TECHNICAL REPORT

Poverty Reduction in Uganda in the 1990s

A Country Case Study

NATHAN
ASSOCIATES INC.
www.nathaninc.com

PREPARED BY
Richard H. Adams, Jr.

SUBMITTED TO
USAID/Washington

SUBMITTED BY
Nathan Associates Inc.

SUBMITTED UNDER
Contract No. PCE-I-00-00-00013-00

November 29, 2002

Contents

ILLUSTRATIONS

Tables

Figure

Poverty Reduction in Uganda in the 1990s

During the 1990s Uganda's record of economic growth and poverty reduction was one of the most impressive in the world. During this decade real GDP growth averaged 6.9 percent per year. This strong economic growth was wide and broad-based, leading to a dramatic decline in poverty across virtually all segments of the population. Between 1992 and 1997/98 the headcount index of poverty fell from 56 percent of the population to 44 percent (Appleton 2001a, 85). More recent data suggest that the incidence of poverty has continued to fall to 35 percent of the population (Economist Intelligence Unit 2001, 26).

How has Uganda achieved these impressive rates of poverty reduction in a continent where poverty rates are generally among the highest in the world? To what extent was this reduction in poverty the outcome of a poverty reduction strategy rather than a more general development strategy? What were the government policies and programs that led to this poverty reduction?

This paper focuses on these and similar questions, relying on secondary sources and data. Because Uganda's success cannot be explained without reference to the country's recent past, the report first briefly describes the chaotic socioeconomic order that the National Resistance Movement (NRM) inherited in 1986. This report then summarizes the general development strategy that the NRM implemented to stimulate economic growth and reduce poverty and analyzes the impact of this general development strategy on poverty and inequality. The fourth part of this report discusses Uganda's more recent adoption (post-1997) of a two-pronged poverty reduction strategy. The final part of this report summarizes the basic lessons learned from this country case study.

Uganda's Recent Past (1972–86)

In 1972 President Idi Amin declared economic war against the large and commercially dominant Asian community in Uganda. This action marked the beginning of an era of social disorder and economic collapse. By 1979, when Amin was overthrown, an estimated 500,000 Ugandans had died as a result of mass murders and political instability. Between 1979 and 1986 more chaos ensued, leading to the displacement of about 7 percent of the population.

As Table 1 shows, by 1986, the year that marks the return of political and social order, GDP per capita had declined about 42 percent from its base in 1971. Between these two benchmark years, other fundamental changes occurred in the economy. Between 1971 and 1986, subsistence activities (excluding livestock and construction) increased from 21 percent to 36 percent of the economy. By contrast, the share of the economy involved in assets and transactions (manufacturing) fell by half. As social and political violence flared, the people of Uganda retreated into self-sufficient agriculture and enterprises. This was a sensible, household-level response in a country that was (and still is) overwhelmingly rural. Seventy-seven percent of Ugandans are farmers, and 94 percent of all rural households are engaged in agriculture (Larson and Deininger 2001, 178).

Table 1
The Level and Composition of Economic Activity in Uganda, Selected Years

Economic Activity	1971	1986	1994	1997	1999
GDP per capita (index: 1971=100)	100.0	58.0	69.0	80.0	86.0
Volume of coffee exports (thousands of tons)	191.0	141.0	152.0	265.0	216.0
War-vulnerable activities (percentage share of GDP at 1991 prices)					
Activities intensive in assets and transactions (manufacturing)	8.8	4.4	6.0	8.6	9.6
Transaction-providing activities (transport and commerce)	21.1	16.1	17.2	17.7	18.2
Asset-providing activities (construction)	12.5	3.5	5.5	7.6	7.9
Total	42.5	24.0	28.7	33.9	35.7
War-invulnerable activities (percentage share of GDP at 1991 prices)					
Subsistence activities excluding livestock and construction	20.5	36.0	26.9	21.0	20.3
Unassigned activities	37.0	40.0	44.4	45.1	44.0

Note: Data are for fiscal years.
SOURCE: Collier and Reinikka (2001, Table 2.2)

General Development Strategy (1986–1997)

When the NRM came to power in Uganda in 1986, it found a society wrecked by 15 years of civil war, mass murder, and economic dislocation. In one sense, Uganda's desperate straits made rapid economic recovery easier because the base was so low and human and financial resources, both at home and abroad, were available to draw on. However, the depth of the social and institutional collapse in Uganda was so great that low levels of trust and high expectations of opportunism made it difficult to accomplish anything. Uganda's striking success in rebuilding its economy makes it a rare successful example of post-conflict recovery in Africa.

