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Macroeconomic Policies and Rural Livelihood Diversification: An Ugandan Case-study

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ABOUT LADDER

LADDER is a research project funded by the Policy Research Programme of the UK Department for International Development (DFID) that seeks to identify alternative routes by which the rural poor can climb out of poverty. LADDER is working with nearly 40 villages and 1,200 households in Uganda, Tanzania, Malawi and Kenya to discover the blocking and enabling agencies in the institutional environment facing rural people that hinder or help their quest for better standards of living for themselves and their families.

This working paper represents work-in-progress and the reader is advised that it has not been subjected to academic quality control, nor edited for errors of fact or interpretation. The paper forms part of a mosaic of research findings that will contribute towards an overall picture of rural livelihoods and micro-macro links to poverty policies in the case-study countries. The findings and views expressed here are solely the responsibility of the authors and are not attributable to DFID.

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Arsene M. Balihuta and Kunal Sen*

Summary

The economic reform programme initiated in 1987 in Uganda was one of the most ambitious programs of economic liberalization in the African continent. Combining both quantitative and qualitative evidence on livelihood diversification of rural households drawn from the household income surveys conducted by the Uganda Bureau of Statistics and the LADDER village reports, this paper examines the effects of the economic reforms on the livelihoods of rural households. The evidence suggests that economic reforms have had a positive impact on the livelihoods of small-holder farmers in Uganda, many of whom have moved out of poverty in the past decade. While coffee and cotton producers have benefited most from the reforms, the response of the Ugandan agricultural sector to the reforms has been broad-based with increasing production evident both in the cash crops and food crops sectors. The dynamism of the agricultural sector has in turn contributed to rapid growth in non-farm activities in the rural economy in recent years and provided households with greater choices in their livelihood strategies. However, not all the policy measures have contributed positively to livelihood diversification that allows households to move out of poverty. Three constraints to livelihood diversification are identified: the design and implementation of the fiscal decentralisation programme, the availability of agricultural finance and the provision of agricultural advisory services.

I. Introduction

Until the beginning of the 1970s, Uganda was one of the more prosperous countries in Sub-Sahara Africa. However, the 1971 military coup led by Idi Amin ushered into Uganda a reign of state terror and general economic, political and social mismanagement. Consequently, by 1979 economic production had declined by about 20%, leading to an acute shortage of goods and services. Social, political and economic infrastructure had become dilapidated, and there was a general despondency and overall demoralisation of the population. Idi Amin was finally overthrown in 1979 but this was followed by a guerrilla war led by the incumbent President which ensued from 1981. This lasted up to January 1986 when the National Resistance Movement (NRM) led by Yoweri Museveni took over power. By this time Uganda had been brought to its knees economically, socially and politically. Production had declined by about 40% of the 1970 GDP and the social, economic and political infrastructure was in ruins.

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To effectively rehabilitate and develop the country, the NRM government sought assistance from the IMF and World Bank in January 1987. In May 1987, the multilateral donors agreed to assist the NRM government conditional on the implementation of the Structural Adjustment Program (SAP). The main aim of the SAP policies has been to restructure, rehabilitate and develop Uganda's economy. The basic belief behind these policies has been that the private sector would be the most efficient sector to revive and develop the country's economy. The Government would then focus on the provision of the most essential public goods and services.

What have been the patterns and trends in the livelihoods of rural households since the onset of the reforms? What have been the effects of the economic reforms on the livelihoods of rural households? To what extent has the structural adjustment programme helped or hindered livelihood strategies that provide rural households a route out of poverty? In this paper, we address these issues, combining both quantitative and qualitative evidence on livelihood diversification of rural households drawn from the household income surveys conducted by the Uganda Bureau of Statistics and the LADDER village reports.

The remainder of the paper is in four sections. Section II describes the key economic reforms undertaken in Uganda in the period 1987-2001. Section III documents changes in household income portfolios and poverty, using material from a variety of sources. In Section IV, we trace the linkages between macroeconomic policies and their microeconomic outcomes, in particular, changes in household livelihoods and well-being. Section V discusses some remaining policy impediments to livelihood diversification. Section VI presents some concluding remarks.

II. The Macroeconomic Policy Context

The economic reform programme initiated in 1987 was one of the most ambitious programs of economic liberalization in the African continent (Collier & Reinikka, 2001). We discuss below the key economic reform measures implemented in the areas of international trade, exchange rates, agricultural policy, the financial sector and fiscal and monetary policy:

International Trade

In 1986, the trade regime was characterised by extensive nontariff barriers and high export taxes. The NRM government attempted a comprehensive program of trade liberalisation, which consisted of the following: a) the granting of the retention of 100% of foreign exchange export earnings to exporters; b) the liberalization of exports and imports procedures by the establishment of export and import certificate systems; c) the introduction of foreign exchange auction for importers; d) the abolition of an export tax on coffee; and e) the liberalisation of the Balance of Payments Current Account. In mid 1990s, these measures were followed by the reduction of import tariff, which declined from 34 per cent in 1994 to 15 per cent in 1999. There also was a reduction in the dispersion of tariffs as measured by the standard deviation from 47 per cent to 23 per cent during the same period (Short, 2000).

Exchange Rate Reform

With respect to exchange rate reform, there were three important sets of measures: a) devaluation of the shilling in 1997 by 77 per cent, followed by two more rounds of devaluation in 1988 (60 per cent) and 1989 (17.5 per cent); b) the legalisation of the parallel

foreign exchange market in July 1990 and liberalisation of the foreign exchange market in the same year; and c) the attainment of Article VIII IMF Status in 1994 with the shilling thereby becoming a convertible currency in the current account.

Liberalisation of the Agricultural Sector

Agricultural liberalisation has mainly consisted of: a) the liberalisation of the marketing of cash and non-cash crops by breaking up the marketing boards; b) the liberalisation of the prices paid to farmers for their produce including cash crops; and c) the liberalisation of agricultural input prices. With respect to the dismantling of the marketing boards, the most significant policy initiative in this area has been the conversion of the Coffee Marketing Board to a publicly owned corporation in 1991-92, with regulatory and quality issues assigned to the newly created Uganda Coffee Development Authority (UCDA). This was followed by the dismantling of the Lint Marketing Board – the marketing board for cotton - in 1994, and the setting up of an independent cotton promoting agency – the Cotton Development Organization (CDO) – in 1995. Other measures taken were the transfer of crop financing responsibilities from the Bank of Uganda to commercial banks and the deregulation of the mode of transportation of cash crops, which was previously monopolised by the state-owned railways.

Financial Sector Reforms

These have largely consisted of the following policy measures: a) the commencement of active liquidity management by Bank of Uganda through: rediscount policy; weekly auctions of Treasury Bills; adjustment of reserve requirements; improved surveillance of the commercial banking system; b) the restructuring of Ugandan commercial and co-operative Banks and the divestiture of government interests from private commercial banks; c) the restructuring of the central bank - the Bank of Uganda; d) the establishment of the Stock Exchange; e) the establishment of the Deposit Insurance Fund; and f) the transfer of 66.9 billion Ugandan shilling worth of commercial Banks non-performing loans to the Non-Performing Assets Recovery Trust.

