

UGANDA TRADE AND POVERTY PROJECT (UTPP)

TRADE POLICIES, PERFORMANCE AND POVERTY IN UGANDA

by

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Introduction

Uganda has probably been the most successful African example of economic liberalisation, attaining macroeconomic stability and reducing policy-induced anti-export bias in its trade policy in the 1990s. Taxes on exports have been abolished, and import protection has been reduced considerably. It now has one of the most liberal trade regimes of any African country. In conjunction with trade liberalisation, the government has liberalised much of the agricultural sector. In particular, coffee marketing is now liberalised and this has been associated with increased prices and incomes for producers. While world prices are a major determinant of Uganda's export earnings from coffee, the high world prices for coffee during much of the 1990s is not the sole reason for increasing producer incomes – the share of the world price received by farmers also increased significantly following liberalisation. There is no doubt that Uganda can be classified as a liberalising economy in the 1990s.

Growth performance has been impressive. In rough terms, real per capita GDP increased by some 70 per cent between 1992 and 1998, and had doubled by the early 2000s compared to the early 1990s. Export growth, especially coffee in the mid-90s but including non-traditional exports more recently, made a significant contribution to this growth performance. While the value of exports varies, often dramatically, from year to year, earnings doubled in real terms during the 1990s. The evidence of successive household surveys is that poverty is being reduced, fuelled by increased agricultural incomes for most of the 1990s (first coffee, then food crops since 1997), and increasing non-farm incomes in recent years. The percentage of the population recorded as living below the poverty line (the poverty headcount measure) fell by some 20 per cent between 1992 and 1998, and has continued to fall. These rough figures support other estimates that the poverty elasticity of growth is about -0.3, i.e. for every ten per cent increase in national income, poverty declines by three per cent.

In this way, liberalisation of trade and agriculture has been associated with poverty reducing growth. A ten per cent increase in the real value of exports could directly add one per cent to growth, and indirectly (allowing for multiplier effects) could add almost three per cent to growth, and could therefore reduce headcount poverty by one per cent. However, the gains of the past decade have not been evenly distributed; while the 'average' household gained, some households are likely to have suffered under liberalisation and some groups remain rooted in poverty. This study aims to review the evidence to identify which types of households have, and which have not, benefited from trade under Uganda's more liberal economic regime, and to suggest what can be done to spread the benefits more widely. Since 1997 the government has adopted a Poverty Eradication Action Plan (PEAP) linked to a Poverty Action Fund (PAF) financed out of HIPC debt relief. This study can inform the trade policy component of the poverty reduction strategy.

This report reviews the trade performance of Uganda since about 1990, and relates this to evidence on trends in poverty and the livelihoods of the poor. The focus is primarily economic, and specifically on how trade has affected poverty. There were several forces at play in the economy during the 1990s that impacted on poverty. These included trade liberalisation and trade performance (which is only in part determined by Uganda's own trade policy), but there were also large aid inflows. Although we will make reference to other factors where appropriate, our concern is

with identifying any ways in which trade policy and performance has affected the poor. Trade may affect poverty by contributing to increased or decreased incomes or opportunities, or by altering the prices the poor face for the main commodities they consume. All of these linkages will be addressed. The Report has five sections.

Section 1 provides a review of trade policy, identifying the major reforms, and of trade performance in the 1990s, considering diversification of exports and trends in imports of consumption goods (especially those that tend to be consumed by the poor). The section also provides an assessment of the performance of particular sectors (effects are different for exporting and import-competing sectors). The major trade policy reforms tend to have a more immediate effect on imports than on exports, as Ugandan reforms directly affect import prices (by reducing restrictions or tariffs). Export revenues are largely determined by world prices, which are beyond Uganda's influence, while export performance is influenced by non-trade factors, such as marketing and transport.

Section 2 reviews evidence on trends in poverty over the period 1992 to 1999 when comparable household survey data are available. This section concentrates on money-metric poverty measures; the broader dimensions of poverty and livelihoods are considered in section 4. While overall poverty has been reduced quite significantly, performance has varied geographically, and certain groups have not benefited from growth. The discussion will distinguish effects on various groups, such as cash-crop producers and food-crop producers. The section also addresses chronic poverty – that significant segment of households that appear rooted in poverty.

Section 3 relates trade performance to poverty trends and the livelihood opportunities of the poor (and non-poor). The effects for exports and imports will be examined separately, including reference to results from modeling exercises, in particular Computable General Equilibrium (CGE) studies for Uganda. We consider how exports of major commodities (traditional and non-traditional) relate to performance of the relevant sectors, and how this in turn affects income opportunities of the poor. In the case of imports, the principal concern is with the effects of tariff reductions on prices. An attempt is made to relate product effects (e.g. prices of food, imports) to consumption, especially of the poor, using evidence from household surveys.

Section 4 contains a livelihood analysis of poor Ugandans engaged in the production of important tradable goods. Attention is focused on three important cash crops - fish, tea and tobacco - which together accounted for a quarter of Uganda's exports in 2000/01. In addition, rice and sugar production are also of interest as these products compete with potential imports. The analysis draws upon the recently completed Ugandan Participatory Poverty Assessment Process.

Section 5 provides an overall assessment of the effects of trade on the poor, bringing together the evidence presented in terms of an impact assessment of the effects of trade on poverty. As export growth contributes to growth, trade can directly contribute to reducing poverty. Trade, imports and exports, affect households in different ways, as producers or consumers, and we emphasise how such distribution affects should be allowed for in any poverty reduction strategy.

1. Trade Policy and Performance ¹

Uganda is an agricultural country with a population exceeding 23.4 million according to the 2002 census. It has averaged real GDP growth of over five per cent per annum since the launch of the Economic Recovery Programme (ERP) in 1987. The ERP was instituted to reverse declining trends in the economy following two decades of political turmoil and economic implosion. Its key features were market-oriented policy reforms including liberalisation of foreign exchange and achieving macroeconomic stabilisation with a view to maintaining low inflation. Since its inception, there has been a dramatic turnaround in the economy, with peak GDP growth rate in the last decade being ten per cent in 1994. Uganda has undergone substantial structural transformation over the past decade with services and industry becoming more important at the expense of agriculture. Services as a share of GDP increased from 34 per cent in 1990 to 40 per cent in 2001, industry increased from 12 to 19 per cent, whilst agriculture fell from 53 to 41 per cent of GDP (see Appendix Table A1). Nevertheless, the Ugandan economy continues to be dominated by agriculture, contributing more than 90 per cent of export earnings, 80 per cent of employment, and about 40 per cent of government revenue. The proportion of monetary in total GDP rose from 66 to 77 per cent in the same period, reflecting the transformation from a subsistence-based to a more market-based agricultural sector.

The impressive economic performance of the 1990s has continued in recent years. Uganda's real GDP (in market prices) grew by 6.3 per cent in 2001/02, as compared to 5.6 per cent per annum in both 1999/00 and 2000/01, when a fall in world coffee prices and rising oil prices constrained the expansion of productive sectors of the economy. Trade performance, in particular exports, has been a fundamental factor in growth, and trade policy has made a contribution. In the early 1990s, Uganda had a strongly protectionist and highly distorted trade regime, with taxes on coffee (the major export) and high tariffs and restrictions on imports. By the end of the decade, a more liberal trade regime was in place. The first sub-section provides a brief review of the chronology and major elements of trade policy reform.

The presence of import barriers or restrictions creates an anti-export bias by raising the price of importable goods relative to exportable goods. Removal of this anti-export bias through trade liberalisation would induce a shift of resources from the production of import substitutes to the production of exports. The factors used intensively in the production of exports, land and rural labour in Uganda, should benefit most. On the other hand, factors employed in the production of import-competing goods, mostly urban capital and labour, can anticipate losses. Typically, import supply from the rest of the world responds more rapidly than domestic export supply, so liberalisation imposes adjustment costs (losses tend to be immediate whereas export gains can take time). The second sub-section reviews data on trade performance, and considers how this relates to the policy reforms. The final sub-section considers other factors influencing trade performance.

¹ General information on Uganda's economic performance can be found in *Statistical Abstract* (e.g. UBOS, 1999, 2000) and *Background to the Budget* (e.g. MFPEP, 1999, 2001); information on trade policy is in WTO (1995, 2001) and Morrissey and Rudaheranwa (1998). Our discussion draws on these and other sources, with some detailed tables in the Appendix.

1.1 Evolution of Trade Policy

The Ugandan economy was characterised by erratic and inconsistent trade policies from the 1970s to the late 1980s. State-owned trade and processing monopolies together with tight control over the foreign exchange market created anti-export bias, a poor policy environment and discouraged the private sector. The Economic Recovery Programme (ERP) launched in 1987 aimed to improve the competitiveness of Ugandan exports by eliminating controls in the foreign exchange market. It aimed at restoring incentives for producers by abolishing most of the price controls and inefficient marketing monopolies. The ERP aimed at promoting investment by introducing investment incentives and guarantees and returning expropriated properties to their owners. The ERP also aimed at increasing revenue mobilisation and enhanced expenditure control and reduction of inflation by preventing excessive monetary expansion.

Trade policy reforms implemented in Uganda since 1987, coupled with direct export promotion measures and other aspects of the ERP, reduced the bias against exports and policy-induced barriers to trade have been reduced substantially. Table 1 provides a summary of the main reforms over 1987-2000, the most recent year for which reforms have been identified. Tariff rates have been reduced, often significantly, and many non-tariff restrictions (e.g. quotas, import bans) have been converted into tariff equivalents. The tariff schedule with rates of zero, 10, 20, 30 and 60 per cent in 1995 has been reduced to a standard schedule with rates of zero, 7 and 15 per cent in 2001, although some goods face higher rates.² Lower tariffs apply to imports from COMESA partners (see Appendix Table A8). Uganda currently has the lowest tariffs in the COMESA region with an average tariff of 12 per cent (the COMESA average tariff is 33 per cent) and a tariff for COMESA members of six per cent (compared to the COMESA 'own' average of 19 per cent). There are no taxes on exports in Uganda currently. The export tax on coffee, which generated up to a half of the government revenue in the 1980s, was abolished in 1992 and temporarily re-introduced in 1994 as a Coffee Stabilisation Tax but eliminated in 1996. The main export duty is a one per cent levy collected by the Uganda Coffee Development Authority on coffee exports.

There are incentives under which import duties on certain raw materials may be refunded under VAT and a duty drawback scheme. The refund mechanism in these schemes have attracted criticisms on grounds of inefficiency, and two new schemes were introduced in July 2000, i.e. the Fixed Duty Drawback Scheme and the Manufacturing Under Bond Scheme. Under the Fixed Duty Drawback (FDD) scheme, duties paid on inputs that go into production of exports are refunded. The FDD scheme applies to exporters of agricultural and fishery products and manufactured goods that do not rely heavily on imported inputs, such as packaging materials. The Manufacturing Under Bond Scheme is intended to meet the needs of companies that export all of their output. A number of other more minor measures, such as tax exemptions, have also been introduced to support exporters.

² Some imports are subject to an import license commission of 2%, a withholding tax of 4% as well as excise duty - normally 10% except on cigarettes (13%), alcoholic beverages (70%) and soft drinks (15%). The 17% value added tax (VAT) applies equally to imports and domestic products.

Table 1: Ugandan Trade Policy Reforms

Year	Reform
1987	<ul style="list-style-type: none"> • Dual trade licensing system introduced, • Duty exemptions on raw materials and capital goods suspended.
1988	<ul style="list-style-type: none"> • Some protective tariffs (sugar, soap) raised, • Open General License (OGL) scheme for imports implemented,
1989	<ul style="list-style-type: none"> • Retention account scheme for export earnings introduced, • Duty exemption on raw materials
1990	<ul style="list-style-type: none"> • Export licensing system replaced with certification system, • Foreign exchange bureau/parallel foreign exchange market legalised,
1991	<ul style="list-style-type: none"> • Import licensing replaced with certification system, • Duty drawback scheme introduced,
1992	<ul style="list-style-type: none"> • Tariff structure rationalised (6 rates in 10-60% range), • Several duties on raw material abolished, • Tax on coffee exports abolished
1993	<ul style="list-style-type: none"> • Unified inter-bank foreign exchange market /floating exchange rate • System of trade documentation reformed, pre-shipment requirements introduced, • Cross border initiative (CBI) to promote regional trade introduced
1994	<ul style="list-style-type: none"> • Further rationalisation (10-50% range) of the tariff structure • Import duties on some of the materials suspended • Tax on coffee exports reintroduced
1995	<ul style="list-style-type: none"> • Coffee tax reduced • Narrow range of products only on negative import list • Reduced exemptions from duties on raw materials and intermediate inputs
1996	<ul style="list-style-type: none"> • Coffee tax abolished • Further rationalisation of tariffs, to three non-zero rates with maximum of 30% (though protective excise duty of 12% applies also on many tariff lines)
1998	<ul style="list-style-type: none"> • Tariff bands reduced to three – 0, 7 and 15 per cent (although with some special excise duties) and almost all import bans removed. • Uganda qualifies for HIPC debt relief
2000	<ul style="list-style-type: none"> • Fixed Duty Drawback Scheme and the Manufacturing Under Bond Scheme introduced for exporters

1.2 Trade Performance

Trade policy reforms in Uganda have been aimed at poverty reduction, promoting employment, economic growth and promotion and diversification of exports, particularly non-traditional exports. There are duty and tax exemptions and concessions as incentives to increase the volume and diversity of exports. The policy initiatives undertaken in recent years have provided incentives and increased producer prices. For example, the elimination of the monopoly of the Uganda Produce Marketing Board (PMB) has contributed to the growth and diversity of horticultural exports.

Trade performance during the 1990s has been volatile on the export side, but surprisingly stable on the import side (Table 2a). Exports increased from seven per cent of GDP in 1990 to 12 per cent in 1996. During the coffee boom of the mid-90s exports peaked at 15 per cent of GDP. The following year exports fell to a more stable level of 11-12 per cent of GDP, remaining at that level until 2001. Imports remained at 20-21 per cent of GDP throughout the decade. As a consequence, Uganda has run a chronic trade deficit in 1990-2001 of around ten per cent of GDP (this has been sustained by aid inflows).

Table 2a. Exports, Imports and Trade Balance, 1990-2001, selected years

Year	1990	1995	1996	1997	1998	1999	2000	2001
Exports/GDP	7.0	10.9	11.9	15.0	12.1	11.8	11.7	11.6
Imports/GDP	20.0	20.8	20.7	20.5	20.1	20.0	20.2	20.7
Trade balance/GDP	-13.0	-10.1	-8.8	-5.5	-8.0	-8.2	-8.5	-9.1

Source: Economist Intelligence Unit, 2002.

Table 2b. Traditional and Non-traditional Exports, selected years (US\$m)

	91/92	93/94	94/95	95/96	96/97	98/98	99/00	00/01
Traditional Exports	131.4	202.3	477.4	435.6	424.2	363.1	258.4	172.0
Non-traditional Exports	40.7	62.4	115.5	152.4	259.3	186.0	180.6	253.2
Total Exports	172.1	264.7	593.0	588.0	683.5	549.1	438.9	425.2

Note: Excludes exports of services. 'Non-traditional' refers to commodities that have only featured in export trade over the last ten years.

Source: Background to the Budget 2002/03 (MFPED, 2002).

Export trends

The composition of Uganda's exports changed markedly during the 1990s, especially in the second half of the decade. One important trend is the fall in export revenue from traditional cash crops, notably coffee since 1999 and cotton in the early 1990s. In contrast, non-traditional exports,³ especially fish, experienced a boost in revenues in recent years. By 2000/01, non-traditional revenues surpassed those from traditional exports (see Table 2b and Table A3).

³ 'Non-traditional' refers to export commodities that have only featured in Uganda's trade over the last ten years.

