REPORT

Volume 1

UGANDA

Diagnostic Trade Integration Study

June 2006

ABBREVIATIONS AND ACCRONYMS

€	Euro
ACP	African, Caribbean, and Pacific
ADT	Average Daily Traffic
ADZ	Aquaculture Development Zone
AfDB	African Development Bank
AGOA	African Growth and Opportunities Act
ASYCUDA	Automated System for Customs Data
BMU	Beach Management Units
BOU	Bank of Uganda
BRC	British Retail Consortium
C&F	Clearing and Forwarding
CA	Competent Authority
CAA	Civil Aviation Authority
CBC	Customs Business Center
CBI	Centre for the Promotion of Imports from developing countries
CBS	Community Based System
CDO	Cotton Development Organization
CEM	Country Economic Memorandum
CEO	Chief Executive Officer
CET	Common External Tariff
CG	Commissioner General
COMESA	Common Market for Eastern and Southern Africa Cooperation for Emerging Markets
CU	Customs Union
DAR	Directorate of Animal Resources
DCP	Department of Crop Protection
DFID	Department for International Development (UK)
DFR	Department of Fisheries Resources
DP	Development Partners
DRC	Democratic Republic of Congo
DTI	Direct Trader Input
DTIS	Diagnostic Trade Integration Study
EAC	East African Community
EBA	Everything But Arms Initiative
EDF	European Development Fund
EDI	Electronic Data Interchange
EDP	Export Development Project
ECGS	Export Credit Guarantee Scheme
EIB	European Investment Bank
EPA	Economic Partnership Agreement
EPADU	Export Promotion Analysis and Development Unit
ERP	Effective Rate of Protection
ERS	Export Refinance Scheme
EU	European Union
EUREPGAP	Euro-Retailer Produce Working Group's Good Agricultural Practices
FDI	Foreign Direct Investment
FFP	Fair Flowers and Plants
FHL	Fresh Handling Limited
FIRRI	Fisheries Resources Research Institute
FLP	Flower Label Program
FMO	Netherlands Development Finance Company
FOB	Free on Board
Foodnet	"Post-Harvest Research and Market Network for East and Central Africa" Project
FPEAK	Flower Producers and Exporters Association of Kenya
FSAP	Financial Sector Assessment Program
FSSP	Fisheries Sector Strategic Plan
FTA	Free Trade Area
GAFRD	General Authority for Fish Resources Development
GAP	Good Agriculture Practices
GDP	Gross Domestic Product
GKMA	Greater Kampala Metropolitan Area
GMO	Genetically Modified Organisms
GMP	Good Manufacturing Practices
GNFS	Goods and Non-Factor Services
GNI	Gross National Income
GOK	Government of Kenya
GOU	Government of Uganda
GPS	Global Positioning Satellite
GSP	Generalised System of Preferences
ha	Hectare
HACCP	Hazard Analysis and Critical Control Points
HCDA	Horticultural Crops Development Authority
HORTEXA	Horticulture Exporters Association
HR	Human Resources
ICBT	Informal Cross Border Trade
ICD	Inland Container Depot
ICO	International Coffee Organization
IDEA	Investment in Developing Export Agriculture
IFAD	International Fund for Agricultural Development
IFS	International Financial Statistics
IFWG	Integrated Framework Working Group
ILM	Integrated Lake Management Project
ILO	International Labour Organisation
IMF	International Monetary Fund
IPPC	International Plant Protection Center
ISO	International Organization for Standardization
IT	Information Technology
ITC	International Trade Centre
IUU	Illegal, Unreported and Unregulated
JICA	Japan International Cooperation Agency
KEDS	Kenya Export Development Services
kg	Kilogram
KIP	Kampala Inland Port
km	Kilometer
KPA	Kenya Ports Authority
KPC	Kenya Pipeline Corporation
KRA	Kenya Revenue Authority
KRC	Kenya Railways Corporation
Ksh	Kenyan shilling
l	Litre
LDC	Least Developed Country
LVFO	Lake Victoria Fisheries Organisation
m	Million
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MCS	Monitoring Control and Surveillance
MEMD	Ministry of Energy and Mineral Development
MFN	Most Favored Nation
MFPED	Ministry of Finance, Planning and Economic Development
MICT	Ministry of Information, Communications, and Technology

MIS	Market Information Systems
MLG	Ministry of Local Government
MOH	Ministry of Health
MWHC	Ministry of Works, Housing and Communication
MPS	Milieu Project Sierteelt
MTCS	Medium Term Competitive Strategy
MTRA	Multi-sector Transport Regulatory Authority
MTTI	Ministry of Tourism, Trade, and Industry
MWLE	Ministry of Water, Land and Environment
NAADS	National Agricultural Advisory Services
NARO	National Agricultural Research Organization
NEMA	National Environment Management Authority
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organization
NPA	National Planning Authority
NRA	National Roads Authority
NRP	Nominal Rate of Protection
NTMP	National Transport Master Plan
OECD	Organization for Economic Co-Operation and Development
OIE	World Organization for Animal Health
PEAP	Poverty Eradication Action Plan
PESP	Program for Economic Cooperation in Projects
PIP	Pesticide Initiative Program
PIRT	Presidential Investors Roundtable
PMA	Plan for Modernization of Agriculture
PMAESA	Port Management Association for Eastern and Southern Africa
POL	Petroleum Oils and Lubricants
PPP	Purchasing Power Parity
PSD	Private sector development
PSOM	Programma Samenwerking Opkomende Market Programme
PSP	Private Sector Participation
QC	Quality Control
RAFU	Road Agency Formation Unit
REER	Real Effective Exchange Rate
RER	Real Exchange Rate
RMP	Residue Monitoring Plan
ROO	Rule of Origin
RPED	Regional Program for Enterprise Development
RTA	Regional Trade Arrangement
SADC	South African Development Community
SCOPE	Strengthening the Competitiveness of Private Enterprise
SEP	Strategic Export program
SIC	Standard Industrial Classification
SPEG	Sea-freight Pineapple Exporters of Ghana
SPS	Sanitary and Phytosanitary
SSA	Sub-Saharan Africa
SWOT	Strengths, Weaknesses, Opportunities and Threats
t	Tonne
TASS	Technical Assistance and Support Services
TAZARA	Tanzania Zambia Railway Authority
TBL	Through Bill of Lading
TBT	Technical barriers to trade
TEU	Twenty-feet Equivalent Unit
TICTS	Tanzania International Container Terminal Service
tkm	Tonne Kilometre
TORs	Terms of Reference
TPA	Tanzania Ports Authority
TRC	Tanzania Railways Corporation
TTCA	Transit Transport Co-ordination Authority
TTF	Transport and Trade Facilitation
TUNADO	The Ugandan National Apiculture Development Organization
UAE	United Arab Emirates
UBOS	Uganda Bureau of Statistics
UCDA	Uganda Coffee Development Authority
UCGEA	Uganda Cotton Growers and Exporters Association
UEPB	Uganda Export Promotion Board
UFA	Uganda Fisheries Authority
UFEA	Uganda Flower Exporters Association
UGSTDP	Uganda Sustainable Tourism Development Programme
UIP	Uganda Integrated Program
UK	United Kingdom
UMA	Uganda Manufacturers Association
UMACIS	Ugandan Manufacturer Association Consultancy and Information Services
UNBS	Uganda National Bureau of Standards
UNCOMTRADE	United Nations Commodity Trade
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
UNRA	Uganda National Roads Authority
URA	Uganda Revenue Authority
URC	Uganda Railways Corporation
US $	United States Dollars
US	United States of America
USAID	United States Agency for International Development
USD	US Dollar
Ush	Ugandan Shilling
VAT	Value Added Tax
WB	World Bank
WC	Working Capital
WCO	World Customs Organization
WFP	World Food Programme
WTO	World Trade Organization
ZEGA	Zambia Export Growers Association

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PREFACE AND ACKNOWLEDGMENTS

The Uganda Diagnostic Trade Integration Study (DTIS) has been prepared under the Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries (IF). The IF is a multi-agency, multi-donor program established by WTO trade ministers in 1996 to promote the integration of least developed countries (LDCs) into the global economy. The participating agencies are the International Monetary Fund (IMF), the International Trade Center (ITC), United Nations Conference on Trade and Development (UNCTAD), United Nations Development Program (UNDP), the World Bank and the World Trade Organization (WTO).

The original IF entailed the preparation of a Needs Assessment for eligible LDCs followed by a Roundtable or Consultative Group meeting to secure donor financing for the trade action plan. Progress in mobilizing donor support proved difficult, and the program started slowly. An independent review of the IF, completed in June 2000, highlighted both the absence of donor resources, as well as the lack of linkages to overall development strategies or programs. The outcome was the redefinition of the IF to ensure better integration of trade with national development strategies, complemented by a trust fund for IF activities financed by multilateral agencies and bilateral donors, with the latter being supplemented by resources of international agencies in terms of staff contributions.

Uganda was among the group of 12 countries that went through the first IF process, for which a needs assessment was prepared and two consultative group meetings were held that considered Uganda's Needs Assessment paper.[1] With the view of using the IF as a mechanism for mainstreaming trade into Uganda's development strategy, the Government of Uganda (GOU) applied to participate in the second IF process in 2003, when its Poverty Eradication Action Plan (PEAP), Uganda's equivalent of the poverty reduction strategy paper, came up for review. In addition, GOU aims to use the second IF process to help it further integrate into the world economy.

The IFWG (Geneva) approved Uganda's application in July 2004. This DTIS has been prepared under the second IF process under the leadership of the Africa Region of the World Bank. The Vice President is Gobind Nankani, the Country Director is Judy O'Connor, the Sector Manager is Kathie Krumm, the Regional Trade Coordinator is Christiane Kraus, and the Lead Consultant is Helena Tang.

Missions for the DTIS were held during July-October, 2005. The DTIS is prepared by a team led by Helena Tang, and comprised Anne Akol (consultant, fish), Kym Anderson (DECRG, Doha and EPA simulations), John Baffes (DECPG, cotton and coffee), William Crandall (consultant, customs), Tom Deeb (consultant, standards), Burcu Duygan (consultant, poverty), Ian Goulding (consultant, fish), Steve Jaffee (PRMTR, standards), Rose Kiggundu (consultant, standards), Shaun Mann (AFTPS, tourism), Don Mitchell (DECPG, maize and tea), Tim O'Brien (consultant, standards), Vijay Raman (consultant, transport and trade facilitation), Andrew Sergeant (consultant, floriculture and horticulture), Andrew Singer (consultant, trade institutions), Dominique Van Der Mensbrugghe (DECPG, Doha and EPA simulations), and Peter Walkenhorst (PRMTR, regional trade agreements and market access). Dmitry Gershenson (IMF) provided the contribution on macroeconomic developments and prospects. The report has also drawn on the draft Trade Policy Review of the WTO provided by Arne Klau. The report has benefited from

[1] Uganda received US$300,000 from the first IF process which was used for the formulation of an Export Sector Strategy; support to the Inter-Institutional Trade Committee; and collation of studies undertaken on trade and trade-related areas.

comments on draft chapters and background papers from, and discussions with, Dino Merotto (AFTP2), Madhur Gautam (AFTS2), Sarah Kitakule and Ron Kopicki (AFTPS), and Frida Johansen (AFTP2). The peer reviewers are Peter Miovic (AFTP2) and Marios Obwona (Economic Policy Research Center, Kampala, Uganda). The report has been produced by Rosemary Mugasha (AFMUG).

The report has been prepared in close consultation with a core group of representatives of the Uganda IF Steering Committee comprising of representatives from the Ministry of Tourism, Trade, and Industry (MTTI), the European Union (EU) which is also the donor facilitator of the IF, the Private Sector Foundation of Uganda (PSFU), and the Economic Policy Research Centre (EPRC). Draft chapters and background papers have been distributed to the relevant ministries, private sector firms and organizations, research institutes and donors, and meetings have been held to discuss individual chapters and background papers. The DTIS team gratefully acknowledges comments received from MTTI, Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Ministry of Health (MOH), Department of Fisheries Resources (DFR), Uganda Revenue Authority (URA), Uganda National Bureau of Standards (UNBS), Cotton Development Organization (CDO), PSFU, Uganda Coffee Trade Federation (UCTF), Uganda Fish Processors and Exporters Association (UFPEA), Uganda Flower Exporters Association (UFEA), National Union of Coffee Agribusiness and Farm Enterprises (NUCAFE), Uganda Tea Authority (UTA), EU, EPRC. This report has also been reviewed by, and benefited from comments from, the IMF, UNCTAD, UNDP, the WTO, and the Swedish Embassy.

The DTIS extends its thanks to the representatives of the public and private sector agencies and institutions, civil society organizations, donor agencies, research institutes and universities who have shared their time and information, without which the report could not be produced. These include: MAAIF, Ministry of Foreign Affairs (MFA), Ministry of Finance, Planning, and Economic Development (MFPED), Ministry of Health (MOH), Ministry of Works, Housing, and Communications (MWHC), MTTI, Bank of Uganda (BOU), National Agricultural Advisory Services (NAADS) Secretariat, National Agricultural Research Organization (NARO), Coffee Research Institute (CORI), Fisheries Resources Research Institute (FIRRI), Kawanda Agricultural Research Institute, Uganda Industrial Research Institute, Lake Victoria Fisheries Organization (LVFO), Dairy Development Authority, National Planning Authority (NPA), the Plan for Modernization of Agriculture (PMA) Secretariat, Uganda AGOA Country Response Office, Uganda Bureau of Statistics (UBOS), Government Analytical Laboratory, Cotton Development Organization (CDO), Uganda Coffee Development Authority (UCDA), National Environment Management Authority (NEMA), Uganda Communications Commission (UCC), Uganda Export Promotion Board (UEPB), Uganda Investment Authority (UIA), UNBS, Uganda National Chamber of Commerce and Industry, Uganda Railways Corporation (URC), URA, Uganda Tourism Board (UTB), Uganda Wildlife Authority (UWA), Secretariat for the Medium Term Competitiveness Strategy for the Private Sector (MTCS), the Kenya Ports Authority, Mbale District Local Government, African Center for Trade and Development (ACTADE), Consumer Education Trust of Uganda, EPRC, FOODNET, SchoolNet, WOUGNET, Macaulay Associates Limited, Makarere University, Taibah Schools, Uganda Management Institute, TechnoServe, UMAIS consulting, Amfri Farm, Victoria Flowers, Jacksons Uganda Limited, Fresh Handling Limited, Britania Allied Industries, Fruits of the Nile, Xculsive Cuttings, Melissa Flowers, Wagagai, Pearl Flowers, Maiyre Estates, Balton Limited, Uganda Floricultural Association and Bamuhalu Flowers, Progress (Kenya), VegPro (Kenya), IMO, Agribusiness Management Associates Limited, Anova, AT Uganda Limited, Bee Natural Products, Chemiphar, Finlay Tea Estates, Ibero Uganda, Kawacom, Kaweri Coffee Plantation, C.N. Cotton, Greenfields, Lake Harvest, Icemark, Interfreight, Kenfreight, MAERSK, Transami SDV, Unifreight Cargo Services, Just Kicking, Land O'Lakes, Quality Cuts, Shoprite, Sheraton Hotel, Fish Merchant International Trading Company Limited, Flona Commodities Limited, Namugongo Fish Farm, SGS,

Ssemwanga Group, Top Quality Management, Aptech, Cayman Consults, Crystal Clear Software, Digital Solutions, Enterprise Uganda, Fit Uganda, Simba Telecom, TeleInVivo, Tourism Uganda, Uga Bytes, Uganda Computer Services, Uganda Export Service, Uganda Telecommunications Limited, Villagephone, Uganda Cleaner Production Center, Agricultural Council of Uganda, Uganda Co-operative Transport Union, Horticulture Exporters Association of Uganda (HORTEXA), Holistic Approach to Health Delivery, Federation of Associations of Uganda Exporters, PSFU, Uganda Coffee Trade Federation (UCTF), UFEA, UFPEA, Uganda Fish Packers, Uganda Fisheries and Fish Conservation Association, Uganda Grain Traders Limited, Uganda Leather and Allied Industries Association, Uganda National Dairy Traders Association, NKG Coffee Alliance Trust, National Agricultural Movement of Uganda (NOGAMU), Uganda Tea Association (UTA), Caltex, Development Finance Corporation of Uganda (DFCU), Stanbic Bank, Horticultural Crops Development Authority (Kenya), Utopia (U.K.), Danish Institute of for International Studies, Danish International Development Agency (Danida), Department for International Development (DFID) of the UK, Royal Netherlands Embassy (RNE), Swedish International Development Corporation (SIDA), Uganda Programme for Trade Opportunities and Policy (UPTOP) supported by the EU, Agricultural Productivity Enhancement Program (APEP), FISH, Productive Resource Investments for Managing the Environment (PRIME/West), Rural Savings Promotion and Enhancement of Enterprise Development (Rural Speed), and Strengthening the Competitiveness of Private Sector (SCOPE) supported by the United States Agency for International Development (USAID), USAID, Food and Agriculture Organization (FAO), International Food Policy Research Institute (IFPRI), United Nations Industrial Development Organization, and the World Food Program (WFP).

EXECUTIVE SUMMARY

The extensive and sustained economic reform program that Uganda has been undertaking since 1987 has been associated with a very impressive growth performance. During the decade of the 1990s, Uganda attained one of the highest *per capita* real GDP growth rates in the world—albeit from a low base—of 3.4 percent, double that of the 1.7 percent for all developing countries. Largely because of the strong economic growth, the poverty incidence fell sharply, from 56 percent in 1992/93 to 38 percent in 2002/03.

Growth, still impressive, has slowed in recent years, from an annual average of 6.9 percent in real terms during 1989/90-1998/99, to 5.5 percent during 1999/00-2004/05. While 5.5 percent is still a very respectable growth rate, the slow-down in growth has raised concerns among the Ugandan authorities over future growth prospects.