The NRM rebuilt the Ugandan economy by pursuing a development and recovery strategy that emphasized four elements: internal peace, food production, trade liberalization, and stable currency.[1]

First, and probably most important, after years of large-scale violence, the NRM was able to establish a reasonable level of internal peace in Uganda. The NRM achieved this goal by delaying the demobilization of soldiers until 1993/94 and then ensuring that economic growth led to more

[1] Discussion of these elements draws heavily on Collier and Reinikka (2001).

employment opportunities for new, young entrants to the labor force. These two initiatives worked in tandem—the delayed demobilization of soldiers meant that those with arms and grievances were not allowed back into society until the fruits of economic expansion (e.g., jobs) became more widely available. Moreover, after soldiers were demobilized they were returned to their home villages and then given the financial and material assistance to facilitate their reintegration into society.

The second element of the NRM development strategy was food production. During the 1970s and 1980s, as the security situation in Uganda deteriorated, food production also plummeted. Because more than 90 percent of Ugandans are involved in agriculture, this had a negative effect on both rural incomes and urban food supplies. However, after 1986 the NRM took concerted steps to boost food production. Marketing channels for food crops were improved, and the government began to raise producer prices for cereal crops (maize, millet, sorghum, cassava). The result was a surge in output. Between 1986/88 and 1998/2000, total cereal production in Uganda rose at an average annual rate of 3.87 percent, which exceeded even the high rate of population growth (3.17 percent). As Table 2 shows, most of this expansion in cereal output came from an expansion of the area of cereal crops harvested rather than and expansion in yield. High-yield technology in agriculture has not reached most of the 2.5 million small farmers in Ugandan agriculture.

Table 2
Cereal Production in Uganda, 1986 to 2000

Year	Total Cereal Production (000 metric tons)	Area Harvested (000 hectares)	Yield (kilograms per hectare)
1986	1,084	822	1,319
1987	1,225	891	1,375
1988	1,398	1,000	1,438
1989	1,485	1,043	1,485
1990	1,558	1,055	1,494
1991	1,523	1,099	1,386
1992	1,743	1,141	1,530
1993	1,881	1,220	1,542
1994	2,036	1,295	1,572
1995	2,080	1,301	1,551
1996	1,588	1,318	1,205
1997	1,625	1,334	1,218
1998	1,911	1,366	1,399
1999	1,825	1,333	1,369
2000	2,111	1,372	1,539
AVERAGE ANNUAL GROWTH RATE			
1986/88–1998/00	3.87	3.44	0.34

SOURCE: *Food and Agriculture Organization, FAO Production Yearbooks (various issues)*

The third element of the NRM development strategy was trade liberalization. During the 1970s exports were taxed, directly and implicitly, at very high rates. As a result, all exports—including the most important agricultural one, coffee—collapsed.[2] Because most Ugandans are involved in agriculture, and many (including the poor) grow both food crops and cash crops (including coffee),[3] the heavy taxation of export crops had a serious, negative impact on welfare. After 1986, the NRM took steps to liberalize the export sector. In the coffee sector, liberalization involved dismantling government-run coffee marketing boards and increasing the number of private exporters buying coffee from farmers (Collier and Reinikka 2001, 34–35). As a result, prices received by small producers rose dramatically. Between 1986 and 1994/95 the percentage of world coffee prices received by farmers increased from about 20 or 30 percent to 80 percent.[4] This factor, coupled with a surge in the world price of coffee in the mid-1990s (Table 3), served to greatly increase the incomes of one of the poorest sectors of Ugandan society: small-scale farmers growing cash crops (Appleton 2001a, 109).