Table 3. Composition of Exports (% shares), 1990-2001 selected years

	1990	1992	1994	1995	1997	1998	1999	2000	2001
Traditional exports									
Coffee	79.0	65.0	74.6	66.9	52.0	55.1	60.1	31.2	21.6
Cotton	3.3	5.6	0.8	1.7	4.9	1.4	3.6	5.5	3.0
Tea	2.0	5.3	2.6	1.2	5.1	5.3	4.5	9.4	6.7
Tobacco	1.7	2.9	1.8	1.3	2.1	4.2	3.1	6.7	7.1
Non-traditional exports									
Maize	1.9	2.7	6.2	4.0	2.5	1.7	1.1	0.6	4.1
Beans and other legumes	2.3	1.9	2.8	2.8	2.0	1.2	1.8	1.1	0.5
Fish and fish products	0.8	4.4	2.3	5.6	4.7	7.4	5.2	7.7	17.3
Cattle hides	2.3	2.3	2.3	1.8	1.7	1.1	0.6	3.2	5.7
Sesame seeds	2.9	4.4	0.3	1.0	0.2	0.0	0.3	0.2	0.2
Soap	0.0	0.0	0.4	0.5	0.4	0.3	0.4	0.4	0.6
Electric current	0.7	1.0	0.5	0.4	2.0	2.2	2.8	4.6	2.3
Cocoa beans	0.3	0.2	0.1	0.1	0.2	0.3	0.3	0.4	0.4
Goat and sheep skins	1.2	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Hoes and hand tools	0.1	0.3	0.2	0.3	0.0	0.0	0.1	0.1	0.1
Pepper	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Fruits	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.2	0.0
Bananas	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.2
Roses and cut flowers	0.0	0.0	0.1	0.1	0.6	1.4	1.5	2.5	3.3
Gold and gold compounds	0.0	0.0	0.0	4.7	13.6	3.6	7.0	10.8	10.9
Other precious compounds	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.7	2.8
Other products	1.6	3.2	4.1	6.9	7.8	14.3	6.7	12.7	10.5
<hr/>									
Traditional exports	85.9	78.7	79.8	71.1	64.2	65.9	71.3	52.6	38.3
Non-traditional exports	14.1	21.3	20.2	28.9	35.8	34.1	28.7	47.4	61.7

Source: Computed from *Background to the Budget* (MFPED, various years)

Coffee has been by far the single most important export commodity over the decade (see Table 3 and Appendix Table A3). Between 1992/93 and 1998/99, coffee contributed between 54 and 77 per cent of total exports, earning US\$457m at its peak in 1994/95. Uganda benefited tremendously from a boom in the world coffee prices in the mid-1990s combined with an increased supply response. But the boom was followed by bust as coffee export prices fell by almost 70 per cent in dollar terms between 1998/99 and 2001/02. Coffee's share of exports has fallen dramatically to only 18 per cent in 2001/02, earning US\$85m, some five times less than in 1994/95. Cotton, another traditional cash crop, also experienced a recent downturn. Having recovered in the mid-90s to reach a peak of US\$26m in 1996/97, export revenues fell

to an estimated US\$17m in 2001/02, primarily due to a price fall. Tobacco, on the other hand, has grown steadily in importance, especially towards the end of the decade. From US\$9m in 1992/93 (five per cent of total exports) to US\$36m in 2001/02 (8%). Tea exports have also improved significantly from only US\$10m (6%) in 1992/93 to US\$36m (8%) in 2001/02, primarily due to an increase in volumes.

Fish is the current export success story in Uganda, increasing from only \$4m (2% of exports) in 1992/93 to \$48m (9%) in 1998/99. A temporary import ban imposed by the European Union caused a loss of foreign currency earnings in 1999/00, as exports dropped to \$19m. When the ban was lifted, exports expanded further to a record \$88m (19% of exports) in 2001/02, making fish the most important export commodity in Uganda in terms of revenue earned. The boom in fish exports can be attributed to increased prices as well as volumes. Hides and skins is another promising export commodity. Total earnings have increased from \$4m (2%) in 1992/93 to \$19m (4%) in 2001/02. Flowers and electricity show equally promising trends. Maize exports are also important, but volatile, as the produce is sold in bulk and depends on food shortages in other parts of the continent (to which transport is often a problem).

Table 4. Composition of Ugandan Commodity Imports, 1995-99 (%)

	1995	1996	1998	1999
Primary Products	22.2	31.2	32.6	30.7
Agriculture	18.4	17.2	19.7	16.5
Food	15.8	14.4	17.4	14
Agriculture raw material	2.6	2.8	2.3	2.5
Mining	3.7	14	12.9	14.2
Manufactures	77.7	68.7	67.4	69.2
Iron and Steel	5.5	5	4.2	4.2
Chemicals	10.7	12.3	12.5	14.6
Other semi-manufactures	12.8	11.7	11.1	11.1
Machinery and Transport Equipment	34.8	28.4	29.2	27.4
Textiles	4.1	3	2.1	2.3
Clothing	1.6	1.5	1.6	1.7
Other Consumer goods	8.3	6.9	6.8	8

Source: WTO (2001).

Import trends

While Uganda's export performance can be narrowed down to an analysis of ten major commodities, a similar analysis for imports is complicated by the fact that more than fifty products are involved. To facilitate an overview, merchandise imports for 1999 can be broken down into two major groups (Table 4): primary products (31% of the total) and manufactures (69%). Food imports (14%) and mining (14%) are amongst the most important primary imports. Machinery/transport equipment (27%), chemicals (15%) and other semi-manufactures are major manufactured imports. The

composition of imports has not changed markedly over the last five years for which data was available.

A more detailed look at the most important single components of Uganda's import bill reveals that petroleum (and related products) is the largest single component of the import bill with \$122m (9% of imports) in 1999 (Table A4). This share has been relatively constant over the decade and is closely related to the world market price for crude oil. Import of road vehicles is another important item, but its share of total imports has fallen substantially from 15 per cent in 1995 to seven per cent in 1999. Together, petrol and vehicle imports totalled \$219m in 1999, which is more than Uganda could raise on its exports of fish and coffee - an indication of the structural trade deficit that Uganda has with the rest of the world.

1.3 Non-Trade Factors and Constraints

Trade policy barriers are only a component of the transactions costs associated with trade. Poor infrastructure, notably by increasing transport costs, and institutional inefficiencies can significantly increase trade costs. The implicit tax on exports due to transport costs and inefficiencies are often very high, in many cases representing a greater cost (tax) to exporters than trade policy.⁴ Many institutional reforms, especially dismantling state monopolies on marketing, complemented the trade reforms. However, institutional rigidities and infrastructure inefficiencies persist and these constrain trade performance.

Agricultural marketing boards have either been privatised or lost their monopoly as competition from the private sector has been introduced. A prominent example is the former Uganda Coffee Marketing Board (now Uganda Coffee Marketing Board Limited), which since 1992 has lost most of its market share to private exporters. This has been associated with a significant increase in the producer price received by farmers, who are also paid more promptly; marketing and production efficiency, incomes and exports have all increased. The monopoly power of Uganda Railway Corporation in shipping coffee exports has also been reduced, although transport costs remain a high burden. Exporters and investors in Uganda appreciate the extent of macroeconomic policy reforms but regard institutional and infrastructure support as being inadequate. Exporters identify a number of problems that increase trade costs: paperwork and slow clearing procedures for exporting, the high cost and lack of credit, and high freight charges. These high transaction costs make exporters less competitive in export markets.

Whereas the macroeconomic policy environment has been favourable for investors in Uganda, other infrastructure-related constraints, particularly utilities, remain a major challenge. Problems related to power unreliability, breakdowns and voltage fluctuations have been the main concern followed by problems with road transport, telecommunications and limited accessibility to finance. A 1998 World Bank survey indicates that firms lost about 89 operating days per year due to unreliable electricity from the public grid. Many firms have had to invest in back-up power generators, i.e. as many as 77 per cent of large firms, 44 per cent of medium size firms and 16 per cent of small sized firms own generators. The cost of generators represented about 16

⁴ For a detailed discussion see Milner *et al* (2000). The survey evidence cited in this sub-section is reported in Morrissey and Rudaheranwa (1998) and Reinikka and Svensson (1999).

per cent of the value of total investment on average and about 25 per cent of the value of investment in equipment and machinery in 1997.⁵ The cost of owning and running a generator is estimated to be about three times more than to buy power from the public grid when available.

Public telephone service delivery is also poor and unreliable. Due to inefficient public service delivery in the communication sector, over a half of the firms in the 1998 World Bank survey had invested in mobile phones (a privately run service) and chances are that this has risen up. The survey indicates that firms tried on average 2.5 times to complete a local call, 4.6 times to complete a long-distance call in Uganda, 4 times to complete a call to a neighbouring country and 2.8 times to complete an international call (this should have improved in recent years). This problem should, however, be less of a constraint now with the rise in mobile phone networks.

The poor functioning of institutions that facilitate trade also constrains efforts to increase exports and may indeed result in reduced incomes and increased poverty. The lack of capacity in the Uganda National Bureau of Standards (UNBS) to monitor and enforce standards in the fish sector in the late 1990s illustrates this point. The EU ban on fish from Lake Victoria in the late 1990s resulted in a loss of income to fishermen and employees in the fish processing plants as a result of abrupt and massive lay-offs in the fish industry. Out of 100,000 people involved in various fishing activities, 32,000 lost their jobs, whilst others earned less than one third of their normal incomes. Families and other dependants (about 300,000 people) of the directly employed were also affected by the ban on Uganda's fish exports in 1999. This example suggests that weak institutions can have direct and indirect effects on efforts to reduce poverty. Stringent quality requirements and standards are of increasing importance in sectors into which Uganda is making attempts to diversify.⁶ For example, maximum chemical residue limits are expected to come into force in 2003 and would affect products in the horticulture and flower industry, both of which are a major source of employment and current export earnings. Institutional capacity is required to ensure they do not have the same adverse experiences as in the fish sector. This relates to livelihoods in trading sectors, an issue considered in Section 4.

⁵ MFPED (2001) "Medium-Term Competitive Strategy for the Private Sector (2000-2005)," Ministry of Finance, Planning and Economic Development, Kampala, Uganda.

⁶ Rudaheranwa N., Matovu F. and W. Musinguzi (forthcoming 2003) "Enhancing Uganda's Access to International Markets: A Focus on Quality," in J. S. Wilson (Ed.), *Standards and Global Trade: A Voice for Africa*.

2 Trends in Poverty in the 1990s⁷

While all the different aspects of poverty are important in their own right, we limit our discussion here to its money-metric aspect using income- and consumption-based approaches because data on these are more readily available from household surveys and this allows us to identify recent trends. More importantly, it allows us to ‘track’ poverty in different regions and household-types, which can be related to the evidence on trade and economic performance by sector and commodity. Broader dimensions of poverty and livelihoods are considered in Section 4.

Since 1989, the Government of Uganda has undertaken a series of household surveys that provide data to monitor poverty, notably the 1992 Integrated Household Survey (IHS). There have been four annual monitoring surveys since 1992, and the results of the Uganda National Household Survey (UNHS) of 1999/2000 have recently become available. The national poverty line is the cost of obtaining 3000 calories per day using the food basket of the poorest 50 percent of Ugandans in 1993 prices. Non-food requirements are estimated as the non-food spending of those households whose total consumption is just equal to the food poverty line. The rationale for this is that if households are sacrificing the food expenditure needed to meet calorie requirements for non-food spending, then this non-food spending must be considered vital. Results have been shown to be robust to the choice of poverty line.⁸ We review trends largely by comparing the results of the 1992 and 1999/2000 surveys.

In 1992 poverty was widespread, with 56 per cent of the population estimated to be below the poverty line. Although poverty was mainly a rural phenomenon (with rural areas contributing 93% to the poverty headcount), 29% of urban residents were poor. Regional variations were significant, and poverty was significantly higher in the North and lowest in the Central region, which includes Kampala (Table 5a). Considering the entire period 1992-2000, a clear picture emerges. Poverty declined substantially to only 35% in 2000. The greatest decline was in urban areas, from 28% to 10%, whilst in rural areas the decline was from 60% to 39% (Table 5a). The performance in conflict-stricken northern Uganda, known for production of cotton, groundnuts and sesame, was the worst. The maize and bean-growing Eastern region registered a decline from 59% to 37%, suggesting gains from non-traditional exports. As the West and Central are the main coffee growing regions it is not surprising that most of the gains from the coffee boom and liberalisation in the coffee sector accrued there, and they experienced the largest reductions in poverty

Sector variations in poverty help us to identify which sectors enjoyed the greatest income growth, and therefore the greatest potential for poverty reduction. In 1992 about 70 per cent of Uganda’s population was employed⁹ in the agriculture sector, 47 per cent engaged in food crop agriculture and 20 per cent in cash crop farming.

⁷ Our discussion is based on Appleton (1998, 1999 and 2001) and the *Ugandan Poverty Status Report 2001* (PMAU, 2002).

⁸ This is true for both the national price index and regional indices (see PMAU, 2002b). However, regional indices are constructed using food-based indices for urban and rural areas that omit *matooke*, an important staple, due to lack of data.

⁹ Households are allocated to the sector in which the household head is employed, data provided in Appleton (2001).

Government services accounted for some eight per cent of employment. All the major socio-economic groups saw a reduction in poverty by at least one quarter in the period 1992-2000 (Table 5b). The food crop sector contributed almost half (43%) of the reduction in poverty over the whole period, but this was almost entirely between 1996 and 2000. The cash crop sector contributed some 27 per cent to the reduction, with gains primarily for the coffee farmers during the coffee boom and liberalisation of the coffee sector in 1992-96. The decline in poverty among households employed in government and private sector services was more pronounced in the later period (1995-2000).

Table 5a Incidence of Consumption Poverty in Uganda 1992-2000 (%)

	1992	1997	2000
Uganda	56	44	35
Rural	60	49	39
Urban	28	17	10
Central	46	28	20
East	59	54	37
West	53	43	28
North	72	60	66

Source: Uganda Poverty Status Report 2001 (PMAU, 2002).

Table 5b Incidence of Poverty by main Occupation of Household head (%)

	Rural			Urban		
	1992	1996	2000	1992	1996	2000
All	60	54	39	28	20	10
Food Crops	60	63	46	-	-	-
Cash Crops	63	47	34	-	-	-
Non-crop agriculture	57	43	44	-	-	-
Agriculture	-	-	-	55	36	23
Mining, Manufacturing	45	40	35	38	36	23
Private Sector Services	40	31	22	16	12	7
Government Services	41	36	22	26	22	6
Non-working	65	68	53	32	18	15

Source: Uganda Poverty Status Report 2001 (PMAU, 2002).

*Chronic Poverty – Trends and Issues*¹⁰

While nationally the proportion of the Ugandan population identified as poor fell from 56 per cent in 1992 to 35 per cent in 1999, with substantial poverty reduction occurring everywhere in the country except the Northern region, this provides no information on the dynamics of poverty change. Our discussion of poverty dynamics is based on panel data, sub-samples of the national surveys in 1992 and 1999, to identify households that remained either poor or non-poor and households that moved in to or out of poverty. Table 6a shows that poverty incidence figures based on the panel of households are broadly similar to the national figures. For the 1992-99 panel, while 49 per cent of these households were poor at the beginning of the period, this had fallen to 29 per cent by the end. Almost 20 per cent of the panel households were *chronically poor*, i.e. poor in the two years for which they were surveyed, while 41 per cent were non-poor in both periods. The remainder moved into or out of poverty between these years, indicating substantial mobility: 30 per cent moved out of poverty, while 10 per cent became poor.

Table 6a Poverty Dynamics in Uganda (% of Households)

Poor in 1992	Poor in 1999	Poor in both periods	Poor (in at least one period)
48.6%	29.3%	18.9%	58.9%
	Moving Out of Poverty	Moving In to Poverty	Not Poor (in both periods)
	29.6%	10.3%	40.9%

Source: Calculations from raw survey data.

Table 6b Distribution of Poor in Uganda 1992-99 (% households)

	Chronic Poor	Moving out of Poverty	Moving into Poverty	Never In Poverty	All
Rural/Urban					
Urban	8.1%	12.2%	8.8%	21.9%	15.0%
Rural	91.9%	87.8%	91.2%	78.1%	85.0%
Region					
Central	23.4%	32.0%	26.3%	37.2%	31.9%
East	19.6%	28.0%	21.9%	19.9%	22.5%
North	30.1%	11.3%	25.4%	6.8%	14.5%
West	26.8%	28.7%	26.3%	36.1%	31.1%

Source: Calculations from raw survey data.

Table 6b shows how chronic and transient poverty is distributed across rural/urban areas and by region. Chronic poverty (column 1) is particularly prevalent in both the

¹⁰ David Lawson (Nottingham) has provided the material and data analysis for this section.

Northern region and rural areas of Uganda. Considering the chronically poor as a whole, almost one third (30.1%) are in the Northern Region. Households in the North also appear less likely to move out of poverty, with only 11 per cent of households escaping poverty being from the North, compared to 32 per cent from the Central region.

Table 6c Regional Poverty Dynamics in Uganda (% households)

	Chronic Poor	Moving out of Poverty	Moving into Poverty	Never in Poverty
Rural/Urban				
Urban	10.6%	23.9%	6.0%	59.1%
Rural	20.5%	30.7%	11.1%	37.6%
Region				
Central	13.8%	29.7%	8.5%	47.8%
East	16.4%	36.8%	10.4%	36.2%
North	38.9%	22.8%	18.1%	20.1%
West	16.2%	27.2%	8.7%	47.6%

Source: Calculations from raw survey data.

Table 6c reports the geographical distribution of chronic and transient poverty by rural/urban and region categorisations. This reveals the strong northern bias of chronic poverty. Almost two in every five (38.9%) northern region households are classified as chronically poor. Additionally, a further 20 per cent of the northern households move back into poverty. Contrast this with the West and Central Regions where less than nine per cent of households move into poverty.

It is clear that while there has been substantial movement both into and out of poverty, there appears to be a core of Ugandan households remaining in poverty. These ‘chronic poor’ are disproportionately located in rural areas (over 90%), especially in the North (30%, Table 6b). One interpretation is that while growth has allowed some 30 per cent of households to move out of poverty, almost 20 per cent of households were unaffected and remained in poverty, while almost 11 per cent moved into poverty (Table 6a). Evidently, growth has been associated with distribution effects. These are considered in the next section.