Fiscal and Monetary Policy Reforms

Fiscal policy measures have included the reduction in Government debt to Banks by Shs. 1.9 billion; the reduction of the debt service ratio through debt buy back from 90% to 60%; a re-orientation of Government expenditure towards priority sectors such as education and health, along with a decrease in overall expenditures; an increase in Government Revenue collection effort and the creation of the semiautonomous Uganda Revenue Authority (URA); and the gradual transformation of the Ugandan tax system from high rates and selective incentives towards lower rates and more standard across-the-board provisions (Chen *et al.*, 2001).

Monetary policy measures have consisted of the introduction of the auction of Treasury Bills; a complete liberalization of bank lending and deposit rates, which are now determined by the Treasury Bill rate; and the limitation of net domestic assets of the banking system to 21% of broad money (M2).

The sequencing of the policies

Within a relatively short period of about 15 years, Uganda has implemented a wide-ranging and comprehensive set of reforms, and at the same time, maintaining a high degree of

'ownership'over its reforms (Holmgren *et al.* 1999, Dijkstra and Van Donge 2001). Table 1 below shows the sequencing of the SAP policy measures that have been implemented by the NRM government since May 1987. Because the initial thrust of the implementation of the SAP was the control of inflation, as well as the achievement of internal and external balance, short run fiscal, monetary, exchange rate and price liberalisation policies were implemented first. Later on more medium and long term sectoral policies were implemented. This was more so after the World Bank and the IMF realised that structural reform could be more constrained by non-economic institutional factors than by distortions in traditional markets.

III. Changes in Rural Poverty and Livelihood Diversification

Changes in Poverty

One of the key features of Uganda's economic performance in the 1990s has been the sharp and sustained fall in rural poverty. Appleton (2001a) estimates that the rural headcount ratio (the number of poor individuals below the poverty line) fell from 59.7 per cent in 1992 to 48.7 per cent in 1997/98 to 39 per cent in 1999/2000 (Table 2). These estimates are obtained from household unit record data contained in the 1992 Integrated Household Survey (IHS), the 1997-98 Fourth Monitoring Survey (MS-4) and the 1999/2000 Uganda National Household Survey (UNHS).

Most dramatic has been the fall in the head count ratios in the Central and Western regions from 58.8 and 54.3 per cent in 1992 to 25.6 and 29.4 per cent in 1999/2000. On the other hand, in the Northern region, the head count ratio increased from 61.8 per cent in 1997/98 to 66.7 per cent in 1999/2000. As Table 2 makes clear, much of the decrease in rural poverty has occurred in the 1997-2000 period – that is, after the liberalization of the agricultural sector in the early 1990s. It is also clear that rural inequality (as measured by the Gini coefficient) has remained more or less the same during 1992-1997 – thus, much of the decrease in poverty can be attributed to the high rates of economic growth observed during this period (see Section IV).

Changes in Livelihood Diversification: Quantitative Evidence

The household unit record data contained in the Household Income and Expenditure surveys conducted at regular intervals by the Ugandan Bureau of Statistics provide an ideal opportunity to examine whether there is any evidence that rural households in Uganda are diversifying their sources of income, and if so, to what extent. We use the 1992/93 Integrated Household Survey (IHS) and 1999/2000 Uganda National Household Survey (UNHS) for this purpose. There are two advantages in this comparison. Firstly, the 1999 IHS re-surveyed about 800 odd households who were previously surveyed in the 1992 UNHS. This provides a more accurate picture of income diversification than if the comparison was based on two different samples of households. Secondly, both the UNHS and the IHS asked detailed questions on the sources of income to these households, which allow for a comparison of income sources in these two years at a fairly disaggregated level. Again, the more disaggregated the sources of income, the more accurate is the information on income diversification.

In this section, we compare rural household income shares from different income sources for 836 rural panel households, estimated from both the 1992/1993 IHS and the 1999/2000 UNHS Survey data. We also compute diversification indices by region to see whether there

has been an increase in income diversification in the seven years between 1992 and 1999 and whether patterns in income diversification differs across regions.[1] The income shares data from the two surveys are used to estimate diversification indices. The income source shares are shown in Tables 3 and 4 while the diversification indices are shown in Table 5 below. If it can be assumed that a smaller diversification index implies less diversification, then as can be seen from Table 5 the results suggest that income portfolios have been less diversified in the 1990s in Uganda. However, these results should be interpreted with caution because the types of income generating activities contained in the survey data do not reflect the actual income generation activities engaged in by the rural households. Rather, they reflect the income generating activities stipulated by the Uganda Bureau of Statistics for their Survey purposes.

The main observations that can be made from the results contained in Tables 3-5 are that:

- although crop agriculture still remains the major source of income for rural households in Uganda, the share of income from crop agriculture has declined for all regions between 1992 and 1999;

- the share of income from miscellaneous sources has increased considerably for all Regions between 1992 and 1999;

- the share of income from remittances has increased considerably, especially for Northern Region, between 1992 and 1999;

- the share of employment income from agriculture has generally declined for all Regions between 1992 and 1999;

- the share of income from off-farm entrepreneurial activities has increased considerably between 1992 and 1999; and

- the diversification indices have diminished for both men and women, for all regions and for all income groups.[2]

Thus, the results from the IHS 1992/1992 and the UNHS 1999/2000 Surveys seem to suggest that indeed rural income diversification may have occurred in Uganda between 1992 and 1999. However, it is not clear from the results whether households have diversified their income sources in order to cope with increasing poverty or to take advantage of the opportunities brought about by increased social and political stability as well as the increased economic liberalisation. One piece of evidence in favour of the latter hypothesis is that the average household income in our panel of households has increased. This can be seen from Table 6, which shows results from the ANOVA Duncan's Multiple Range Test applied to the 1992 and 1999 household incomes of 836 panel households. The results indicate that rural household incomes have significantly increased between 1992 and 1999. This finding seems to be consonant with the overall decreasing poverty in Uganda that we have noted in the previous section.

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[1] The diversification index is defined as: 1/(sum of squares of proportional contributions to total income). Higher values of the index imply a more diversified income portfolio (see Ellis *et al*., 2001).

[2] Income groups are income quartiles when total household incomes are ranked in descending order.

Changes in Livelihood Diversification: Qualitative Evidence

More evidence on the increasingly diverse range of livelihood pursued by rural households in Uganda comes from the nine village reports that were undertaken as a part of the LADDER research project. Several households reported new activities in the past 5 years, not necessarily related to the agricultural sector. Examples of these are boda boda bicycle and motor cycle transport, brick making, drug shops, eating joints and petty trade. Within the agricultural sector, households are increasingly growing food crops such as beans, cassava, irish potatoes and maize for sale in local markets, and not merely for self-consumption.