The recent slowdown in growth is due to a large extent to the slow-down in private consumption, which likely reflects a return to more normal trends after high levels in the post-conflict period. The concern, however, is that the slack has not been picked up by more sustainable sources of growth, in particular from private investment and exports, which brings to the fore the need to focus efforts in these areas. A parallel report being prepared by the World Bank, the Country Economic Memorandum for Uganda, will, amongst other issues, analyze recent trends in productivity, employment, and investment. The DTIS focuses on how to sustain export growth, although private investment and exports are obviously linked (the former being the source of the latter). Indeed, the key investment climate issues discussed in the DTIS are equally important for both private investment and exports; they are also the key issues facing foreign investors.

Export growth contributes to overall economic growth, which in turn is the key to reducing poverty as evidenced by experiences world-wide as well as in Sub-Saharan Africa (SSA). However, the benefits of high growth—including those from export growth—may not reach some of the poorest households. This is underlined by the finding of the recent Uganda Poverty Assessment Report (World Bank) of growing inequality in the country, including that between rural and urban areas. Accordingly, improving agricultural incomes would need to be the cornerstone of Uganda's poverty reduction strategy; in addition, non-farm earning opportunities need to be increased to absorb the rapidly growing labor force. On the trade front, this means that promoting traditional agricultural exports is important while at the same time supporting the continued diversification of exports.

Uganda has made important progress in diversifying from traditional exports, partly due to the emergence of non-traditional exports (in particular fish, cut flowers, and maize), and partly due to the decline in traditional exports (in particular coffee). Exports of coffee—which had driven the high merchandise export growth in the first half of the 1990s—have been falling since the mid-1990s, in part due to the decline in international prices, but also due to the coffee wilt disease and the unsuccessful GOU coffee replanting program. By 2004/05, fish exports had overtaken coffee exports as the largest merchandise export item from Uganda. Services exports have also become more important, in particular tourism.

These trends in Uganda's exports reflect its competitive advantages, which are based on two distinctive factors—its landlocked status which results in high transportation costs for both exports and imports; and its natural advantage in agro-based products. Accordingly, in the international markets, Uganda's competitive advantage lies in those products which are based on domestically produced inputs and raw materials, as well as those which have high value-weight ratios (fish and cut flowers are prominent examples). In the regional markets, Uganda has a

competitive advantage in some agricultural products, in particular in maize, with Uganda being a surplus producer surrounded by mostly maize deficit countries. It appears to also have a competitive advantage in some manufactured goods with respect to countries/regions that are even more landlocked than itself, such as southern Sudan, eastern Democratic Republic of Congo (DRC), and Rwanda. DRC and Rwanda are among Uganda's top 10 export partners, and metal products are amongst the top exports to these countries. Finally, Uganda could also aim to develop a competitive advantage in service exports, for which high transport costs would not be such an important constraint.

There are economy-wide and sector-specific constraints to stronger export performance in Uganda. Addressing the former would help provide a stronger enabling economic and business environment to support the expansion of existing exports, as well as the diversification into other exports such as manufacturing and information, communication and technology (ICT). However the provision of an appropriate enabling environment by itself may not be sufficient, and there may also be sector-specific constraints to exports that need to be tackled. This report addresses both these sets of issues.

ECONOMY-WIDE ISSUES

Economy-wide issues include those that can be addressed domestically (either by the government and/or the private sector possibly with donor support) or externally (either in a regional context or in a multilateral arena). It should be noted that virtually all aspects of the development agenda—ranging from education, health, taxation, governance, business environment, financial sector development, and so on—could affect trade performance The analysis in this report focuses on the more trade-related aspects. Complementary analysis on factors important for export diversification is being covered in the forthcoming CEM.

With respect to domestic issues, Uganda has performed well in some important areas. It has achieved macroeconomic stability, with inflation being at single digits since the mid-1990s. Although Uganda's high aid inflows have given rise to concerns about the emergence of "Dutch Disease", the real exchange rate remains substantially more depreciated than in the mid-1990s despite a slight reversal of this trend in recent years (and a slight slowing of real merchandise export growth). Moreover, many other factors determine export competitiveness—including all the behind-the-border issues addressed in this report. Nonetheless, since Uganda is likely to continue to be highly aid-dependent for the foreseeable future, it is important that aid (and public expenditures) be optimally utilized for generating growth in the country. Using aid flows to strengthen infrastructure (which are also priority areas for attention—see below) would support this aim.

Uganda has also made good progress on the institutional front. With respect to the business environment, Uganda does well (ranking in the top third among some 150 countries and better than most other Sub-Saharan African countries) in contract enforcement, labor flexibility, and the closure of business. Although the level of corruption in Uganda is no worse than the average of other countries at a similar level of economic development, Uganda can certainly make improvements in this area which will increase its competitiveness by reducing the cost of doing business and by making itself more attractive to foreign investment.

Much more attention needs to be given to infrastructure. *Power* is the immediate priority, followed by *transport*. Access to, and high cost of, *finance* need to be addressed, and various measures are also recommended for trade policy; regional trade arrangements; customs; sanitary, phyto-sanitary (SPS) and other trade-related standards; and trade-related institutions. Addressing

them will certainly facilitate trade which will help the poor by enhancing growth; some recommendations also have a directly beneficial effect on the poor.

Power

Power shortage has long been an important constraint, and has recently reached crisis proportions because of low water levels in Lake Victoria, from which Uganda derives its main source of power—hydropower. Running a generator is 2 to 6 times more expensive than obtaining electricity from the public grid for a Ugandan manufacturing firm (2 times for larger firms and 6 times for smaller firms). Such costs have further been exacerbated by the world oil price increase. Reducing the cost of energy would reduce the costs of production in Uganda. This is crucial for maintaining the competitiveness of existing exports which depend on energy to greater or lesser extents: flower and horticulture exporters require energy for cold stores, processing equipment, and irrigation; fish exporters require electricity to make ice to maintain the quality of fish throughout the supply chain and for cold stores; manufactured exporters require energy to run their factories; tourism operators need energy to run their hotels and restaurants; ICT exports need energy to run computers; and transportation of all exports require fuel. Reducing the costs of energy could also lead to the emergence of new export products (for example in manufacturing and ICT) once this potential binding constraint is relaxed.

More permanent relief from the power shortage situation is not expected until 2010, when the Bujagali dam is expected to be operational. In the interim, GOU is planning to install thermal power, which will be expensive. The current situation in Uganda is imposing serious costs on the private sector, which is requesting GOU to provide tax exemptions on diesel for their generators. Appropriate modalities would need to be worked out to ensure that exemptions are time-bound and not abused.

Transport and Trade Facilitation

By virtue of its landlocked status, Uganda is automatically disadvantaged with respect to transport and trade facilitation (TTF). Not only does it have to incur additional costs arising from the greater distance to the sea ports, it also needs to bear costs arising from TTF issues in its littoral neighbors which are outside of its control. In Uganda's case, such issues are arguably more constraining than those that are under its control.

Of the TTF issues outside of Uganda, the most important one is congestion at Mombasa Port, which handles 95 percent of Uganda's external trade traffic. Customs bonds add a substantial 4 percent to the costs of export and import commodities transiting through Kenya. The poor performance of rail transport in Kenya necessitates intensive use of higher cost road services. Finally, the cost of transportation of petroleum products by pipeline is excessively high because of the lack of competition from the railways.

There are also several TTF issues within Uganda. First is increasing congestion around Kampala, the transport hub for most of Uganda's exports and imports, which could fast become a constraint to trade expansion. Second is high costs of road transport due to high tariffs on freight vehicles (raised from 7 to 25 percent with the introduction of the CET), and slow refund of VAT to freight companies. (Oil company margins also appear high although the reasons behind them need further analysis). Third is the need to expand air freight infrastructure and facilities. Fourth is potential anti-competitive behavior of railway concessionaire (of the Northern Corridor) as it would also concession the ferry services that serve the Central Corridor; with respect to access of all inland container depots (ICDs) to railway services in the event that the railway concessionaire establishes its own ICD; and with respect to petroleum transport after the construction of the

pipeline from Eldoret (Kenyan side) to Kampala. Finally, rural roads are poor which reduce returns to farmers.

Several of these TTF issues need to be addressed in conjunction with partners in the East African Community (EAC). The most important is addressing the problem of port delays, including the use of electronic data interchange (EDI) of transit related information and improved cargo tracking (the Global Positioning Satellite). Second is finalizing the joint concessioning of the Kenya and Uganda railways which would provide competitive pressures on road transport services and on petroleum transport. Third is reviewing the CET tariff on heavy freight vehicle imports taking into account fiscal implications. Fourth is reducing or removing the requirement for customs bonds, particularly when major clearing and forwarding firms are involved.

Given the many TTF issues that are outside of Uganda's control, it is all the more important for Uganda to address those issues within its control. First is to expedite approval and implementation of the Master Plan for the Greater Kampala Metropolitan Area. Second is to expedite refunds of VAT (in this context for transport operators but obviously also more generally). Third is to invest in freight infrastructure and facilities at Entebbe Airport, and accelerate the rural road connectivity program. And fourth is to ensure the independence of the proposed Multi-Sector Transport Regulatory Authority to control potential anti-competitive behavior indicated above.

Finance

High costs of finance and low credit market participation appear to constrain growth in Uganda. High costs of finance appear to be mainly driven by high overhead costs, including high costs of power and telecommunications. Reducing the costs of power (discussed above) will also help reduce the cost of telecommunications (see later), both of which will help reduce the costs of finance. In addition, improvements in the contractual and informational frameworks could increase credit market participation.

Trade Policy

Prior to joining the East African Community (EAC) Customs Union (together with Kenya and Tanzania) and adopting the Common External Tariff (CET) in January 2005, Uganda had one of the most liberal trade regimes amongst developing countries, with tariff levels actually close to those in developed countries (and even lower in agriculture). Adoption of the CET has raised both the levels as well as the escalation of tariffs in Uganda, and has reduced the competitiveness of some import-dependent industries. Perhaps more importantly, adoption of the CET has been anti-poor—in particular the urban poor—given the large increase in tariffs on food which makes up a larger share of the expenditures of the poor than the rich. The anti-poor effect is exacerbated by the fact that for 58 "sensitive products" not included in the CET, special tariffs ranging up to over 100 percent apply, with resulting likely higher consumer prices being more harmful for low-income consumers who depend heavily on the basic products included in the sensitive list (such as milk, grains, used clothing, and sugar). Adoption of the CET has also brought the risk of welfare-reducing trade diversion, with Uganda substituting more expensive imports from its EAC partners for less expensive imports from more efficient producers in third countries. In light of these negative effects of the CET, Uganda would be well advised to push for reductions in the CET at the 2009 review. It is also recommended that Uganda, in consultation with its EAC partners, establish a time-table for the phase-out of special tariffs on "sensitive products".

Uganda has a generally liberal export regime. One issue that requires attention is the 20 percent export tax on raw hides and skins adopted for the purpose of developing a domestic tanning and

leather industry. It is not clear that this strategy would work since the main problem of the sector is the poor quality of hides and skins due to poor nutrition, diseases, and so on. Moreover, cross country experience indicates that export taxes generally induce smuggling. Finally, and perhaps most importantly, such a tax depresses prices to the producer; in Uganda's case, poverty would likely be worsened since livestock farmers are amongst the poorest in the population.

Regional Trade Arrangements (RTAs)

In addition to the EAC, Uganda is also a member of the Common Market for Eastern and Southern Africa (COMESA), as is its EAC partner Kenya. Its other EAC partner, Tanzania, is a member of the South African Development Community (SADC). Since COMESA and SADC intend to form customs unions in the medium-term which will entail their own CETs, and one country realistically cannot adopt two different CETs, let alone the customs and fiscal integration that are basic components of fully functioning customs unions, Uganda (and its EAC partners) will be confronted with the choice of which agreement to go with.

Another problem stemming from overlapping RTA membership relates to conflicting commitments and trade deflection. Specifically, EAC members are allowed to continue their existing obligations to SADC and COMESA, and imports from member countries in these RTAs are exempt from the EAC CET. This means that border controls will need to be maintained to ensure that EAC preferences are not extended to these other countries. In other words, EAC is not effectively functioning as a customs union as there is no free internal movement of goods between EAC members (quite aside from the fact that there is a transition period with respect to Kenyan exports to the other 2 EAC partners).

One way to alleviate the drawbacks of trade deflection and conflicts of overlapping RTA membership is for Uganda to reduce external trade barriers—by reducing the CET as well as by joining the COMESA Free Trade Area.

Customs

Uganda has launched a comprehensive reform program to improve customs administration in the context of an overall reform and modernization program of the Uganda Revenue Authority (URA). Significant progress has been made in some areas, and commentary from various private sector groups has been positive. The most important priority now is successful implementation of ASYCUDA++. Priority attention is also needed for developing and issuing regulations under the EAC Customs Management Act.

Other measures that would help facilitate trade include operationalization of the post-release audit unit by acquiring appropriate staff and securing necessary training. A risk-based approach should be implemented for: (i) physical inspections of exports involving duty drawbacks and VAT refunds as the current system of physically inspecting many consignments regardless of the exporter's compliance record is inefficient; (ii) in-transit bonds; and (iii) extending inland container depot and warehouse license periods. Valuation practices at border stations should be reviewed to ensure effective application of WTO rules. It is also recommended that a World Customs Organization (WCO) time release study be undertaken to provide diagnostic information on processing and clearance bottlenecks and clearance times. Customs consultation processes with other agencies and the private sector should be formalized and regularized, and the development and implementation of the URA integrity program accelerated.

Sanitary, Phyto-sanitary (SPS) and Other Standards

Uganda has developed pockets of enhanced SPS/quality management capacity that have evolved in response to export market requirements (such as for fish) or acute SPS problems (such as certain animal diseases), typically supported by donors. But it lacks a broader strategy to utilize agro-food standards to enhance its international competitiveness and to protect human, plant, and animal health.

Uganda faces potential risks of market access problems related to some of its more important exports. Most critical is the case of fish exports to Europe, for which additional measures are needed to improve hygiene and safety in the fish export supply chain. Such measures, including changing the policy/strategy for investment in landing site upgrading (see later discussion on sub-sector issues), will help reduce the high losses of caught fish, hence improve the sustainability of the resource, and increase capacity utilization in the fish processing industry.

Other more readily manageable SPS-related challenges facing Uganda's trade include potential risks of mycotoxin contamination of Ugandan maize and coffee which can be minimized by investments, advisory services, and field testing. There is also a need to rationalize and improve the performance of its national network of laboratory testing facilities.

Despite the enormous amount of development assistance geared towards promoting Uganda's agro-food exports, there has only been modest success in fostering the development of sustainable SPS/quality management capacities. Attention should now be focused on establishing a coherent and agreed-upon vision for promoting and managing standards to improve export competitiveness and increase returns to primary producers, traders, and processors. Some incremental technical assistance and investment is needed, but of equal or greater importance are: (i) development of improved strategies; (ii) more clearly prioritizing investments and other capacity-building needs; (iii) shifting resources towards awareness-raising and promotion of basic/good practices among primary producers, enterprises and regulatory agents; (iv) better defining the roles and responsibilities of different players; and (v) intensifying the levels of collaboration—within the private and public sectors, between them, and among donor agencies—in the implementation of agreed strategies and programs.

Trade Policy Institutions

Capacity limitations in the Ministry of Tourism, Trade, and Industry (MTTI) have resulted in other ministries (most notably the Ministry of Finance, Planning, and Economic Development (MFPED)) stepping in to fill the vacuum of trade policy making. This has precipitated a vicious circle whereby MTTI steps back even further, resulting in even less money being made available to it. The first step in addressing this challenge should be expeditious approval by the Ministry of Public Service (MPS) of the 2004 functional analysis plan, followed by MFPED approval of funding for the plan. A consultant with specialist skills in public sector change management should be hired to support implementation.

Capacity limitations of MTTI have undermined the effectiveness of the Inter-Institutional Trade Committee (IITC). The functioning of ITTC could be improved by having committee meetings chaired by members from outside GOU, and by providing training to IITC sub-committee members. IITC should also be given legal status so it can raise donor funds for specific studies and projects. These efforts should displace the proposal in the functional analysis plan of setting up a separate liaison group (the Export Growth Group).

To ensure that trade will continue to be incorporated into the PEAP, the terms of the National Trade Policy (NTP) currently under preparation should be fully consistent with the PEAP. The NTP should also include an explicit statement on the lead role of MTTI in trade policy making, as well as a full analysis of the trade policy issues facing Uganda covering say, the next 3 to 5 years, to guide MTTI in allocating its resources. This exercise should be repeated annually, on a rolling basis, either in the NTP itself or separately.

Export Development Institutions

Since export development in most developing countries including Uganda is mostly concerned with addressing supply side constraints, the Uganda Export Promotion Board (UEPB)—hitherto focused on market entry services—needs to be restructured into a new body with a clear supply-side focus to better meet private sector demands. This new body should be independent, such as a corporation, with its board composed primarily of active exporters.

Further, since export development is really an element of private sector development (PSD), the adequacy of the existing institutional framework for PSD is important. Uganda lacks an effective high-level institutional framework devoted to PSD. There is also no overall GOU PSD strategy although there have been overlapping initiatives aimed towards supporting PSD, most notably the medium-term competitiveness strategy (MTCS) and the strategic export program (SEP). Now that the SEP appears to have been terminated, the MTCS should evolve into an overall National PSD Strategy, supported by and linking into the PEAP. The Presidential Investors Round Table should feed consultations at the highest level into the National PSD Strategy.

The National PSD Strategy, given its cross-cutting nature, will require a high level coordination mechanism to ensure the involvement of the different line ministries and agencies. Along the lines of the ITTC, such a mechanism could have subcommittees dealing with specific sub-sectors or industries having good growth potential or specific supply-side constraints, and coordination should extend beyond government ministries to the private sector.

SUB-SECTOR SPECIFIC ISSUES

The selection of sub-sectors for more in-depth analysis is based on extensive consultations with stakeholders in Uganda (GOU, the private sector, donors, and civil society organizations). Two criteria were used in their selection: Uganda's competitive advantage in them (as discussed earlier), and/or their importance for poverty reduction. With respect to the latter, agriculture is clearly important,[2] and within agriculture, coffee and maize are particularly important since those engaged in their production are less likely to be poor than those engaged in other kinds of crop farming. The selected sub-sectors which meet one or both criteria are: fish, floriculture and horticulture, tourism, ICT, and agricultural crops (coffee, cotton, and tea). With respect to maize, this report covers only the issue of standards (see above); other pertinent issues will be covered in the forthcoming CEM. The sub-sectors selected do not represent an exhaustive list of those in which Uganda has competitive advantage; however, they can provide "quick wins" since Uganda has already demonstrated export potential in them. With respect to sub-sector issues, the most important priority is to address the coffee wilt disease and restructuring of the coffee replanting program.