3 Trade and Poverty: Exploring the Linkages

It is only over the last five or so years that economists have started to address, in a rigorous manner, the ways in which trade may impact on the poor.¹¹ Data permitting, the unit of analysis would be the household as producer and consumer. As a producer, the household earns income by selling the factors it possesses (e.g. renting land, wage labour) or by utilising the factors directly for production (e.g. combining household land and labour to grow food, for sale or own-consumption). The distinguishing feature of poor households is that they possess few or low-value factors (e.g. they do not have access to land and their labour is of very low quality). Trade expands market opportunities and increases the demand for, and return to, factors. International trade (the focus of this study) provides access to (and competition from) a larger market, but also one that is more competitive, so success in exporting or import-competition requires increased efficiency in producing high quality goods. The major share of the benefits from trade will accrue to those households owning the factors that are most in demand, and in general these will not be poor households. This does not mean that trade will not benefit the poor, but rather suggests that the poor will derive the least direct benefit from trade. Insofar as trade expansion fuels economic growth, aggregate demand in the economy increases and this benefits all.

From the perspective of producers, exports are beneficial (increased demand leads to increased production and incomes) but imports pose a challenge. Increased competition from imports can lead to a reduction of production of import-competing sectors, at least in the short-run. This means that the owners of factors supplied to those sectors will suffer a reduction in income; in a country like Uganda, this is mostly wage labour in manufacturing. If the economy is flexibly it will adjust over time and, in the long-run, the economy should become more efficient. However, most evidence relates to the short-run, so there will be winners and losers from trade. From the perspective of households as consumers, however, trade is generally beneficial. Import competition implies that imports and the products of import-competing sectors will be cheaper. Expansion of export sectors, if they also sell on the local market, should mean lower prices and/or higher quality. Thus, trade has inter-acting effects on households, some good and some bad. To disentangle how these effects may have impacted on different households in Uganda, we present a number of simulations using a CGE model in the first sub-section. This helps to identify the types of households that benefited from trade and those that did not benefit.

It is important to distinguish trade policy from trade performance, especially as it is the latter that results in effects on poverty. Trade performance is an outcome, while trade policy is one of the inputs that influences that outcome. Trade policy reforms affect relative incentives, and the performance outcome depends on the ability of agents and sectors to respond to these altered incentives. The link between policy and performance is not a simple direct one. Policy reforms have economic effects on (a)

¹¹ McKay (1999) reviews the broad issues regarding how economic reforms affect the poor, and McKay *et al* (2000) is an early review of the links between trade and poverty. McCulloch *et al* (2001) detail the ways in which trade can affect prices, employment and government revenues and how these effects then impact on households. While we do not follow the conceptual framework they outline, our approach is broadly in line with theirs. Winters *et al* (2002) provide a comprehensive review of the evidence on the effects of trade liberalisation on poverty.

prices of traded products (b) output, wages and employment opportunities in affected sectors, and (c) the government's fiscal position. The economic effects may then be associated with social impacts, specifically effects on income distribution and poverty, and in some cases environmental impacts. In this section we focus on economic effects, holding discussions of social and environmental effects until the next section.¹² Furthermore, we focus on import prices and consumers to address (a), and export performance to address (b), although we attempt to identify if any sectors have evidently suffered from competition from cheaper imports.

A brief comment on the fiscal effects is warranted. Import liberalisation might be expected to reduce government revenue, as tariffs are typically an important tax. Despite the significant trade liberalisation since the early 1990s, tariffs have continued to be a major source of tax revenue. Tariffs on goods other than petroleum products accounted for 12.8% of recurrent revenue in 1994/95; this fell to 8.6% in 1998/99, but the decline was more than off-set by increased revenue from VAT on imports.¹³ There are a number of reasons why import liberalisation may not be associated with lower tariff revenues. First, the lower tariff rates discourage evasion and avoidance so collection efficiency increases. Second, quantitative restrictions may be converted into tariffs. The implicit tariff rate (revenue as a share of import value) actually increased from 13 per cent in 1990 to 25 per cent in 1996.¹⁴ Third, the tariffs may apply to an increasing value of imports. This may arise either because demand is elastic or, more commonly, because there was also devaluation (which increases the domestic price of imports). In fact, the effect of devaluation on import prices (in domestic currency) may be greater than the effect of tariff reductions. This is a beneficial combination: tariff-induced relative price distortions are reduced, tax revenue does not decline, and there is an incentive for exporters (who receive more domestic currency for the given world price at which they sell). Even if tariff revenue declines, as did happen in Uganda, the revenue short-fall is likely to be slight and can be made up from increased revenue from other taxes (VAT and income tax in the case of Uganda).

The remainder of this section addresses three separate issues. First, we review some simulation evidence of how trade reforms impact on Uganda, taking into account distribution effects on types of household. Second, we look at the performance of the agriculture sector as this is the mainstay of the economy. There is evidence that producer prices of some major crops increased and that farmers substituted into, and increased production of, those crops. Finally, we look at trends in prices of important consumption goods to see how these may affect the real incomes of the poor. Although we do not have good data on real market prices, we compare trends in nominal market prices to the unit values reported in household surveys for the poor

¹² Our 'economic approach' is broader than the rather narrow depiction of economic approaches presented in Kanji and Ware Barrientos (2002). They argue that economic approaches are too aggregate, whereas much of our analysis is concerned with effects on prices and production of specific commodities and how these affect sectors and households. Furthermore, their depiction emphasises the production and export side, whereas we pay attention to consumption and import effects.

¹³ In 1994/95, Customs Duty accounted for 34.4% of government recurrent revenue (duty on petroleum alone was 21.6%), but by 1998/99 this had fallen to 28.3% (petroleum 19.7%). Over the same period, the share of revenue from sales tax increased from 28.6% to 33.4% (of this, VAT on imports increased from 13.5% to 19.2%), and from income tax increased from 13.9% to 17.3% (MFPED, 2000: A26).

¹⁴ See Bigsten (2000) for a discussion.

and non-poor (with data on which products are most important in the consumption baskets of households).

3.1 Model Simulation Evidence¹⁵

Trade liberalisation increases competition faced by domestic producers; while some firms may fail, others may respond by increasing efficiency (especially firms using imported inputs). There are welfare gains for consumers who can purchase an increasing variety of goods, potentially of better quality, at lower prices. The immediate effect of import liberalisation is losses in some sectors, gains in other sectors, gains to consumers and possible revenue losses to government; the net impact is indeterminate. The longer term impact will depend on how effectively the export sector responds to improved incentives: although trade liberalisation does not usually affect actual export prices, it increases the return to exportables relative to the return to importables. An adequate export response is usually sufficient to ensure that the net impact of trade liberalisation is favourable. Because there are so many different effects, some offsetting and others reinforcing, one cannot say *a priori* how trade reforms will affect household welfare. Even if one expects an aggregate gain for the economy, it is important to know which types of households or sectors are most likely to gain and which are most likely to lose. Computable General Equilibrium (CGE) models are useful in this respect, as they allow one to trace through how relative prices alter production and factor incomes, and how this in turn affects real incomes of specific types of households.

The results of simulations from CGE models of Uganda summarised in Table 7 depict three distinct cases, and show the distribution of impacts for ten types of households (the share of each type in the economy is given in the second column). The first two cases refer to multilateral Uruguay Round (UR) liberalisation, and therefore allow for changes in world prices (that arise from liberalisation in other countries). The 'Export Growth' column simulates the effect of a ten per cent increase in the world price of coffee *only* (no other adjustments are allowed). Although this may appear to be a large price increase, the simulation is intended to illustrate the impact of export expansion more generally; the estimated supply response of coffee farmers is quite low (output increases by 2.3%), while labour and other factors are treated as fixed. Obviously, a lower price increase would have less of an impact, but greater supply response would have a greater impact.¹⁶ The aggregate effect is significantly positive, there is an increase of almost 0.5% in real household income (welfare) at the national level. Most households benefit but those that are most likely to produce or trade coffee benefit most. Interpreting the table, coffee-growing farmers (Agriculture) gain, as do traders, processors and providers of inputs (including services) to the farmers (these will be in the urban and rural non-farm self-employed households). Rural wage earners derive some benefit, as wages increase, but urban wage earners are unaffected. The households that lose, the rural non-working, are those that are most likely to include the chronic poor (and that depend on transfers).

¹⁵ This sub-section is based on Blake *et al* (2002), supplemented from simulations conducted by Jennifer Mbabazi.

¹⁶ It is well known that there are many constraints on expanding agriculture production, at least in the short-run, so a low supply response is to be expected (see McKay *et al*, 1997).

**Table 7 Effects of Trade on Household Welfare in Uganda
(Illustrative CGE Simulations)**

	Share	Export Growth	UR	Imports only
1. Urban wage earners	12%	0.00	0.08	-0.40
2. Rural wage earners	10%	0.08	0.24	-0.40
3. Agricultural, central	14%	0.57	0.50	0.30
4. Agricultural, eastern	14%	0.57	0.36	0.10
5. Agricultural, western	15%	0.65	0.51	0.20
6. Agricultural, northern	9%	0.51	0.29	0
7. Urban non-farm self employed	12%	0.87	1.20	0.70
8. Rural non-farm self employed	9%	0.80	0.87	0.40
9. Urban non-working	1%	0.00	-0.53	-0.90
10. Rural non-working	3%	-0.07	-0.59	-1.20
Total		0.46	0.42	-0.12

Note: The ‘share’ column is the share of each household type in total income (of all households). The first two columns of results are simulations of the effect of the Uruguay Round (UR), first assuming only a 10% increase in the world price of Ugandan coffee exports and second assuming full implementation of UR (with only a mild increase in coffee prices). The third column simulates the effect of only Uganda’s tariff reductions during 1994-97.

Sources: The first two columns of results are from Blake *et al* (2002), and the third is a simulation by Jennifer Mbabazi (Nottingham).

In this ‘export growth’ simulation, even agricultural households in the Northern region benefit, although this is not a coffee growing area. The model generates this by allowing farmers in that region to substitute from other crops into coffee. Even if this is unrealistic, the simulation captures the broader benefits of export growth. In simple terms, a significant expansion of exports provides a direct benefit to households that do or can supply factors to the export sector (in production, processing, marketing or trading). Note that this simulation imposed severe rigidity on the economy – it did not permit factors (such as labour and capital) to move between sectors (e.g. from wage labour into export crops), nor did it permit any efficiency gains in the economy.

The second simulation (UR, all factors) relaxes this rigidity, allowing for import liberalisation and some factor movement. This simulation assumes a much more moderate increase in world coffee prices (0.4%), which as it happens would have no effect on aggregate welfare (although coffee producers and traders benefit). Thus, the second simulation adds factor mobility and tariff reductions to export price increases that would not affect aggregate welfare. It is evident that once flexibility for the

economy to adjust is allowed, the net impact is positive – a 0.42% increase in total household welfare (the measure of national income). All households except the non-working gain, although the greatest gains are again to farmers and, especially, the non-farm self-employed. Non-working households lose in this simulation because tariff reductions reduce government revenues and this leads to a cut in transfers (to some extent this is an artefact of the structure of the model, but it serves to highlight the problem of those depending on transfers). A greater increase in export prices would generate greater benefits, but the distribution across households would follow the pattern shown here.

The third simulation marks a contrast to the first, and models ‘import liberalisation only’ (representing the sector pattern of tariff reductions in Uganda) so that there is no change in export prices and full factor rigidity is imposed. In effect, this situation captures the effect of cheaper imports on a structurally rigid economy (in this sense it represents the short-run impact). The decline in prices offers a benefit to households as consumers, but a loss as producers or wage earners in import-competing sectors (domestic prices fall so incomes, payments to owners of factors, fall). Under these circumstances, national income would decline slightly, a change of -0.12% , as imports displace domestic production. Again, the greatest losses are among non-working households, and the other losses are among wage earners (they would be employed in the import-competing sectors that lose). Most agricultural households gain, and the self-employed households gain most. The commodities or services these households produce are the least affected by competition from imports, so the return to the factors they own (land and farm labour) are not reduced, and they can benefit from lower consumer prices for imports. As a result, they experience an increase in real income.

These results provide three broad conclusions. First, in a relatively inflexible and constrained economy such as Uganda, increases in world prices of exports *alone* (unless they are very large) or import liberalisation *alone* will not provide a benefit on the aggregate. Indeed, there may even be a reduction in national income (in the case of import liberalisation only). Second, trade liberalisation is more likely to provide aggregate benefits if there are also efficiency gains and factors are mobile (this captures the ability of the economy to respond and adjust). In fact, the greatest benefits arise in the case of multilateral liberalisation when the economy has some flexibility to respond to opportunities to export. In this context, it should be stressed that import liberalisation is an important factor contributing to this gain because it encourages domestic efficiency – factors are encouraged to shift out of import-competition into export production.

Third, there are significant distribution effects of trade liberalisation. In general, the largest proportional gains are to the urban self-employed, but there are also significant gains in agriculture. The benefits to agriculture are greater in the main food and coffee growing central and western regions, because the factors that benefit are more prevalent in those regions. This is consistent with the evidence that agricultural growth, and poverty reduction, in Uganda in the 1990s was concentrated in these areas (whereas the Northern region fared least well). In these simulations, the non-working households are the major losers. Although not all of these households are the poorest, these household types will tend to include the poorest (the chronically poor), those that do not own the factors that benefit.

These estimates of the effect of trade reform on Uganda suggest that the overall effect will be small, but on balance positive. As there are major benefits to agriculture/rural households, the impact is likely to be pro-poor. The effect for specific products or sectors depends on how the relevant world prices change, and the flexibility of the Ugandan economy in allowing and encouraging (via the structure of incentives) producers to respond to relative price changes. Uganda is likely to benefit because prices for the cash crops that it exports will rise. However, producers respond not so much to the prices they face for individual commodities, but the relative prices faced for substitute commodities. The CGE models address the effects associated with relative price changes. For example, if cash crop prices increase, farmers will substitute from food to cash crops, and food production will fall. However, if imports do not meet the demand for food, food prices may then rise. The net effect could be to increase the returns to farming in general, so more resources will be attracted to agriculture, or existing resources will be used more effectively. Consequently, outputs of most agricultural commodities, and incomes to farm households, can rise, as appears to have been the case in Uganda. As shown, the outcome depends on the magnitude of relative price changes and the ability of producers to respond (as represented by factor mobility).

The simulations also help to identify complementary non-trade policies. Agricultural policy reform is required to increase the incentives facing domestic producers and to remove the constraints (such as access to inputs, credit and technology) that peasant farmers tend to be subject to. Policies to facilitate internal factor mobility and transport efficiency are shown to be important. It is also evident that agricultural trade liberalisation in other countries, especially developed countries, will benefit Uganda through the impact on world prices of the goods it exports. Nevertheless, there are some households that may not benefit from trade or economic growth. Such households depend on transfers (from government in the model, but remittances or inter-household transfers may be more important in practice).

Trade Strategy and the Importance of Sectors

For the purposes of the CGE simulations, we concentrated on the distribution of effects by household type rather than sector. This allowed us to identify the types of households that are likely to gain, or not gain, from export growth and/or import liberalisation. Although we do not have information on the incidence of poverty by household type, it still allows us to draw some conclusions regarding the likely impact on the poor. The CGE simulations show that the benefits of exporting are most likely to accrue to agriculture, as that sector accounts for the greatest share of the commodities Uganda exports, and this should help reduce rural poverty. However, the costs of import liberalisation are most likely to accrue to wage labour in manufacturing, and may have an adverse impact on the urban poor.

Another way to consider the impact of trade on the economy is to consider the production side and identify which sectors of the economy are likely to benefit and which are likely to lose. One way of doing this is to consider the output multipliers of different sectors, i.e. for a unit increase in the demand for the output of a sector, what is the effect on the demand for the output of other sectors in the economy? If sectors with high multipliers benefit from trade, the aggregate benefit for the economy is enhanced. On the other hand, if sectors with high multipliers are the most likely to

face import competition, the adjustment costs for the economy will be greater. Table 8 presents output multipliers for a range of sectors.

Table 8 Output Multipliers and Economic Impact

	Output Multiplier	Rank
Cash Crops	1.525	12
Food Crops	1.062	16
Livestock	1.086	15
Forestry products	1.495	13
Fish products	1.343	14
Mining and quarrying	1.611	11
Coffee, cotton and sugar products	2.348	2
Manufactured foods	2.010	7
Beverages and tobacco	1.723	10
Textile, cloth and footwear	2.040	6
Building materials	1.941	8
Chemicals	2.389	1
Metals and machinery	2.194	=3
Other manufactures	2.199	=3
Transport equipment	2.163	5

Notes: Output Multiplier calculated from the 1992 Input-Output Table; ranks manufacturing sectors higher than primary sectors because the former demand inputs from the latter.

Output Multipliers will rank manufacturing sectors higher than primary sectors because the former demand inputs from the latter (specifically, multipliers relate to backward linkages and are higher the greater the share of intermediate inputs in total inputs). For example, growing crops requires some equipment and services inputs from other sectors, but has far less demand for the output of other sectors than manufacturing (which demands considerable intermediate inputs). In general, the export sectors have low output multipliers because they are primary sectors (the first six rows in the table). The important exception is ‘coffee, cotton and sugar products’ because this is a processing sector that demands significant inputs from agriculture (cash crops), but also from (business) services and machinery. The same is true of textiles and manufactured foods to a lesser extent.