IV. Macro-Micro Linkages

We begin this section by describing the evolution of key macroeconomic indicators for Uganda in the past two decades. Output (GDP) growth in Uganda has around 6 per cent per annum, with a clear acceleration in the growth rate since 1992 (Figure 1). The sustained high growth rates of the 1990s have been driven primarily by the growth of the monetised sector of the economy, though this is strongly correlated with the growth of non-monetary GDP. The sectoral distribution of output indicates a steady increase in the share of the monetised sector in total GDP from 66.5 per cent in 1987-89 to 76.6 per cent in 1996-99 (Table 7). However, within the monetised sector, the share of agriculture does not show a perceptible increase, with much of the increase in the monetised sector being brought about by an increase in the shares of manufacturing, construction and wholesale and retail trade in total GDP. There is also evidence of increasing diversification in Uganda's export basket, with the share of coffee in total exports declining from 79 per cent in 1990 to 60.1 per cent in 1999 (Table 8). The share of non-traditional exports in total exports has increased steadily from 14.1 per cent in 1990 to 28.7 per cent in 1999. Of the latter, the strongest growth has been in fish and in cut flowers exports. In the aggregate, there is evidence of an increasing shift of the Ugandan economy from a subsistence economy to a monetised one, and from reliance on one or two traditional exports to a more diversified export basket, which increasingly includes non-traditional commodities.

A remarkable feature of the Ugandan economy in the 1990s has been the rapid decline in the inflation rate (Figure 2). A lower inflation rate implies far greater uncertainty on the part of producers and consumers with respect to relative prices, and hence, allows for households to respond more positively to opportunities at the micro level brought about by economic reforms. Since the mid 1990s, the inflation rate has been stable at around 5 per cent.

With respect to exchange rate management, the Bank of Uganda was able to hold the real exchange rate at a constant level for the period 1994-1997, with a steady depreciation since then (Figure 3). This may have been largely a result of the low inflationary environment and the maintenance of fiscal discipline (Henstridge & Kasekende, 2001). The successful management of the real exchange rate by the central bank may have been an important contributing factor behind the large supply response observed from the agricultural tradable sector from the mid-nineties onwards (such a response is not evident till the mid-nineties as pointed out by Belshaw *et al*., 1999).

There has also been a long-run upward trend in the terms of trade in favour of agriculture (Figure 4). This provides an increasing incentive for farmers to invest in agricultural activities. However, the terms of trend for cash crops shows a sharp fall from 1994, after showing a steady increase in previous years. In contrast, there has been an increase in the

terms of trade for food crops since 1995. The relative price movement in favour of food crops as compared to cash crops since 1995 may explain why an increasing number of farmers seem to prefer growing food crops over cash crops in recent years (this is evident from the responses received from farmers in the LADDER village reports). However, it is not clear what the effects of these price changes will be on rural poverty, as a large proportion of poor households tend to be net buyers of food (World Bank 1996).

Returns to Farming and Rural Labour

As we have discussed, there has been a complete withdrawal of parastatals from the marketing of the major cash crops, along with the decontrol of producer and input prices, and in the case of coffee, a removal of the export tax. Djikstra and Van Donge (2001) argue that these reform measures have led to a significant supply from the agricultural export sector. They do this by looking at the procurement of the major cash crops – coffee, cotton, tea and tobacco pre- and post-liberalization. We observe a significant increase in the procurement of coffee – both robusta and arabica, tea and tobacco from 1987 to 1996 (Table 9). In the case of coffee, private exporters have played an increasingly important role in coffee procurement and commanded 88.8 per cent of the market in 1996 (Table 10). Also, with the entry of the private sector in coffee marketing and processing leading to increased competition, there have been significant efficiency gains in these areas (Agricultural Policy Secretariat, 1996). For coffee, there has also been a sharp increase in real producer prices as a ratio of cost of production from 37 per cent in 1989 to 194 per cent in 1996. The share of producer prices as a ratio of world prices has also steadily increased from 12 per cent in 1987 to 79 per cent in 1998 (Figure 5). In the case of cotton, real producer price as a ratio of cost has increased from 76 in 1989 to 96 per cent in 1997, and as a ratio of lint world price from 56 per cent in 1990 to 65 per cent in 1998 (Figure 6). The increase in the returns to farming could also be explained by the fall in real input prices, following the decontrol of input prices and the greater competition in these markets following government withdrawal from direct procurement and distribution of inputs and the entry of the private sector (see Table 11). Rural real wage rates also tend to show some increase over the period 1989-1998, though this is most marked in the case of permanent labour (Figure 7).

The favourable supply response in the post-reform period is not only confined to the cash crop sector; total food crop production also shows an increase, particularly since the mid-nineties (Figure 8). Cassava and sweet and Irish potatoes are occupying higher weights within total food crop production. The pattern and trends in food crop production in Uganda over the 1990s is consistent with the micro-level evidence obtained from the LADDER village reports that point to the increasing importance of the production and sale of food crops in the livelihood diversification strategies of rural households.

V. Policy Constraints to Livelihood Diversification

The evidence from the two previous sections seems to suggest that economic reforms have had a positive impact on the livelihoods of many rural households in Uganda. Coffee and cotton producers seem to have benefited the most from the reform measures. In particular, the removal of the export monopoly of the government parastatals and the removal of government controls on producer prices, processing and export margins, have led to farmers obtaining higher producer prices in real terms for these two crops. The increasing prosperity of the smallholder farmers growing coffee and cotton would have contributed to larger demand for services, construction and other non-farm activities, fuelling growth in these

sectors (for evidence on the growing importance of the non-farm sector in the post-reform period, see Deininger & Okidi, 2001). This may explain the increasing importance of these sectors in the livelihood strategies of rural households (as evident from the UBS's household income surveys and the LADDER village reports). On the whole, there is support for the view that economic reforms have provided an environment for rural households to diversify as a means of increasing their incomes and thereby, improve their economic well-being.

However, at the macro level, not all the policy measures have contributed positively to livelihood diversification that allows households to move out of poverty. Perhaps the most important factor identified at the village level from the LADDER surveys is the design and implementation of the fiscal decentralization process. In almost all the villages surveyed, there is evidence of crops and livestock being taxed at several points during a transaction and by different individuals who have been given tenders to collect local taxes. Taxes are costs to transactions and if not implemented fairly and in a transparent manner, can provide strong disincentives to local producers to engage in commercial transactions. A non-transparent tax system affects poor households more than it does other sections of the rural economy since the more well-off households may have knowledge of the loopholes in the tax system and also have 'networks' which allow them to evade taxes. The fiscal decentralization process being currently implemented in Uganda is one of the most ambitious in the developing world. Decentralization is central to the government's chosen mode of governance and the Local Government Act 1997 confers responsibility for most areas of service delivery to sub-national governments (Government of Uganda, 2001). Furthermore, local authorities should have a comparative advantage in identifying the poor and also may be more efficient providers both of social and community services such as health and water supply and economic services such as agricultural extension, irrigation and roads (Bird *et al.*, 1995). Thus, to the extent local governments are best suited to providing services needed to accelerate economic growth and poverty alleviation, they should have a larger role in both raising revenues and in allocating expenditures. Yet the experience in Uganda thus far shows that, despite the desirable goals of the fiscal decentralization process, the design and implementation of this process has left a lot to be desired.

A second impediment to livelihood diversification that is evident from the LADDER village reports is the provision of agricultural finance. In the wake of the economic reforms, the government guarantee system on crop finance was withdrawn, and producers had to make their own arrangements by either borrowing directly from commercial banks or using their own funds. As the PMA notes, the government's policy on rural finance is that ultimately it should be privately run (PMA, p. 114). The PMA places a great deal of emphasis on micro-financial institutions and government initiatives such as the Poverty Alleviation Project and Entandikwa as schemes targeted to the poor. Yet it is not obvious whether such institutions and schemes can effectively play the role of credit providers to the vast majority of rural households. As Table 12 indicates, the agricultural sector was receiving a smaller proportion of bank credit over the 1990s, with the share of agriculture in total commercial bank loan to the private sector falling from 34 per cent in 1990 to 20 per cent in 1996. Micro-level evidence obtained from household surveys also point out the difficulties faced by poor rural households in accessing formal sources of credit, with lack of knowledge about credit providers, tight repayment schedules, high initial capital requirements and the lack of loans for agricultural purposes representing barriers to access (Smith *et al.*, 2001).