Table 3
Price of Coffee Exports in Uganda, 1991/92 to 1997/98

Fiscal year	Price (US$/kg)
1991/92	0.86
1992/93	0.82
1993/94	1.14
1994/95	2.55
1995/96	1.72
1996/97	1.38
1997/98	1.57

Source: Appleton (2001a, 109)

The fourth element of the NRM development strategy was maintaining a stable currency. During the period 1986/87 to 1991/92 inflation in Uganda averaged 107 percent per year, which had a negative impact on all segments of the population, especially the poor. However, in the early 1990s the government, with the IMF and the World Bank, began a new adjustment program of fiscal restraint. Aggregate government expenditures were not allowed to exceed government revenues, and expenditures by each public ministry were carefully monitored. In the words of Ugandan President Yoweri Museveni: “There will be no inflation. Inflation is indiscipline. If there is no money then we will close down some (government) ministries and walk.”[5] As a result of these efforts, inflation declined to less than 7 percent per year (Henstridge and Kasekende 2001, Table 3.1).

Foreign assistance played a prominent role in the achievement of the four elements of the NRM development strategy. A recent assessment found that financial aid and its associated conditionality played a positive role in the trade liberalization and fiscal restraint policy reforms of the late 1980s and early 1990s (Holmgren and others 1999). Since 1994, when most of the NRM macroeconomic reforms were secured, conditionality has become less important and financial assistance more important in ensuring policy reform. Since then the share of foreign aid has ranged between 48 and 66 percent of total government expenditure (Collier and Reinikka 2001, Table 2.7). These foreign aid flows have done much to provide the NRM policy elite with the wherewithal to pursue reform.

---

[2] For example, Table 1 shows that the volume of coffee exports declined by 26 percent between 1971 and 1986.
[3] According to Appleton (2001a: 106), about one-third of all agricultural households in Uganda grow some nonfood cash crop.
[4] While the prices received by Ugandan coffee farmers increased sharply, their total output expanded only marginally. Between 1986/88 and 1998/2000 total green coffee production increased by only 1.3 percent per year in Uganda (FAO, various years).
[5] Quoted in Henstridge and Kasekende (2001, 58).

Impact of Development Strategy on Poverty and Inequality

Fortunately, there are household-level data that can be used to evaluate the impact of Uganda's general development strategy on poverty and inequality. Beginning in 1992, Uganda undertook a series of five large-scale household surveys that were designed to monitor changes in living standards. These surveys, which were conducted virtually annually, had large samples—typically 5,000 households—and were designed to be nationally representative. All five surveys had similar sampling procedures and questionnaires, which makes their results comparable over time.[6]

Appleton (2001a) has used these surveys to estimate changes in poverty and inequality in Uganda from 1992 to 1997/98. Appleton used per capita consumption as the basic poverty indicator and calculated a national poverty line based on the cost of basic food and nonfood requirements. These figures are shown in Table 4.

Table 4
Poverty in Uganda, 1992 to 1997/98

Survey Year	Poverty Headcount (%)	Poverty Gap (%)	Poverty Gap Squared
NATIONAL			
1992	55.7	20.3	9.9
1993 / 94	51.2	16.9	7.5
1994 / 95	50.2	16.3	7.3
1995 / 96	49.1	16.4	7.6
1997 / 98	44.4	13.7	5.9
URBAN			
1992	27.8	8.3	3.5
1993 / 94	21.0	5.5	2.0
1994 / 95	21.5	6.3	2.7
1995 / 96	19.8	5.6	2.2
1997 / 98	16.7	4.3	1.6
RURAL			
1992	59.7	22.0	10.8
1993 / 94	55.6	18.6	8.3
1994 / 95	54.3	17.7	7.9
1995 / 96	53.7	18.1	8.5
1997 / 98	48.7	15.2	6.6

Notes: Poverty figures are calculated on the basis of the national poverty line, which includes the cost of basic food and nonfood requirements in each survey year.

SOURCE: *Appleton 2001a, Tables 4.4–4.8*

6 For more details on these surveys, see Appleton (2001a).

Two items are noteworthy. First, no matter what poverty measure is used—headcount index, poverty gap or squared poverty gap—poverty fell in the nation and in urban and rural areas between 1992 and 1997/98. According to the headcount index, which measures the percent of the population living beneath the poverty line, national poverty fell from 55.7 to 44.4 percent. According to the more sophisticated poverty gap index, which measures in percentage terms how far the average expenditures of the poor fall short of the poverty line, national poverty also fell, from 20.3 to 13.7 percent. These are considerable achievements over a five-year period. Second, the figures in Table 4 show that poverty is more widespread and severe in rural areas than in urban areas. In the final survey year (1997/98), the headcount index of poverty in rural areas was almost three times higher than that of urban areas (48.7 versus 16.7 percent). In 1997/98 the poverty gap index was also far higher in rural than urban areas (15.2 versus 4.3 percent).