[2] It is also part of the generic terms of reference of the DTIS that agricultural crop exports are covered given their importance for poverty reduction.

Agricultural Export Crops

Boosting agricultural crop exports is essential for poverty reduction. While diversification from such exports is important in light of the trend decline in commodity prices, crop exports will remain important for some time to come because of the large numbers of people who depend on them as the main source of income. Further, the importance of agricultural export growth to long-term economic growth is supported by the very successful experience of many of the currently middle-income countries, including Brazil, Chile, Morocco, and Thailand.

The 3 agricultural export crops—coffee, cotton, and tea—analyzed in the DTIS made up around 28 percent of Uganda's merchandise exports in 2004/05, and were the main sources of income for around 17 percent of the population. Of these three, coffee is by far the most important, contributing to around 18 percent of total merchandise export revenues, and being the main source of income for 11 percent of the population. This is followed by cotton (5 percent of merchandise exports and 5 percent of population) and tea (4 percent of merchandise exports and 1 percent of population). While coffee exports had fallen significantly from the peak reached in the mid-1990s, cotton and tea exports had been fluctuating around an upward trend, with cotton exports in 2004/05 reaching their highest level in a decade.

The differing performances of these 3 sub-sectors reflect, in part, differing trends in their international prices. Although coffee prices have been rising in the last 3 years they are still far below the peaks reached in the mid-1990s, while cotton and tea prices have been fluctuating around a relatively flat trend over the last decade. More importantly, they reflect crop-specific issues, the addressing of which would increase their production and exports even in the context of long-term declines in international commodity prices.

Coffee. The main issue with coffee is the coffee wilt disease (CWD) which has affected more than half of the robusta trees (over 80 percent of Uganda's coffee is robusta). The loss due to CWD is around 44 percent of the estimated 2005/06 output, and around one-quarter of recent export revenues. The problem has been exacerbated by the failure of the government coffee replanting program introduced in 1992/93 aimed at replacing old robusta trees with high-yielding varieties, and later also at containing CWD.

Efforts by the Coffee Research Institute to develop coffee wilt resistant varieties should be accelerated. The coffee replanting program needs to be restructured. Although officially still in place, the program has been stopped by the administering agency—the Uganda Coffee Development Authority (UCDA)—since May 2004. This is the least desirable scenario, as farmers are still awaiting the distribution of seedlings that are not coming, which means that little replanting is being undertaken. GOU needs to either formally announce the termination of the program or restructure it to correct for its many drawbacks. Finally, with Uganda producing only half the coffee it can sell to existing European partners without any loss in the price premium it fetches, the various efforts and strategies to diversify export markets and products do not seem to be a priority at the moment. Further, such strategies have little impact on poverty since the returns to farmers would be the same regardless of where coffee is sold, whereas increasing production through tackling CWD and a restructured coffee replanting program would be greatly important for poverty reduction.

Cotton. The main issue with respect to the cotton sector is improving profitability, which would depend in part on raising yields. The recommendation here is for GOU to accelerate the adoption of genetically modified (GM) cotton, which has been adopted by major cotton producers worldwide and which has resulted in substantially increased yields particularly in developing countries (for instance a 19 percent increase in China and an 80 percent increase in India). The

other issue facing cotton is the practice of announcing indicative prices by the Cotton Development Organization (CDO). If the objective is to provide information to smallholders to make their marketing decisions, then the announcement should be made more frequently rather than only at the beginning of the season which is the current practice. Alternatively, if indicative prices are meant to be guaranteed prices to growers, then they should clearly be announced as such, in which case ginners would need to hedge their exposures. Finally, with respect to value-addition in cotton, the potential in garment and textiles exports is low, with high transport costs (because of Uganda's landlocked status) being one of the main constraining factors. Opportunities may exist in niche markets such as clothing with heritage/craftsmanship characteristics. Uganda may also be competitive in cotton yarn exports if cheap and reliable energy is available.

Tea. The tea industry has been performing well as a result of liberalization and privatization, with a record high production of 37,000 tons in 2004. The main issue here is to ensure an appropriate role of the government. There are risks that some of the proposals in the recently prepared draft National Tea Development Policy would undermine achievements in this sector, in particular in areas where private sector management and decision are infringed upon, such as encouraging labor-based technology to create employment; or ensuring tea factories continue to establish ample woodlots for tea processing. One area where joint public-private activity is warranted is research, which is important given the need to increase the sector's competitiveness in light of the expected decline in international prices. Tea research could get a kick-start from public funding, but the industry would need to continue the funding and direct the research program.

Floriculture and Horticulture

Floriculture has emerged as the third largest non-traditional export after gold and fish. Horticulture exports are much less important, dominated by fresh fruits and vegetable exports with small amounts of processed fruits (mostly dried fruits) exports. Floriculture exports employ around 6000 people, while international export horticulture employ around 2,900.

The key to continued rapid expansion of floriculture is the expansion of a significant cluster of production at high altitudes which will diversify the industry both geographically and by product. This requires: identification of the most suitable areas for high altitude products; developing infrastructure (feeder roads and electrification; assessing adequacy of main roads from production areas to Entebbe Airport); undertaking trials to identify best varieties and agronomic practices; and facilitation of land purchases and other permissions. In addition, the cold store at the airport needs to be expanded. There continues to be need for training and for a chief executive officer (CEO) of UFEA to help with the diversification efforts.

Considerable support has been provided to horticulture exports over the last 10 years by donors. After much trial and error, only one vegetable export has been successfully developed—Scotch Bonnet peppers—for which Uganda has been a competitive supplier to the "ethnic food" market in the U.K. This may be due to such factors as: Uganda's climate not favoring the growing of many of the high-value horticultural crops demanded in Europe; the lack of commercial farms to start a large horticultural export sector; and the well-established Kenyan horticultural export industry which is a formidable competitor for Uganda. Within the region, Uganda's horticultural exports are dominated by bananas to Kenya, with small amounts of pineapples and melons. There is potential to increase regional horticultural exports to Kenya and perhaps also DRC and Sudan. Processed horticultural exports have been constrained by: high transport costs (due to Uganda's landlocked status); small local and regional markets for achieving economies of scale; expensive raw materials—Uganda does not produce much of the fruit that is required for fruit

juices (apples and grapes) necessitating imports of raw materials and even when local fruits are used the scale of production is too small to ensure steady throughput through the year at sensible prices; expensive packaging that needs to be imported; and expensive and unreliable electricity. This varying potential in horticulture exports (greater in regional markets but perhaps less in international markets and for processed products) should be taken into account in allocating resources to the sector for actions identified in the Action Plan. Finally, horticulture contributes to export earnings through supplying to the tourism industry—expansion of the latter (see discussion later) would certainly benefit horticulture.

The initiative of the Ministry of Agriculture, Animal Industry, and Fisheries to raise applicable standards and increase the level of official oversight and inspection of the industry is inconsistent with its low export potential. More worrisomely, it could undermine the little exports that are taking place—much of which destined for the ethnic/migrant Ugandan communities in Europe—for which there is practically no official or private buyer concern over food safety matters.

Fish

Fish exports have grown rapidly over the last decade to become the largest merchandise export item. The fishery sector is very important for poverty reduction: it is the main source of income for some 266,000 households, equivalent to around 1.2m. people or 4 percent of the population. Those engaged in fishing (including fishers, boat owners and crew, and those employed in fish processing factories) have higher incomes than even those engaged in manufacturing, and certainly higher than those engaged in agricultural export crops.

The fisheries sector faces three very significant challenges: sustainable exploitation of capture fisheries; upgrading landing sites; and development of aquaculture. Excessive capture fishery exploitation is threatening stock collapse and loss of supplies for exports. A much clearer regional initiative (involving Kenya and Tanzania) is needed to bring fishing capacity within sustainable limits. Meanwhile, a unilateral national policy on fishing capacity limits could demonstrate the principle of responsible fishing. Establishing fish capacity limits would entail first establishing the number of licenses at the national level, followed by allocation of access rights by community management structures. This requires the emergence of strong and functional beach management units (BMUs) which need to be empowered with legally enforceable resource usage rights. Such developments are also essential to address the issue of deficient hygiene standards at landing sites, which exposes Uganda's fish exports to risks of future EU bans.

GOU currently considers landing sites as public infrastructure and, together with donors, have assumed responsibility for their development. But there are many drawbacks to this approach, including slow mobilization of and insufficient funds; centrally planned approach which risks resource misdirection; lack of ownership at the fishery level leading to poor management of facilities; deterrence to private investment because of government involvement; and conflicting roles of government being the developer and enforcer of regulations of the sites. It is recommended that GOU publicly withdraw from the development of facilities at landing sites and leave their development and management to BMUs.

Finally, development of aquaculture is the way forward in view of the sustainable resource issue. This requires establishing an appropriate regulatory regime (streamlining system of permits and improving controls over potential hazards from feeds and veterinary medicine inputs); providing training with a much greater focus on practical skills; introducing a credit scheme for investment financing; having GOU withdraw from investment in hatcheries and undertake a geographic information systems-based aquaculture mapping exercise and designating aquaculture

development zones (ADZs) based on suitable environmental criteria. ADZs could also be the focus of rural infrastructure development.

Tourism

Tourism is in a nascent stage in Uganda, having only been restarted in the early 1990s after its collapse in the 1970s and 1980s due to the political and economic turmoil in the country. Prior to the collapse, however, Uganda was an important tourist destination in Africa, receiving in the 1960s a similar number of tourists as Kenya and certainly more than Tanzania. The exact contribution of tourism to foreign exchange earnings is unclear, ranging from US$197m. according to the Bank of Uganda (BOU) in 2004, to US$444m. according to the Uganda Bureau of Statistics (UBOS), and much lower according to World Bank estimates (an estimated 45,000 tourists per year rather than the official UBOS figure of 512,000 tourists per year). The number of people employed in the tourism industry ranges from 21,000 in direct employment up to 240,000 in indirect employment (including informal employment such as street vendors catering to tourists). Tourism is important for poverty reduction both directly and indirectly. On a direct basis, those who derive their main source of income from tourism are better off than those employed in other kinds of services, fishing, manufacturing and agriculture. Indirectly, tourism provides incomes to those engaged in the production of goods that supply the tourism industry.

The most important issue facing tourism is security, in particular the insurgency in the north which is the main factor behind the negative image of Uganda in international markets. Improved security and safety in the north is a top priority. Second, stronger GOU commitment to tourism is needed; the recent promotional films produced by Cable Network News (CNN) featuring President Museveni leading a tourist on a gorilla walk is an important step in this direction, as is the passing of the Tourism Bill. Stronger political commitment would help improve the coordination of GOU planning, implementation, policy development and institutions related to the tourism sector. Better understanding of the economic impact of tourism, including its linkages to poverty reduction objectives, would also help to obtain greater GOU buy-in at all political levels. This will require collection of information (through annual exit surveys) which will allow some interpretation of the distributional aspects of tourism income at a regional level. Third, there needs to be focused and innovative product and market development. It is recommended that a product development strategy with growth strategies for 5 market segments be developed: adventure/activity-based tourism; regional packages; foreign residents (and their visiting friends and relatives); domestic residents; and specialized activities (such as hot-air ballooning; luxury camping; tourist rail journey from Nairobi to Jinja and Kampala; tourist ferry between Tanzania, Uganda, and Kenya; and regional air charter services flying into the National Parks). Fourth, Uganda needs to do more to market its existing products, using part of the tourism levy (just passed into law) for this purpose. Finally, training should be strengthened in such areas as basic marketing and sales; food preparation and production; health, hygiene and safety; administration; customer care; and product knowledge.

Other Services

ICT is a nascent sub-sector in Uganda, with most players in the field having been in operation for only a few years. ICT exports have increased tremendously since they emerged in 1997/98, from US$0.2m. that year to around US$25m. in 2004/05, three-quarters of which (US$19m.) were exports of communication services (telephone, electronic mail, faxes, etc.) and the remainder (US$6m.) were exports of computer and information services including databases, data processing, software, etc.

The potential of Uganda in call centers remains to be determined in light of some key factors that are important for these exports such as accent and perception of the country, while it has some potential in software development exports. A major constraint that needs to be tackled with respect to both these types of ICT exports is development of both the national and the international backbone. With respect to the national backbone, a national fiber optic network needs to be developed which will first require a feasibility study to help GOU determine where investments going forward should be made, and whether an "open access" model should be adopted. Such a model, which is considered the cutting edge of service and infrastructure provision, would leave infrastructure provision in one entity (the government or private-public partnership), while competition takes place in the form of service provision that feeds off of backbone infrastructure. A private-public task force needs to be created to evaluate the different options and make recommendations for going forward, and the newly-created Ministry of ICT needs to be empowered to direct discussions and take action.

With respect to the international backbone, Uganda is looking into linking into the East African Submarine System (EASSy), a submarine optic cable system that would link the East African seaboard from Durban, South Africa, through Mozambique, Madagascar, Tanzania, Kenya, and Djbouti. The EASSy Project has been delayed by disagreements over the financing and ownership structure of the Project, with the consortium of 31 telecommunications companies favoring a members-only ownership structure, while an "open access" model is favored by the New Partnership for Africa's Development (NEPAD) and the World Bank (which will fund the Project if the "open access" model is adopted). Kenya, which objects to the "open access" model, is considering withdrawing from the Project, in which case Uganda would have to consider alternative options for accessing the international backbone, including collaborating with Kenya in the latter's construction of its own parallel cable rivaling that of EASSy.

MARKET ACCESS ISSUES

Addressing the cross-cutting and sub-sector specific constraints discussed above may not be sufficient for promoting Uganda's exports if there are barriers to entry in Uganda's external markets. Overall, Uganda does not face high tariff or non-tariff barriers to its exports, although it faces high tariffs among the world's top 20 importers of its major exports (fish fillets, coffee, tea, tobacco, and cotton), particularly so in the middle-income countries. While this is not an issue currently, since such Ugandan exports have not yet reached their potential in existing (mostly European) because of production constraints, this would still be a useful area for Uganda to focus on at the Doha negotiations, particularly in light of the importance of these exports for poverty reduction.

Tariff barriers are lower in developed countries, on top of which most extend trade preferences to Uganda that dilute the effects of tariffs as well as tariff escalation. Ugandan exporters have been able to meet the requirements of preferential treatment (including rules of origin) on a consistent basis in its main export market, the EU. It would therefore appear that tariff barriers in the European market do not pose much of a constraint to Ugandan exports.

One issue that has emerged as a potentially important one for LDCs in the context of the current Doha negotiations relates to preference erosion (reduction of tariffs by developed and developing countries would expand exports from competing countries to the detriment of the poorer developing countries that currently benefit from trade preferences). Analysis indicates that the overall Doha effect on Uganda would be small (around -0.2 percent of GDP). There are some significant effects on individual sectors, in particular raw cotton and dairy products which are expected to gain around 6-7 percent in value-added. Clearly Uganda would have to address

supply constraints to actually benefit from such a scenario; in the case of cotton the adoption of GM cotton is particularly important.

Uganda is in the middle of negotiating an Economic Partnership Agreement (EPA) with the EU. EPA will not improve the preference margins Uganda currently enjoys in the EU market although one issue that may be important is for Uganda to obtain rules of origin (ROO) provisions under EPA that are at least as favorable as those currently enjoyed under Cotonou. Specifically, Uganda should try to obtain "cumulation" (imported inputs processed in other beneficiary countries being allowed for Uganda's exports to the EU), rather than the more restricted "diagonal cumulation" under Everything But Arms (only inputs imported from other beneficiary countries in the same regional grouping are allowed). Uganda could use the negotiations to request EU support for addressing transport and trade facilitation measures that would help reduce Uganda's disadvantages as a landlocked country. Uganda might also use the negotiations to lock in and advance reforms in its domestic services sector.

Uganda faces two issues in regional markets. First is conflicting ROO arising from the different RTAs Uganda is party to. This could force firms to focus on only certain export destinations as they might need to produce differently to receive preferential treatment in different markets. It could also be extremely costly for firms to show compliance with ROO that vary across different agreements. Multiple origin schemes further place a burden on the administrative capacity of customs services, and may be subject to abuse. It is therefore recommended that Uganda pushes for simple, non-restrictive ROO specifications in RTAs it is party to. Finally, Uganda can enhance its regional trade linkages by joining the COMESA Free Trade Area.

CONCLUSIONS AND STRATEGIC ISSUES

Uganda has made important economic achievements since embarking on the major economic reform program in 1987. There is macroeconomic stability, growth has been impressive and has been associated with large declines in poverty. There has been diversification of exports from traditional products, but the contribution of exports to growth remains low.

The recent slow-down in economic growth has brought to the fore the need to promote higher growth in private investment and exports. This report has found that the main constraints to export expansion in Uganda are supply-side ones, with power and transport being amongst the most important cross-cutting constraints. With respect to individual sub-sectors, addressing the coffee wilt disease and restructuring the coffee replanting program are top priorities given the importance of coffee exports as a source of foreign exchange earnings and for poverty reduction. Tariff and non-tariff barriers in accessing external markets are less important, although urgent attention needs to be paid to meeting SPS standards for fish.

The detailed agenda for export development is presented in the Action Plan below. Implementation of this agenda requires effective partnerships—between Uganda and its EAC partners; between government ministries; between GOU and the private sector; between Uganda and its development partners; and between the development partners themselves. In some cases, these partnerships have worked well; in other cases, not so much. The following issues merit attention.

EAC partnership. Notwithstanding the benefits of joining the EAC, the costs are high: the CET has raised tariffs on trucks substantially; it is anti-poor; and it could lead to trade deflection. In addition to working with its EAC partners to lower the CET, Uganda needs also to work with them on those key behind-the-border issues important for trade that could only be solved in a regional context—such as transport and trade facilitation. Uganda could advance its own

interests within the EAC partnership by taking into account the wide spectrum of common concerns in its negotiations with those partners.