Another policy constraint identified in the LADDER village reports has been the lack of provision of agricultural extension and veterinary services. The PMA notes this lacuna and observes that 'the government will take important steps to alleviate this constraint by

appointment of graduate level extension workers at sub county level funded through a district conditional grant' (PMA, p. 111). It is not clear yet whether the fiscal decentralisation programme, when fully implemented, would yield a net positive effect on the provision of agricultural extension and veterinary services to rural households.

VI. Concluding Remarks

The structural adjustment programme in Uganda was one of the most radical sets of economic reforms in Sub-Saharan Africa in the past two decades. In this paper, we have argued that economic reforms have had a positive impact on the livelihoods of small-holder farmers in Uganda, many of whom have moved out of poverty in the past decade. While coffee and cotton producers have benefited most from the reforms, the response of the Ugandan agricultural sector to the reforms thus far has been broad-based with increasing production evident both in the cash crops and food crops sectors. The dynamism of the agricultural sector has in turn contributed to rapid growth in non-farm activities in the rural economy in recent years, and provided households greater choices in their livelihood strategies. In the Ugandan case, there seems to be a causal linkage between increasing livelihood diversification evident at the household level and the observed fall in rural poverty in the nineties.

Economic reforms were not the only factor that contributed to falling rural poverty. Clearly, the establishment of a high degree of internal peace when previously there had been large-scale violence and ethnic conflict has been extremely significant in providing an enabling environment for the economic recovery to take place. Along with this has been the achievement of a remarkable degree of macroeconomic stability fairly early on in the reform process. Other factors have also contributed: the most important among these is the Universal Primary Education (UPE) initiative of 1997 which led to a near-doubling of officially recorded primary school enrollments. As Appleton (2001b) finds, the provision of primary education has a clear positive impact on livelihood diversification in Uganda as it increases the probability of obtaining non-farm earnings in households where adults have obtained an additional year of schooling. While it is premature to predict the final impact of the UPE on poverty rates, it can be argued that by reducing entry barriers to high-return non-farm activities the UPE can play an important role in enabling households with little or no assets to move out of poverty.

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Table 1: Structural Adjustment Program Policies in Uganda: 1987-2000	
Policy Measure	**Period**
1. Reduction in Govt debt to Banks by Shs. 1.9 billion 2. An increase in Govt expenditure in priority sectors 3. An increase in Govt Revenue collection effort 3. An increase in external resource inflows 4. The devaluation of the shilling by 77% 5. Conversion of the Shilling to 1/100th if its value and an imposition of 30% conversion tax on the converted currency and bank deposits 6. An increase in crop producer prices 7. An increase in petroleum products prices 8. Introduction of a foreign exchange rationing system in favour of some key industries(soap, soft drinks and beer) 9. Granting non-traditional exporters 100% retention of their export earnings	1987-88
10. Devaluation of the shilling by 60% (July 2, 1988) 11. An increased Corporate income tax 12. Economic Monitoring Committee established 13. Further devaluation of the shilling by 9% (December 1988) 14. Further 30% increase in petroleum products prices 15. Liberalisation of foreign exchange allocation 16. Further devaluation of the shilling by 17.5% (March, 7, 1989) 17. 10% increase in lending and 5% deposit rates 18. Further 30% increase in petroleum pump prices 19. 100% export retention scheme extended to all non –coffee exports 20. Scope of Commercial Transaction Levy broadened 21. Road Permits and Licence fees increased 22. Trade and licensing administrative restrictions removed 23. Rehabilitation of physical infrastructure started 24. Institutions to handle the privatisation process established 25. Verification and valuation of Departed Asians expropriated properties started 26. Coffee exporters granted 100% retention of their export earnings 27. Nominal interest rates raised to 28% from 18% in July 1988	1988-89
28. Legalisation of the parallel foreign exchange market in July 1990 29. A new Investment Code passed (November 1990) 30. Establishment of an exports certificate system in September 1990 to liberalise the exports procedures	1989-90
31. Establishment of Uganda Revenue Authority 32. Establishment of an imports certificate system in September 1990 to liberalise the imports procedures 33. Reduction in Government expenditure by 17% 34. Introduction of the auction of Treasury Bills 35. Introduction of Foreign Exchange Auction for Importers 36. Coffee Exporters allowed to surrender their coffee exports proceeds at the average forex bureau rate	1991-92
37. Establishment of a foreign exchange auction in January 1992 38. Banking System Net domestic assets limited to 21% of broad money(M2) 39. Lending and deposit rates linked to the Treasury Bills rate determined in the Treasury Bills Auction Market 40. Abolition of export tax on coffee 41. Civil servants retrenched and soldiers demobilised 42. Private wings in private hospitals established-cost sharing	1992-93

Table 1: Structural Adjustment Program Policies in Uganda: 1987-2000	
Policy Measure	**Period**
43. Interest rates fully liberalised – they fall to 20%	
44. Abolition of the foreign exchange auction in November 1993 45. Commencement of active liquidity Management by Bank of Uganda through: rediscount policy; weekly auctions of Treasury Bills; adjustment of reserve requirements; improved surveillance of the commercial banking system 46. Payment of domestic arrears to the tune of 32 billion shillings 47. Reduction of debt service ratio through debt buy back from 90% to 60% 48. Restructuring of Uganda Commercial Bank and Uganda Co-operative Bank started 49. Restructuring of Bank of Uganda 50. The Stock Exchange established	1993-94
51. The liberalisation of Lint Marketing Board 52. The Deposit Insurance Fund Established 53. Treasury Bills made 'bearer payable' 54. Interest rates fully liberalised 55. Liberalisation of Balance of Payments Current Account 56. Attainment of Article VIII IMF Status 57. The shilling becomes a convertible currency.	1994-95
58. Privatisation of public enterprises 59. 66.9 billion worth of Uganda Commercial Banks non-performing loans transferred to Non-Performing Assets Recovery Trust	1995-96
60. Government Divests its interests from private commercial banks 61. Elimination of the monopoly of Uganda Electricity Board 62. Uganda Posts and Telecommunications broken into 3 companies 63. The Commercial Court Division of the High Court established	1996-97
64. Divestiture of government interest in the production of traditional export crops 65. Establishment of the National Environmental Action Plan 66. Approval of a strategic plan for the power sector 67. Government increased funding for road rehabilitation 68. License awarded to the second national telecommunications operator 69. 51% of Uganda Telecommunications company sold 70. The strategy to attain UPE objectives while maintaining quality developed 71. The strategy to rationalise the teacher student ratio to 1:55 adopted 72. A Health Plan covering the 1997-2000 adopted 73. Financial Management System to increase transparency by districts implemented 74. Elimination of all remaining non-tariff barriers 75. Elimination of tax exemptions 76. Promulgation of a new land law for clarifying land ownership 77. Divestiture of 85% of government parastatals 78. Introduction of cost sharing in tertiary institutions 79. Restructure Uganda Revenue Authority 80. Capitalise Bank of Uganda 81. Impart bans on soft drinks and beer lifted 82. Issuing of promissory notes Government stopped	1997-98
83. Import ban on cigarettes removed 84. Reduction of the size of the civil service to 53,190 85. Participation of the private sector in the operation Uganda Railways	1998-2001

