities have higher expectations and, therefore, are more demanding about quality and less satisfied even if objectively they are getting comparatively better services. This has a series of implications on how to deal with community feedback, including importance of access to information and education of beneficiaries on what quality to expect. This result also implies that community feedback as such is useful, but should not be the sole source of monitoring information.

45. **The contrast between satisfaction and quality of service provision raises questions for the effectiveness of community based monitoring and the demand for accountability.** If the population in poor communities has low expectations or is not exposed enough to what services of good quality should look like, to be able to indeed assess quality, it is not clear that it can effectively lobby for quality services. For social accountability mechanisms to be effective, additional measures may be needed to enable disadvantaged communities to properly monitor the services they receive. The issue is not specific to Uganda, and there are examples of social accountability initiatives with mixed results (Fox 2015). Issues of political economy may also have to be considered for social accountability measures to work (Joshia and Houtzagerb 2012). The importance of information for a positive impact of community monitoring has been documented for the case of Uganda by Reinikka

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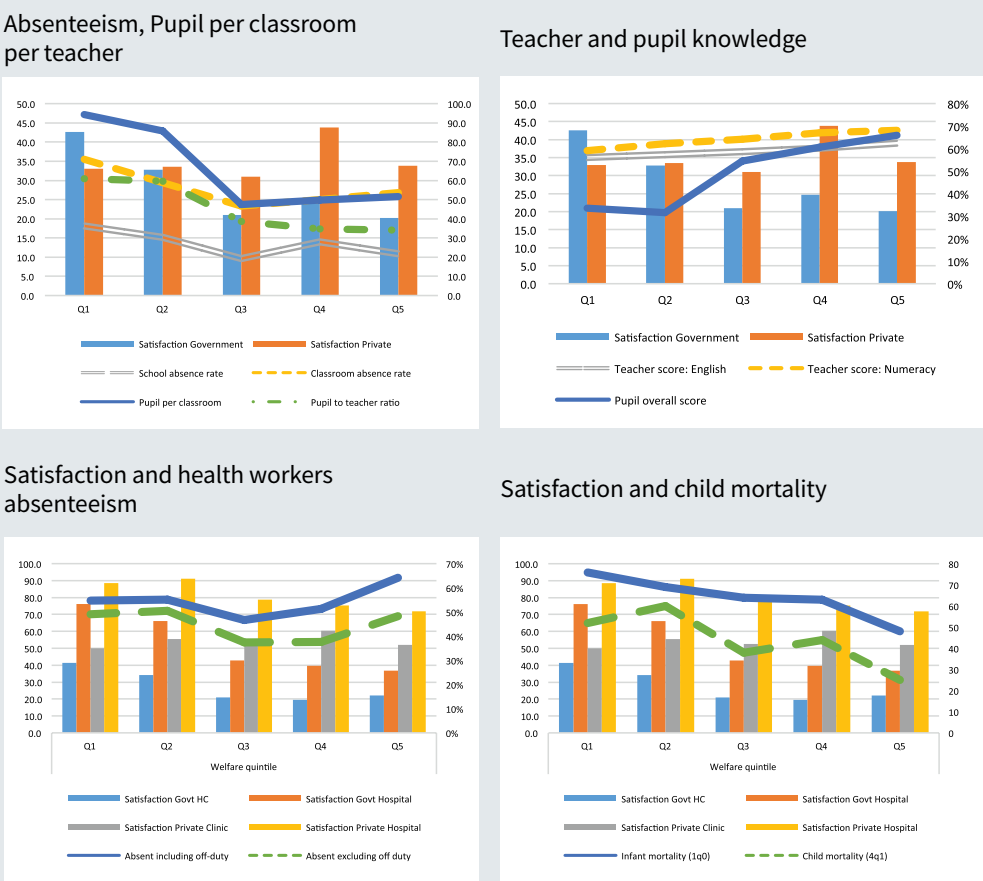
4. That is, whether teachers are in the classroom even if they may be in the school.