This serves to illustrate the point that the aggregate impact on the economy will tend to be greater in sectors with higher value added. Primary exports benefit households supplying factors to produce them, but adding stages of processing spreads the economic benefits wider (although one would have to allow for the possibility of domestic processors offering producers prices lower than the potential export price). Uganda’s comparative advantage is in primary commodities, but the economy can derive a greater benefit if exports are upgraded so that that more value added is

domestic. Non-traditional exports often require more processing and/or packaging than traditional exports, so the shift into new products should broaden the economic benefits. Furthermore, if linkages are greater (higher multipliers) the benefits spread to more households and are more likely to contribute to poverty reduction.

3.2 Trade, Agriculture and Poverty¹⁷

The CGE models are no more than simulations of how trade reforms are likely to affect prices, and how this impacts on households via the linkages in the economy. It is relevant to consider what has happened to production and household incomes in particular sectors, and we focus on agriculture as being the single most important sector. The impact of trade liberalisation on poverty depends on whether poor households are net consumers or net producers of the products whose prices have changed and the nature of the labour they supply. That is, price increases benefit net producers but hurt net consumers. In this section we focus on agriculture households as producers (the next section considers the perspective of consumers).

As noted, agriculture's share in GDP declined from over 50 per cent in the late 1980s to just over 40 per cent in the early 2000s, mostly accounted for by a decline in the share of food crops in GDP. However, this was during a period of dramatic GDP growth, and real growth rates in agriculture averaged about five per cent per annum during the 1990s. As agriculture is defined to include fishing, most of the growth in (non-traditional) exports emanated from the sector. The share of agriculture products in imports declined during the late 1990s, as did the volume of imports of most agricultural products (excepting cereals and sugar preparations among the major imports). Thus, agriculture was evidently a dynamic sector, and contributed to the reductions in household poverty reported above.

Actions to directly increase the ability of the poor to raise their incomes hinge on more targeted interventions in sectors where the poor are involved, and an increase in returns to the factors that the poor own. This is so given that recent results on poverty show that the fall in poverty in Uganda mainly resulted from intra-sector shifts and there were very limited inter-sector and interaction shifts.¹⁸ Survey results show that the agricultural sector is a key employer in Uganda and therefore the Plan for Modernisation of Agriculture (PMA) is central to the fight against poverty while increased liberalisation which will ensure increased returns to unskilled labour is critical. Also, the PEAP has involved actions aimed at increasing the quality of life of the poor, which encompass measures aimed at increasing the quantity and quality of education as well as improved health care and adult literacy, which in turn, improve the productivity of labour.

Low income constrains the ability of households to buy or produce the products they need, e.g. products like food and housing and services like health care and schooling. Table 9 gives changes in real prices received by producers for selected crops between 1992 and 1999, the response in terms of number of growers per crop, and changes in yield per farmer. Producer prices of coffee more than doubled reflecting both the liberalisation of coffee marketing and favourable world prices. Prices of tea, maize,

¹⁷ This section draws on Deininger and Okidi (2001, 2002), Larson and Deininger (2001).

¹⁸ Interaction shifts capture the extent to which people move into expanding sectors.

groundnuts and peas also rose significantly. On the other hand, the prices of beans and cassava, the two most widely grown crops (in terms of the percentage of farmers planting them), fell. The prices of three other widely grown crops remained stagnant – *matoke*, sweet potatoes and millet. This benefits consumers as these are mostly staple foods, but represents a loss to growers unless they substitute into more profitable crops.

Table 9: Real Producer Prices and Output Growth, 1992-1999

Crop	Price per kg (Ushs)			Growers (%)		Output
	1992	1999	Change (%)	1992	1999	Change (%)
<i>Cash Crops</i>						
Coffee	239	500	109.2	16.4	27.5	56.5
Cotton	510	230	-54.9	7.1	5.8	-31.7
Tea	185	510	175.7	0.3	0.1	1289
Tobacco	1005	1013	0.8	2.3	2.4	-51.9
<i>Starchy Crops</i>						
Cassava	158	113	-28.5	59.7	58.5	27.6
Matoke	75	78	4.0	41.2	57.0	-0.8
Sweet Potatoes	113	114	0.9	61.9	56.8	354.9
<i>Grains</i>						
Maize	120	200	66.7	27.5	67.8	131.4
Millet	300	300	0	41.9	31.3	-31.7
<i>Legumes</i>						
Beans	320	256	-20	76.1	69.2	-0.1
Peas	300	400	33.3	9.9	19.8	94.9
Groundnuts	300	567	89	31.8	29.7	-27.0

Notes: All data based on a number of sample villages. The percentage of farmers growing the crops refers to the villages, not the national average. Similarly, the output growth is the mean per farmer ion the sample villages.

Source: Uganda Poverty Status Report 2001, derived from Deininger and Okidi (2001).

It appears that farmers have substituted into more profitable crops. In general, the number of growers increased for those crops that saw an increase in prices, especially coffee, maize and peas. The main exceptions are tea, which accounted for very few growers, and groundnuts. Similarly, the percentage of growers declined for crops with falling prices, especially cotton and beans. There is evidence that substitution occurred mostly within types of food crops as relative prices changed. Within grains, the shift was from millet to maize; within starchy crops, there was a shift into matoke (the price of which rose relative to the other two); and within legumes, from beans to peas.

The increase in output also tended to reflect changes in relative prices. The largest growth in output was generally in crops where prices increased – tea, maize, peas and coffee. The largest declines in output were in cotton, which recorded the largest fall in prices, and millet (although the price was stagnant, the price relative to maize

declined). Groundnuts are an exception, as output fell despite the significant increase in prices, and tobacco is also something of an exception. This merely serves to highlight the importance of non-price factors in determining yields. Access to labour, credit and land are all significant constraints to crop substitution, while in addition access to technology and seeds constrains output growth.

Many of the commodities discussed above are included among the ‘strategic export’ commodities identified for Uganda – coffee, tea, cotton, and vegetables.¹⁹ The strategic commodities we have not addressed are fish, livestock, fruits, flowers and Irish potatoes. In terms of recent export growth, the most important of these are fish, cattle hides and cut flowers, which together accounted for some 27 per cent of exports in 2001. We discuss the fish sector in the next section, and note that cut flowers tend to be a commercial (market garden) rather than agricultural activity. Within agriculture, cash crops will continue to be very important but are susceptible to sudden and often dramatic changes in world prices. One strategy is to aim for high quality niche ends of the market, which is possible for coffee and perhaps tea but may not be viable for cotton, and another is to do more processing. Vegetables, especially legumes, and fruits, especially banana, do offer export potential, but are unlikely ever to become very significant (given that there is intense competition in these buyer-driven global markets).

A major factor in the reduction in rural poverty was the improved incomes and earnings from marketed agricultural produce. This is in part a reflection of trade policy reforms in crops with favourable world prices – producers of coffee and tea benefited during this period, although producers of cotton did not. The relevance of agriculture for poverty and the poor, however, is not limited to export crops. Food crop production is a larger sector, and staple foods are more likely to impact on the poor, as consumers if not producers. In this context it is measures to increase yields and output that matter, not effects on prices. As emphasised earlier, the principal effect of trade policy, and often of trade, is on prices. Of greater importance than trade *per se*, however, is the ability of farmers to respond to opportunities, in particular to substitute crops as relative prices change. While the evidence is that farmers will respond to price incentives, it is also evident that they face major constraints in doing so. These are issues to be addressed in the PMA, and could be considered as necessary measures to enhance the potential of farmers to benefit from trade (internally, in the case of food crops, as well as external trade in cash crops).

3.3 Trade, Imports and Prices

Had adequate data been available we would have identified tariff reductions at a product level in Uganda during the 1990s and linked this to trends in import volumes and prices of those commodities. However, such detailed import data are not readily available. What we do in this section is to identify price changes in a range of

¹⁹ See Government of Uganda (2001); information and communication technology is the only non-agriculture sector identified. An assessment of some of these commodities, coffee and fish, from the perspective of the impact on the poor, is provided in Booth *et al* (2002). They include an extensive discussion of the world coffee market, including price trends and fair trade opportunities, and also address prospects for further growth in fish exports. However, their concern is more with the poor from a livelihoods and household/market interaction approach, whereas our concern here is with effects on poverty (income opportunities) from an economic perspective. As such, the two studies are complementary.

commodities, consider which of these are likely to be affected by competition from imports, and assess the effects on consumers, including the poor. Table 10 provides an indication of price changes during the 1990s, by comparing the percentage change in nominal unit values of goods purchased by households between 1992 and 1999. For reference, Appendix Tables A5a and A5b show the change in average nominal market prices for a range of staples between 1987 and 1999. Appendix Table A6 indicates the importance of various commodities in expenditure of poor and non-poor households (while Table A7 gives the same information by income quartile).

Tables A5 indicate the goods for which market prices increased the most. The greatest market price increases, more than 300% since 1990, were for bananas, tomatoes, groundnuts, sweet potatoes, dry cassava, dry beans, meat, salt and paraffin. Moderate price increases, between 200% and 300% applied to maize meal, rice, cooking oil, soap, bread and charcoal. The lowest price increases, less than 200%, applied to onions and sugar. This can be contrasted with what appeared to happen to prices faced by rural and urban, poor and non-poor households (Table 10). We consider each of these in turn (note that some products in table A5 are not recorded in Table 9).

Matooke (bananas), sweet potatoes and cassava are important in the consumption of the poor, accounting for over 20% of expenditure (about 15% for the urban poor), but account for less than 18% of consumption of non-poor, and only about 10% for the urban non-poor (Table A6). Table 9 shows that unit values of matooke and sweet potatoes increased significantly for rural households, and more so for poor than non-poor households. However, unit values reported for cassava fell for poor households. Meats accounted for only about 2.5% of the consumption of the poor, compared to 4.5% for the non-poor, and there is no pattern in changes in unit values. Of the other commodities for which market prices increased significantly, changes in unit values again exhibited no clear patterns.

Rice is one of the more interesting products as imports have increased in recent years (see Section 4). Rice is a very minor product in the consumption of the rural poor (0.3% of expenditure), but accounts for about one per cent of consumption of urban poor and almost two per cent for urban non-poor. Reported unit values for rice increased at comparable levels across household types. Thus, the increased imports of rice, with the implication that this reduces prices, would have tended to benefit the urban non-poor rather than the poor. Maize is far more important as a staple of the poor (almost 5% of expenditure), especially of the urban poor as against the urban non-poor, and although market prices appeared to increase significantly, unit values rose only moderately. This suggests that the increase in relative producer prices that encouraged increased production of maize translated into moderate price increases, so that in real terms the poor may have benefited.

Sugar is another product for which import competition is present, and this should dampen price increases. The data support this: market prices increased by relatively little, while unit values only increased slightly. Sugar is an important commodity, accounting for almost four per cent of expenditure of the urban poor and the non-poor, but just over two per cent of expenditure of rural poor. Although one cannot draw definite conclusions from the type of price data reported, it is evident that prices of rice and sugar, the two goods facing the most import competition, increased by

relatively little. However, in both cases it was the urban households, especially the non-poor, that are most likely to have benefited.

Table 10: Change in (Nominal) Unit Values of Purchased Products, 1992 -99

	All		Poor		Non-Poor	
	Rural	Urban	Rural	Urban	Rural	Urban
Matooke	103%	11%	86%	25%	68%	26%
Sweet Potato	38%	96%	100%	23%	95%	30%
Cassava	-16%	41%	-20%	-5%	9%	20%
Irish Potato	5%	183%	58%	49%	101%	62%
Rice	30%	18%	22%	26%	28%	21%
Rain Maize	-28%	43%	11%	-4%	-42%	54%
Cob Maize	7%	43%	14%	-24%	28%	30%
Flour Maize	32%	11%	15%	14%	37%	11%
Bread	172%	13%	95%	47%	125%	40%
Millet	9%	22%	24%	28%	-23%	35%
Sorghum	46%	108%	116%	110%	24%	71%
Beef	108%	95%	106%	96%	108%	92%
Pork	166%	95%	123%	131%	117%	134%
Goat	120%	42%	69%	104%	117%	53%
Other Meat	410%	235%	295%	332%	550%	177%
Chicken	141%	45%	123%	87%	83%	68%
Sugar	38%	22%	42%	30%	37%	18%
Coffee	194%	49%	100%	4%	71%	142%
Tea	43%	-11%	13%	-8%	21%	6%
Salt	36%	35%	32%	45%	44%	28%
Soda	70%	32%	71%	115%	23%	59%
Beer	-8%	8%	23%	41%	-19%	5%
Other Alcohol	243%	113%	184%	179%	99%	193%
Cigarettes	98%	14%	56%	25%	80%	49%
Other Tobacco	67%	39%	62%	-32%	43%	98%
Groundnuts	108%	77%	101%	51%	103%	71%
Fresh Fish	63%	30%	30%	51%	34%	59%
Steam/Dry Fish	46%	13%	19%	27%	20%	36%
Egg	216%	-34%	190%	81%	65%	-5%
Cooking Oil	45%	-27%	27%	22%	-14%	1%
Marg/Butter	337%	23%	108%	47%	143%	131%
Orange	198%	38%	9%	-12%	152%	117%
Fresh Bean	20%	38%	133%	-5%	-24%	47%
Dried Bean	35%	-2%	5%	12%	14%	17%
Simsim	54%	6%	11%	16%	-15%	80%
Matches	0%	-2%	-3%	-5%	-3%	3%
Wash Soap	123%	57%	107%	73%	108%	60%
Bath Soap	118%	43%	86%	70%	82%	67%

Source: Percentage change in mean unit values, calculated from household survey data by David Lawson.

Although there are substantial varieties in the composition of household expenditure amongst poor households, some commodities tend to be more important than others in terms of how much money is spent on them. We identify twelve commodities, which together account for almost two-thirds of the household expenditure of an average poor household (Table 11). The most important food items include cassava, sweet potatoes, beans, maize, vegetables, matoke, fish, sugar and alcohol. Important non-food items are firewood, clothes/footwear and washing soap. These commodities also tend to be important for the non-poor households, but the latter would also be able to afford more 'luxurious' goods such as restaurant meals, meat and eggs/milk (see Appendix Table A6).

Having identified the most important goods for the poor households, it becomes useful to classify these products as primarily tradables or non-tradables (or, at least, not traded internationally). This distinction is necessary to ascertain how a more liberal trade regime might have affected the expenditure of the poor. In particular, the price of imported goods would be expected to fall as import restrictions are reduced (although trends in the exchange rate may be a more important determinant of actual import prices). Similarly, import-competing product prices are also expected to decline due to increased competition. The effect on domestic prices for export goods is unclear. On the one hand, high prices in export markets will divert sales away from the domestic market and increase local prices. On the other hand, export demand may encourage increased production, with increased supply available for local markets (transport and trade costs could account for a margin between domestic and export prices). In this context, the desired strategy is to produce goods for the export market (generally requires higher quality), and market any surplus on local markets.

In principle, trade liberalisation would not directly affect prices for non-tradables, but it may affect production and thus have an indirect effect on prices. Broadly speaking the price of non-tradables falls relative to exportables but increases relative to importables, so the net effect will depend on substitution possibilities in production and consumption. For example, staples such as cassava, matoke and sweet potatoes could be considered as non-tradables (they are produced primarily for household consumption and local markets) but are substitutes in consumption for foods such as rice, an importable, or maize, an exportable. If the price of rice falls due to cheaper imports and the price of maize falls due to increased production, then the price of staples relative to these alternatives increases. Demand for and prices of staples will fall, and it is possible that ultimately relative prices will remain the same. However, it is possible that there are segmented markets, e.g. rice is consumed primarily by non-poor urban households whereas staples are most important in the consumption of poor rural households, in which case any effect of trade on staples will be dampened.

Four of the twelve goods can be deemed non-tradables - cassava, matoke, alcohol (home-made) and firewood. Fish, beans, vegetables, maize and sweet potatoes are exportables (and often significant exports), while sugar and soap are import competing and clothes are typically imported. The fact that the import component of the expenditure of a poor household is relatively small implies that import liberalisation would have a negligible direct effect on these households.

Table 11. The most important consumption goods of an average poor household

Product	Expenditure share (%)	Type	Change in unit value 1992-99 Rural poor	Consumer price index 1992-99
Cassava	10.3	Non-tradable	-20%	+60%
Beans	6.3	Tradable (export)	+133% (fresh) +5% (dried)	+52.2% (dried)
Vegetables	4.4	Tradable (export)		
Alcohol	2.4	Non-tradable	+184%	
Firewood	12.5	Non-tradable		
Washing soap	2.0	Tradable (import)	+107%	
Sweet potatoes	7.5	Tradable (export)	+100%	+38%
Maize	4.8	Tradable (export)	+11 to 15%	+38% (meal)
Matoke	4.0	Non-tradable	+86%	+40%
Fish	3.0	Tradable (export)	+30% (fresh) +19% (dried)	
Clothes/ footwear	3.8	Tradable (import)		
Sugar	2.4	Tradable (import-)	+42%	+16%
Total	63.4			

Source: Derived from Household Survey data (see Table A6).

Table 11 illustrates the change in prices for the twelve goods in the 1992-99 period. Prices can be obtained either directly from the household survey or on the basis of the consumer price index. This can produce conflicting observations, as is to be expected given that the quantity measure (units) and quality vary. Nevertheless, the data are indicative. The available data do not provide conclusive evidence as to whether the prices of tradables have increased less than for non-tradables. There is some tendency in this direction, as in the case of sugar, which has experienced very modest price increases, possibly due to potential competition from imports.