Table 1: Structural Adjustment Program Policies in Uganda: 1987-2000	
Policy Measure	**Period**
formalised 86. Excise taxes restructured and tariffs reduced 87. All arrears of public enterprises liquidated 88. All marketing regulations on agricultural outputs and inputs to be reviewed and all restrictions on exports to be removed and all agricultural exports procedures to be simplified 89. To establish and autonomous Road Agency Authority 90. All Government Department made to pay for goods and services 30 days after delivery	

Source: Uganda Government, Policy Framework Papers, and Budget Speech, Various Issues (1987-2001).

Table 2: Changes in Rural Poverty (head count ratios – per cent)			
Region	**1992 HIS**	**1997/98 MS-4**	**1999/2000 UNHS***
National	69.4	48.7	39.0
Central	54.3	34.5	25.6
East	60.6	56.8	39.2
West	54.3	44.0	29.4
North	73.0	61.8	66.7
Gini Coefficient	0.324	0.311	0.320

Note: * preliminary estimates.
Source: Appleton (2001a), Tables 2.1-2.3

ıble 3: Major Rural Income Sources

1992												1999											
COME URCE	**SHARE(%)**											**INCOME SOURCE**	**SHARE(%)**										
trepreneurial	**Na**	**Ce**	**Ea**	**No**	**We**	**Ma**	**Fe**	**P**	**Mp**	**Wo**	**R**	**Entrepreneurial**	**Na**	**Ce**	**Ea**	**No**	**We**	**Ma**	**Fe**	**P**	**Mp**	**Wo**	**R**
ops	45.8	44.3	45.7	46.5	47.5	46.2	44.6	44.7	45.9	47.6	45.0	Crops	40.4	44.0	35.5	40.3	40.6	41.8	37.5	31.2	45.4	45.1	37.6
scellaneous	17.0	20.4	17.7	15.0	18.5	17.6	19.1	29.9	18.0	14.4	9.7	Miscellaneous	31.8	31.5	32.4	17.5	33.7	30.1	28.9	28.9	26.5	30.0	34.0
mittances	9.3	9.6	8.4	8.8	11.2	8.2	12.5	9.6	10.0	9.4	8.4	Remittances	17.5	15.1	21.7	27.9	15.8	16.6	23.7	27.2	18.9	14.8	17.6
ınufacturing	1.5	2.3	1.9	0.7	0.5	1.2	2.1	0.6	0.8	1.2	3.1	Manufacturing	1.2	1.7	0.8	2.3	0.6	1.5	1.0	1.8	0.8	1.4	1.3
vestock	0.4	0.4	0.5	0.6	0.2	0.5	0.1	0.1	0.4	0.4	0.8	Livestock	0.6	1.0	0.6	0.1	0.3	0.2	0.7	0.8	0.9	0.2	0.2
nt	0.6	0.8	0.7	0.4	0.3	0.5	0.8	0.5	0.9	0.3	0.5	Pension	0.5	0.0	0.8	0.0	0.7	0.2	0.7	0.0	0.5	0.6	0.4
nsion	0.1	0.1	0.0	0.3	0.2	0.1	0.3	0.2	0.0	0.1	0.2	Allowances	0.5	0.1	0.5	1.5	0.4	0.7	0.3	0.6	0.4	0.8	0.4
nstruction	0.1	0.3	0.2	0.0	0.0	0.2	0.0	0.3	0.0	0.2	0.0	Rent	0.3	0.1	0.9	0.0	0.0	0.2	0.4	0.1	0.4	0.1	0.5
ıde	2.0	2.8	1.6	2.9	0.3	1.9	2.4	1.6	3.2	1.6	1.7	Trade	0.9	0.0	1.1	2.5	0.8	0.5	1.6	1.6	0.7	0.7	0.7
nployment												**Employment**											
ops	11.5	9.4	12.7	12.3	11.8	12.3	9.1	9.0	11.2	14.7	11.2	Crops	3.4	4.0	2.4	5.4	4.1	4.7	2.4	4.5	3.3	3.7	3.8
ucation	1.8	1.6	2.8	2.3	1.1	1.9	1.3	0.2	1.0	0.9	4.7	Government	1.4	0.3	2.4	1.5	1.9	1.8	1.0	2.1	0.5	1.9	1.4
nstruction	0.8	1.2	0.3	1.2	0.6	1.1	0.0	1.3	0.5	0.7	1.0	Finance	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
ıde	0.2	0.5	0.1	0.7	0.0	0.1	0.4	0.4	0.1	0.3	0.0	Manufacturing	0.4	0.4	0.4	0.0	0.3	0.3	0.4	0.6	0.1	0.1	0.4
orkshops	0.2	0.6	0.1	0.0	0.0	0.3	0.1	0.1	0.4	0.0	0.3	Livestock	0.2	0.0	0.0	0.0	0.2	0.2	0.1	0.0	0.3	0.2	0.2
vestock	0.2	0.3	0.1	0.1	0.5	0.3	0.1	0.2	0.4	0.1	0.1	Construction	0.2	0.2	0.3	0.0	0.3	0.2	0.2	0.3	0.0	0.3	0.2
tering	0.1	0.0	0.0	0.4	0.2	0.0	0.5	0.0	0.1	0.4	0.0	Transport	0.1	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.0	0.3	0.0
ınufacturing	0.1	0.0	0.4	0.0	0.2	0.2	0.0	0.0	0.5	0.0	0.0	Workshops	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
mple Size	**836**	**250**	**245**	**198**	**143**	**619**	**217**	**208**	**210**	**200**	**216**	**Sample Size**	**836**	**262**	**230**	**131**	**173**	**494**	**302**	**170**	**210**	**200**	**216**

ı = National **Ce** = Central **Ea** = Eastern Region **No** = Northern Region **We** = Western Region **Ma** = Males **Fe** = Females
= Poorest **Mp** = Middle Poor **Wo** = Welloff **R** = Rich

urce: Integrated Household Survey, 1992-1993; Uganda National Household Survey, 1999-2000.

Table 4: On/off-Farm Major Rural Income Sources(*National*)[3]			
1992		**1999**	
INCOME SOURCE	**SHARE(%)**	**INCOME SOURCE**	**SHARE(%)**
On-Farm:		**On-Farm:**	
Entrepreneurial	47.3	Entrepreneurial	41.0
Employment	11.7	Employment	3.6
Off-Farm:		**Off-Farm:**	
Entrepreneurial	30.5	Entrepreneurial	51.8
Employment:	3.2	Employment	2.3

***Source**:* Integrated Household Survey, 1992-93; Uganda National Household Survey, 1999-2000.

Table 5: Diversification Indices				
	1992		**1999**	
	Index	**Sample Size**	**Index**	**Sample Size**
National	2.20635	836	1.60874	836
Central Region	2.05456	250	1.62226	262
Eastern Region	2.24660	245	1.62418	230
Northern Region	2.21170	198	1.63524	131
Western Region	2.39532	143	1.54765	173
Males	2.23761	619	1.61129	494
Females	2.11716	217	1.60456	302
Poorest	1.91438	208	1.44652	170
Middle Poor	2.20183	210	1.54211	210
Welloff	2.29357	200	1.71577	200
Rich	2.41111	216	1.70208	216

Source: Integrated Household Survey, 1992-93; Uganda National Household Survey, 1999-2000.