Appropriate role of government. The scaling back of government involvement in productive activities in Uganda since the economic reforms started in 1987 has undoubtedly been very beneficial to promoting growth in the economy. The recent slow-down in growth seems to have precipitated interest in greater public sector intervention in some areas. There is a risk that such interventions can undermine the progress made so far—such as in the tea sector, or in mandating certain standards for horticulture exports. There are also instances where government presence is in direct competition with the private sector which undermines the latter—such as in the case of development of fish landing sites and aquaculture hatcheries, and the case of the Uganda National Bureau of Standards competing with private sector laboratories in providing diagnostic testing services. Yet, in some important areas where government actions are needed, they have not been adequate. These include efforts in developing a coffee wilt-resistant robusta variety; imposing fishing capacity limits in the face of depleting capture fishery resources; expediting VAT refunds; and updating outdated legislation such as the Fish Act and the Food and Drugs Act. Finally, half-completed actions by government have led to the least desirable outcomes—such as the coffee replanting program, or the in-limbo merger of UEPB, UTB, and Uganda Investment Authority (UIA).

Partnership with the private sector. Although Uganda appears to have a strong and well-established national commitment to encouraging the private sector, and certainly the impressive growth over the last decade or so is driven by the private sector, there is scope for much more effective communication and coordination between the government and the private sector. With the exception of a few lead players in the private sector that lobby at the highest political level on specific interests, there is no effective consultative mechanism or forum for which wider private sector concerns are discussed with GOU. There are a few examples of private sector organizations that effectively represent their members' interest but there is not a strong private sector organization that represents across-the-board private sector interests. To some extent, this may reflect the stage of development of the Ugandan private sector—a more mature private sector may be able to organize itself and represent its own interests better. But it also reflects the fact that the private sector does not have an effective GOU counterpart with which to interact on private sector development issues. As a result, the private sector cannot be confident that GOU will address their interests. A case in point is the IITC, in which private sector enthusiasm for participation is low because they do not expect to obtain results from it.

Poverty reduction focus. The focus of several initiatives seems to be inconsistent with GOU's announced intention of poverty eradication. Increased production and/or productivity are the key issues for several sub-sectors (such as coffee, cotton, and fish) and the key to poverty reduction given the numbers of people whose livelihoods depend on them. While initiatives focusing on diversifying markets and products could generate some income and employment, the returns to primary producers will be little affected. Such initiatives also detract from some of the fundamental issues in the sector that need to be addressed and that are the key to poverty reduction—including addressing the sustainability of fishing resources and developing aquaculture; addressing the coffee wilt disease; and raising productivity in cotton.

Donor support and coordination. Donors have played an important role in the promotion of exports in Uganda, with prominent examples being development of the floriculture export industry; strengthening of SPS capacity in the aftermath of the EU fish import ban; and provision of much needed training in various areas. There continues to be need for donor support in several areas. However, such support would be much more effective if undertaken via comprehensive and coordinated sector/sub-sectoral interventions rather than isolated support in narrow areas,

which has too often been the case in the past. The DTIS has identified the need for such a comprehensive and coordinated approach in several areas including the fisheries, coffee, and cotton sub-sectors, and SPS management.

Action Plan. The recommendations in the report have been summarized in the Action Plan that immediately follows this executive summary. Recommendations on energy are not included in the Action Plan—GOU is currently formulating a plan to address the crisis situation with possible support from the World Bank. Recommendations regarding the financial sector are also not included here—they are being addressed under a Financial Sector Technical Assistance program currently under preparation by the World Bank. The Action Plan provides a suggested time frame for initiating the recommended actions and the agencies involved—public sector, private sector, and/or development partners (DP).

ACTION PLAN

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
Trade Policy						
Tariff Policy						
	In consultation with EAC partners, establish a time-table for phase-out of special tariffs on "sensitive products".		X		MTTI, MFPED, EAC partners	Medium term
	Work with EAC partners on the reduction of the CET.		X		MTTI, MFPED, EAC partners	Medium term
Non-Tariff Import Policy						
	Collaborate with pesticide regulation authorities in EAC partner countries to register agro chemicals which have undergone supervised tests in any one of the 3 countries.		X		EAC pesticide regulation authorities	Medium term
Export Policy						
	Critically assess export tax on raw hides and skins with a view to phasing it out.		X		MTTI, MAAIF, MFPED	Short term
Regional Integration						
	Harmonize trade standards and behind-the-border regulations with EAC and COMESA member countries to pursue deeper regional integration and to avoid contradictory requirements.		X		MTTI, MFPED, EAC partners	Medium term
Trade Information						
	Undertake year-round monitoring of informal cross-border transactions to improve trade statistics			X	UBOS, DP	Short term
Market Access						
International Market Access						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Negotiate for more favorable rules of origin (including "cumulation' and simple change of tariff heading or lower value-added rule) to improve access to EU markets in context of EPA negotiations.		X		MTTI, MFPED	Short term
	Undertake studies to identify services sectors for liberalization for EPA negotiations.		X	X	MTTI, MFA, DP	Medium term
	Push for reductions in tariff peaks and tariff escalation including in middle-income developing countries in the context of Doha Round of WTO negotiations.		X		MTTI, MFA	Short term
	Take proactive stance in Doha Round by offering own concessions (such as extension of tariff bindings and bound cuts to more tariff lines) in exchange for substantial reforms of world agricultural trade.		X		MTTI, MFA	Short term
Regional Market Access						
	Push for simple, non-restrictive rules of origin specifications in regional arrangements.		X		MTTI, MFPED	Short term
	Expedite accession to COMESA Free Trade Area.		X		MTTI, MFPED	Short term
Institutions for Trade Policy Making						
	Hire consultant with specialist skills in public sector change management to implement Functional Analysis Plan.		X	X	MTTI, DP	Short term
	Introduce Medium-Term Strategic Plan for MTTI based on Functional Analysis.		X	X	MTTI, DP	Short term
	Transfer AGOA Office activities into MTTI.		X		GOU	Short term
	Provide legal status to IITC.		X		GOU	Short term
	Extend staff training beyond Functional Analysis plan to improve quality of all IITC sub-committee secretariat functions.			X	MTTI, DP	Short term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Improve functioning of IITC and sub-committees by considering having committee meetings chaired by members outside GOU and do not set up separate Export Growth Group.		X		MTTI	Short term
	Ensure continued MTTI involvement in PEAP Pillar Working Groups including through adequate activity planning and staffing arrangements.	X	X		GOU	Short term
	Adopt National Trade Policy (NTP) which will include full analysis of various trade policy issues facing Uganda in next 3-5 years based on which to provide guidance on resource allocation in MTTI.		X	X	MTTI, DP	Short term
	Conduct annual exercise to update resource allocation within MTTI based on continuous update of analysis of trade issue needs (see above) either within NTP itself or separately.		X		MTTI	Short to Medium term
	MTTI to second specialist staff to key overseas missions (e.g. Geneva, Brussels, Arusha, Lusaka).		X		GOU	Medium to Long term
	MTTI to take lead role in trade policy making including developing and implementing positions for all regional and international trade policy negotiations; MFA to assume role of coordinating GOU relationship with regional and international groups that entail more than just trade policy; MFPED to take lead in negotiations that cover more than just trade policy (deferring to MTTI in trade policy matters).		X		GOU	Medium term
	Modify "Memorandum on Restructuring of MFA" to reflect the above two points.		X		GOU	Short term
Institutions for Export Development						
	Seek donor assistance for preparing and implementing restructuring plan to transform UEPB into new independent body such as corporation with clear supply-side focus.		X	X	GOU, DP	Short to Medium term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Combine MTCS and SEP into new National PSD Strategy that links into Pillar Two of PEAP. PIRT to continue consultations at highest level which will feed into new PSD Strategy.		X	X	GOU, DP	Short to Medium term
	Designate a dedicated line unit within institution that has overall leadership role in development planning for the development and implementation of new PSD Strategy.		X		GOU	Short to Medium term
	Support new PSD Strategy with mechanism (based on IITC model) for coordination and dialogue with different line ministries, agencies, private sector, and CSO.		X		GOU, private sector, CSOs	Short to Medium term
	Take decisive action with respect to proposed merger of UEPB, UTB, and UIA—either go forward expeditiously with merger or formally announce abandonment of the merger.		X		GOU	Short term
	Review transfer of ECGS and APEX to UDB.		X		BOU	Short term
Trade-Related SPS and Quality Management Capacity						
Standard setting and legislation						
	Complete needed consultations and actions to enact the pending new/revised legislation related to food safety, agricultural health, and biosafety.		X		Ugandan Parliament, Agricultural Sessional Committee, relevant Ministries and Departments	Short-Term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Harmonize selected East Africa regional SPS and quality regulations and procedures that will facilitate trade and private investment	X			UNBS, MAAIF, and regional counterparts	Medium-Term
Testing and Diagnostics						
	Develop laboratory plan that rationalizes existing capacities and creates one central laboratory for specialized plant and animal health testing		X	X	Task force with UNBS, MAAIF Departments, and Chemiphar, SGS, MOF	Short Term
	More clearly define role of UNBS relative to that of private sector testing recognizing UNBS's primary roles as providing accreditation, setting standards, and confirming testing accuracy.		X		MTTI, UNBS, Chemiphar, SGS	Short-Term
Fisheries Supply Chain						
	Develop awareness raising and training program among fishers to promote hygiene, proper handling practices, and storage to preserve fish quality			X	UFEA, DFR, UFFCA, Local Councils	Short-term
	Examine the feasibility and potential approaches to implementing a system of traceability in the fish supply chain.			X	Same as above	Medium Term
	Develop appropriate regulatory framework for aquaculture, train staff of competent authority to monitor and enforce regulations, conduct necessary risk assessments and promote adoption of good aquacultural practices.	X		X	DFR, UFPEA, Private consultants	Medium-Term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	For pesticide residues in fish, shift from consignment testing to surveillance approach involving random samples of water, raw material, and finished products.		X		DFR, UFPEA, Chemiphar	Short term
Horticulture						
	Reconsider proposed policy to formally link issuance of phytosanitary certificates with *mandatory* adoption of EUREPGAP and other management systems.		X		MAAIF	Short-Term
	Promote quality and facilitate the broad adoption of GAP, better post-harvest and packing practices and associated systems for supply chain management in the form of a voluntary UgandaGap, appropriate to the industry's level of development and in accordance with evolving buyer requirements.		X	X	Private companies, DCP, NGOs	Medium-Term
Proposed Reintroduction of DDT						
	Gauge perceptions of foreign buyers in relation to reintroduction of DDT to obtain sense of actual risks and potential buyer requirements.			X	Private sector associations, MOH, MAAIF	Short term
	Organize event in which pubic officials and private sector representatives from other countries will elaborate on how they managed the reintroduction of DDT for malarial control and minimized the trade, environmental and other risks.			X	Private sector associations, MOH	Short-Term
Coffee						
	Develop plan for industry-wide assistance in raising producer awareness by providing training on quality and ochratoxin control.	X		X	UCDA, National Union of Coffee Farmers, Private Companies	Short-Term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
Tourism and Food Safety						
	Conduct comprehensive baseline survey and needs assessment on food safety in hotels and restaurants.			X	MTTI, UTA	Short Term
Maize						
	Evaluate and apply quick and inexpensive screening tests for aflatoxin that can be used at collection centers and storage warehouses.	X		X	NARO, WFP, Maize Traders	Short-Term
	Intensify efforts to improve post-harvest drying/management of maize through training + investments in suitable facilities.	X		X	NARO, NAADS, WFP, Maize Traders	Medium-Term
Promotion of Good Practices						
	Promote awareness and application of HAACP through broad based programs in the food and manufacturing sector generally or in designated pilot sectors.	X		X	UNBS, TQM, CPC, Industry associations	Medium-Term
Transport and Trade Facilitation Issues Outside of Uganda						
Reduce delays at Mombasa and Dar Es Salaam Ports						
	Use regional fora to address problem of delays in Ports, including placing emphasis on use of electronic data interchange and improved cargo tracking (see related recommendation for Uganda Customs regarding establishing advance shipping information system in ASYCUDA++)		X	X	KPA, KRA, TRA, TPA, URA	Short Term
Reduce incidence of or abolish customs bonds						
	Use regional fora to remove or reduce the requirement for customs bonds, including mandatory requirement of global positioning satellite on transit trucks to facilitate monitoring.		X		KRA, TRA, URA	Medium Term
Enhance regional rail capacity						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Finalize concessioning of railways and regulate rail service provider to prevent abuse of market power in niches that railways could dominate (such as container traffic).	X	X		MWHC, MTRA (proposed), GOK, GOT	Short and Medium Term
Transport and Trade Facilitation Issues Inside Uganda						
Reduce POL cost						
	Enhance competition for POL transport by improving rail capacity and ensure independence of MTRA to prevent pipeline extension to Kampala having monopoly over POL.	X	X		MWHC, MTRA (proposed), GOK	Medium Term
Improve road infrastructure						
	Expedite approval and implementation of Master Plan for the Greater Kampala Metropolitan Area.		X	X	MWHC, MFPED, KCC, Ministry of Local Government, DP	Short Term
	Accelerate rural road connectivity contingent on donor funding.		X	X	Local Government, DP	Short to Medium term
Reduce road transport costs						
	In conjunction with EAC partners, consider applying capital goods tariff slab for truck imports taking into account macroeconomic and fiscal implications.		X		MWHC, MFPED, EAC partners	Medium to Long term
	Expedite refunds of VAT payments on truck purchase.	X			URA	Short term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
Enhance air freight infrastructure and facilities						
	Seek external assistance to support proposed CAA investment plan for freight infrastructure and facilities at Entebbe Airport.	X		X	MWHC, MFPED, CAA	Medium Term
Enhance road transport efficiency						
	MTRA to introduce vehicle inspection and enhance drivers' training.		X		MWHC, MTRA (proposed)	Medium Term
Improve transport data						
	MTRA to collect data on Uganda's regional transport flows from URA, UNRA, and MWHC.		X		MWHC, MTRA (proposed), UNRA, URA	Medium Term
	URA to maintain computerised database of completed transit truck movements (and rail movements after the railway is concessioned) and share database with MTRA.	X			URA	Short Term
Customs						
EAC Customs Management Act						
	Priority attention to developing and issuing regulations under the EAC Customs Management Act.		X		URA, EAC partners	Short term
	Prepare proposed improvements to EAC Customs Management Act and resolve remaining institutional issues for joint border posts including matters related to sovereignty.		X		URA, EAC partners	Medium term
Information technology						
	Secure funding from donors for the rollout of ASYCUDA++ to all major border stations and Entebbe.			X	URA, DP	Short term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Once ASYCUDA++ is operational, investigate possibility of encouraging shipping companies who already provide consignment information in Mombassa to do so for Through Bills of Lading (TBL) for Ugandan traffic to URA customs.	X			URA, EAC	Short term
	In cooperation with EAC partners, develop capability for direct trader input from point of embarkation.	X		X	URA, EAC, DP	Long term
	Regularly evaluate ASYCUDA++ operations and update selection criteria based on experience.	X			URA	Short term
Import/export procedures						
	Review valuation practices at all border stations to ensure effective application of WTO valuation rules as per 2004/2005 URA Business Plan.	X			URA	Short term
Transit procedures						
	Eliminate use of internal customs checkpoints and replace with more reliable and effective measures based on automation, modern technologies, and intra-EAC cooperation.		X	X	URA, DP	Long term
Other customs operations						
	Operationalize post-release audit unit by acquiring staff with right set of academic qualifications and experience and by securing necessary training.	X			URA	Short term
	Consider removing or reducing the requirement for in-transit bonds for clients meeting acceptable risk-management criteria.		X		URA	Medium term
	Consider extending ICD and warehouse license periods from one to five years, based on risk-management criteria and appropriate monitoring		X		URA	Medium term
	Implement risk-based approach for physical inspections for exports involving duty drawback and VAT refunds.	X			URA	Medium term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Undertake a World Customs Organization time release study to provide diagnostic information on processing and clearance bottlenecks and clearance times.			X	URA, WCO, DP	Short term
	Re-instate systematic collection of road truck vehicle flow information and develop new program to use archival information to compute time for goods coming to Uganda from Mombassa and for goods continuing in transit in Uganda.	X		X	URA, DP	Short term
Cooperation with other agencies and private sector						
	Formalize and regularize customs consultation processes to foster open communication and constructive partnerships with stakeholders	X			URA	Short term
Sudan						
	Develop a comprehensive plan to augment border stations (staff and infrastructure) to deal with potential increases in traffic to and from the Sudan.	X		X	URA, DP	Medium term
Management and human resources						
	Accelerate development and implementation of URA integrity program.	X		X	URA, DP	Short term
Coffee						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
Combat coffee wilt disease						
	Undertake careful study of history of disease outbreaks in the region.	X			CORI, UDCA	Short term
	Study and publish all information obtained through surveys to enhance documentation of disease in Uganda.	X			CORI, UCDA	Short term
	Accelerate research for development of wilt-resistant coffee varieties.		X	X	CORI, MAAIF, DP	Short term
	Test newly developed varieties in the field.			X	CORI, UCDA, MAAIF, DP	Short term
Evaluate/restructure the coffee replanting program						
	Hire independent auditor to evaluate coffee replanting program including pre-program replanting process.		X	X	UCDA, UCTF, DP	Short term
	Restructure replanting program according to findings of the evaluation (action above) and align it according to the development of wilt disease-resistant varieties.		X	X	UCDA, UCTF, MAAIF, DP	Short term
Cotton						
Introduce genetically modified cotton						
	Initiate work on legal and regulatory framework for genetically modified (GM) cotton.	X		X	UGCEA, CDO, NARO	Short term
	Introduce GM cotton.		X	X	UGCEA, CDO, NARO	Medium term
Restructure practice of announcing indicative prices						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Change practice of announcing indicative prices by either: (i) disseminating more up-to-date price information; or (ii) making them guaranteed prices combined with some kind of price hedging mechanism.		X X	X	UCGEA, CDO	Short term Long term
Tea						
Research and dissemination						
	Establish tea research program at Rwebituba to be funded and directed by the tea industry.				UTA	Medium term
	Industry to disseminate new planting materials derived from research.				UTA	Medium term
Role of government						
	Confine government role to usual regulatory one dealing with health, environment, and safety issues.	X			GOU	Short term
	Develop information database.			X	MAAIF	Medium term
Fish						
Ensure Sustainable Exploitation of Capture Fisheries						
	Undertake study to measure fishing capacity with a view to assessing feasibility of implementing fishing capacity limits on Lake Victoria.		X	X	LFVO, DP	Short term
	Develop national plan for determination of sustainable limits to fishing capacity, and allocation of access rights.	X		X	DFR, MAAIF, Local Govts., DP	Short term
	Study costs and benefits of national landing policy with a view to de-criminalizing Lake Victoria fish landings outside Uganda.		X	X	DFR, DP	Long term
Develop Aquaculture						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Simplify approval system: reduce number of permits, clarify conditions for permit award, remove movement permit requirements, remove new controls for wild fry collection and for import of live fish and fish disease.	X			DFR, MAAIF	Short term
	Undertake aquaculture mapping and land-use planning survey to identify aquaculture development zones as focus of public investments in aquaculture and rural infrastructure, and for zonal Environmental Impact Assessments.		X	X	DFR, MAAIF, DP	Medium term
	Provide support (credit and technical assistance) to hatchery investors using development model of Egypt's successful tilapia aquaculture industry.			X	DFR, MAAIF, DP	Long term
	Support applied and adaptive research in collaboration with private sector and dissemination of results using development model applied in USAID FISH project.			X	DFR, MAAIF, DP	Medium term
	Upgrade aquaculture training facilities including • developing aquaculture training school in Fisheries Training Institute • upgrading existing practical training facilities after study • modifying syllabus to reflect national strategic priorities (monosex tilapia, feed formulation, pond management, water quality monitoring, fish health, etc)			X	DFR, MAAIF, DP	Medium term
	Upgrade veterinary drug controls and residue monitoring plan including: • preparing regulatory framework • establishing residue monitoring program			X	DFR, MAAIF, DP	Short term
Upgrade landing sites to improve quality and reduce losses						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Leave development and management of landing sites to private sector.	X			DFR, MAAIF, Local Govts.	Short term
	Reallocate public funding for fisheries infrastructure from landing sites to roads, water supply, electrification, etc.	X			DFR, MAAIF, Local Govts.	Short term
	Derive legal and administrative models for commercially sustainable BMUs by launching pilot project in a small number of sites to examine the best means of BMU incorporation, assess financial viability and levy issues, determine capacity needs for local authorities and BMUs and monitor investment and business performance in relation to publicly managed sites.			X	DFR, MAAIF, DP	Short term
	National roll-out of best model for BMUs derived from lessons from pilot project (action above).		X		DFR, MAAIF	Medium term
	Offer beach management units (BMUs) which have acquired legal personality (by incorporation) legally enforceable land use rights (such as long lease issued by Local Authority).		X		DFR, MAAIF, Local Govts.	Medium term
	Develop BMUs as commercial enterprises by allowing the incorporated BMUs to charge market rates for goods and services at landing sites users.	X			DFR, MAAIF, Local Govts.	Medium term
	Replace existing system of levy collection from fishery sector with direct payments from BMUs to District Council in the form of site rental (as set by lease agreement) and a landing levy (consisting of base levy as required by UFA and local levy determined by District Council).	X			DFR, MAAIF, Local Govts.	Medium term
Floriculture						
Establish a high altitude floriculture production cluster						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Undertake technical and business feasibility study to confirm viability of establishing high altitude production, identify the best sites, and evaluate the scale of investment and productive output.			X	UFEA, DP	Short-term
	Identify infrastructure requirements (roads, electricity, water, telecommunications) and associated capital costs to establish high altitude cluster (after identification of the latter)			X	UFEA, DP, MTTI, MEMD, MLG, MWLE, NRA	Short term
	Remove administrative constraints to facilitate establishment of farms, including land tenure, reimbursement of VAT, etc	X			UIA, UFEA, MWLE	Short term
	Establish trial programs in one or more farms to identify best agronomic practices and new crop opportunities.			X	UFEA, DP, growers	Short term
	Promote the investment in new floricultural production at high altitude and facilitate the establishment of "clusters". This will be achieved by local and national authorities assisting investors establish legal entities (ie, new companies), Government would assist with infra-structural support and donors would help with supporting the building of the airport cold store, management and technical training and agronomic trials.				UFEA, District Authorities, UIA, MWLE, NRA.MEMD, CAA and DP	Short to medium term
Increase capacity of FHL-managed cold store at Entebbe Airport						
	Continue discussions between UFEA/FHL and CAA (managed by SCOPE).	X			UFEA, FHL, SCOPE, CAA	Short term
	Seek financing for cold store expansion by exploring: use of "distressed flower fund"; donor funds; development banks.			X	UFEA, FHL, BOU, DP, development banks	Short term
Improve quality and number of management, supervisors and technical workers on flower farms						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Continue Applied Tropical Floriculture courses to train supervisors and widen curriculum to include floriculture at higher altitudes.			X	UFEA, DP	Medium term
	Implement proposed courses for training farm managers at the Bugalassi and Mountains of the Moon colleges.			X	UFEA, DP	Medium term
	Continue implementation of appropriate standards set by industry and by importing countries.			X	UFEA, DP, exporters, growers	Medium term
Maintain cohesion and cooperation within floriculture industry						
	Ensure existence of strong central association by continuing support to UFEA.			X	UFEA, DP, exporters, growers	Medium term
Horticulture						
Expand fresh horticultural exports to regional markets						
	Help farmers and/or farmer groups improve horticultural yields and quality to improve competitiveness. Help reduce transaction costs by creating more market connections to regional markets.			X	NAADS	Medium term
Expand processed horticultural exports						
	Technical assistance for companies to develop new equipment and staff training			X	NGOs	Medium term
Tourism						
Improve Security						
	Formulate specific measures to improve safety and security in the country, particularly in the north.			X	GOU, DP	Short term
Product Development						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Implement existing concession procedures to develop concession opportunities for: (i) canopy walkway; (ii) hot-air ballooning; (iii) mid-range accommodation chain; (iv) camping circuit; (v) private management or co-management of revenue-losing national parks and wildlife reserves; (vi) houseboats on Lake Albert and the Nile in Murchison Falls National Park; (vii) improved mountaineering experience in the Ruwenzori Mountains.	X		X	UWA, UFA	Medium Term
	Increase number of gorilla viewing permits and sales by undertaking research to review permit availability; drafting agreement for privatizing sales of gorilla permits; and reviewing option of larger tourist group size and "shift" viewing.			X	UWA	Short term
	Publicize sites identified for exclusive luxury camping (such as Ishasha in Queen Elizabeth National Park) and provide reliable booking system.			X	UWA	Short term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Improve targeted transport infrastructure including:					
	(i) tourist rail journey from Nairobi to Jinja and Kampala		X	X	MWHC, private sector, DP	Short term
	(ii) tourist ferry between Tanzania, Kenya and Uganda		X	X	MWHC, private sector, DP	Short term
	(iii) allowing regional air charter services to fly into Kidepo, Murchison and Queen Elizabeth N.P.		X	X	CAA, private sector, DP	Medium term
	(iv) tarmac runways and improve fencing in above National Parks		X	X	MWHC, DP	Medium term Short term
	(v) target two key roads for up-grade: the "Ishasha road" and "Semliki Valley" road		X	X	MWHC, DP	
	Introduce institutional changes to accommodate new tourist products: open immigration offices in Kidepo, Murchison and Queen Elizabeth NPs.		X		MIA, UWA, CAA	Medium term
	Improve planning framework for tourism development by completing: (i) ten district tourism plans	X		X	MTTI, district governments, DP	Medium term
	(ii) Jinja Tourism Plan	X		X	MTTI, Jinja government, DP	Short term