Food prices are among the most important factors affecting the real income of the poor, but are influenced by domestic production more than imports, especially in the case of the rural poor. While trade has been important in influencing opportunities to earn incomes, it has had only a slight effect on the prices paid by poor households for the major goods they consume.

4 Livelihoods and the Broad Dimensions of Poverty

This section contains a livelihood analysis of poor Ugandans engaged in the production of key tradable goods. We focus our attention on the production of three important cash crops, which together accounted for 25 per cent of Uganda's exports in 2000/01, namely fish, tea and tobacco. We also discuss evidence on rice and sugar production as both are import competing commodities.²⁰

4.1 Tobacco Growers

Tobacco accounted for 6.3 per cent of Uganda's total exports in 2000/01. Tobacco cultivation takes place in the Northern, Western and Central regions of Uganda, mainly on a small and medium scale basis with plantations in the ranges of 0.25 to 5 hectares. The market is dominated by British American Tobacco (BAT) Uganda Ltd, which contracts farmers to grow tobacco on an annual basis. Presently there are over 50,000 tobacco farmers registered with BAT Uganda. BAT also provides inputs and wood fuel for curing the tobacco on credit to the farmers and technical advisory services on tobacco production. Tobacco growing is labour intensive, involving men, women and children. The farmers sell their unprocessed tobacco to BAT at a price set through mutual discussion with the farmer. After purchase from farmers tobacco is sent to the BAT processing plant in Kampala. Over 90 % of tobacco produced is exported after processing, sent to Mombassa for onward shipment to the main export destinations of Austria, Egypt, France, Germany, Hungary, UK and Japan. The rest of the tobacco is sent to Jinja Factory for manufacture of local cigarette brands.

To shed more light on the livelihoods of some of the small-scale farmers engaged in tobacco cultivation, we draw upon a recent participatory poverty study in Godia, Arua in Northern Uganda. In Godia, most families depend on a mixture of food and cash crop production for their livelihoods, producing on small plots of land using traditional methods. Other common livelihood strategies are animal rearing and, by women, brewing. A large majority of the local residents grow tobacco for BAT, and the farmers sell a much higher proportion of their output than in most of Uganda.

Do the poor benefit?

With a guaranteed market for their main cash crop, one would expect the residents to prosper. Unfortunately, this is not the case for most farmers for a variety of reasons:

First, the farmers have very weak bargaining power because they lack effective farmer organisation. They are therefore open to exploitation when their tobacco is graded and priced. Farmers complain that the BAT officials always give their tobacco the lowest grade and hence the lowest price. They have no other place to sell their produce as BAT is the only company allowed to purchase tobacco in the area. Introducing competition would be a way to address this.

Secondly, due to unequal gender relations, intra-household income distribution often does not benefit family members equally. Men control tobacco income, but their

²⁰ The analysis draws upon the recently completed Ugandan Participatory Poverty Process (PMAU, 2003a) supplemented with earlier evidence (PMAU, 2001).

spending habits favour alcohol consumption rather than women and children. Although women's labour is critical in tobacco production, no women are currently registered with BAT as tobacco growers.

Finally, current production practices are not environmentally sustainable as tobacco curing requires a lot of fuel wood. Together with demand for wood for domestic fuel and for building this has led to severe deforestation in the area. In turn, deforestation has led to drought and there are severe water shortages for about five months of the year.

A few farmers do make a profit, however, and have managed to cut the costs of production. As one farmer explained: *'I have learnt to raise my own nursery beds for tobacco and eucalyptus seedlings. This cuts down the amount of loan from the BAT company'*. Other community members also acknowledged that tobacco income, paid out as a lump sum, when the farmer sells his crop, can be invested in livestock, buildings and trade. With good planning skills, income from tobacco could be used to make a poor person better-off. Unfortunately, only few people have those skills.

Policy recommendations

The current Government position on how to address the potential negative effects on the poor from trade liberalisation and privatisation for tobacco farmers in Arua and elsewhere, has been to suggest the promotion of social safety nets. However, whilst it is acknowledged that trade liberalisation does need supporting policies to ensure that poor people are not further marginalized, this study suggests a different approach. The above case study demonstrates how the Government could address the same concerns in a more sustainable and cost-effective manner. Three main policy recommendations emerge:

First, the Government needs to oversee and regulate the activities of large companies and traders/buyers that are in a monopsony or monopoly position. In particular, the current policy of granting exclusive trading rights to BAT needs to be revisited. If more companies were allowed to purchase tobacco from farmers they would be more likely to get a higher price for their tobacco.

Secondly, the Government could support farmer's groups much more actively than is presently the case. Experience all over the country suggests that farmers are not likely to organise by themselves and yet organisation is crucial to increase their income opportunities. The Plan for Modernisation of Agriculture provides the appropriate framework for supporting farmer's organisations, but Government must follow-up to ensure that this component receives sufficient attention and financial support.

Finally, the promotion of functional adult literacy programmes is a relevant suggestion, which was pointed out by local government officials in Arua. This could potentially create more awareness among farmers, most of whom are illiterate, of their situation and enable them to plan better and improve decision-making. More generally, education of farmers has been found to be a significant factor in increasing efficiency and output.

4.2 Tea Pickers

Tea is Uganda's third largest export commodity contributing eight percent of total export revenue in 2000/01; 97 per cent of Uganda's tea production is exported, while the rest is consumed domestically. Tea is primarily produced on large-scale estates, employing large numbers of plantation workers who harvest the tea. It is sold at the weekly tea auctions in Mombasa. Our analysis of the livelihoods of tea estate workers is based upon participatory poverty studies of casual workers at the Mwera Tea Estate in Mubende (Central Region) owned by the Madhvani Company.

At Mwera, the casual tea pickers are employed on three-month verbal contracts and most are only employed for around eight months of the year due to the season. The same people are continuously re-employed, but lack of job security makes the workers feel vulnerable and many reported paying bribes to the supervisors in order to retain their jobs. Most of the casual workers depend solely on their wages to meet all their needs. Very few of them have access to land and the long hours of work (up to eleven hours per day, six days a week) make additional income generating activities difficult. Workers earn an average of Shs. 30-60,000 per month depending on their productivity. In addition, they are entitled to housing on the estate, paid public holidays and annual leave and receive a small Sunday bonus.

The casual workers complained that the wages are not enough to satisfy their basic needs and some noted that they depend ~~for~~ on food ~~on~~ for the lunch (posho with beans) provided by Madhvani. Casual workers' hand to mouth existence also means they cannot save, and therefore not invest in productive assets to improve their situation. All those consulted during the research, including public officials, agreed that the casual workers are amongst the poorest people in the sub-county. This view is supported by comparing their monthly income with the national poverty line, which is around Shs. 23,700 per adult equivalent per month in 2001/02 prices. Since the casual workers typically have many dependants (children, elderly and relatives), most of them would also be classified as income poor.

Madhvani does not provide protective clothing and the workers complained of lack of protection from the chemical sprayers and from snakes. One worker said: *'There are foxes and snakes that live in the tea bushes. In addition the dew makes our skin around the thighs peel off. We are not allowed to make an alarm when we see a snake as that may scare other workers and halt work.'* The Management explained that they used to provide protective wear but that the casual workers sold it off, so it is now up to them to provide it themselves. The workers find it hard to prioritise this expenditure, due to pressure to provide basic necessities from their wages.

Most of the casual workers are illiterate and have very limited horizons. Low income, lack of time and fear of being arrested for defaulting on graduated tax payments mean that most do not venture beyond Mwera and the surrounding parishes. The workers are often themselves children of casual labourers and most expect their children to become casual labourers too. While they complain about oppression and poor terms and conditions, few attempt to leave, deterred by lack of skills and alternatives. The daily struggle to meet practical needs serves to retain the status quo.

Policy Recommendations

The case study suggests that large-scale cash crop agriculture, as currently practised by the Madhvani Group, does not have the potential to contribute to poverty reduction in Uganda. To ensure this, the Government must support its own employment legislation that protects the rights of the workers, as discussed below:

First, there is a need for Government to effectively monitor existing labour practices and enforce sanctions in cases of violation. The illegal routine of continuously reemploying workers on casual contracts is one example. The number of working hours is another example. The law stipulates a maximum of 56 working hours per week - in comparison, tea pickers at Madhvani in Mubende work up to 66 hours per week. It is important that the Government puts pressure on plantation owners to ensure safe and healthy working practices, such as providing protective clothing.

Secondly, the low wages paid at Mwera highlights the urgency of revising the minimum wage legislation in Uganda. The minimum wage has been set at Shs. 6,000 per month since 1984. In 1997 the Wage Review Commission recommended that this should be increased to Shs. 75,000. The Cabinet then reduced this amount to Shs. 53,500, but at the time of writing this has still to receive the assent of the President.

4.3 Rice farmers

Rice is a relatively new crop in Uganda, introduced on a large scale in the 1960s. As illustrated in Table 12, production increased steadily during the 1990s, but rice is not yet a major crop in Uganda. To illustrate, the total production of millet is around six times higher. Almost all of the rice cultivated domestically is also consumed domestically but this is not sufficient to cover demand for rice and Uganda is a net rice importer. Rice imports have increased during the last decade, although a downward trend has been observed in recent years. Agricultural imports generally fell during this period, making rice an important exception. Rice is cultivated in wetlands, primarily in the Eastern and North-western regions.

Table 12 Production and Import of rice, 1991-2001.

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production											
Quantity (1,000 MT)	61	68	74	77	77	82	80	90	95	109	114
Imports											
Quantity (1000 MT)	409	827	2,084	8,147	8,838	12,530	32,546	53,704	39,741	51,257	22,225
Value (1,000\$)	150	289	1,035	3,565	4,618	5,595	10,638	15,901	13,620	16,146	6,179

Note: Exports of rice over the same period were negligible.

Source: FAOSTAT (2003).

For a better understanding of the livelihoods of people involved in rice cultivation we turn our attention to Bugiri in Eastern Uganda. More specifically, the rice-growing scheme of Tilda Uganda Limited. At Tilda, men from the neighbouring village, Butema, are employed as casual workers - mostly to scare off birds. They work 10-11

hours per day and earn around 30,000 shillings per month. However, they do not depend on casual work for survival. Rather it is a component of the livelihood strategies pursued by the men and their families, so their conditions are not so desperate. Most of them have small pieces of land on which they grow food, they keep poultry and their wives may engage in petty trading and brewing. They were ranked in the 'poor' category in a well-being ranking exercise in the village, above those in the 'poorest' group. Encouragingly, the village participants noted that through hard work, saving and investing in income-generating activities this group could become better-off.

Unfortunately, current production practices have had detrimental environmental impacts. Land is becoming increasingly scarce because the rice scheme is taking up a substantial amount of what is available. This, combined with population pressure, has led people to cut trees to clear more land for settlement and cultivation. As a consequence, the soil cover on the hills is now very thin and there has also been serious flooding. In addition, Tilda Uganda Limited carries out aerial spraying to control weeds, but local people reported that it is killing their poultry and livestock. They are also frightened about its impact on their own health.

In sum, although the rice scheme provides extra income for some families, it is clear that this is happening at the expense of livelihood opportunities of other families in the village, because land is becoming more scarce.

4.4 Sugar cane cutters

Sugar production is one of Uganda's major agricultural activities with an annual harvest of 1.5 million metric tonnes of sugar cane. The major millers of sugar in Uganda are Kakira, Kinyara, and Sugar Cooperation of Uganda Ltd. National production satisfies most of domestic demand, but cheap imported sugar also enters the country, both legally and illegally. As illustrated in Table 13, sugar imports have increased over the decade, although they are still at relatively low levels. To protect domestic producers, Government increased the import duty on sugar from 10% to 15% in June 2002 and have promised severe punishment for illegal importers.

Table 13 Production and Import of Sugar, 1991-2001.

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Production											
Quantity (1,000 MT)	845	960	950	950	1,150	1,450	1,600	1,550	1,600	1,550	1,500
Imports											
Imports (1,000 MT)	17.1	15.0	11.0	49.0	53.3	16.0	29.0	75.2	51.2	54.3	31.5
Value (1,000\$)	6,392	8,059	6,000	14,837	27,240	9,130	14,172	31,637	19,070	21,729	12,707

Note: Domestic production is for 'sugar cane'. Imports are 'raw equivalent'.

Source: FAOSTAT (2003).

We report here of a livelihood study of temporary plantation workers at Kakira sugarcane estate in Jinja, Central region also owned by the Madhvani Company. At

Kakira, close to 10,000 workers are employed on the 49 sq. km. sugar estate itself and in the sweets, edible oil and soap factories situation there. Most of the workers are employed on a temporary contract for 12 months and do not work longer than that. Most of the labour have been recruited from far away districts such as Arua, Mbale, Kabale and Kamuli districts and housed in 23 residential camps on the estate.

When the workers were recruited they were promised a salary of Shs. 100,000. The reality, however, is very different. Deductions from the workers' wages total about 65,000 per month, for PAYE, subscription to NUPAWU (the National Union of Plantation and Agricultural Workers), NSSF contributions and payment for lodging and utilities in the camp. At the end of the day, cane cutters have only Shs. 35,000 in monthly net income. But even this amount is not certain as payment is on a piece-rate basis. The workers are expected to cut 85 bundles of 15 canes each per day or to harvest a specific number of rows covering a specified area. If a cane cutter cannot complete the task within a day, he must do so the next morning in order to receive payment for one day's work. This results in many workers working for a whole week but only being paid for three days of work.

Some of the workers form rotational savings schemes of 5-7 members, in which the participants hand over their entire monthly salary to each member of the group on a rotational basis. These schemes enable some to buy sought-after items such as radios and bicycles, but others waste the money on drinking and prostitutes. While the group members wait their turn to receive a payment they borrow money to survive.

The cane cutters work from 5am until 7pm, with a break at 3pm for a cup of porridge provided by the company. These working hours violate the 1985 agreement between NUPAWU and Kakira as well as national legislation, which both stipulate a 40 hour working week. Workers complained bitterly of perpetual harassment by supervisors, leading to anxiety, depression and low self esteem. Most attempts to stand up for their own rights result in summary dismissals and terminations. Sometimes the workers resort to sugar-cane burning as a way of avenging the employer's perceived injustices²¹.

The living conditions on the estate are very poor. Four to six workers share one room in dilapidated houses that have not been repaired for over three decades. Contact with spouses is not allowed during the one-year period of the contract. The water provided is unsafe, as it is pumped directly from Lake Victoria. These conditions are in stark contrast to the prospects the men were promised as they were recruited.

The fact that the workers are far away from home makes it almost impossible to leave the estate as they would not be able to afford the bus fare. Nor are the workers allowed to run any kind of businesses in the camps so it becomes meaningless for them to invest in productive assets. When the contract is over, the company provides transport home. The workers, however, rightly fear that their families will get very angry and disappointed when they realise that they have returned empty-handed.

²¹ Fires at sugar plantations are not uncommon. A recent fire at Kakira Sugar Works burnt 470 acres of sugarcane (*New Vision*, 11 February 2003).

Policy Recommendations

Government should not favour big companies at the expense of the workers. NAPAWU officials claim that its power to win concessions from a strong investor is limited. It is the responsibility of Government to ensure that investors do not become so strong that they can get away with evident exploitation of labour. There is a need to strengthen the occupational health and safety inspectorate of the Ministry of Gender, Labour and Social Development so that it can work more effectively with District Labour Offices to make sure that workers are not being exposed to exploitative working conditions.

4.5 Fishermen

Nile Perch and Tilapia amounted to around 11 per cent of total export revenue in 2000/01. In 2001/02 fish brought in more foreign currency than coffee, thus making it the most important export commodity in Uganda. The fishing industry has become more sophisticated in recent years following the abolition of the EU ban and the subsequent surge in demand. The number of boats has increased, carrying a greater number of nets. Improvements in infrastructure have also taken place allowing large companies to buy fresh fish directly from the site, using refrigerated trucks. The main export market is Europe with around two-thirds of all exports.

The livelihood analysis of fishing communities presented here is more general than that for other sectors because six very different communities are covered: Kasensero (Rakai), Busabala (Wakiso), Gorofa (Bugiri), Ntoroko (Bundibugyo), Kigungu (Masindi) and Acomia (Soroti). All six fishing sites share many similar features, although of course there are important points of distinction. This analysis focuses on their common characteristics with the purpose of drawing policy recommendations relevant to the sector as a whole.

In all the sites, livelihoods depend on and revolve around the fishing industry with few involved in agriculture. The main livelihood groups include boat owners (the wealthiest group) and fishermen, who hire boats and sometimes nets from owners. People also earn a living in a variety of other ways at the landing sites. Women engage in trade and run bars and restaurants. Men build boats, clean and prepare nets and fish stalls, and load/unload trucks. The boat owners and fishermen often split the catch equally, and the fishermen split the catch between themselves. In Gorofa, terms for fishermen are lowest with fishermen receiving only 20 per cent of the catch. The large pool of unemployed workers serves to reduce the fishermen's share as there are plenty of other free hands available. Fishermen also bargain with the companies who buy their fish, but their bargaining power is low. The sellers complained bitterly about being cheated by the processors. The root causes of this exploitation is the lack of organisation between fishermen combined with the perishable nature of fish.