Table 6: Mean rural incomes 1992-1999		
Duncan Grouping	**Mean Income**	**Year**
A	716,709.00	1992
B	1,146,532.00	1999

Source: Integrated Household Survey, 1992-93; Uganda National Household Survey, 1999-2000.

Table 7: Composition of GDP (per cent share)				
Sector	**1987-89**	**1990-92**	**1993-95**	**1996-99**
Monetary GDP	65.5	68.5	72.1	76.6
Agriculture	23.7	24.5	24.2	23.0

[3] Similar information for regional, gender and income group may be computed from Table 2.

Cash crops	3.3	3.3	3.2	3.8
Food crops	11.1	11.7	12.5	11.4
Manufacturing	5.2	5.8	6.9	9.3
Construction	5.0	5.1	6.0	7.4
W.sale & retail trade	10.8	11.3	12.2	14.6
Hotels & Restaurants	1.0	1.3	1.7	1.8
Transport/communic.	4.1	4.2	4.5	4.9
Community services	14.3	15.3	15.5	15.3
Non-monetary GDP	34.5	31.5	27.9	23.4

Source: Uganda Bureau of Statistics, *Statistical Abstracts,* various issues.

Table 8: Composition of Exports (per cent)

COMMODITY	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TRADITIONAL EXPORT CROPS										
Coffee	79.0	63.8	65.0	53.1	74.6	66.6	55.8	52.0	55.1	60.1
Cotton	3.3	6.4	5.6	2.7	0.8	1.7	2.2	4.9	1.4	3.6
Tea	2.0	3.7	5.3	5.8	2.6	1.2	2.2	5.1	5.3	4.5
Tobacco	1.7	2.5	2.9	2.1	1.8	1.3	1.0	2.1	4.2	3.1
NON-TRADITIONAL EXPORTS										
Maize	1.9	2.3	2.7	11.6	6.2	4.0	2.6	2.5	1.7	1.1
Beans and other Legumes	2.3	2.3	1.9	6.3	2.8	2.8	2.3	2.0	1.2	1.8
Fish and Fish products	0.8	2.9	4.4	4.4	2.3	5.6	6.8	4.7	7.4	5.2
Cattle hides	2.3	1.8	2.3	2.6	2.3	1.8	1.1	1.7	1.1	0.6
Sesame seeds	2.9	5.7	4.4	1.4	0.3	1.0	1.3	0.2	0.0	0.3
Roses and cut flowers	n/a	n/a	N/a	0.1	0.1	0.1	0.4	0.6	1.4	1.5
Traditional export crops	85.9	76.4	78.7	64.8	79.8	71.4	61.1	64.2	65.9	71.3
Non-traditional exports	14.1	23.6	21.3	35.2	20.2	28.6	38.9	35.8	34.1	28.7

Source: Uganda Bureau of Statistics, *Statistical Abstracts,* various issues.

Table 9: Procurement of Main Export Crops (in tonnes)

	COFFEE			TEA	TOBACCO
	Robusta	Arabica	Total		
1987	158,002	9,065	167,067	3,511	1,214
1988	141,718	9,439	151,157	3,512	2,639
1989	161,154	7,888	169,042	4,658	3,456
1990	116,807	11,940	128,747	6,704	3,322
1991	133,465	13,901	147,366	8,877	5,140
1992	95,174	15,160	110,334	9,504	6,686
1993	122,182	22,369	144,551	12,102	5,183
1994	166,814	31,557	198,371	13,462	6,548
1995	159,725	21,740	181,465	12,692	6,851
1996	260,765	27,160	287,925	16,939	6,349

Source: Uganda Bureau of Statistics, *Statistical Abstracts,* various issues.

Table 10: Coffee Procurement by type of organisation (per cent share)

	Coffee Marketing Board	Union Export Services	Private Exporters
1987	100	0	0
1988	100	0	0
1989	100	0	0
1990	95.5	0.0	4.5
1991	78.6	3.9	17.5
1992	67.9	28.6	3.5
1993	28.4	12.1	59.5
1994	14.4	8.8	76.8
1995	6.5	13.8	79.7
1996	4.0	7.2	88.8

Source: Uganda Coffee Development Agency

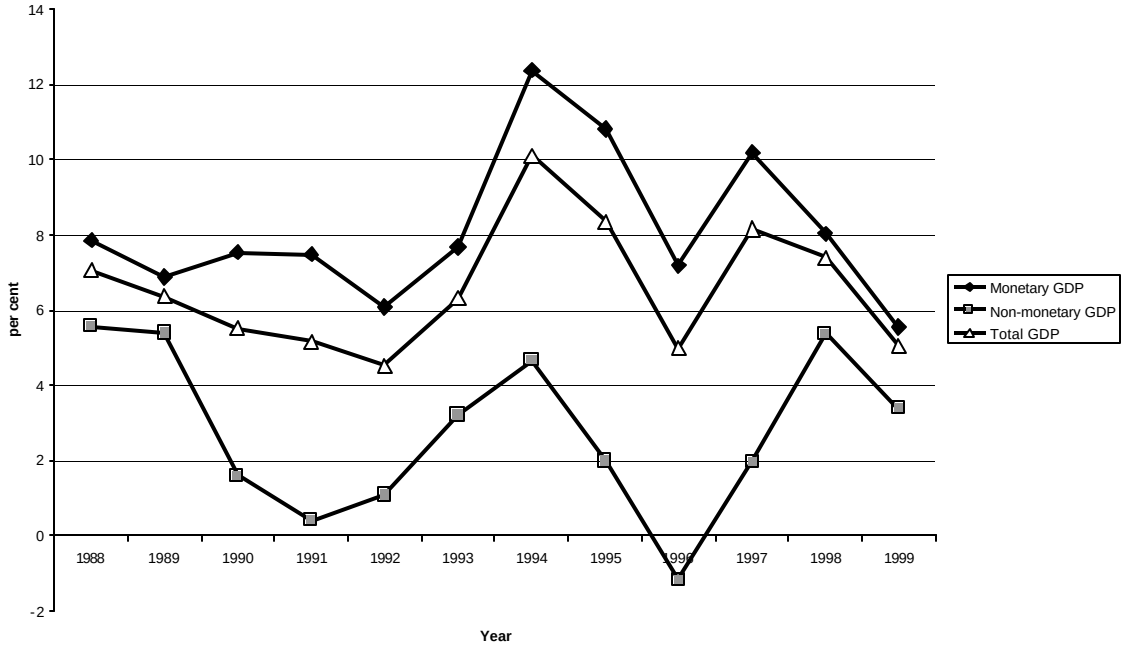
Table 11: Change in Real Agricultural Input Prices

Item	July 1990	May 1991	May 1992	May 1993	May 1994	May 1997	December 1998
Planting seeds	-15.6	-2.5	-0.7	16.2	3.5	-2.1	33.1
Agricultural chemicals	25.3	-17.7	28.7	18.2	2.2	5.4	-7.0
Agricultural tools	2.1	-2.3	-17.4	8.3	0.8	-32.6	-4.7

Note: Deflated by the CPI.
Source: Agricultural Policy Committee, *Report on Economics of Crop and Livestock Production, Processing and Marketing*, 1998/99.