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Improve service delivery by private sector: (i) initiate scheduled minibus transportation to national parks create delivery platform for domestic tourism such as website linked to mobile phone protocol that coordinate bookings between public and private service providers				Private sector Private sector	Short term Short term
Market Development						
	Allocate part of tourism levy to finance public relations efforts in source markets.		X		MTTI	Short term
	Undertake market intelligence reports for specific segments: adventure tourism (for backpacker/overlander markets, domestic market, UK market, USA market, South African market); and for regional tourism.			X	MTTI, DP	Short term
	Undertake value chain studies for 2 key market segments: adventure and short excursions.			X	MTTI, DP	Short term
	Develop skills in sales and marketing, and in food safety and hygiene.			X	Public and private higher education institutes, DP	Medium term
Measurement of tourism impact						
	Collection of key tourism data, implement information sharing system between UBOS, UTB, URA, MTTI, UWA, foreign visa-issuing mission, regional and district municipalities and private sector, conduct annual exit surveys (expenditure and motivation) at Entebbe Airport.	X		X	MTTI, UWA, CAA, MIA, BOU, World Tourism Organization, DP	Short term
Information, Communications, Technology (ICT)						
Building National Backbone						

Objective/Policy/ Technical Issue	Action recommended	Requirements			Agency involved	Time frame for initiation of action
		Implement existing policy	Change policy/ legislation/Reform Institutions	Technical assistance/ investments		
	Commission full-scale feasibility study to assess current state of infrastructure, levels of potential demand and economic activity, and relate to appropriate forms of infrastructure development; study will include plan for roll-out of infrastructure.			X	MICT, DP	Short term
	Create public-private-donor task force to assess model for infrastructure development including the "open access" model and other models that have worked in other countries, based on which to develop specific recommendations for going forward.			X	MICT, DP	Short term
Connection to International Backbone						
	Continue to explore ways to participate in EASSy Project including playing active role in dialogues about how to encourage Project to proceed.				MICT	Short term
	Explore alternative solutions to international connection should EASSy not come to fruition, including collaborating with Kenya on their own cable should the latter proceed on this front.				MICT	Short term

Time Frame: Short-term—within 12 months; Medium term—within 2 years; Long term—2 to 5 years.
DP denote development partners.

1. CONTEXT AND BACKGROUND

The Diagnostic Trade Integration Study (DTIS) identifies the key constraints, both internal and external, to the expansion of Uganda's trade, with a focus on how trade expansion can help alleviate poverty in the country.

The importance of trade for poverty reduction is recognized by the Government of Uganda (GOU) in the most recent revision of its Poverty Eradication Action Plan (PEAP 2004/5-2007/8). Trade appears in 2 of the 5 pillars of the PEAP, the "Economic Management" and the "Enhancing Production, Competitiveness and Incomes" pillars. The coverage of the DTIS overlaps with most of the areas where policy actions pertaining to trade are indicated (Table 1.1). The DTIS aims to provide concrete actionable measures in these areas.

It should be noted at the outset that all factors that affect private investment are important for trade integration in general, and export supply responses and competitiveness in particular. These factors could include virtually all aspects of the development agenda, ranging from education and health, to financial sector development, infrastructure, governance, and a host of other factors pertaining to the business environment.

This report focuses on a narrower and more trade-related subset of this broad agenda mentioned above, in accordance with the generic terms of reference (TORs) for DTISs as determined by the Integrated Framework Working Group (IFWG).[3] For the purpose of this DTIS, these generic TORs have been further refined to reflect Ugandan-specific conditions, based on extensive consultations with the various stakeholders in Uganda, including representatives from government ministries, the private sector, donor organizations, and civil society organizations.[4] The coverage of this DTIS also complements those issues that are being addressed in the growth-themed Uganda Country Economic Memorandum (CEM) currently under preparation by the World Bank. Hence, while this DTIS focuses on those issues ranging from production to market access that pertain to products traded in external markets, the CEM covers, in addition, those issues that pertains to production and investment of products that are destined for the domestic market.

The rest of this chapter provides the overall socio-economic context under which Uganda is striving towards greater trade integration. It reviews the macroeconomic environment, the country's economic and trade performance to date, and poverty trends and profile. This is followed by analyses of issues that affect trade, grouped into those that can be addressed domestically (Chapters 2 to 8), and those that need to be addressed in a multilateral arena or regional context (Chapter 9). The constraints that can be addressed domestically include *economy-wide* ones arising from macroeconomic policies and the investment climate (Chapter 2); domestic trade policies and regional trade agreements (Chapter 3); weaknesses in trade policy and trade development institutions (Chapter 4); insufficient capacity to meet increasingly stringent SPS standards in international markets (Chapter 5); and inadequate transport infrastructure and trade facilitation including customs (Chapters 6 and 7). They also include *sector and sub-sector-specific* constraints to trade (Chapter 8). The sub-sectors have been chosen either for their importance for poverty reduction, and/or Uganda's competitiveness in them, either internationally

[3] The IFWG in Geneva consists of representatives from all the multilateral and donor agencies that are involved in the IF.

[4] The Aide-Memoire for the Preliminary Mission of the Uganda DTIS conducted in May 2005 provides the list of organizations consulted.

or regionally. The selected sub-sectors are: agricultural commodities (coffee, cotton, maize and tea); the major emerging exports (fish, floriculture and horticulture), and services (tourism and ICT) (see Chapter 8 for the rationale behind the selection of these sub sectors).

Table 1.1 Trade & Trade related areas in the PEAP, 2004/05-2007-08

Strategic Objectives	Challenges/ Constraints	PEAP Outcomes/Indicators	PEAP Policy Action
Pillar One: Economic Management			
1.0 Macroeconomic stability consistent with rapid private-sector led growth	External debt ratio high, despite recent debt relief	1.4 Reduce external debt to sustainable levels	• Implement programmes to boost export performance
Pillar Two: Enhancing Production, Competitiveness, and Incomes			
2.1 Increased and more efficient private sector production		2.1.1 Total export as % of GDP	• Maintain liberal trade policy • Minimize domestic and international barriers to trade • Harmonize activities under Strategic Export program (SEP) with PMA & MTCS programs
2.2 Increased and more efficient agricultural production	Tariff and non tariff barriers to Uganda's exports	2.2.1 • Agriculture export as % of total value of agriculture output	• Harmonize some of the current SEP with the PMA and MTCS programs and activities, co-ordinate by the MTCS Secretariat. • Focus SEP activities along the commodity value chain.
2.3 Increased and sustainable fisheries production		2.3.1 • Value of Fish exports (US$m)	Implement the 2003 Fisheries Sector Strategic Plan, which include, [*inter alia*]: • Development of quality guarantees for fish exports
2.5 Increase and more efficient production of non-agriculture goods and services	• Limited infrastructure and security around tourism sites • Inadequate promotion of Uganda tourism resources	2.5.2 Increased tourism revenues • Number of tourists visiting Uganda	• Promote abroad of Uganda as a tourist destination • Promote diversification of tourism products including rural tourism, cultural routes, etc. • Training of staff in the tourism industry • Provide business development services for tourism, in cooperation with private sector

The DTIS also presents an action plan which will contain policy reforms, institutional capacity building measures, and investment requirements identified in the report for removing bottlenecks and seizing opportunities to promote the integration of Uganda into the global economy. The poverty reduction aspect of trade is addressed through the selection of the sub-sectors. In addition the DTIS also analyzes where applicable, and to the extent possible quantifies, the

impact on poverty of the various aspects of trade and trade policies covered in the report, based on which it provides recommendations to alleviate any negative impacts on poverty.

1.1 ECONOMIC BACKGROUND

Reforms and growth and poverty reduction outcomes

After gaining independence in 1962, Uganda went through an extended period of political turmoil beginning in 1971 until 1986, when the National Resistance Movement under the leadership of President Museveni assumed control of the government. The extended period of relative political stability since then has allowed the country to undertake an extensive and sustained economic reform program, beginning with the Economic Reform Program in 1987. Since then, the country has achieved macroeconomic stability and undertaken wide-ranging structural reforms including liberalization of key markets and sectors, prices, and privatization of public enterprises.

Macro stability was achieved early in the 1990s (Table 1.2), and has been maintained since. By 2002, the far-reaching trade liberalization that had begun in the mid-1990s had resulted in an economy that was very open, not only by Sub-Saharan African standards but also by developing country standards, with tariff levels actually close to those in developed countries (Chapter 3).

The economic reforms have been accompanied by a dramatic rebound in growth, helped in the early 1990s by buoyant coffee prices**.** This has enabled Uganda to attain one of the highest *per capita* real GDP growth rates in the world during the decade of the 1990s—albeit from a low base—of 3.4 percent compared to 1.7 percent for all developing countries. Largely because of the strong economic growth, the incidence of poverty in Uganda was reduced from 56 percent in 1992/93 to 38 percent in 2002/3.

Growth, still impressive, has slowed in recent years, from an annual average 6.9 percent in real terms during 1989/90-1998/99, to 5.5 percent during 1999/00-2004/05. The concern is not so much that growth is slower (5.5 percent is still a very impressive rate of growth), but what underlies this slower growth and what the implications are for sustaining high growth in the future. These questions will be addressed in the CEM currently under preparation, which will be complemented by analysis of the DTIS that focuses on how to enhance trade integration to contribute to growth of the economy.

While sustained higher growth is clearly essential for poverty reduction,[5] the benefits of high growth may not reach some of the poorest households. This is underlined by the finding of the recent Poverty Assessment (PA)[6] that there has been growing inequality in the country. The growing inequality is found: between rural and urban areas and regions (the latter in part caused by continuing conflict in the North); between household size groups (reflecting widening fertility differential between poor rural women and richer urban women); and between higher educated and lower educated households. Given these findings, the PA emphasizes that improving agricultural incomes would need to be a cornerstone of Uganda' poverty reduction strategy, in addition to increasing non-farm earning opportunities to absorb the rapidly growing labor force.

[5] There is abundant cross-country evidence on the strong positive relationship between GDP growth and poverty reduction. This relationship applies also to Sub-Saharan Africa (SSA). Demery and Squire (1996), for example, argue that the dominant factor responsible for changes in poverty in SSA during the 1980s is economic growth.

[6] World Bank (2005a).