Tradition and cultural norms surrounding the fishing industry prohibit women from fishing. One young woman said: *'We have to rely on the men all the time because we cannot go to get the riches ourselves from the resource, the lake. Our poverty will be continuous until we are allowed to go to the lake'*. Women do not tend to own boats either. Lack of ownership and access to resources effectively means that women have an inferior power position vis-à-vis their men. The consequences are domestic violence, alcoholism, infidelity and prostitution. The women are also less able to take

good care of their children under such conditions, thus limiting the potential positive impact of the increased income that the fishing brings to the head of household.

Prostitution is a major source of livelihood among women at the fishing sites. Many young men migrate to the area to participate in the fishing and, once there, they no longer observe the social/cultural controls that they were accustomed to. The availability of cash income in the hands of young men combined with plenty of redundant and idle time has led to increasing levels of prostitution. Most prostitutes do not protect themselves from AIDS because their clients prefer not to use condoms. Lack of awareness about the disease combined with poorly functioning health units in the area make fishing sites a high-risk area for HIV/AIDS.

In all sites, fishermen reported a declining fish catch. This was attributed to use of the wrong type of nets, over-fishing, poisoning of fish by fishermen and pollution of Lake Victoria by fish processing companies. As a fisherman in Rakai described: *'We used to get fish within a radius of 2 km but now we have to go deep into the waters to be able to have a reasonable catch'*.

There is some evidence that the increased economic activity in the fishing areas have benefited the wider community in terms of small investments by wealthy fishermen in shops, video halls, restaurants and lodges. A few poor people may benefit from this capitalist expansion in terms of increased employment opportunities, although the services on offer are unaffordable to them. There appears to be limited upward mobility in the communities, with few fishermen becoming boat owners. Fishermen ascribed this to lack of capital, and this was commonly attributed to the absence of a savings culture. Fishing offers immediate profits for a while, and these profits are also immediately consumed, often in alcohol and on prostitutes.

Across the sites, residents complained of multiple taxes on fishing. Taxes mentioned included: income tax; graduated tax; licence fees for boats, engines, fish, nets, fish trading and processing paid to the fisheries officers, charges on landing a boat and on selling fish in the market paid to the tenders of landing sites. Despite over-taxation, the fishermen get very poor public services in return. Water supply, roads and health services are generally in a poor state. There is an urgent need to address the very unhygienic sanitary conditions at the landing sites. People relieve themselves in and around the lake and at the same time people use the lake water for drinking. This leads to problems with dysentery, cholera and diarrhoea.

Policy Recommendations

A number of policy recommendations emerge from the analysis of the fishing communities:

First, there is evidence to suggest that fishermen are being over-taxed. Thus while government benefits from high tax revenue and booming exports, there are limited returns to the fishermen and their families, who do not seem to be prospering nor enjoying the public goods that the government is responsible for providing. While this in itself is unsatisfactory given the Government's commitment to poverty reduction, it is also a self-defeating strategy. The current sanitary practices are jeopardising Uganda's standards of hygiene and if the issue is not urgently addressed,

a new EU ban may be imposed if fish are found to transmit dysentery or cholera to European consumers.

Secondly, there is a need to strengthen the bargaining power of fishermen *vis-à-vis* the fish processors. The government should therefore promote the membership of legally recognised fisheries community organisations. Such organisations could help to give a sense of ownership of resources to fishing communities and awareness of rights and responsibilities in access to and management of resources. Finally, the Government needs to explicitly target fishing communities in its HIV/AIDS awareness campaigns.

4.6 General Conclusions

An important message of the case studies is that the tangible benefits to the poor people involved in production are actually quite limited, despite the general growth in the economy. Indeed, many of the people involved in growing tea, cutting sugar cane and growing tobacco are caught in a state of poverty. Important explanatory factors include low levels of co-operation and organisation among small producers; exploitative contract and employment practices by large companies; and unequal power relations between men and women (especially at the intra-household level). There is evidence for some crops that current production patterns show signs of being environmentally unsustainable. It is important that Government recognises its own role and responsibilities in ensuring that the benefits of trade do effectively trickle-down to poor producers. It can do so largely by supervising and enforcing existing labour market legislation, altering the power relationship between workers/farmers and traders/processors so that the former are not exploited, encouraging farmer's organisations and continuing support for female education.

5 Conclusions and Policy Implications

There is clear evidence of a decline in poverty in Uganda during the 1990s, and this was associated with sustained economic growth in part due to growth of exports. Thus, trade was an important factor contributing to poverty reduction. The headcount poverty index fell from 56 per cent in 1992 to 46 per cent in 1996, due largely to growth in coffee production, and to 35 per cent by 2000, with the most recent reduction reflecting growth in food crop production. While the gains from trade and growth are widely distributed, with average incomes in most regions and types of households increasing, they are not evenly distributed (there is no evidence of a decline in income inequality). Some households have been unaffected, and some may even have suffered a loss of income (including some urban wage labour and especially households with a non-working head - AIDS is an important factor here).

Over the longer 1992-2000 period, average real consumption per adult grew at a similar rate (around 4%) for all deciles. The Northern regions have benefited least, although this may have been alleviated recently as cotton production and exports increased. Growth in cash crop production was a more important source of poverty reduction than increased food crop production over 1992-96, but the proportional contributions were reversed over 1996-2000. The incidence of poverty is greater in more remote, and less secure, regions, and among large families (often where relatives are caring for AIDS orphans). Through the Poverty Eradication Action Plan and the Poverty Action Fund (established through HIPC), Uganda has tried to tackle the problems. In the late 1990s, expenditure on primary education increased 307 per cent, on primary health care by 227 per cent, on agriculture by 186 per cent and on roads by 279 per cent (MFPED, 2001a). Despite these achievements, the problem remains immense and many people and regions remain vulnerable (poor transport and lack of access to markets are a major problem).

The analysis presented in Section 3 demonstrates that trade has made an important contribution to this reduction in poverty. In the first half of the 1990s, most of the gain from trade was through coffee exports. Since the late 1990s, however, significant export diversification has occurred, although exports are still largely of primary commodities. As export growth has contributed to economic growth, it has contributed to poverty reduction. Section 3 also demonstrated that the gains from trade are unevenly distributed, some households derived no benefits (and some even suffered losses). Section 4 showed that even in some export sectors, the lowest paid workers derived negligible benefits. Thus, while trade has benefited the Ugandan economy on aggregate, and increased average incomes, some remain rooted in poverty. This is to be expected: trade and growth can reduce poverty, but trade alone will not eradicate poverty.

In this final section we aim to do two things. First, we present a brief and broad summary of the main findings in the form of identifying the types of households that gained from Uganda's trade performance in the 1990s, and the types that did not gain. Future Ugandan trade policy should aim to consolidate the gains, i.e. support sectors that have experienced export growth, and also to support diversification, not only in emerging non-traditional exports but also in upgrading and processing. This is the 'export side' of trade policy, but the strategy must also recognise the pressures of

trade liberalisation on import-competing sectors. Furthermore, complementary government policies will be needed to target the poor in sectors or households that are marginalised from international trade. These issues are addressed in the second sub-section, which considers the sustainability of trade policy, before concluding with how trade can be integrated into the PEAP.

Who gained from trade?

<i>Household types</i>	<i>Principal factors</i>
Coffee farmers	Increased farm-gate prices; favourable world prices, liberalisation of marketing
Food crop farmers	Increased demand associated with growth in the economy, leading to higher prices
Self-employed	Increased demand for the services they provide (e.g. trading, processing).
Rural wage labour	Increased demand for labour given growth of agriculture production
Central region	Coffee and food crop production
Western region	Coffee and food crop production
Eastern region (less)	Food crop and tea production

Who did not gain from trade?

<i>Household types</i>	<i>Principal factors</i>
Non-working households	Received lower (transfer) incomes but faced higher consumer prices (especially food).
Wage earners (urban)	Increasing food prices relative to wages, and import competition reduced wages and/or employment.
Northern region	Poor performance of cotton and insecurity

The summaries above show that the gains from trade (export growth) were widespread, although concentrated in households (producers or providers of services) and regions where cash and food crop agriculture predominated. Although not specified in the CGE model, households engaged in non-traditional exports, especially fish, will also have gained in more recent years. The growth in exports benefited not only the households engaged in export sectors but also provided a dynamic gain. The increase in incomes increased general demand for food and services and spread the benefits more widely throughout the economy.

The households that did benefit from trade, or that derived limited benefits in the 1990s, comprise three distinct types. First, the Northern region is remote from the dynamic parts of the economy, faces insecurity and is more vulnerable to droughts, and is relatively dependent on cotton (in the 1990s, production and world prices were low). This is the poorest region. While a recovery in world prices for cotton means that trade offers potential gains, in terms of poverty reduction the priority is to address

the security problem. Nevertheless, improved transport and marketing infrastructure would integrate the North better with the rest of the country. This would facilitate increased exports and may reduce the price of food transported to the region.

Second, urban wage earners are likely to have borne the cost of increased competition from imports. To some extent this is a short-run adjustment cost. If food crop production continues to expand, food prices will decline and this will increase the real incomes (purchasing power) of urban workers. Policies to address employment and industrial development are central to increasing the incomes of workers. The development of processing industries can help, especially if these avail of the growth in production of primary commodities. More generally, investment is needed to increase efficiency, and education (general and vocational) can increase productivity.

The final group are what are termed in the CGE model as non-working households, but are better thought of as the chronic poor. These are households that lack assets and factors, and are therefore the least able to avail of any expansion in employment opportunities as the economy grows. They include the lowest skilled labour and female-headed 'AIDS-afflicted' households. Reducing poverty in such households will require targeted interventions. For example, public works schemes could provide employment opportunities (this may be practical in the North).

Towards a Sustainable Trade Policy

We use a Sustainability Impact Assessment (SIA) to identify the most likely significant effects of a particular or set of trade reforms and assess the implications of these for economic, social and environmental indicators.²² This is emerging as a standard technique to inform negotiators, e.g. in the European Commission, of various scenarios associated with alternative agreements on trade reform. The objective is to identify where gains and losses are most likely to arise, so that complementary policies can be identified. Mitigating measures are those that offset or address potential losses or costs, while enhancing measures are those that increase the ability of sectors and agents to respond and benefit from the opportunities provided by the reforms.

Causal chain analysis (CCA) is the fundamental assessment method used in each of the SIAs. The purpose of CCA is to identify the significant cause-effect links between a proposed change in an existing trade policy and its eventual economic, environmental and social impacts (i.e. its impacts on sustainable development). The aim of CCA is to distinguish the significant cause-effect links in the chain. The analysis is undertaken, in logical sequence by section, from 'cause' to 'effect'. We provide an illustrative analysis for Uganda.

The starting point is the 'first order' economic effects as outlined in section 3. In some sectors prices (or returns) will be expected to increase (exports and some import-using), whilst in others prices are likely to fall (import-competing). Given the estimated first order effects, we then identify the economic effects (economic SIA). In the case of imports, it is important to distinguish domestic producers that compete

²² A very large literature is emerging on SIA, especially in work for DG Trade of the European Commission. A comprehensive site is <http://idpm.man.ac.uk/sia-trade>.

with the product from those that consume the product (consumers can be of final products or firms purchasing intermediate inputs). In general, consumers gain from lower prices but competing producers lose (lower production and/or lower profits) unless they can respond with increased efficiency. Competing producers may increase investment if they anticipate increasing efficiency, but the likely impact on employment is negative. Users of the product as an input may increase investment and employment. Producers of the product for export would be expected to gain and may increase investment and employment. Note that, in general, employment effects can be short-run adjustment costs (levels of employment and/or real wages respond) whereas investment effects are more likely to occur in the medium to long term.

As a next step, we treat the economic impact as motivating the social effects (social SIA). The balance of economic winners and losers in an economy will determine the initial income (wage) and employment effects. If the prices of imports of final goods are reduced, consumers benefit; if the goods affected are consumed by the poor (often this will not be the case), then the poor benefit. The overall social impact will depend on the flexibility of the economy and factor markets (especially for labour), and the ability of the government to compensate for adjustment costs. Experience suggests that poorer countries are less flexible and government resources more limited, hence adjustment costs are likely to be greater (this was illustrated in the CGE simulations). As products and sectors are affected in different ways, and have different factor and skill-intensities, there will be distribution and social effects.

Finally, we identify the environmental effects (environmental SIA). This will tend to depend on the nature of the production process for the product(s) in question. Exports and imports may be of different resource intensity and hence there may be different effects on the environmental assessment indicators in certain sectors. In countries with limited environmental regulation, pressures to increase efficiency to compete with cheaper imports may have adverse impacts on the environment. This can only be assessed on a case by case basis.

Table 13 summarises much of the preceding discussion. Most evidence of the effects of trade policy and performance on output and production are favourable, i.e. the economic impact has been positive. Export sectors have gained in general. While traditional exports are more susceptible to world prices, and hence performance is volatile, non-traditional exports have grown significantly in recent years. There is little evidence that import liberalisation has adversely affected food crop producers, as import prices have not fallen in any consistent manner. This is due to a combination of factors: tariffs on foods remain relatively high, devaluation increases the prices of imports, and natural barriers confer significant protection. Similar considerations apply to import-competing manufactures. The outcomes are consistent with the CGE evidence that net economic effects will be positive if there is sufficient flexibility to allow domestic producers to respond to the change in incentives.

In general, the economic impacts of trade in Uganda have been favourable in the 1990s. The challenge for future trade policy is to sustain and consolidate these gains. In respect of traditional (cash crop) exports, the major issue is 'insulating' Uganda from declines in world prices. Producers should aim to increase productivity, requiring investment in new varieties and technology, and to upgrade quality (e.g. aiming for niche markets such as organic coffee). In respect of non-traditional

exports, the need is to continue diversification, upgrading quality (to link into global marketing chains) and, where possible, adding processing to increase domestic value-added. Some import-competing sectors are likely to face increased competition in the future, as further import liberalisation is implemented (e.g. East African regional integration). Firms will need investment in technology to increase efficiency, and training and education to increase labour productivity.

Table 13: Impacts of Trade Reforms in Uganda

Sectors	Most Likely Effects		
	Economic	Social	Environmental
Food	Cheaper imports (mostly in urban markets). Producer prices have tended to rise, along with local production. Export potential	Lower food prices benefit consumers (and poor). Stimulus to local production benefits rural areas and poor. Intra-household issues	Increased transport may generate pollution. Intensity of land use may increase and lead to degradation.
Cash crops (exports)	Better incentives for producers have led to increased production Export revenue	Increase in economic activity (incomes). Poverty reduction. Intra-household issues	Increased transport. Intensity of land use may increase and lead to degradation. Use of fuel/wood increases.
Manufactures (import-competing)	Cheaper imports reduce domestic production	Decrease in economic activity (wages). Unemployment.	Increased transport. Lower and more efficient production reduces pollution.
Manufactures (import-using)	Cheaper imports benefit traders and producers.	Increase in economic activity (wages). Employment and poverty reduction.	Increased transport, Increased production, May mean more fuel use and pollution.
Fiscal variables	Tariff revenue has fallen, but other tax revenues increased. Export promotion costs.	Adjustment costs and lower government spending hurt poor.	Costs of regulation and monitoring

Identifying significant social impacts is more difficult. There are potential gains in employment and incomes from increased production, and these are evident in agriculture and among processors and traders. However, these gains have not been evenly distributed, and there is little evidence that the chronic poor have benefited. This reinforces the general point that trade has direct effects only on those engaged in commercial production and trade-related activities. In Uganda, these direct effects have been positive, in economic and social terms (increased incomes, and greater opportunities to earn income). The chronic poor are marginalised from such activities, and therefore derive no direct benefits; non-trade policies will be required to address such groups. It is also the case that the nature of intra-household distribution limits the share of benefits accruing to females. However, it is not at all evident that a gender perspective would alter the choice of trade policy, or how one analyses the effects of trade on poverty. The problems are not due to trade itself. If a loss of tariff revenue leads to reduced government spending on social services, there will be an adverse social impact. During the 1990s, aid revenues have allowed the government to increase 'pro-poor' public spending (e.g. on health and education).

Although there is some anecdotal evidence, it is not possible to reach firm judgements on the environmental impacts. Trade, insofar as it affects the intensity and patterns of production (and transport), can obviously have environmental effects. It cannot generally be assumed that these effects are adverse (e.g. increased efficiency in farm production reduces the impact on the environment), nor that any adverse effects are not worth incurring. It is appropriate to highlight adverse environmental impacts where they arise, but one should determine why they arise before deciding on the appropriate policy response (e.g. environmental regulation). Nevertheless, it is important to be aware of potential environmental effects of any trade strategy.

Trade Policy and the Poverty Reduction Strategy

The SIA analysis identifies some of the core issues in integrating trade policy into the poverty reduction strategy. The Poverty Eradication Action Plan (PEAP) was launched in 1996 with the key objective of transforming Uganda into a modern economy in which people in all sectors can participate in economic growth. It aims for increased employment opportunities, increased provision of basic social services, expansion of the private sector and creation of national capacities to respond to natural disasters. Other key priorities include primary education, primary healthcare, agricultural extension services and the maintenance of rural feeder roads. It is envisaged that through the enabling framework of PEAP, the government of Uganda will meet its set target of reducing headcount poverty to 10 per cent by 2017.