Although poverty in Uganda was, and still is, primarily a rural phenomenon, some of the largest reductions in poverty in the 1990s occurred in rural areas. This can be seen by disaggregating changes in poverty by sector of household head. The results of this disaggregation, shown in Table 5, emphasize the broad-based character of poverty reduction in Uganda: the headcount index of poverty fell in 10 of the 13 economic sectors.[7]

Table 5
Poverty in Uganda by Economic Sector of Household Head, 1992-1995/96

Economic Sector	Poverty Headcount (%)		Poverty Gap (%)	
	1992	1995/96	1992	1995/96
Food crop	64.1	62.1	24.5	22.5
Cash crop	60.4	46.0	20.7	11.9
Noncrop agriculture	55.0	40.2	22.2	14.5
Mining	31.5	74.2	2.6	12.7
Manufacturing	43.6	27.1	15.8	8.7
Public utilities	33.6	11.3	5.6	1.5
Construction	36.4	35.0	11.5	8.7
Trade	25.2	20.0	7.2	4.5
Hotels	25.8	19.3	8.1	5.1
Transport	31.5	14.8	11.0	6.6
Misc. services	26.6	27.9	10.2	10.8
Government Services	36.2	29.5	10.5	7.7
Not working	58.2	62.1	22.9	29.0

SOURCE: *Appleton 2001a, Tables 4.12–4.13*

The table also shows that the headcount index of poverty fell dramatically in two of the three rural sectors: cash crop farming (including coffee farming) and noncrop agriculture. In each of these rural sectors, poverty declined by more than 25 percent.[8] As explained above, these improvements

---

[7] According to Table 5, the headcount index of poverty fell in all economic sectors except mining, miscellaneous services, and not working.

[8] Table 5 also shows that the headcount index of poverty fell by 4 percent in the food crop sector of the rural economy.

in rural poverty were driven by increases in average agricultural incomes, as farmers began receiving better prices for their food and (especially) export crops.

While poverty fell sharply in Uganda during the 1990s, what happened to income distribution? Table 6 addresses this question by reporting changes in the Gini coefficients for the five survey years.

(Inequality is measured by the Gini coefficient of inequality, which can be expressed as:

$$G = 1 - \sum_{i=0}^{n-1} (F_{i+1} - F_i)(f_{i+1} + f_1)$$

Where n = number of households;
F_i = cumulative population shares corresponding to household$_i$; and
ϕ = cumulative expenditure shares corresponding to household.)

Table 6
Inequality in Uganda, 1992 to 1997/98

Survey Year	National	Urban	Rural
1992	0.364	0.394	0.326
1993 / 94	0.345	0.365	0.296
1994 / 95	0.365	0.396	0.32
1995 / 96	0.366	0.373	0.325
1997 / 98	0.347	0.345	0.311

SOURCE: *Appleton (2001a: Table 4.11)*

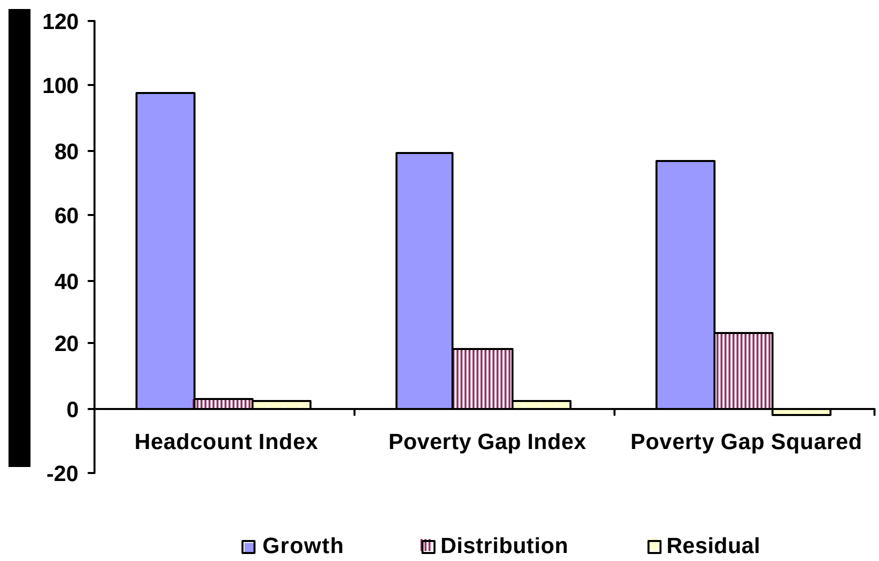
In all three areas—national, urban and rural—the Gini coefficient declined between 1992 and 1997 / 98. This suggests that the lower (poorer) deciles of the population witnessed greater increases in their incomes (expenditures) than the more affluent deciles. According to data from Appleton (2001a, Table 4.10), between 1992 and 1997 / 98 the mean per capita expenditures of those in the lowest (poorest) decile increased by 27.1 percent, while those in the highest (richest) decile rose by 15.8 percent. During the 1990s Uganda's pattern of growth was decidedly pro-poor.