In this regard, the DTIS aims to help support GOU's poverty reduction efforts in its selection of agricultural sub-sectors for more in-depth review.[7]

Table 1.2 Key Economic Indicators

	1990/91	1995/96	2000/01	2001/02	2002/03	2003/04	2004/05
Real Sector							
GDP (m. US$)	1841.3	5901.0	5681.3	5846.8	6256.8	6822.9	8710.0
GDP per capita (PPP, International $)	716.1	963.2	1336.3	1403.2	1456.8	n.a.	n.a.
Gross Domestic Investment/GDP	15.8%	20.3%	18.2%	19.3%	20.5%	22.5%	22.8%
Public Investment/GDP	6.6%	4.5%	5.5%	5.3%	4.7%	5.2%	5.0%
Private Investment/GDP	9.2%	15.7%	12.8%	14.1%	15.8%	17.3%	17.8%
External Accounts (US$m)							
Exports of Goods & Services	202.1	747.1	736.3	733.5	787.9	1018.6	1193.4
Imports of Goods & Services	731.9	1668.2	1174.2	1692.0	1801.4	2058.8	2499.5
Current Account Balance excl. grants	-449.3	-500.0	-261.8	-770.7	-840.7	-815.6	-887.1
(share of GDP)	-24.4%	-8.5%	-4.6%	-13.2%	-13.4%	-12.0%	-10.2%
Current Account Balance incl. grants	-187.4	-223.4	184.4	-285.1	-359.0	-117.4	-101.5
(share of GDP)	-10.2%	-3.8%	3.2%	-4.9%	-5.7%	-1.7%	-1.2%
Fiscal Accounts (% of GDP)							
Revenues	7.8%	10.5%	10.8%	12.2%	12.2%	12.6%	12.9%
Expenditures	22.8%	16.6%	20.5%	23.4%	22.6%	23.4%	21.2%
Overall balance, excluding grants	-15.1%	-6.1%	-9.7%	-12.2%	-10.4%	-10.8%	-8.3%
Overall balance, including grants	-4.4%	-1.9%	-1.8%	-4.2%	-3.9%	-1.3%	0.1%
Prices, Exchange Rates (period average)							
Inflation (CPI, annual average)	24.5%	7.5%	4.5%	-2.0%	5.7%	5.0%	8.0%
Exchange rate (Shillings per dollar)	960.8	1012.8	1762.9	1755.0	1882.8	1934.7	1737.6
Export Price Index (1999/00=100)	78.9	131.8	79.4	63.6	73.4	85.2	94.6
Import Price Index (1999/00=100)	93.7	111.1	99.7	97.5	103.4	111.7	119.3
Terms of Trade (1999/00=100)	84.1	118.6	79.6	65.2	71.0	76.3	79.3
Social Indicators							
Population (in millions)	16.7	20.1	23.8	24.4	25.2	26.0	26.9
Adult literacy rate (% people >15)	57.3	62.9	68.0	68.9	68.9	n.a.	n.a.

Note: All data on Ugandan fiscal year basis except for GDP per capita (PPP, international $). PPP denotes purchasing power parity.
Source: World Bank and International Monetary Fund.

Sectoral contribution to growth

The DTIS takes as its basic premise that export growth is important for overall economic growth, which is evidenced by the experience of many countries, in particular the East Asian countries.[8] During the period 1989/90-2004/05, private consumption was the main driver of growth in

[7] A recent econometric analysis of the determinants of poverty in 24 low income countries over the period 1987-1996 found that exports—and in particular agricultural exports—as a share of GDP is negatively related to poverty levels. See World Bank (2004a).

[8] Quite aside from the trivial accounting relationship whereby exports constitute one component of the gross domestic product (GDP) such that higher export growth leads to higher GDP growth, exports could also enhance overall economic growth through the positive externalities that are associated with exports, including economies of scale, and technological upgrading that is entailed in competing in international markets as well as enabled by the foreign exchange earnings from exports, all of which help raise productivity in the domestic economy.

Uganda, being responsible for an overwhelming 78 percent of overall economic growth (5 percent of the 6.4 percent GDP growth), while private investment contributed to 19 percent and exports of goods and services contributed to only 15 percent (Table 1.3). Growth in private consumption has slowed in the recent years, with its contribution to GDP growth falling from 5.5 percent during 1989-90-1998/99 to 4.1 percent in 1999/00-2004/05. This has largely been the reason behind the recent slow-down in overall economic growth. By itself this trend is not worrisome, as it likely reflects a return to more normal trends after high levels of private consumption in the post conflict period. Of greater concern, however, is that the slack has not been taken up by more sustainable sources of growth, in particular from private investment and exports. The CEM addresses the issue of private investment growth, while the DTIS will focus on exports, although the two are obviously linked.

Table 1.3 GDP by expenditure categories[9]

	1989/90-1998/99	1999/00-2004/05	1989/90-2004/05
Contribution to growth			
Private Consumption	5.5%	4.1%	5.0%
Public Investment	0.1%	-0.1%	0.1%
Private Investment	1.2%	1.2%	1.2%
Government Consumption	0.9%	0.6%	0.8%
Exports of GNFS	1.0%	0.8%	0.9%
Imports of GNFS	-1.3%	-0.8%	-1.1%
Statistical Discrepancy	-0.6%	-0.3%	-0.5%
GDP at market prices	6.9%	5.5%	6.4%
Contribution to growth in shares			
Private Consumption	79.9%	74.8%	78.2%
Public Investment	2.0%	-1.6%	0.9%
Private Investment	17.5%	20.9%	18.5%
Government Consumption	13.8%	11.2%	12.9%
Exports of GNFS	14.6%	14.5%	14.6%
Imports of GNFS	-19.4%	-14.9%	-17.9%
Statistical Discrepancy	-8.4%	-4.9%	-7.3%
GDP	100.0%	100.0%	100.0%

Source: DTIS team calculations based on data from Uganda Bureau of Statistics (UBOS).
Note: Contribution to growth = shares of real GDP * real growth, and denotes what total GDP growth would have been if growth of all the other sectors were zero.

The high growth performance since the beginning of the 1990s has been accompanied by a structural change in the economy, with a steadily declining share of agriculture and increasing shares of industry and services. Services, in particular, have been the largest contributor to growth over the 1990/91-2004/05 period, being responsible for nearly half of the growth (2.7 percent of the 6 percent GDP growth came from services during that period), and have overtaken agriculture as the dominant productive sector in the economy (Table 1.4). Much of the growth in the services sector has been directed to domestic demand rather than exports, as reflected in the large contribution of private consumption to growth on the expenditure side. This further

[9] The trade data used in this table, which are from the Uganda Bureau of Statistics (UBOS), are different from trade data from the Bank of Uganda (BOU). BOU trade data is estimated based on inflows and outflows of foreign exchange, while UBOS trade data is from Customs. The discussion of trade performance in the rest of this chapter is based on BOU data.

underlines the fact that sustaining long-term economic growth would probably require re-direction of the sources of growth towards investment and exports, including services exports. By selecting some services sectors for more in-depth review, the DTIS aims to support efforts on this front.

Table 1.4 Sectoral Shares of GDP and Contributions to Growth

	Shares of GDP (in %)			Contribution to Growth			Average growth per annum
	1990/91	2004/05	Average 1990/91-2004/05	1989/90-1998/99	1999/00-2004/05	1989/90-2004/05	
Agriculture	51.1%	33.5%	41.7%	1.8%	1.3%	1.7%	3.6%
Industry	15.9%	24.6%	20.8%	1.8%	1.6%	1.7%	8.8%
Construction	9.0%	13.4%	10.9%	0.8%	0.9%	0.8%	8.2%
Gas, electricity, water	0.9%	1.3%	1.2%	0.1%	0.1%	0.1%	7.1%
Mining and quarrying	0.3%	0.9%	0.6%	0.1%	0.1%	0.1%	21.9%
Manufacturing	5.7%	9.0%	8.1%	0.8%	0.5%	0.7%	9.5%
Services, etc	33.0%	41.9%	37.6%	2.7%	2.6%	2.7%	7.4%
Total GDP at factor cost				6.3%	5.5%	6.0%	6.0%

Source: DTIS team calculations based on data from UB0S.

1.2 TRADE PERFORMANCE

Even among landlocked countries in Sub-Saharan Africa, Uganda exhibits a very low level of trade integration as measured by the share of exports and imports of goods and services in GDP (Table 1.5). While Uganda's growth performance is all the more impressive given its low degree of trade integration, this also highlights the extent to which growth has hitherto been driven by domestic consumption, and in turn the need to shift to a more outward oriented or export-driven growth as discussed earlier.

Table 1.5 Trade Integration and Real Per Capita Growth, 1990-2004

	Exports of Goods & Services /GDP	Imports of Goods & Services/GDP	Exports and Imports of Goods & Services /GDP	Real per capita GDP growth per annum
Developing Countries	25.5%	25.5%	51.0%	2.4%
Landlocked SSA	18.9%	27.4%	46.3%	-0.1%
Uganda	10.8%	25.3%	36.2%	3.5%

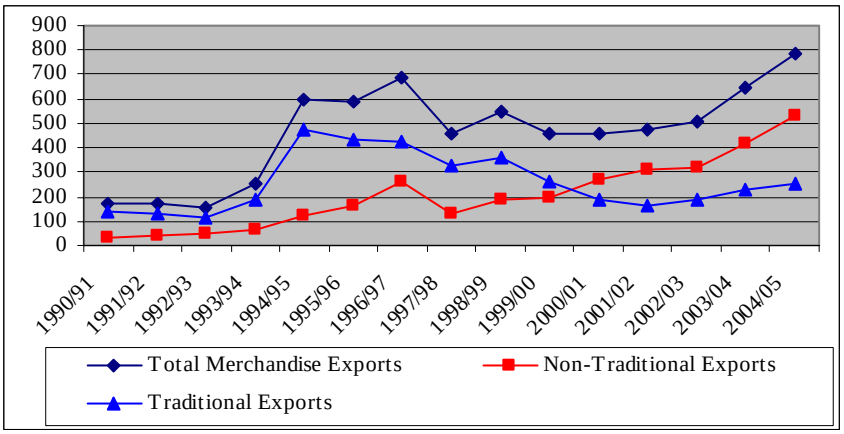
Sources: DTIS team calculations based on World Development Indicators, World Bank.
Notes: Developing countries = low +middle income countries (World Bank definition); all trade/GDP ratios in current US dollar terms. Landlocked SSA denote landlocked sub-Saharan African countries and include Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, Swaziland, Uganda, Zambia and Zimbabwe.

Export Performance

After accelerating during the first part of the 1990s—quadrupling from US$176m. to US$684m. between 1990/91 and 1996/97—Uganda's merchandise exports fell. Merchandise exports then stagnated for several years before they began to pick up in 2003/04, reaching US$786m. in 2004/05 (Figure 1.1 and Table 1.6).

Export expansion during the first half of the 1990s was driven by the acceleration of coffee exports, in part due to liberalization of the coffee sector, and in part fuelled by the boom in international prices. Coffee exports peaked in 1994/95 at around US$460m., making up over three-quarters of Uganda's total merchandise exports. Since then, coffee exports had fallen precipitously as international prices plummeted, reaching a low of US$85m. in 2001/02 (less than 20 percent of the peak level reached in 1994/95) before recovering slightly.

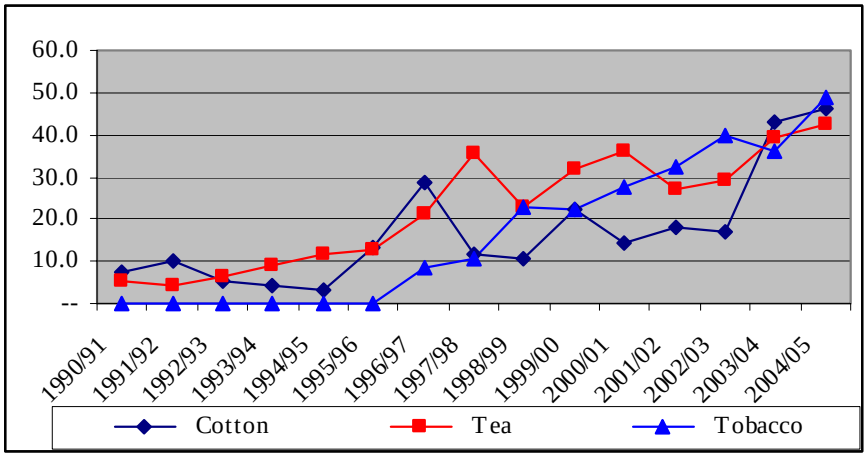
Figure 1.1 Merchandise Exports: Traditional and Non-Traditional (US$m)



Source: Bank of Uganda (BOU) data. Classification of traditional and non-traditional exports based on UBOS.

Traditional exports largely followed the trend of coffee exports, given the importance of the latter (at their peak in 1994/95 coffee exports made up 97 percent of traditional exports). The other major traditional exports—cotton, tea, and tobacco—did not suffer such a large decline in price, and trended upwards such that by 2003/04 they had exceeded the levels in both volume and value terms of a decade ago (Figure 1.2). Correspondingly, the importance of coffee exports in traditional exports fell, and by 2004/05 their share was only 46 percent, while cotton, tea, and tobacco contributed shares of between 17 to 19 percent.

Figure 1.2 Non-Coffee Commodity Exports (US$m.)



Source: IMF.

While traditional exports have been trending downwards, non-traditional exports have trended upwards and by 2000/01 they had surpassed traditional exports as the dominant export category

(Figure 1.1). Fish exports dominate non-traditional exports. Since 1992/93, when fish exports first emerged, they had increased 25 times, from US$4.4m. to US$170 m. in 2004/05, surpassing coffee exports as the largest merchandise export item. Another emerging non-traditional export is cut-flowers, which rose six-fold from a little over US$5m. in 1996/97, when they first emerged, to US$32m. in 2004/05. The other major non-traditional exports—electricity, cereals, hides and skins, cobalt, and beans—fluctuated without clear upward or downward trends.

Table 1.6 Composition of Exports (US$m)

	94/95	**95/96**	**96/97**	**97/98**	**98/99**	**99/00**	**00/01**	**01/02**	**02/03**	**03/04**	**04/05**
Coffee	456.6	404.4	365.6	268.9	306.7	186.9	109.6	85.3	105.5	114.1	144.5
Cotton	3.3	13.2	28.6	11.4	10.8	22.5	14.1	18.0	16.9	42.8	41.3
Tea	11.8	12.5	21.3	35.6	22.7	31.9	35.9	26.9	29.5	39.3	33.1
Tobacco	--	--	8.6	10.8	22.9	22.4	27.6	32.3	39.9	36.2	36.2
Sub-total	***471.7***	***430.1***	***424.1***	***326.7***	***363.1***	***263.7***	***187.3***	***162.4***	***191.7***	***232.4***	***255.1***
Fish Products	17.0	37.5	34.6	28.0	47.6	24.8	66.6	107.5	111.4	118.1	169.6
Gold [1/]	--	35.2	110.5	25.5	27.9	39.4	58.5	56.7	48.2	58.5	71.3
Flowers	--	--	5.3	6.8	7.2	8.3	13.2	15.9	17.0	27.2	31.7
Electricity	--	--	8.1	12.0	12.3	13.8	16.7	13.9	15.5	12.6	8.3
Maize	20.2	9.4	16.5	8.1	6.1	4.0	6.1	13.1	8.2	18.8	13.3
Hides and Skins	--	--	7.8	7.8	6.6	6.1	22.7	19.6	4.2	5.9	6.4
Cobalt	--	--	--	--	--	7.3	12.8	10.9	1.9	2.7	13.7
Beans	11.7	7.4	6.0	2.2	4.6	4.8	2.0	1.5	5.5	4.9	4.3
Others	74.8	70.7	70.6	41.3	73.7	87.7	72.4	72.5	104.3	166.1	212.6
Sub-total	***123.6***	***160.2***	***259.4***	***131.7***	***186.0***	***196.2***	***271.0***	***311.6***	***316.2***	***414.8***	***531.2***
TOTAL	**595.3**	**590.3**	**683.5**	**458.0**	**549.1**	**459.9**	**458.3**	**474.0**	**507.9**	**647.2**	**786.3**

Source: IMF.
Note: 1/ Most of the recorded gold exports are re-exports from DRC, although there are 3 gold mines in Uganda.

Service exports are dominated by tourism, which rose 8 times between 1992/93 and 2003/04, from US$24m. in 1992/93 to US$197m. in 2003/04 (Figure 1.3).[10] By 2003/04, according to official statistics, tourism had surpassed both coffee and fish as the top foreign exchange earner from merchandise and services exports.

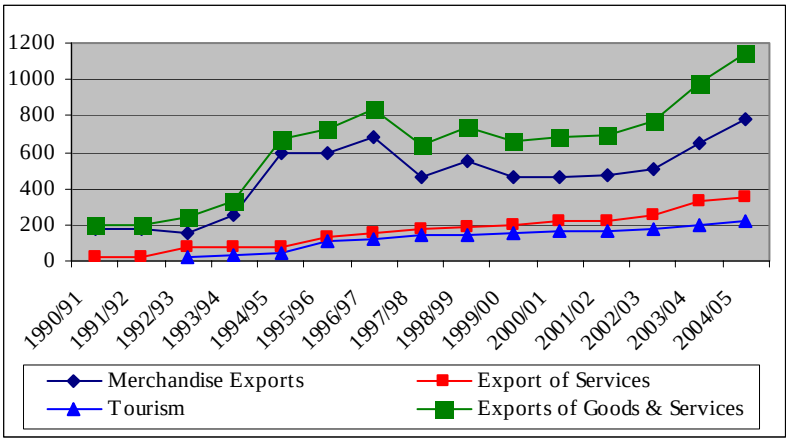
Europe as a country grouping is Uganda's largest export partner, where 46 percent of Uganda's exports were destined in 2004. Within Europe, European Union (EU) countries absorbed nearly 30 percent of Uganda's exports in 2004, with Netherlands, Belgium, and the United Kingdom being the top destinations (Table 1.7). Uganda's top export partner in Europe (as well as in the world) is Switzerland (not a EU member), to which over 16 percent of Uganda's exports were destined in 2004.[11]

[10] Note that there are large discrepancies between the tourism revenue data compiled by the Bank of Uganda, presented here, and those compiled by the Uganda Bureau of Statistics, which indicated that tourism receipts amounted to US$444m. in 2004. World Bank estimates of tourism receipts are far lower than either of these 2 official sources. See Volume 2, Chapter 4.

[11] Most of the coffee and cotton exported to Switzerland are to affiliated companies or commodity brokers based in Switzerland, and not to the country itself.