There are four main pillars of PEAP: creating the framework for economic growth and transformation, ensuring good governance and security, directly increasing the ability of the poor to raise incomes and directly increasing the quality of life of the poor. Trade policy has a direct role in the first pillar, as expanding trade can contribute to growth, and the third pillar, as export growth provides opportunities to increase the incomes of the poor. The platform for a pro-poor trade policy is quality and productivity to increase the value-added and competitiveness of Ugandan producers, whether exporting or producing for the local market. This can help Uganda

to sustain its traditional exports in volatile world markets, expand non-traditional exports and diversify into new markets.

The livelihoods analysis (section 4) showed that even where sector output is growing this does not ensure that all workers in the sector receive increased incomes. The lowest skilled workers are the least likely to benefit from growth (or will only benefit when growth is sustained and widespread). While low labour costs can make producers more competitive and labour market flexibility is important if an economy is to respond to the challenges and opportunities of liberalisation, competitiveness built on productivity and quality is more robust than that built on cheap labour. If the economy is to be competitive, it is important that markets are competitive; where possible, the government should prevent the emergence of monopoly producers or monopsony buyers. Ensuring that basic labour standards are complied with is an important element in ensuring that poorer segments of society benefit from growth.

There are two related areas that Uganda could target for further export growth, food and processing. Uganda has considerable potential to increase productivity and production in agriculture and expand exports of, for example, maize, vegetables and fruits. If investment in expanding food crop production aims to penetrate export markets this will encourage quality upgrading; any surplus above export demand can be supplied to the domestic market. Producers aiming to export will want to increase productivity, and this could reduce prices of food in domestic markets. Investment in infrastructure (transport, storage and distribution) and in agriculture supports exports and domestic sales. Expansion of agriculture provides the inputs to develop domestic processing industries, which in turn create employment. In this way, trade policy can be a dynamic element of the poverty reduction strategy.

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APPENDIX TABLES

Table A1: Composition of GDP at Constant (1991) prices (percent shares)

Industry Group	1987	1990	1992	1995	1998	1999	2000	2001
<i>Agriculture</i>	54.8	53.5	51.2	46.6	42.6	42.2	42.0	41.0
Cash Crops	3.4	3.3	3.3	3.2	3.5	4.0	3.8	4.5
Food Crops	37.4	36.5	34.5	31.9	28.0	27.3	27.5	27.2
Livestock	9.3	9.0	8.7	7.4	7.2	7.1	7.1	5.2
Forestry	2.1	2.0	2.1	1.9	1.8	1.8	1.8	1.8
Fish	2.7	2.6	2.6	2.1	2.1	1.9	1.9	2.4
<i>Industry</i>	11.8	12.3	13.1	15.9	19.2	19.5	19.2	19.0
Mining and Quarrying	0.1	0.2	0.3	0.3	0.7	0.7	0.7	0.6
Manufacturing	4.9	5.5	6.1	7.5	9.5	9.6	9.1	9.9
Utilities	0.9	0.8	0.9	0.9	0.9	1.0	1.0	1.5
Construction	5.9	5.8	5.8	7.2	8.1	8.2	8.4	7.0
<i>Services</i>	33.3	34.1	35.7	37.6	38.0	38.4	38.8	40.1
Trade	10.5	11.1	11.3	13.1	13.0	12.9	12.8	10.1
Hotel and restaurant	1.0	1.1	1.4	1.8	1.8	1.8	1.7	1.9
Transport and Communication	4.1	4.1	4.2	4.7	5.1	5.3	5.5	4.7
Owner Occupied dwellings	3.4	3.1	3.0	2.8	2.9	3.0	3.1	3.6
Community Services	14.3	14.7	15.8	15.2	15.2	15.4	15.7	19.8
Total	100	100	100	100	100	100	100	100

Source: The Republic of Uganda (1997, 2001 and 2002).

Table A2: Growth rates of GDP at Constant (1991) prices (percent)

Industry Group	1987	1990	1992	1995	1998	1999	2000	2001
<i>Agriculture</i>	4.9	7.4	5	6	9.0	5.0	4.2	6.4
Cash Crops	0.7	7.5	0.9	7.1	-6.4	20.4	-2.8	11.4
Food Crops	6.0	7.9	8.0	7.1	18.4	2.8	6.7	5.5
Livestock	4.1	3.7	1.9	2.5	3.1	2.1	3.4	5.0
Forestry	15.2	9.5	6.4	6.1	7.0	6.4	7.2	6.9
Fish	4.1	14.8	3.9	6.3	6.0	-4.0	4.0	4.0
<i>Industry</i>								
Mining and Quarrying	-17.1	16.6	7.9	28.2	7.0	4.7	5.3	7.1
Manufacturing	9.1	5.3	7.9	18.3	12.8	6.3	-0.9	10.3
Utilities	6.7	1.6	9.1	9.9	4.6	7.5	7.9	9.2
Construction	4.2	5.8	5.0	19.2	6.4	4.9	8.5	5.7
<i>Services</i>								
Trade	8.0	6.9	3.9	16.3	9.5	3.2	3.9	7.2
Hotel and restaurant	18.9	11.6	12.0	11.8	2.6	3.1	1.8	2.4
Transport and Communication	8.8	7.6	4.4	13.5	7.0	9.0	7.5	10.0
Owner Occupied dwellings	2.8	2.9	3.5	8.0	7.0	6.8	6.5	7.0
Community Services	3.1	8.6	8.8	6.5	5.8	6.2	6.6	7.0
Total Monetary	8.2	7.5	6.1	10.8	8.3	5.3	4.6	7.2
Total non-monetary	4.0	1.6	1.1	2.0	5.4	2.6	4.4	3.6
Total GDP	6.7	5.5	4.5	8.4	7.6	4.7	4.6	6.4
Per Capita GDP	3.8	2.6	0.9	5.2	4.8	2.0	2.0	4.0

Source: The Republic of Uganda (1997, 2001 and 2002).

Table A3a: Composition of Ugandan Exports 1992/93-2001/02 (\$US million)

	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	Estim 01/02	actual 01/02
<i>Traditional</i>											
Coffee	111.3	180.0	456.6	404.4	365.6	268.6	306.7	186.9	109.6	84.0	85
Cotton	5.3	4.3	3.3	13.3	25.7	14.8	10.8	22.5	14.1	16.9	
Tea	10.0	12.1	11.7	12.5	20.8	37.8	22.7	31.8	35.9	27.6	78
Tobacco	6.8	5.9	8.1	7.9	8.6	10.8	22.9	22.4	27.6	35.8	
<i>Non-traditional</i>											
Fish	4.4	11.1	17.0	37.6	34.6	27.9	47.6	18.6	50.1	87.5	88
Maize	7.9	14.0	20.2	9.4	16.5	8.1	5.9	4.0	6.1	14.9	20
Flowers	0.0	0.0	2.0	5.4	5.3	6.9	7.2	8.3	13.2	16.4	15
Hides/skins	4.1	6.7	10.4	8.9	7.8	7.8	6.6	6.2	22.7	21.1	19
Electricity	1.5	1.0	3.1	2.5	8.1	2.0	12.3	13.8	16.7	13.3	
Other	20.5	28.6	61.9	87.6	186.1	79.8	97.3	122.1	145.8	138.4	
Total	172.8	264.7	595.3	590.5	680.1	465.5	541.1	436.6	441.8	456.4	463

Source: Bank of Uganda.

Table A3b: Composition of Ugandan Export volumes, 1992/93-2001/02.

	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	Estim 01/02
<i>Traditional</i>										
Coffee	2.3	2.6	2.9	3.9	4.4	2.9	3.8	3.0	2.8	3.0
Cotton	4.9	4.0	4.0	8.3	18.7	7.4	8.6	21.4	12.1	21.3
Tea	8.4	10.4	11.3	12.4	16.9	22.2	21.6	24.0	28.1	30.9
Tobacco	3.7	3.3	4.1	4.3	4.6	7.4	10.6	10.3	9.9	18.9
<i>Non-traditional</i>										
Fish	2.5	5.8	8.6	13.6	11.6	9.9	16.3	9.8	22.3	29.5
Maize	64.5	64.9	109.5	59.1	70.8	33.5	26.8	11.7	29.6	113.0
Flowers	-	-	-	.6	1.5	1.7	1.9	2.2	3.5	4.3
Hides/skins	4.8	5.5	5.1	5.2	5.2	6.3	11.4	8.3	17.9	25.5

Note: Units are 1,000 metric tonnes, except for coffee which is millions 60 kg. bags.

Source: Bank of Uganda.

Table A3c: Ugandan Exports 1992/93-2001/02 (unit values)

	97/98	98/99	99/00	00/01
<i>Traditional</i>				
Coffee	1.36	1.02	0.64	0.46
Cotton	1.25	1.05	1.16	0.80
Tea	1.05	1.33	1.28	0.90
Tobacco	2.16	2.18	2.79	1.89
<i>Non-traditional</i>				
Fish	2.92	1.90	2.25	2.96
Maize	0.23	0.34	0.21	0.13
Flowers	-	3.46	3.81	3.78
Hides/skins	0.58	0.74	1.27	0.83

Source: Bank of Uganda.

Table A4. Imports of Selected Commodities, 1994-1999

	1994 share	1999 share	Volume change	Share change
Live animals	0.15	0.03	-63.55	-80.86
Meat and meat preparations	0.03	0.03	99.04	4.51
Dairy products and birds eggs	0.39	0.11	-47.78	-72.58
Fish, seafood	0.03	0.01	-54.70	-76.21
Cereals and cereal preparations	5.36	4.26	51.53	-20.44
Vegetables and fruit	0.80	0.20	-52.93	-75.29
Sugars, sugar preparation and honey	2.29	1.56	30.33	-31.57
Coffee, tea, cocoa, spices and manufactures thereof	0.04	0.11	436.16	181.52
Feeding stuff for animals (excl. unmilled cereals)	0.03	0.02	34.98	-29.13
Miscellaneous edible products and preparation	0.79	0.42	1.26	-46.83
Beverages	0.20	0.09	-10.35	-52.93
Tobacco and tobacco manufactures	0.02	0.05	313.50	117.11
Textile fibres, wastes; not manufactured	2.75	1.65	14.40	-39.93
Crude fertilizers and minerals	0.94	1.09	119.30	15.15
Petroleum products and related materials	8.26	8.93	105.94	8.13
Medical and pharmaceutical products	4.09	5.41	152.32	32.48
Essential oils, perfumes; toilet cleaning preparations	0.98	1.42	177.02	45.45
Fertilizers, manufactured (other than crude fertilizers)	0.30	0.35	117.55	14.23
Plastics in primary forms	1.12	1.24	110.54	10.54
Plastics in non-primary forms	0.51	0.37	38.14	-27.47
Sub-TOTAL	29.07	27.35		-5.93
Total Imports (\$million)	715.63	1362.94	90.45	

Source: Derived from data in Uganda Bureau of Statistics (www.ubos.org).

Table A5a Average Market Prices, selected goods 1987-1999 (1990 = 100)

Year	Bananas kg	Maize meal kg	Tomatoes kg	Groundnuts kg	Sweet Potatoes kg
1987	14.4	7.9	18.0	14.2	11.9
1988	40.3	29.0	57.0	50.2	56.3
1989	85.7	90.0	82.7	93.4	99.0
1990	100.0	100.0	100.0	100.0	100.0
1991	126.2	113.9	138.1	136.4	159.2
1992	246.1	200.5	245.2	245.8	263.8
1993	215.2	158.8	204.0	166.1	189.9
1994	244.7	185.1	266.8	274.3	290.3
1995	647.8	174.3	324.9	264.3	225.5
1996	203.2	209.0	325.1	271.4	197.9
1997	269.6	292.8	362.0	381.9	388.9
1998	242.4	289.5	344.6	359.7	231.8
1999	345.4	276.8	318.3	361.1	364.2
	Dry Cassava kg	Rice kg	Dry Beans kg	Cooking Oil 300ml bottle	Soap kg
1987	10.5	13.0	15.2	20.8	28.6
1988	38.0	44.0	43.9	66.1	99.3
1989	73.5	75.6	83.6	98.5	82.0
1990	100.0	100.0	100.0	100.0	100.0
1991	106.9	106.9	115.7	132.2	137.0
1992	221.8	176.2	225.4	215.2	199.7
1993	255.2	186.0	177.5	253.6	222.0
1994	255.5	180.6	288.6	230.2	189.6
1995	255.8	181.9	319.5	230.6	207.6
1996	262.0	218.8	329.4	263.6	224.2
1997	426.4	217.2	447.9	220.9	226.1
1998	437.7	224.0	398.2	239.2	240.6
1999	355.8	242.4	343.0	259.9	253.7

Table A5b Average Market Prices, selected goods 1987-1999 (1990 = 100)

Year	Onions kg	Sugar kg	Milk Litre	Meat kg
1987	12.5	7.9	15.4	13.4
1988	35.6	28.2	43.8	52.2
1989	67.3	79.2	77.5	79.8
1990	100.0	100.0	100.0	100.0
1991	75.1	114.8	122.5	128.2
1992	113.9	164.3	174.5	175.7
1993	102.4	155.0	190.4	167.2
1994	141.0	163.7	212.2	210.5
1995	158.7	163.9	280.4	276.7
1996	127.4	183.2	280.7	317.9
1997	181.6	182.5	307.3	324.4
1998	374.8	174.7	317.3	307.5
1999	156.7	191.3	335.2	317.3
	Bread kg	Salt kg	Charcoal kg	Paraffin Litre
1987	10.6	15.4	32.4	10.3
1988	45.4	65.7	59.4	56.2
1989	83.7	80.3	77.6	53.9
1990	100.0	100.0	100.0	100.0
1991	108.3	134.7	126.8	201.4
1992	146.9	249.3	144.4	256.6
1993	175.0	227.5	170.4	282.4
1994	190.1	220.4	187.2	254.7
1995	184.1	332.0	194.5	275.1
1996	194.2	321.9	214.4	291.2
1997	195.3	237.9	223.0	307.6
1998	197.9	304.4	219.5	312.5
1999	202.3	317.5	208.9	316.4

Source: Computed with information from *Uganda Statistical Abstracts* (1996, 1997, 1998 and 2000).

Table A6 Allocation of Total Household Annual Expenditure (% shares, 1999)

Product	Poor			Non Poor			All		
	Rural	Urban	All	Rural	Urban	All	Rural	Urban	All
Food, Beverage and Tobacco (all)									
Matooke	3.97%	3.52%	3.94%	8.40%	5.32%	7.58%	7.02%	5.12%	6.60%
Sweet Potatoes	7.74%	4.57%	7.45%	6.39%	2.25%	5.28%	6.81%	2.52%	5.87%
Cassava	10.56%	7.41%	10.28%	5.94%	2.12%	4.92%	7.39%	2.72%	6.36%
Irish Potatoes	1.16%	0.40%	1.09%	1.34%	0.59%	1.14%	1.28%	0.57%	1.13%
Rice	0.30%	1.07%	0.38%	0.75%	1.90%	1.06%	0.61%	1.81%	0.88%
maize	4.60%	5.97%	4.74%	4.07%	2.92%	3.77%	4.24%	3.28%	4.03%
Bread	0.03%	0.24%	0.05%	0.23%	0.92%	0.41%	0.17%	0.84%	0.32%
Millet	1.78%	1.01%	1.71%	1.60%	0.50%	1.31%	1.66%	0.56%	1.42%
Sorghum	1.73%	0.91%	1.66%	0.59%	0.20%	0.49%	0.95%	0.28%	0.80%
Meatt	2.43%	2.79%	2.47%	4.38%	4.65%	4.46%	3.78%	4.46%	3.93%
Sugar	2.25%	3.73%	2.39%	3.38%	3.65%	3.46%	3.03%	3.67%	3.17%
Coffee	0.01%	0.02%	0.01%	0.02%	0.03%	0.02%	0.02%	0.03%	0.02%
Tea	0.40%	0.46%	0.40%	0.44%	0.42%	0.43%	0.42%	0.43%	0.43%
Salt	1.32%	1.03%	1.29%	0.79%	0.44%	0.69%	0.95%	0.50%	0.86%
Soda	0.05%	0.07%	0.05%	0.31%	0.93%	0.48%	0.23%	0.83%	0.36%
Beer	0.06%	0.29%	0.08%	0.66%	2.11%	1.05%	0.47%	1.91%	0.79%
Other Alcohol	2.41%	2.04%	2.38%	2.28%	1.28%	2.01%	2.32%	1.37%	2.11%
Cigarettes	0.39%	0.45%	0.40%	0.59%	0.80%	0.65%	0.53%	0.76%	0.58%
Other Tobacco	0.45%	0.51%	0.45%	0.20%	0.06%	0.16%	0.28%	0.11%	0.24%
Restaurant	0.36%	1.36%	0.46%	1.10%	5.14%	2.19%	0.87%	4.73%	1.72%
Other	1.25%	0.84%	1.22%	1.15%	1.16%	1.16%	1.19%	1.13%	1.17%
Ground Nuts	0.85%	1.22%	0.88%	1.30%	1.05%	1.23%	1.16%	1.07%	1.14%
Fish	2.95%	3.24%	2.97%	3.10%	2.62%	2.97%	3.05%	2.69%	2.97%
Eggs and Milk	1.24%	0.86%	1.21%	2.15%	2.75%	2.32%	1.87%	2.54%	2.02%
Infant Formula	0.00%	0.01%	0.00%	0.01%	0.02%	0.01%	0.01%	0.02%	0.01%
Cooking/margarine	0.96%	1.37%	1.00%	1.20%	1.55%	1.29%	1.12%	1.53%	1.22%
Fruit	0.55%	0.41%	0.53%	0.67%	0.78%	0.70%	0.63%	0.74%	0.66%
Veg	4.44%	4.25%	4.44%	3.11%	2.74%	3.01%	3.53%	2.92%	3.40%
Beans	6.28%	5.98%	6.26%	4.52%	2.39%	3.95%	5.07%	2.80%	4.57%
Simsim/peas	1.47%	0.57%	1.39%	0.57%	0.27%	0.49%	0.85%	0.31%	0.73%
Non-Durable Goods (selection)									
Kerosene	1.54%	1.69%	1.55%	1.33%	1.31%	1.33%	1.40%	1.35%	1.39%
Charcoal	0.07%	2.26%	0.27%	0.22%	2.54%	0.84%	0.17%	2.51%	0.69%
Firewood	12.82%	9.45%	12.51%	8.95%	2.28%	7.16%	10.16%	3.08%	8.60%
Matches	0.33%	0.36%	0.33%	0.23%	0.17%	0.21%	0.26%	0.19%	0.25%
Washing Soap	1.98%	2.11%	1.99%	1.34%	1.23%	1.31%	1.54%	1.32%	1.49%
Toothpaste	0.05%	0.22%	0.07%	0.16%	0.38%	0.22%	0.12%	0.36%	0.18%
Batteries	0.47%	0.61%	0.48%	0.72%	0.68%	0.71%	0.64%	0.67%	0.65%
Petrol/Diesel	0.01%	0.00%	0.01%	0.15%	0.53%	0.25%	0.11%	0.47%	0.19%
Bus/Taxi	0.58%	0.63%	0.58%	1.58%	2.91%	1.93%	1.26%	2.65%	1.57%
Semi-Durable and Durable (Selection)									
Clothes, Footwear	3.78%	4.27%	3.82%	3.88%	4.74%	4.11%	3.85%	4.69%	4.04%
Stoves	0.00%	0.02%	0.00%	0.01%	0.05%	0.02%	0.01%	0.05%	0.02%
Electrical	0.06%	0.09%	0.06%	0.15%	0.29%	0.19%	0.12%	0.27%	0.15%
Bicycle	0.23%	0.09%	0.22%	0.23%	0.16%	0.21%	0.23%	0.16%	0.21%
Aggregated Categories:									
Proportions by Type of Good									
Food Beverage	61.99%	56.56%	61.59%	61.24%	51.55%	58.69%	61.52%	52.23%	59.50%
Non-Durable	28.90%	32.11%	29.13%	27.60%	33.41%	29.13%	27.98%	33.19%	29.11%
Durable	7.75%	10.27%	7.94%	10.09%	13.86%	11.09%	9.34%	13.42%	10.23%
Tax	1.37%	1.06%	1.34%	1.06%	1.17%	1.09%	1.16%	1.16%	1.16%