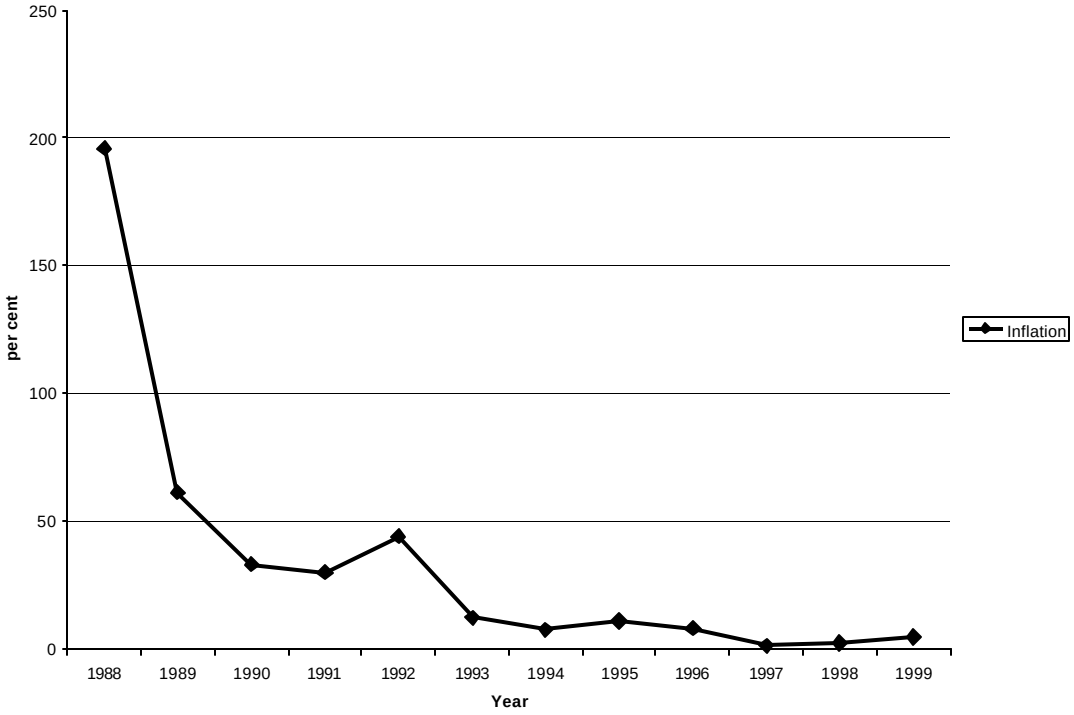
Table 12: Allocation of Commercial Bank Loans to the Private Sector - percentage									
Sector	1988	1989	1990	1991	1992	1993	1994	1995	1996
Agriculture	48	32	34	34	25	25	24	23	20
Of which: crop finance	34	20	20	24	22	22	22	21	18
Trade and commerce	29	35	38	39	45	46	44	46	46
Manufacturing	13	14	12	13	16	18	21	23	27
Transportation	7	10	9	7	6	5	4	3	3
Building and construction	2	10	9	8	10	7	8	7	5

Figure 1: Growth Rates of GDP



Source: Uganda Bureau of Statistics, Statistical Abstracts, various issues.

Figure 2: The Inflation Rate

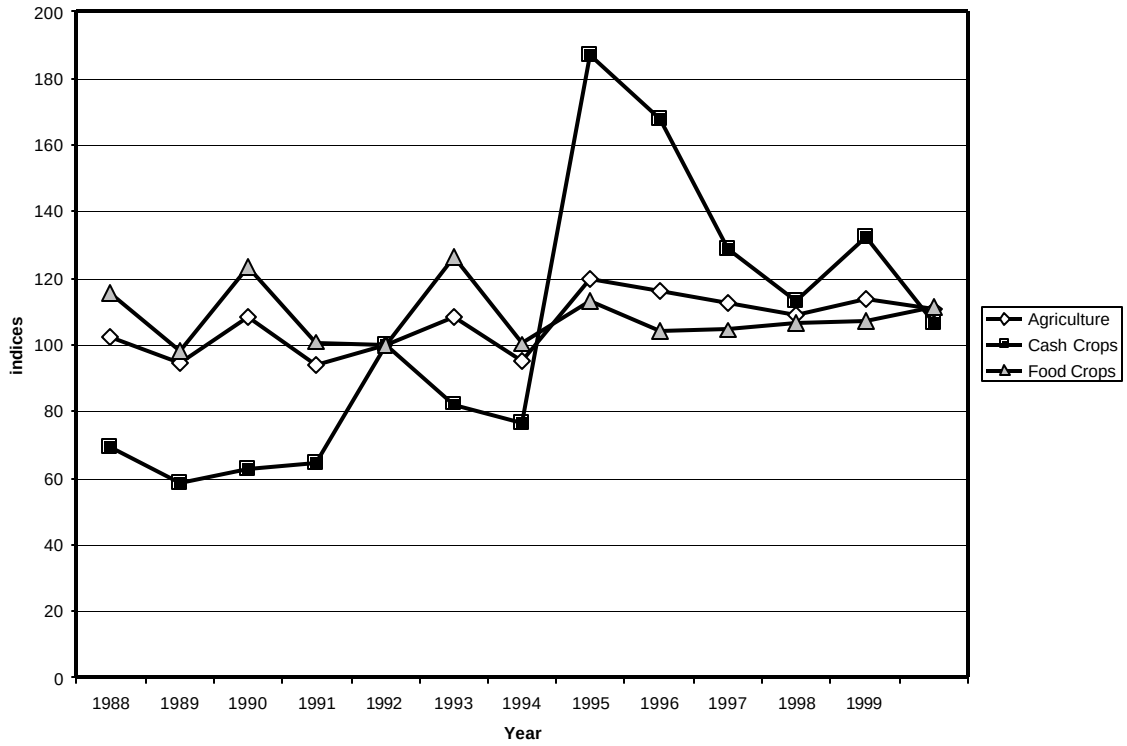


Source: Uganda Bureau of Statistics, *Statistical Abstracts*, various issues.