It is possible to pinpoint the relative contributions of changes in income growth and changes in inequality to poverty reduction in Uganda by using the decomposition suggested by Datt and Ravallion (1992). In this decomposition the change in the poverty indicator P between two years, t_1 and t_2, is decomposed into three components: growth (G), distribution (D), and a residual (R):

$$P_{t2} - P_{t1} = G + D + R$$

Figure 1 shows the results of this decomposition, as calculated by Appleton (2001a). Using the headcount index as the poverty measure, income growth accounted for 95 percent of the decline in poverty, and improvements in income distribution accounted for only 3 percent. Using the poverty gap index as the poverty measure, income growth still accounted for most of the decline in poverty: 78 percent for growth and 20 percent for improvements in income distribution. In Uganda during the 1990s, growth in incomes accounted for the dominant share of the overall decline in poverty.

Figure 1
Decomposition of Poverty Changes into Growth and Redistribution Components, 1992 to 1997/98



Towards a Poverty Reduction Strategy

During the first decade of its rule (1986 to 1996), the NRM used a general development and recovery strategy focusing on internal peace, food production, trade liberalization, and macroeconomic stability to achieve impressive reductions in poverty and inequality in Uganda. Not until 1997 did the President of Uganda, Yoweri Museveni, see fit to launch a specific poverty reduction strategy. In that year Museveni initiated two specific antipoverty initiatives: the Poverty Eradication Action Plan (PEAP) and the Universal Primary Education (UPE) Plan.

As summarized by Goetz and Jenkins (1998), the PEAP has five objectives: (1) maintain existing macroeconomic policy in support of economic growth; (2) focus public expenditures on increasing economic opportunities for the poor; (3) provide basic social services (education and health) for the masses; (4) develop the capacity to respond rapidly to economic crises; and (5) promote transparency and accountability. The PEAP is a good example of mainstreaming poverty reduction in national development planning because it requires all line ministries and district governments not only to reorient their spending towards the poor, but also to establish appropriate and effective poverty monitoring systems. This is especially important for ministries and agencies working in rural areas.

After the PEAP, the second-most-important antipoverty initiative is the UPE Plan. This plan has a target of universal primary education for all Ugandan children by 2003. Under this initiative, the government promises to provide primary education for as many as four children per family, institute automatic promotion for all pupils regardless of achievement, and stipulate parameters for school governance, financing, and expenditures. The plan also sets national standards of 55 pupils per teacher and one book per pupil (McGee 2000, 88).

While there are no detailed data to evaluate the impact of the UPE Plan on poverty, a preliminary analysis of this plan by Appleton (2001b) suggests that it is a useful means for increasing the school enrollment of the poor. Under the UPE Plan, three types of students seem more likely to attend primary school: girls from households with poorly educated parents; children from very poor families; and children from poorer regions, such as rural northern areas. However, Appleton's work suggests that the impact of the UPE Plan on economic efficiency might be less than some analysts have suggested. Appleton calculates that for each year of schooling, earnings will increase by only 4 percent. This is a modest benefit, especially considering the opportunity costs incurred by the poor for attending an extra year of school.