Countries in the region are also important export destinations for Uganda, with COMESA[12] being the second most important regional grouping destination after the EU, absorbing 26.8 percent of Uganda's exports in 2004. Within COMESA, Kenya is by far Uganda's most important export partner, absorbing nearly 12 percent of Uganda's exports and being the second most important worldwide export destination after Switzerland in 2004. In addition to Kenya, three other COMESA member countries rank among the top ten Uganda export destinations—the Democratic Republic of Congo (DRC), Rwanda, and Sudan. Including countries outside of COMESA, Africa as a region absorbed nearly one-third of Uganda's exports.

Figure 1.3 Exports: Merchandise, Services and Tourism (US$m)



Source: BOU.

Table 1.7 Export Destinations, 2004

By regional grouping (share of total exports)		Top ten export destinations and products		
		Share of total exports		Top export items
European Union	29.4%	Switzerland	16.4%	coffee, gold, cotton
COMESA	26.8%	Kenya	11.6%	tea, electricity
Other Europe	16.7%	Netherlands	9.2%	flowers, fish, coffee
Asia	8.0%	Belgium	5.2%	Fish, coffee, tobacco
Other Africa	5.7%	United Arab Emirates	5.0%	Gold, fish, cotton
Middle East	5.6%	United Kingdom	4.4%	Coffee, cotton, survey instruments*
North America	2.8%	DRC	4.3%	maize flour, metal products
South America	0.1%	Rwanda	3.7%	metal products
Rest of World	0.8%	France	3.4%	Fish, tobacco
		Sudan	3.4%	Coffee, beer, cement

Source: 2004 Statistical Abstract, UBOS; UNCOMTRADE.
Note: 1/ Survey instruments are re-exported items.

The importance of regional trade may increase further with the recent peace settlement in Sudan. Given the vast construction and development needs of that country, there is strong potential for Uganda to expand its exports and re-exports to Sudan. The regional trade aspect will be taken into account throughout the rest of this report, including issues with respect to market access, and transport and trade facilitation, and in the context of those sub-sectors for which regional trade is particularly important, such as maize, fish, horticulture, and services.

[12] COMESA stands for Common Market for Eastern and Southern Africa; see Chapter 3 for list of members.

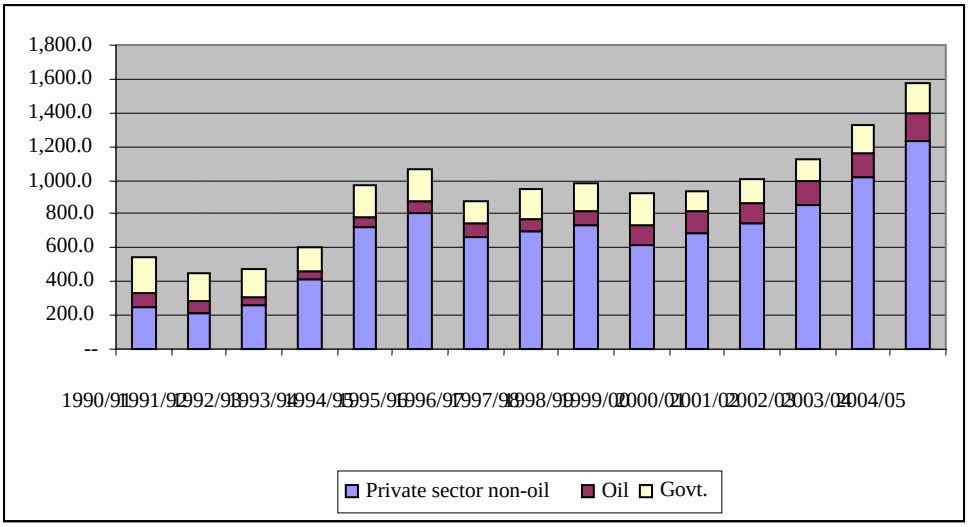
The Middle East has potential to be a more important export market for Uganda (for example for floriculture exports—see Chapter 8). The United Arab Emirates (UAE) ranked as the top 5th export destination for Uganda's products in 2004.

Uganda's competitive advantages, as discussed earlier, are reflected in the top export products (excluding gold) destined for these top markets. For the European markets, the top exports in 2004 were coffee, fish, roses, and cotton, all relatively high value-to-weight products. The top exports to DRC and Rwanda that year included manufactured metal products, as well as maize. The top exports to UAE were fish and cotton.

Import Performance

While merchandise exports have more or less stagnated, merchandise imports have been rising, with the increase being especially steep during the last few years. Between 2001/02 and 2004/05, merchandise imports rose nearly 60 percent, from around US$1bn. to nearly US$1.6bn. Both private sector and government imports have been rising, with private sector imports experiencing the steepest increase (Figure 1.4).

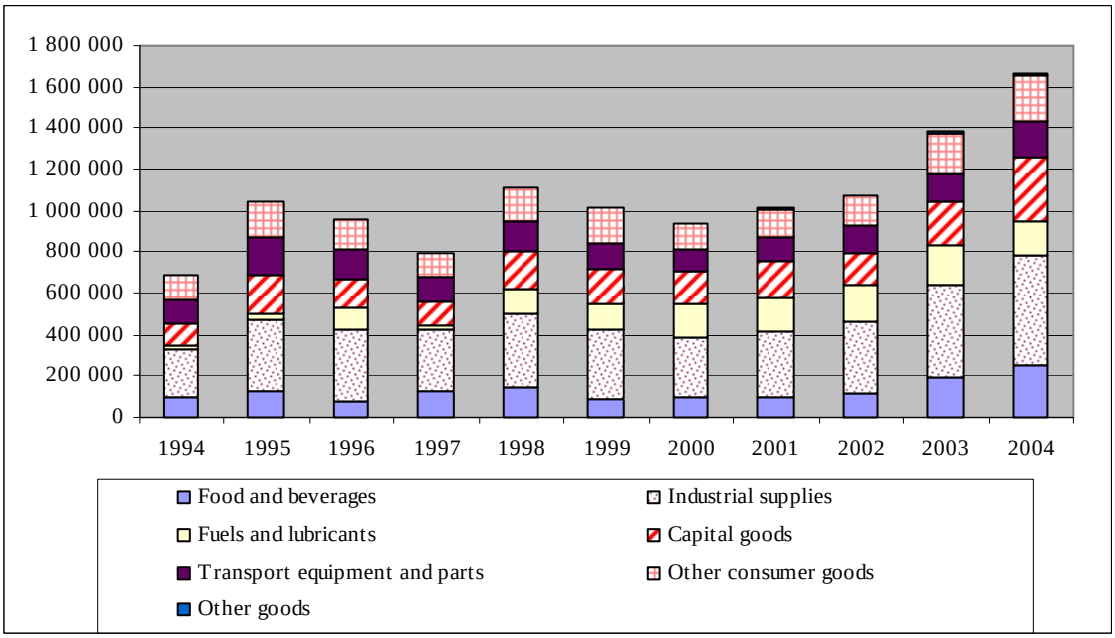
Figure 1.4 Merchandise Imports (US$m.)



Source: IMF, data from BOU.

Merchandise imports increased for all broad economic groups during the decade 1994-2004 (Figure 1.5), with imports of fuels and lubricants registering among the highest growth rate during that decade (Table 1.8).

Figure 1.5 Imports by broad economic groups, 1994-2004 (thousand US$)



Source: World Bank staff derivations based on UN COMTRADE data.

Table 1.8 Imports by Broad Economic Groups

	Annual average growth (in percent)			Contribution to growth of imports (in percent)		
	1994-2004	1994-2001	2001-2004	1994-2004	1994-2001	2001-2004
Food and beverages	10.1%	-0.1%	38.1%	16.1%	2.9%	13.2%
Industrial supplies	8.8%	5.1%	17.9%	34.7%	17.1%	17.7%
Fuels and lubricants	20.8%	30.8%	0.5%	15.9%	15.1%	0.8%
Capital goods	11.4%	7.6%	20.7%	23.4%	13.2%	10.2%
Transport equipment and parts	4.2%	-0.7%	16.8%	9.0%	3.4%	5.6%
Other consumer goods	7.2%	3.3%	17.0%	13.8%	6.5%	7.3%
Other goods	24.9%	-3.0%	125.8%	0.3%	0.0%	0.3%
Total	9.3%	5.7%	18.0%	100.0%	100.0%	100.0%

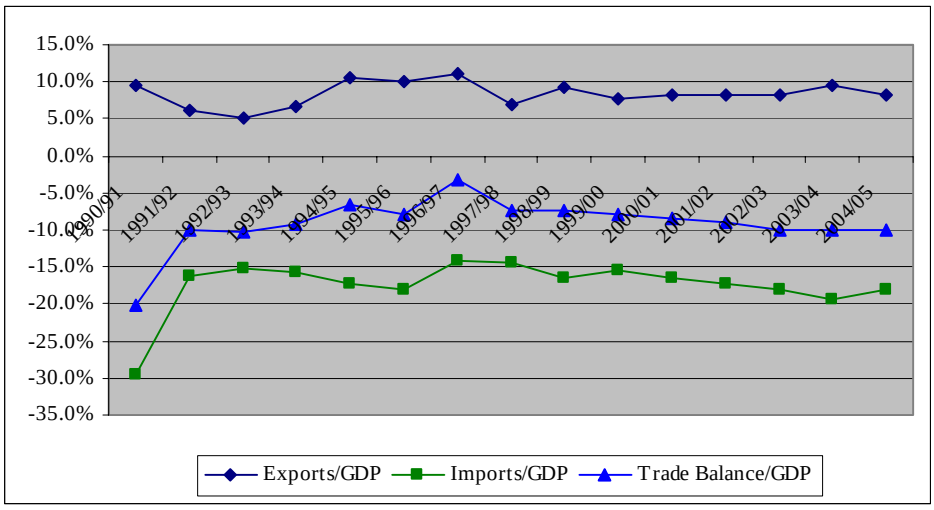
Source: World Bank staff estimates based on UN COMTRADE data.

Faster growth in imports than exports, especially in the recent years, had resulted in a widening of the merchandise trade deficit, which stood at around 10 percent of GDP in 2004/05 (Figure 1.6). The acceleration in imports since 2001 has been across-the-board in consumer, capital and industrial goods, with the exception of fuels and lubricants which registered the lowest growth (Table 1.8). Such a pattern of import increase is generally not a cause for concern in terms of the sustainability of the trade deficit, which typically arises if the increase in imports are predominantly in consumer goods and not in capital or industrial goods, since the latter are required to raise productive capacity in turn generating exports (hence foreign exchange revenues to pay for the imports) and growth down the road. However, if the capital and industrial goods that are imported are skewed towards machinery and equipment for housing construction rather than for productive investments, then they would be for consumption rather than investment purposes. In light of the current construction boom in Uganda, the CEM is undertaking further analysis into the composition of capital goods imports to ascertain whether the recent increase in

such imports are for investment or consumption purposes, and the attendant implications not only on the sustainability of the trade deficit but of growth itself.

At the same time, questions have been raised as to whether imports could rise faster to absorb the rising aid flows, to counter the potential "Dutch Disease" problem (whereby larger inflows than outflows of foreign exchange lead to appreciation of the real exchange rate which dampens export competitiveness[13]). Import levels depend on aggregate demand in the economy and policy and institutional factors. Economic growth, albeit somewhat lower than earlier, remains strong in Uganda and in fact imports have accelerated since 2001 although economic growth has slowed. On the policy side, Uganda has had very low import tariffs, although the recent implementation of the common external tariff (CET) of the customs union of the East African Community (EAC) has resulted in a slight increase in tariffs. Any future downward adjustment of the CET—as allowed for in the customs union protocol—would be one policy lever for raising imports. Since imports of intermediate (rather than final goods) are needed for raising the productive capacity (and hence exports and growth) of the economy, adjusting the tariff band for intermediate goods would be more important than lowering the maximum tariff which applies to final goods. On the institutional side, there are issues regarding transport and trade facilitation including customs that could be addressed to ease imports—these are discussed in depth in Chapters 6 and 7. Perhaps most importantly, using aid flows (and public expenditures) to strengthen infrastructure (which has high import content), would minimize the "Dutch Disease" problem and build productive capacity at the same time (see Chapter 2).

Figure 1.6 Merchandise exports, imports, and trade balance (shares of GDP)



Source: IMF, based on data from BOU.

Finally, with respect to import partners, COMESA as a group is as important a source of imports for Uganda as it is an export destination, ranking second as a regional grouping from which Uganda obtains its imports, and being the source of one-quarter of Uganda's imports (Table 1.9). Most of the imports from COMESA countries are from Kenya, which was Uganda's top import partner in 2004. Kenya is clearly a very important trading partner for Uganda on both the export and import sides.

[13] See Chapter 2 for further discussions of this issue.

Table 1.9 Sources of Import, 2004

By regional grouping (share of total imports)		Top ten import sources and products		
		Share of total imports		Top import items
Asia	28.9%	Kenya	12.5%	Cement, medicament, salt
COMESA	25.2%	South Africa	9.3%	metal products, sugar cane/beet, trucks
European Union	18.2%	Japan	8.2%	trucks, automobiles, cement clinkers
Other Africa	9.3%	India	8.1%	medicaments, cereals
North America	7.1%	United States	6.9%	maize, maize flour, vegetable oils
Middle East	7.1%	China	6.9%	batteries, electrical equipment, footwear
South America	2.0%	UK	5.6%	unused postage, used clothing, books
Other Europe	1.5%	UAE 1/	5.4%	computer parts, electrical equipment, trucks
Rest of the world	0.7%	Malaysia	4.5%	palm oil, animal and vegetable fats, machinery
		Germany	2.4%	telephonic equipment, used clothing

Source: 2004 Statistical Abstract, UBOS; UNCOMTRADE.
Note: top import items are according to HS6 code. 1/ These items imported from UAE are transshipments.

Informal Trade Performance

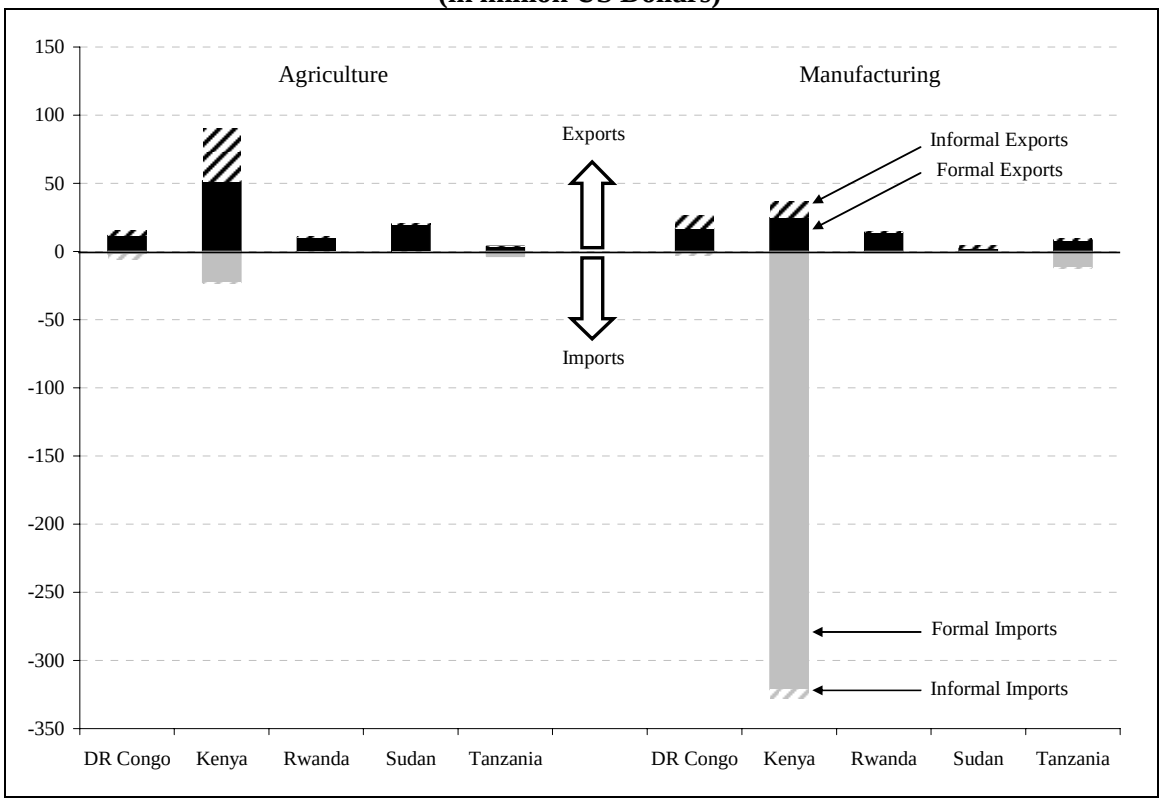
In addition to the formal trade described above, Uganda also engages in substantial informal trade with its neighbors. A survey of informal cross-border trade between Uganda and five neighboring countries (DRC, Kenya, Rwanda, Sudan, and Tanzania) launched by the Uganda Bureau of Statistics (UBOS) and the Bank of Uganda (BOU)[14] estimated that informal exports amounted to 50 percent of official exports to the five neighboring countries, while informal imports amounted to about 4 percent of official imports to those five countries for the period of four months October 2003 to January 2004. Informal exports were estimated to be 5 times the size of informal imports during those four months (US$23.7m. for the former and US$4.6m. for the latter). Such informal trade has come about because shipments across borders by bicycle or wheelbarrow of up to 200 kg do not require official registration, so that traders can avoid the (relatively low) EAC or COMESA tariffs and other direct and indirect taxes that apply only to formal businesses. Such trade is persisting between EAC countries even after all tariffs are reduced to zero because of the fiscal disincentives related to becoming a formal business—including the liability for value-added and other taxes—remain.

Uganda has informal trade surpluses with all its five neighbours for both agricultural and manufacturing products. The positive informal trade balance for manufactures with Kenya is particularly notable, given that Uganda runs a very large official trade deficit with that country.

Kenya dominates as the informal export destination, absorbing 71 percent of such exports from Uganda, followed by DRC (20 percent), Sudan (4 percent), and Rwanda and Tanzania (around 3 percent each) (Figure 1.7). Except for Tanzania, the other 4 countries already rank within the top ten of Uganda's export partners according to official statistics (Table 1.7). Adding these informal exports to the official export figures underlines all the more the importance of these neighboring countries for Uganda's export trade.