5. Patient caseload is defined as the average number of outpatient visits a health worker attends to per working day.

and Svensson (2005) and Svensson et al. (2015) among others. Reinikka and Svensson (2005) conducted an experiment that shows that making information on budget allocation available to beneficiaries reduces corruption and elite capture and has a positive impact on enrollment and educational outcomes. Svensson et al. (2015) conducted an experiment on community-based monitoring of absenteeism versus head teachers monitoring. They found that local monitoring improves teacher attendance but only when the head teacher is responsible for monitoring and there are financial incentives for teachers at stake. Moreover, they also found that parents generate significantly less reliable reports than head teachers do. Overall, in a context where poverty and expectations are a problem, more needs to be done for social accountability to be effective.

FIGURE 14: Inputs and user satisfaction by welfare quintiles in education sector



Source: Staff calculations using the 2013 Service Delivery Indicators (SDI) survey, the UNHS 2012/13, and the Uganda Demographic and Health Survey (UDHS) 2011.

46. **This report has documented that Uganda has continued to reduce poverty from 2006 to 2013, even as growth faltered.** Although growth slowed for all households, poor households still experienced consumption growth and poverty fell. Agricultural growth drove much of this poverty reduction aided by peace in the north, improvements in domestic and regional food markets, favorable international prices, and good weather. Urbanization and modest improvements in education outcomes also contributed to poverty reduction.

47. **However, it is not clear that the processes that brought about gains in the past can be relied upon to address the continuing challenge of extreme poverty in Uganda, particularly in the impoverished Northern and Eastern regions.** Uganda's formula for success is one that works when conditions are favorable, particularly in agriculture. Moreover, luck was on Uganda's side. There was little fundamental change in the nature of production that benefited poverty reduction—either in agriculture or in other sectors.

48. **The benefits of security and liberalized markets cannot be underestimated and will likely aid future poverty reduction, as they have done in the past.** Ensuring continued stability in the region, and further promoting efficient crop markets and regional exports such as through investments in regional corridors and improving export efficiency will be important for future agricultural growth in Uganda, and this benefits poor households.

49. **However, sustained gains also require a fundamental shift in the nature of production from low-investment, informal activities to higher-capital, more productive employment.** This in turn requires effective public investment in services (such as education, health, and agricultural extension) and safety nets. Without this, it is hard to ensure sustained progress in poverty reduction, reduce vulnerability, and address regional inequality.

50. **Modernizing agricultural production will require a focus both on fostering demand for agricultural products and on addressing the constraints households face in making investments.** Continued efforts in increasing demand for agricultural production through regional trade, growth in urban demand, and investments in agro-processing industries are needed to keep prices of agricultural commodities high. Addressing constraints to modern input adoption will entail improving the quality of inputs in local markets through certification (public or private), and complementary investments in extension and credit to address the knowledge and financial constraints farmers face. This is particularly important in the Northern and Eastern regions where agricultural income growth is particularly vulnerable. Addressing the volatility of returns to investing in agriculture in this region—through safety nets or other insurance mechanisms—may also be needed.

51. **Increasing the contribution of non-agricultural income growth to poverty reduction requires a focus on firm growth and job creation, but also investments in education and increased financial inclusion.** An assessment of the constraints to firm growth are beyond the focus of this report, but this report has shown that for non-agricultural growth to be inclusive of the poorest

households, investments in education and skills training for the poorest are needed (especially for vulnerable groups such as adolescent girls), as well as stronger financial markets for savings and credit. When urbanization occurs this brings direct gains to those who move, and evidence suggests that investments in education and financial markets will aid migration.

52. **Improving educational outcomes and addressing knowledge gaps through extension and vocational training will require improving service delivery.** Although the analysis highlights many benefits to higher education, progress in improving educational outcomes has been slow. The quality of service delivery is lower for poorer households and poorer households are also less vocal about the poor quality of service delivery they receive, limiting the effectiveness of local accountability mechanisms to improve service delivery in poor communities.

53. **Concerted action to reduce fertility rates is also needed to reduce the strain that high dependency ratios puts on poverty reduction and to improve the socioeconomic status of women.** Investing in education and economic opportunities for adolescent girls helps to reduce fertility rates.