One possible drawback of the UPE initiative is its effect on student performance. Exploratory work by Otteby (1999) in two districts in Uganda suggests that average academic performance may fall sharply as larger numbers of students enroll in school. More pupils, and more pupils from disadvantaged backgrounds, may reduce what children can learn at school. One of the main challenges of the UPE initiative will be to combat these potentially adverse consequences.

Conclusion

This paper has used secondary sources to review the character and determinants of poverty reduction in Uganda. Three lessons emerge.

First, the impressive rates of poverty reduction in Uganda in the 1990s were achieved more as a result of a general development strategy than of a specific poverty reduction program. With considerable foreign support, this general development and recovery strategy focused on four basic elements: internal peace, food production, trade liberalization, and stable currency. This basic, sensible macroeconomic development strategy generated high enough rates of GDP growth —an average of 6.9 percent per year—to spark strong income increases (and poverty reductions) in almost every sector of society.

Second, the pattern of economic growth generated by the development strategy in Uganda was wide and broad-based. Both the headcount index of poverty and the Gini coefficient of inequality declined, not only for the nation as a whole, but for both the urban and rural sectors of the economy as well. Moreover, disaggregating the changes in poverty by economic sector shows that poverty fell in 10 of the 13 economic sectors. In the all-important rural sector, where the bulk of the population lives, poverty fell by 25 percent in the cash crop and noncrop agriculture sectors, and by 4 percent in the food crop sector. Reductions in poverty in these key rural sectors were achieved largely by the twin policies of food production and trade liberalization pursued by the government. As marketing structures for food crops were liberalized and export taxes were reduced on export crops (such as coffee), farmers could raise their incomes by producing more for the market. Farmers and other rural workers thus were able to work their way out of poverty.

Third, buoyed by the success of its general development strategy, the NRM in 1997 adopted a two-pronged poverty reduction strategy focusing on poverty eradication and universal primary education. Although the data to evaluate the impact of these two initiatives on poverty are not yet available, it seems likely that the primary education initiative, in particular, will have a positive impact on the welfare of the poor.

References

Appleton, Simon. 2001a. Changes in Poverty and Inequality. In *Uganda's Recovery: The Role of Farms, Firms and Government*. Edited by R. Reinikka and P. Collier. Washington, D.C.: World Bank

Appleton, Simon. 2001b. What Can We Expect from Universal Primary Education? In *Uganda's Recovery: The Role of Farms, Firms and Government*. Edited by R. Reinikka and P. Collier. Washington, D.C.: World Bank.

Collier, Paul and Ritva Reinikka. 2001. Introduction. In *Uganda's Recovery: The Role of Farms, Firms and Government*. Edited by R. Reinikka and P. Collier. Washington, D.C.: World Bank.

Datt, Gaurav and Martin Ravallion. 1992. Growth and Redistribution Components of Changes in Poverty Measures: A Decomposition with Application to Brazil and India in the 1980s. *Journal of Development Economics* 38 (April): 275–95.

Economist Intelligence Unit. 2001. *Uganda: Country Profile, 2001*. London: Economist Intelligence Unit.

Food and Agriculture Organization. Various years. *FAO Production Yearbook*. Rome.

Goetz, A. and R. Jenkins. 1998. Creating a National Framework for Reducing Poverty: Institutional and Process Issues in National Poverty Policy—Uganda Country Report. Unpublished paper.

Henstridge, Mark and Louis Kasekende. 2001. Exchange Reforms, Stabilization and Fiscal Management. In *Uganda's Recovery: The Role of Farms, Firms and Government*. Edited by R. Reinikka and P. Collier. Washington, D.C.: World Bank.

Holmgren, Torgny, Louis Kasekende, Michael Atingi-Ego and Daniel Ddamulira. *Aid and Reform in Uganda: Country Case Study*. Research Series No. 23. Kampala: Economic Policy Research Centre.

Larson, Donald and Klaus Deininger. 2001. Crop Markets and Household Participation. In *Uganda's Recovery: The Role of Farms, Firms and Government*. Edited by R. Reinikka and P. Collier. Washington, D.C.: World Bank.

McGee, Rosemary. 2000. Meeting the International Poverty Targets in Uganda: Halving Poverty and Achieving Universal Primary Education. *Development Policy Review* 18 (March): 85-106.

Otteby, Kim. 1999. The Effects of Universal Primary Education in Uganda. Unpublished undergraduate dissertation. University of Oxford, Oxford, England.