Figure 3: The Real Exchange Rate

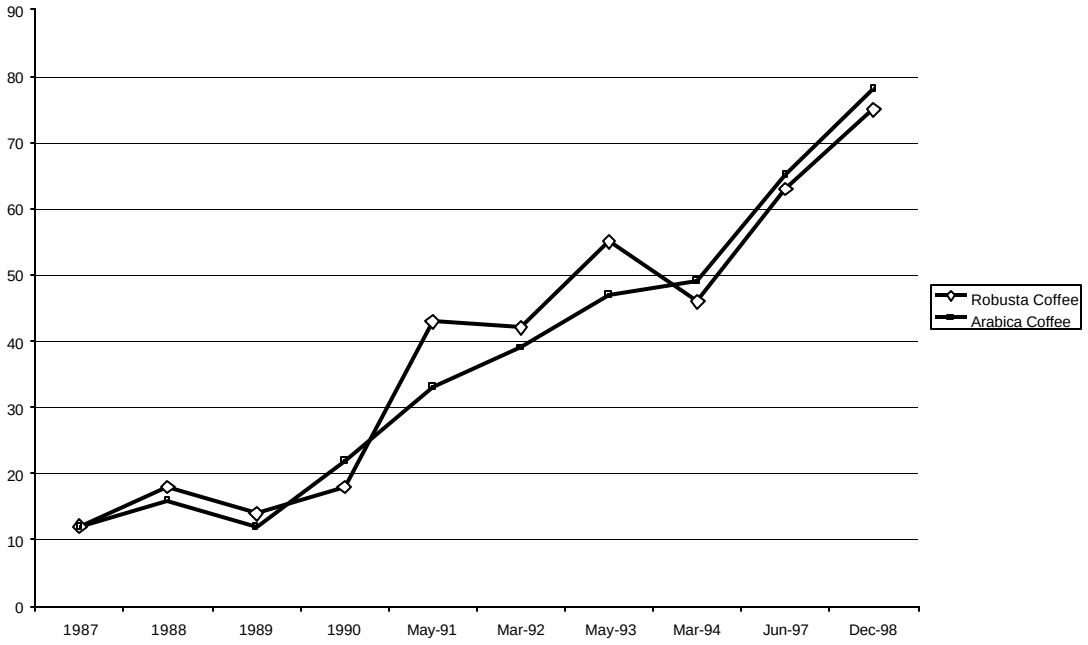
Notes: The real exchange rate = nominal exchange rate*US Price Level/Domestic Price Level. For US Prices, we use the US Producer Price Index, and for Domestic Prices, the Ugandan Consumer Price Index. The nominal exchange rate used is the official exchange rate.

Figure 4: Terms of Trade



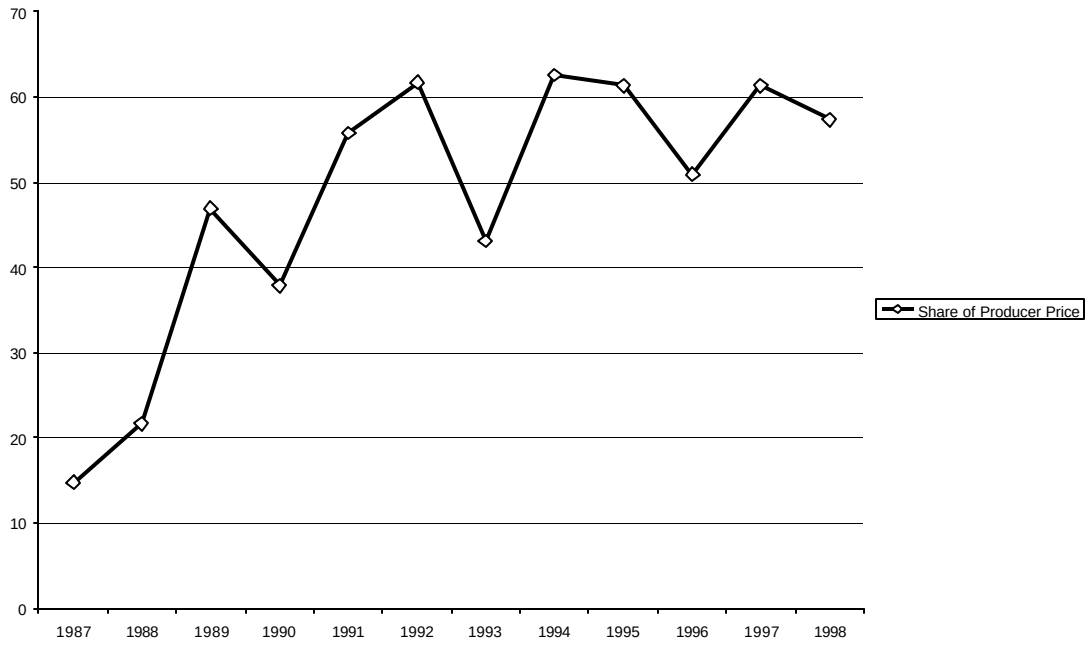
Note: Price deflators for agriculture, cash crops and food crops deflated by the implicit price deflator for manufacturing.
Source: Uganda Bureau of Statistics, Statistical Abstracts, various issues.

Figure 5: Share of Coffee Producer Price in World Market Price



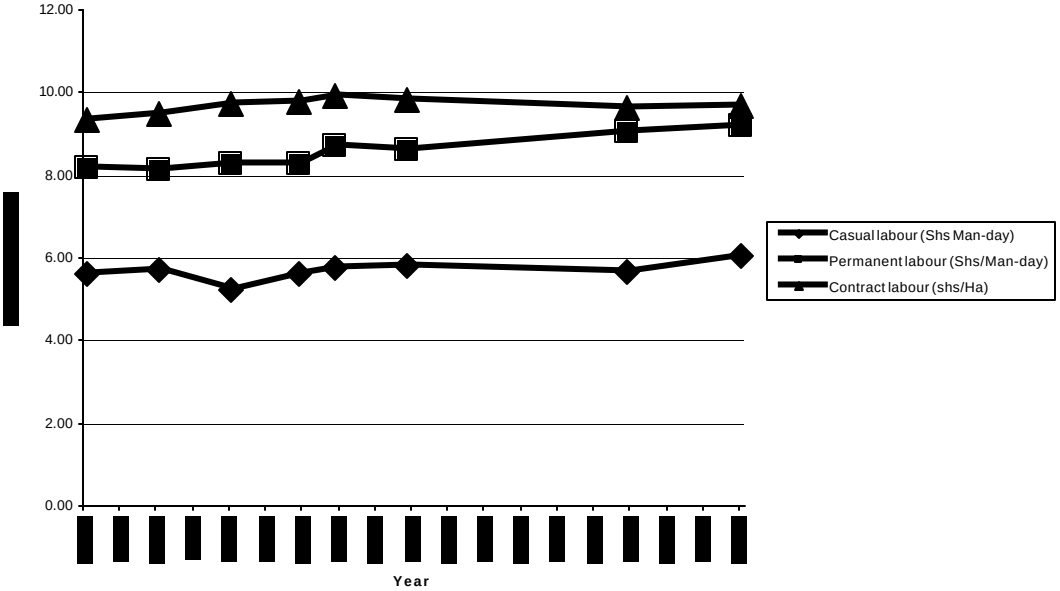
Source: Agricultural Policy Committee, *Report on Economics of Crops and Livestock Production, Processing and Marketing 1998/99*

Figure 6: Share of Cotton Producer Price in World Market Price



Source: Agricultural Policy Committee, *Report on Economics of Crops and Livestock Production, Processing and Marketing 1998/99*

Figure 7: Real Wage Rates of Agricultural Labour



Note: real wage rates are in natural logarithms.
Source: Agricultural Policy Committee, *Report on Economics of Crop and Livestok Production, Processing and Marketing, 1998/99*

Figure 8: Production of Selected Food Crops