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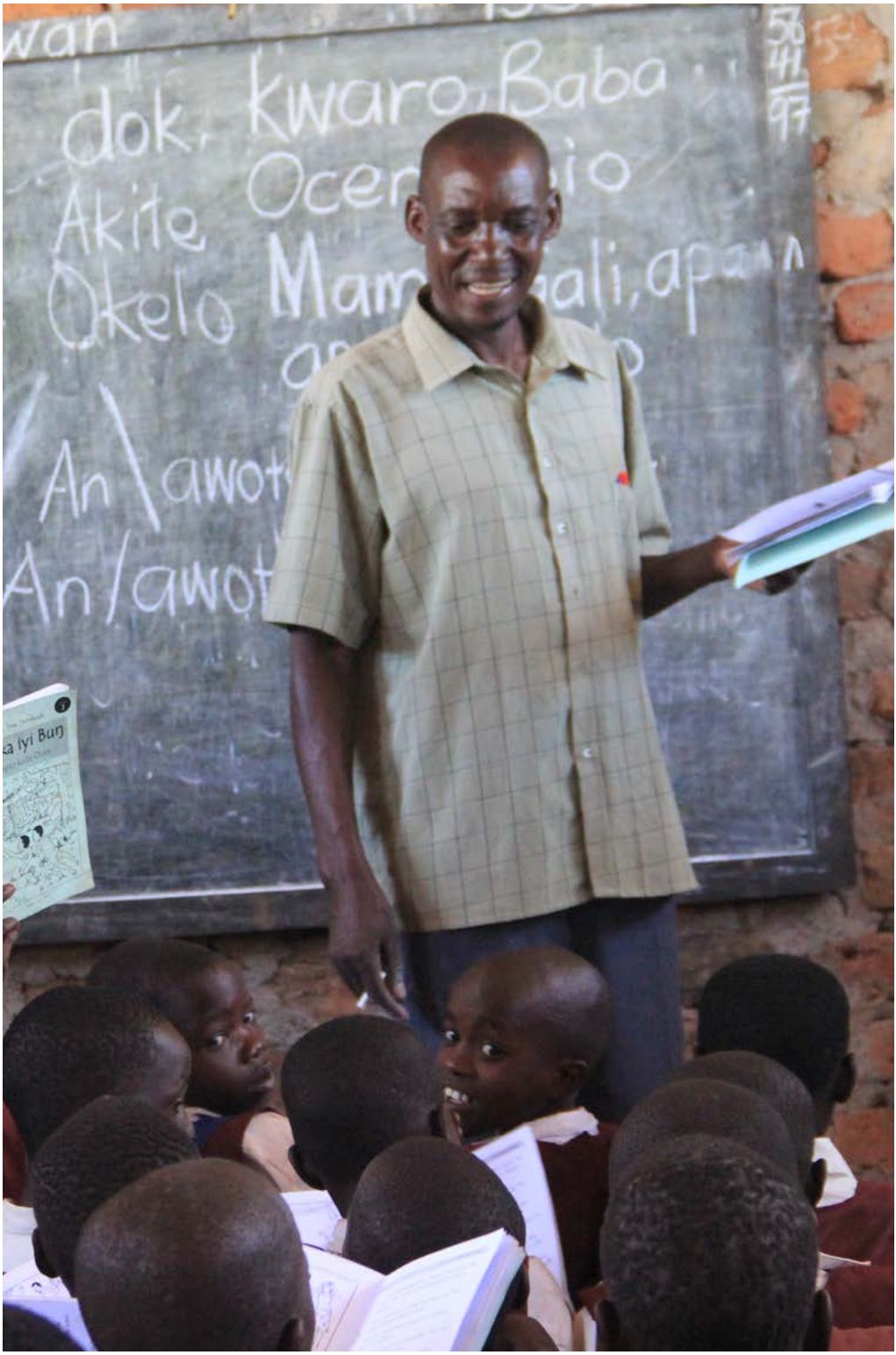
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