Table A7 Household Annual Expenditure Shares 1999, by Welfare Quartiles

Product	Lowest 25%		Highest 25%	
	1	2	3	4
Food, Beverage and Tobacco				
Matooke	4.73%	6.69%	7.93%	7.05%
Sweet Potatoes	6.17%	6.88%	6.26%	4.17%
Cassava	8.76%	7.06%	5.66%	3.97%
Irish Potatoes	0.94%	1.34%	1.17%	1.05%
Rice	0.64%	0.77%	0.89%	1.21%
maize	4.01%	4.32%	4.21%	3.59%
Bread	0.17%	0.20%	0.28%	0.62%
Millet	1.62%	1.48%	1.54%	1.03%
Sorghum	1.59%	0.69%	0.53%	0.39%
Meat	3.94%	3.92%	3.69%	4.17%
Sugar	2.86%	3.15%	3.32%	3.35%
Coffee	0.02%	0.02%	0.02%	0.02%
Tea	0.41%	0.45%	0.45%	0.39%
Salt	1.04%	0.91%	0.82%	0.65%
Soda	0.24%	0.28%	0.34%	0.60%
Beer	0.49%	0.54%	0.60%	1.53%
Other Alcohol	2.59%	2.37%	1.83%	1.67%
Cigarettes	0.56%	0.61%	0.49%	0.66%
Other Tobacco	0.34%	0.22%	0.25%	0.16%
Restaurant	1.03%	0.89%	1.41%	3.55%
Other	1.35%	1.04%	1.11%	1.20%
Ground Nuts	1.08%	1.17%	1.16%	1.14%
Fish	3.26%	3.07%	2.89%	2.66%
Eggs and Milk	1.61%	1.90%	2.11%	2.46%
Infant Formula Foods	0.02%	0.00%	0.00%	0.02%
Cooking/margarine	1.26%	1.16%	1.23%	1.22%
Fruit	0.64%	0.65%	0.62%	0.71%
Veg	3.78%	3.49%	3.42%	2.90%
Beans	5.36%	4.88%	4.72%	3.35%
Simsim/peas	1.29%	0.75%	0.51%	0.39%
Non-Durable Goods (some)				
Kerosene	1.36%	1.41%	1.44%	1.34%
Charcoal	0.32%	0.46%	0.74%	1.23%
Firewood	10.28%	9.57%	8.70%	5.86%
Matches	0.28%	0.26%	0.25%	0.20%
Washing Soap	1.66%	1.57%	1.49%	1.23%
Toothpaste	0.12%	0.13%	0.19%	0.26%
Batteries	0.54%	0.66%	0.67%	0.71%
Petrol/Diesel	0.06%	0.16%	0.13%	0.40%
Bus/Taxi	1.00%	1.17%	1.66%	2.45%
Semi-Durable and Durable (Selection)				
Clothes and Footwear	3.84%	3.85%	4.06%	4.40%
Charcoal/Kerosene Stoves	0.00%	0.01%	0.02%	0.03%
Electrical Appliances	0.13%	0.13%	0.13%	0.23%
Bicycle	0.26%	0.24%	0.20%	0.15%
Aggregated Categories:				
Proportions by Type of Good				
Food Beverage	61.77%	60.89%	59.43%	55.90%
Non-Durable	28.04%	28.13%	29.18%	31.10%
Durable	9.03%	9.83%	10.25%	11.82%
Tax	1.16%	1.15%	1.15%	1.18%

Table A8: Tariffs in Uganda, 1990s selected years (%)

HS	CHAPTER	IMPORT DUTY			COMESA DUTY		
		1996	1999	2002	1996	1999	2002
1	LIVE ANIMALS AND PRODUCTS	10	7 - 15	7	2	4 - 6	4
2	MEAT AND EDIBLE MEAT OFFAL	30	15	15	6	6	6
3	FISH AND AQUATIC INVERTEBRATES	30	15	15	6 - 30	6	6
4	DAIRY PRODUCTS EGGS AND HONEY	10 - 30	15	15	2 - 6	6	6
5	PRODUCTS OF ANIMAL ORIGIN	0 - 30	15	15	0 - 6	6	6
6	VEGETABLE PRODUCTS	0 - 10	0 - 7	0 - 7	0 - 4	0 - 4	0 - 4
7	EDIBLE VEGETABLES	30	15	15	6	6	6
8	EDIBLE FRUIT AND NUTS	20	15	15	4	6	6
9	COFFEE, TEA, MATE AND SPICES	10 - 30	15	0 - 7	2 - 6	6	0 - 4
10	CEREALS	0 - 20	0 - 15	0 - 15	0 - 4	0 - 6	0 - 6
11	PRODUCTS OF THE MILLING INDUSTRY	10 - 30	7 - 15	15	2 - 6	6	6
12	OIL SEEDS AND OLEAGINEOUS FRUITS	10 - 30	7	7	0 - 6	4	4
13	LAC,GUMS, RESINS AND OTHER SAPS	10 - 30	7	7	2 - 6	4	4
14	VEGETABLE PLAITING MATERIALS	10 - 30	7	7	2 - 6	4	4
15	ANIMAL OR VEGETABLE FATS AND OILS	5 - 30	7 - 15	0 - 15	2 - 6	4 - 6	0 - 6
16	PREPARATIONS OF MEAT OR FISH	30	15	15	6	6	6
17	SUGARS AND SUGAR CONFECTIONERY	10 - 30	15	7 - 15	2 - 6	6	4 - 6
18	COCOA AND COCOA PREPARATIONS	30	15	15	6	6	6
19	PREPARATIONS OF CEREALS,FLOUR	5 - 30	7 - 15	15	2 - 6	4 - 6	6
20	PREPARATIONS OF VEGETABLES	30	15	15	6	6	6
21	MISCELLANEOUS EDIBLE PREPARATIONS	5 - 30	7 - 15	7	2 - 6	4 - 6	4
22	BEVERAGES, SPIRITS AND VINEGAR	30	15	15	12	6	6
23	RESIDUES AND WASTE FROM FOOD INDs	10	15	15	2	6	6
24	TOBACCO AND TOBACCO SUBSTITUTES	30 - 60	15	15	12	6	6
25	SALT,SULPHUR AND STONE,CEMENT	5 - 20	7 - 15	7 - 15	2 - 5	4 - 6	4 - 6
26	ORES, SLAG AND ASH	10	7	7	2	4	4
27	MINERAL OILS,FUELS AND MINERALS	10	7 - 15	0 - 15	0 - 2	4 - 6	0 - 6
28	ORGANIC CHEMICALS AND COMPOUNDS	5	7	0 - 7	5	4	0 - 4
29	ORGANIC CHEMICALS	5	7	0 - 7	5	4	0 - 4
30	PHARMACEUTICAL PRODUCTS	0	0	0	0	0	0
31	FERTILIZERS	0	0	0	0	0	0
32	TANNING OR DYEING EXTRACTS	5	7 - 15	0 - 15	5	4 - 6	0 - 6
33	ESSENTIAL OILS AND RESINOIDS	30	15	0 - 15	6	6	0 - 6
34	SOAP, WASHING AND DENTAL PRODUCTS	10 - 30	7 - 15	0 - 15	2 - 6	4 - 6	0 - 6
35	ALBUMINOIDAL SUBSTANCES	5 - 10	7	0 - 7	2 - 6	4	0 - 6
36	EXPLOSIVES AND MATCHES	10 - 30	15	15	2 - 6	6	6
37	PHOTOGRAPHIC AND CINEMATOGRAFICS	0 - 20	7 - 15	0 - 15	0 - 4	4 - 6	0 - 6
38	MISCELLANEOUS CHEMICAL PRODUCTS	0 - 20	0 - 7	0 - 7	0 - 5	0 - 4	0 - 4
39	PLASTICS AND ARTICLES THEREOF	0 - 20	7 - 15	7	0 - 5	4 - 6	4
40	RUBBER AND ARTICLES THEREOF	0 - 20	0 - 15	0 - 15	0 - 6	0 - 6	0 - 6
41	RAW HIDES AND SKINS	30	7	7	6	4	4
42	ARTICLES OF LEATHER	10 - 30	15	15	2 - 6	6	6
43	FUR SKINS AND ARTIFICIAL FUR	10 - 30	15	7 - 15	2 - 6	6	4 - 6
44	WOOD AND ARTICLES OF WOOD	0 - 30	7 - 15	7 - 15	0 - 6	4 - 6	4 - 6
45	CORK AND ARTICLES OF CORK	10 - 30	15	15	2 - 6	6	6
46	STRAWS, PLAITING AND BASKET WARE	30	15	7 - 15	6	6	4 - 6
47	PULP OF WOOD AND FIBROUS MATERIAL	10 - 20	7	7	2 - 4	4	4

48	PAPER AND PAPER BOARD	5 - 30	7 - 15	7	2 - 6	4 - 6	4
49	PRINTED BOOKS AND NEWSPAPERS	0 - 10	0 - 7	0 - 7	0 - 2	0 - 4	0 - 4
50	SILK	10	15	15	2	6	6
51	WOOL, FINE OR COARSE ANIMAL HAIR	10	7 - 15	15	2	4 - 6	6
52	COTTON	10 - 20	7 - 15	7 - 15	2 - 4	4 - 6	4 - 6
53	OTHER VEGETABLE TEXTILE FIBRES	5 - 20	15	7 - 15	2 - 5	6	4 - 6
54	MAN MADE FILAMENTS	5 - 30	7 - 15	7 - 15	2 - 5	4 - 6	4 - 6
55	MAN MADE STAPLE FIBRES	10 - 30	7 - 15	7 - 15	2 - 6	4 - 6	4 - 6
56	WADDING, FELT AND NON WOVENS	10 - 20	7 - 15	0 - 15	2 - 4	4 - 6	0 - 6
57	CARPETS AND TEXTILE FLOOR COVERS	20	15	15	4	6	6
58	SPECIAL WOVEN FABRICS	10 - 30	15	15	4 - 6	6	6
59	INPREGNATED, COATED TEXTILE FABRICS	10 - 20	15	7 - 15	2 - 4	6	4 - 6
60	KNITTED OR CROCHETED FABRICS	20	15	15	4	6	6
61	ARTICLES OF APPAREL AND CLOTHING	20	15	15	4	6	6
62	ARTICLES OF APPAREL, CLOTHING NOT KNITTED	20	15	15	4	6	6
63	OTHER MADE UP TEXTILE ARTICLES	0 - 20	15	0 - 15	0 - 6	6	0 - 6
64	FOOTWEAR, GAITERS AND THE LIKE	20	15	15	4	6	6
65	HEADGEAR AND PARTS THEREOF	30	15	15	6	6	6
66	UMBRELLARS WALKING STICKS AND WHIPS	30	15	15	6	6	6
67	PREP[ARED FEATHERS, HAIR AND FLOWERS	30	15	15	6	6	6
68	ARTICLES OF STONE, PLASTER, CEMENT E.T.C.	0 - 10	15	0 - 15	2	6	0 - 6
69	CERAMIC PRODUCTS	10	7 - 15	15	2	4 - 6	6
70	GLASS AND GLASS WARE	10	15	7 - 15	2	6	4 - 6
71	PRECIOUS PEARLS, STONE AND METAL, COINS	0 - 30	0 - 15	15	0 - 6	0 - 6	6
72	IRON AND STEEL	0 - 10	7	0 - 7	0 - 5	4	0 - 4
73	ARTICLES OF IRON OR STEEL	0 - 20	0 - 7	0 - 7	0 - 4	0 - 4	0 - 4
74	COPPER AND ARTICLES THEREOF	5 - 20	7	7	2 - 5	4	4
75	NICKEL AND ARTICLES THEREOF	10 - 20	7 - 15	7 - 15	2 - 4	4 - 6	4 - 6
76	ALUMINIUM AND ARTICLES THEREOF	5 - 10	7 - 15	0 - 15	5	4 - 6	0 - 6
78	LEAD AND ARTICLES THEREOF	5	7	0 - 7	5	4	0 - 4
79	ZINC AND ARTICLES THEREOF	5 - 20	7	0 - 7	2 - 5	4	0 - 4
80	TIN AND ARTICLES THEREOF	10 - 20	7	0 - 7	2 - 4	4	0 - 4
81	OTHER BASE METALS, CERMETS	10	7	7	2	4	4
82	TOOLS, IMPLEMENTS AND CUTLERY	10	7	7	2	4	4
83	MISCELLANEOUS ARTICLES OF BASE METAL	10 - 20	15	7 - 15	2 - 4	6	4 - 6
84	NUCLEAR REACTORS, BOILERS, MACHINERY	0 - 20	0 - 7	0 - 7	0 - 4	0 - 4	0 - 4
85	ELECTRICAL MACHINERY AND EQUIPMENT	0 - 30	0 - 15	0 - 15	0 - 6	0 - 6	0 - 6
86	RAILWAY OR TRAMWAY LOCOMOTIVES	0	0 - 15	0	0	0 - 6	0
87	VEHICLES OTHER THAN TRAMWAYS	0 - 30	0 - 15	0 - 15	0 - 6	0 - 6	0 - 6
88	AIR CRAFT, SPACECRAFT AND PARTS	0 - 10	0 - 15	0 - 15	0 - 2	0 - 6	0 - 6
89	SHIPS, BOATS AND FLOATING STRUCTURES	0 - 10	0 - 15	0 - 7	0 - 6	0 - 6	0 - 4
90	OPTICAL, PHOTOGRAPHIC, PRECISION E.T.C.	0 - 30	0 - 15	0 - 15	0 - 6	0 - 6	0 - 6
91	CLOAKS AND WATCHES AND PARTS	30	15	15	6	6	6
92	MUSICAL I NSTRUMENTS AND PARTS	30	15	7	6	6	4
93	ARMS AND AMUNITION AND PARTS THEREOF	0 - 10	7	7	0 - 2	4	4
94	FURNITURE BEDDINGS AND ILLUMINATIONS	0 - 30	7 - 15	15	0 - 6	4 - 6	6
95	TOYS GAMES AND SPORTS REQUISITES	10 - 30	7 - 15	7 - 15	2 - 6	4 - 6	4 - 6
96	MISCELLANEOUS MANUFACTURED ARTICLES	10 - 30	7 - 15	7 - 15	2 - 6	4 - 6	4 - 6
97	WORKS OF ART, COLLECTIONS AND ANTIQUES			15			6