[14] This survey is funded by the UK Department of International Development (DFID) and BOU. The results are reported in UBOS (2004a).

Figure 1.7 Uganda's Formal and Informal Trade with its Neighbors, 2004 (in million US Dollars)



Note: Informal trade estimates should be treated with care, as the trade volumes for the four month study period of October 2003 to January 2004 were extrapolated to the full year 2004.
Source: UN COMTRADE database, and UBOS, 2004.

63 percent of informal exports are agricultural exports, while 37 percent are industrial. Topping the list of informal agricultural exports are maize (19 percent of informal exports), beans (17 percent), fish (8 percent), other grains (7 percent), and bananas (3 percent). Among the leading industrial exports are re-exports of second hand shoes (7.5 percent of such exports) and second and clothes (6 percent), as well as cement (3 percent). Maize and beans which together make up 36 percent of informal exports, are comparable in value to all informal industrial exports combined. When informal maize exports are added to the formal maize export figures, the importance of maize to Uganda's exports and for its rural economy is all the more highlighted.

1.3 POVERTY TRENDS AND PROFILE

The dramatic growth rebound in Uganda that accompanied the economic reforms has been largely responsible for the reduction in poverty during the decade 1992/93 to 2002/03. Poverty fell in all the regions in the country, although more so in urban than rural areas, and more so in the center and the west than the north (Table 1.10), which underlies—among other factors—the rise in inequality in Uganda mentioned earlier.

Table 1.10 Population Share and Poverty Headcount (in percent)

	Population share		Poverty headcount		Reduction in poverty headcount
	92/93	**02/03**	**92/93**	**02/03**	**92/02**
National	100	100	55.7	37.7	18.0
Rural	87.6	86.5	59.7	41.7	18.0
Urban	12.4	13.5	27.8	12.2	15.6
Centre	30.6	31.6	45.6	22.3	23.3
East	27.9	29.3	58.8	46.0	12.8
North	17.3	15.3	72.2	63.3	8.9
West	24.2	23.7	53.1	31.4	21.7

Source: Uganda Poverty Assessment Report, World Bank (2005), p.7.

Poverty incidence (as measured by the headcount ratio) is highest for households headed by individuals engaged in agriculture. According to the 2002/2003 Uganda National Household Survey (UNHS), around 75 percent of the poor in Uganda are employed in agriculture (Table 1.11). While poverty has declined across all sectors, it has declined the least for those involved in agriculture.

Econometric analyses that control for geographic location, education, and household size confirm the relationship between the type of economic activities households are engaged in and poverty.[15] Poverty is found to be more common among rural households, in the Northern region, and among those primarily involved in the livestock sector. Households engaged in livestock are the poorest. Compared with them, those working in the utilities sector (electricity, gas, and water) fared the best, followed by those engaged in hotels, lodging and restaurants; then in descending order those engaged in other services; fishing; manufacturing, and lastly crop agriculture (Table 1.12). The finding that households engaged in fishing fares better than those in manufacturing maybe somewhat surprising, though there are two possible explanations for this. The first is that all households engaged in fishing are included, which are not only fishers, but also boat crews and owners, as well as those employed in fish processing. Secondly, fishers in Uganda also fare quite well, earning around 60 percent of the value-added generated by export fishery (see Volume 2, Chapter 2).

Among crop producers, export (cash) crop producers such as coffee and maize producers fared the best, being 5 to 8 percent less likely to be poor compared to those who are mainly involved in livestock (Table 1.13). Interestingly, cotton producers fare worse than both livestock producers and producers of other crops. This is consistent with the fact that cotton producers are mainly located in more arid areas of the country and have few alternative more profitable means of livelihood.

[15] An OLS regression and a Probit model were carried out to study the microeconomic determinants of household welfare and poverty after controlling for all other observable characteristics such as region, education, and household size. The analysis is primarily based on the 1999 UNHS due to lack of information on key variables such as production and income in the 2002/03 survey. See Appendix 1.

Table 1.11 Poverty by Main Economic Activity of Household Head

	Incidence of Poverty (Headcount ratio)		Main Activity of the poor	
	1992/1993	2002/2003	1992/1993	2002/2003
Crop agriculture	63.6	50.4	79	69.9
Non-crop agriculture	52.4	33.6	2.7	4.9
Mining/construction	36.5	23.0	1.1	1.3
Manufacturing	44.4	28.4	3.0	5.4
Trade	26.5	17.4	3.3	6.5
Transport/comm.	34.5	18.3	0.9	1.3
Government services	36.8	12.6	1.0	1.8
Other services	29.5	24.1	4.9	2.0
Not working	65.6	38.9	3.7	5.8
All	**57.7**	**37.7**	**100**	**100**

Source: Uganda Poverty Assessment, World Bank (2005), p.36-37.
Note: Non-crop agriculture includes livestock farming, poultry farming, fishing and hunting.

Table 1.12 Relative real per capita income by industry groups

Main economic activity of household	Percent difference with livestock households
Utilities	41%
Hotel and lodging, bars, restaurants	29%
Services	26%
Fishing	24%
Manufacturing	14%
Crop Agriculture	9%

Source: Duygan (2006) based on 1999/2000 UNHS; see Appendix 1.

Table 1.13 Relative real per capita income for crop producers

Main economic activity of household	Percent difference with livestock households
Maize	7.7%
Coffee	5.0%
Other crops	0.1%
Cotton	-6.4%

Source: Duygan (2006) based on 1999/2000 UNHS; see Appendix 1.

Moving out of agriculture is clearly important for poverty reduction in light of the higher level of poverty and lower level of income in agriculture compared to all other sectors except for livestock. However, the transition out of agriculture—which has already started as discussed earlier—is a long-term proposition. Given the large share of the population in the rural area (86.5 percent in 2002/03) (Table 1.10), the large share of the employed in agriculture (65 percent in 1999/00), and the large share of the poor in agriculture (75 percent in 2002/03) (Table 1.14), continued reduction of poverty in the country would require higher growth in agriculture. Within agriculture, higher growth of export crops is particularly important since the majority of those engaged in crop farming are engaged in such crops—in particular maize and coffee—as their main activity. Further, such households also fare better than those engaged in other crops or livestock, as discussed earlier.

Table 1.14 Share of Households by Main Economic Activity

	All	Poor
Crop Farming	62%	78%
Maize	33%	39%
Cotton	2%	3%
Coffee	14%	13%
Tobacco	1%	1%
Other crops	12%	21%
Non-crop agriculture	3%	3%
Livestock and poultry	2%	2%
Fishing	1%	1%
Hunting	0%	0%
Mining and Quarrying	0%	1%
Manufacturing	4%	2%
Utilities (Electricity, gas, water)	0%	0%
Construction	2%	1%
Services	22%	8%
Hotel and lodging, bars, restaurants	2%	0%
Not working	5%	6%

Source: Duygan (2006) calculations based on 1999/2000 UNHS.

The importance of agriculture is further underlined by the fact that even in urban areas, 18 percent of the income of the poor is from crop farm income (Table 1.15). The importance of coffee is also reflected in the fact that it contributed to 9 percent of the income of poor households in the central region, the same region that had experienced the greatest decline in poverty over the last decade.

Table 1.15 Sources of Household income for the poor, by region

	Uganda	Kampala	Central	Eastern	Northern	Western	Rural	Urban
Crop-Farm income	45.6%	1.1%	52.0%	43.2%	37.5%	58.2%	46.7%	17.4%
Maize	4.2%	0.0%	3.4%	7.9%	2.1%	2.8%	4.3%	2.8%
Cotton	0.4%	0.0%	0.2%	0.5%	0.7%	0.0%	0.4%	0.4%
Coffee	2.6%	0.0%	8.6%	2.2%	0.1%	1.8%	2.7%	2.0%
Tobacco	0.5%	0.0%	0.0%	0.0%	0.8%	1.2%	0.6%	0.0%
Other Agric. Income	4.4%	0.0%	3.1%	2.6%	6.9%	3.4%	4.6%	0.7%
Wages&Salaries	9.5%	36.6%	11.9%	11.6%	6.7%	9.5%	8.7%	28.6%
Non-Agric. Income	11.9%	17.5%	9.5%	13.0%	15.3%	6.0%	11.3%	26.3%
Capital income (rent, dividends…)	6.7%	24.3%	6.3%	6.4%	7.0%	6.7%	6.6%	8.1%
Remittances	6.6%	14.7%	5.6%	7.5%	8.1%	3.2%	6.5%	8.2%
Other income (Transfers)	15.5%	5.8%	11.6%	15.7%	18.5%	13.0%	15.6%	10.8%

Source: Duygan (2006) based on 1999/2000 UNHS.
Note: "Poor" is defined here as households living below the basic needs poverty line. Non-crop agriculture income includes income from livestock, poultry, fishing, and hunting.

2. SELECTED COMPETITIVENESS ISSUES: MACROECONOMIC ASPECTS AND INVESTMENT CLIMATE

Many factors determine the competitiveness of a country's exports. These include, notably, the macroeconomic situation in particular inflation levels and the real exchange rate; the trade policy regime; the business environment; the cost and availability of infrastructure; taxes; and so on. The trade policy regime is covered in Chapter 3 of this report, while transport and trade facilitation issues are covered in Chapters 6 and 7. This chapter focuses on the macroeconomic aspects and key investment climate issues.

2.1 INFLATION AND REAL EXCHANGE RATE

International experience has shown that low levels of inflation and a stable and competitive real exchange rate are important for export growth.[16] A low level of inflation is important for encouraging private investment, including in export sectors. Exchange rate volatility creates a risky business environment in which there are uncertainties about future profits and payments. These risks are especially exacerbated in countries where financial instruments for hedging against foreign exchange risk are not developed, which is the case in many developing countries including Uganda.

Uganda has achieved and maintained macroeconomic stability since the early 1990s. Inflation has fallen from over 50 percent in the early 1990s to single digits after 1992. BOU currently manages liquidity with the goal of keeping underlying inflation[17] below 5 percent. BOU's track record in inflation control is good, and inflation expectations appear to be low, as reflected in the gently sloping yield curve for government securities. Inflation therefore does not appear to be a competitiveness risk.

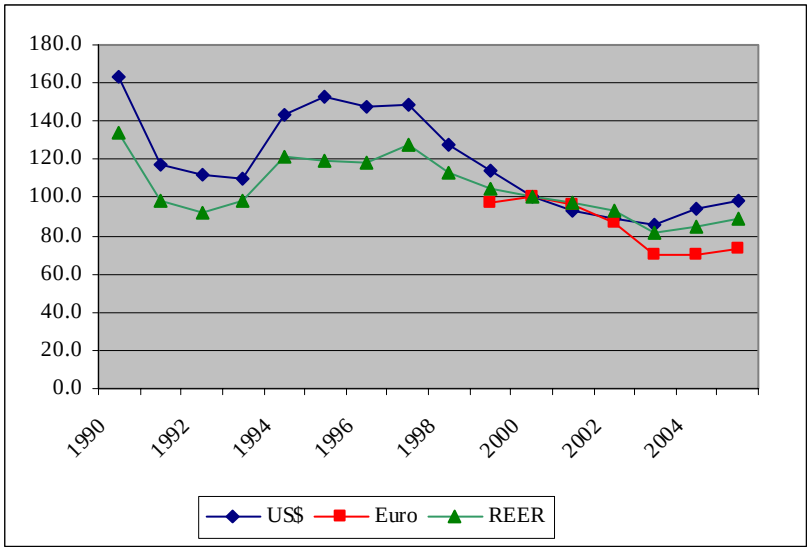
The various measures of the real exchange rate (RER) showed a steady depreciation between 1997 and 2003, after which they showed a slight appreciation (Figure 2.1). This has led to concerns over the current and prospective competitiveness of Uganda's exports, and the reasons behind the appreciation, in particular the role played by aid inflows. Much of the recent concern in Uganda has been focused on the appreciation of the Ugandan shilling with respect to the U.S. dollar; between 2003 and 2005, the Ugandan shilling appreciated 12.3 percent in real terms compared to the dollar.

The exchange rate with the dollar, however, is not the best indicator of Uganda's overall export competitiveness since the U.S. is not an important export destination for Uganda, absorbing only 2.8 percent of its exports in 2004. The real exchange rate with the euro, which is a better measure of Uganda's export competitiveness (nearly 30 percent of Uganda's exports are destined for the EU[18]), shows a smaller appreciation of 5 percent during 2003-05, almost all of which occurring in 2005. The best measure of export competitiveness, the real effective exchange rate (REER, a trade-weighted average real exchange rate with all of Uganda's major export partners) shows an appreciation somewhere in between the two, of around 8.5 percent during 2003-05. In sum, all the different measures of the RER indicate that there had been an appreciation during 2003-05,

[16] See, for example, World Bank (2005b).
[17] "Underlying inflation" excludes food prices. This is different from the CPI inflation rate shown in Table 1.2 which includes food price inflation.
[18] It is recognized that not all EU countries are on the euro; nevertheless, the euro RER is a good proxy for measuring Uganda's export competitiveness with respect to its EU export partners.

with the focus on the RER with respect to dollar likely overstating the potential impact on Uganda's overall export competitiveness.

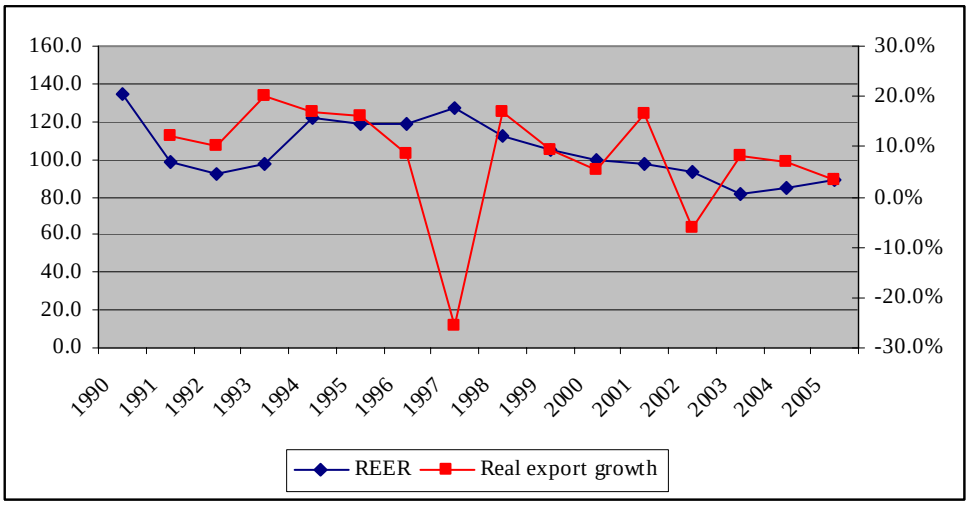
Figure 2.1 Real Exchange Rates (1999/00=100)



Source: dollar and euro real rates calculated based on IMF IFS; REER from IMF IFS.

Real merchandise export growth had slowed somewhat in the last few years (Figure 2.2). Recent research conducted by BOU also indicates that the sharp appreciation of the exchange rate between August 2003 and September 2004 had reduced export profitability and competitiveness in some key export sectors, as well as reduced farmgate prices to coffee and cotton farmers.[19] Nonetheless, it is important to note that many other factors also affect competitiveness, including all the behind-the-border issues that are addressed in this report.

Figure 2.2 Real Merchandise Export Growth and REER



Source: IMF.

[19] Bank of Uganda and Ministry of Finance, Planning, and Economic Development (2005).

Since Uganda is expected to continue to be highly aid-dependent (currently aid supports 50 percent of the government budget, or around 10 percent of GDP), it is important that the aid inflows are optimally utilized for generating growth in the country while minimizing their potential negative impact on competitiveness that could result from an appreciated real exchange rate (the "Dutch Disease" effect). Recent research[20] suggests that competitiveness can be strengthened (rather than weakened) when aid inflows are used to enhance productive potential by strengthening infrastructure, eliminating supply bottlenecks, and so on. While an initial exchange rate appreciation weakens exports, subsequent productivity gains can leave exporters more profitable, boosting the country's medium-term export and growth performance. Furthermore, the high import content of infrastructure in Uganda would also reduce the pressure on the real exchange rate at the same time. Import content for power generation in Uganda is around 90 percent, for transmission and distribution around 70 percent, and for paved roads is around 90 percent. The focus on infrastructure is further justified in Uganda's case as infrastructure—and in particular power—is one of the potential binding constraints to manufacturing in the country (see next section).

2.2 KEY INVESTMENT CLIMATE ISSUES[21]

Recent quantitative analysis has found that *infrastructure* (in particular power) and *finance* (high cost and low level of credit intermediation) are the most important constraints for manufacturing in Uganda,[22] for both domestic and foreign investors. High cost of finance, in turn, is due to high cost of doing business arising from infrastructural constraints. Hence, greater growth benefits will come from focusing on improving infrastructure than from better policies and institutions.

These findings are in line with the fact that Uganda has already created a market-friendly policy environment by attaining macroeconomic stability and by undertaken wide-ranging structural reforms such that there is limited government intervention in the economy with privatized, well-supervised and well-capitalized banks, and no price controls.

They also reflect the achievements Uganda have made in institutional reforms. Uganda is doing relatively well with respect to contract enforcement, labor flexibility, and closure of business. According to Doing Business[23], in 2004 Uganda ranked in the top third among some 150 countries for these 3 categories—10th for contract enforcement; 33rd for hiring and firing, and 41st for closure of business. It did better in these areas than most other Sub-Saharan African (SSA) countries.

Governance also does not appear to be a binding constraint, with the level of corruption in Uganda being around the average for countries at a similar stage of economic development (see Figure 2.3). Ugandan manufacturing firms spend less on unofficial payments as shares of sales to get things done compared with most countries in SSA, the Middle East and North Africa, and Latin America and the Caribbean. Further, only 7 percent of Ugandan firms give gifts to tax

[20] See, for example, Adam and Bevan (2003), Radelet, Clemens and Bhavnanai (2004), and Sundberg, Lofgren and Bourgignon (2005).

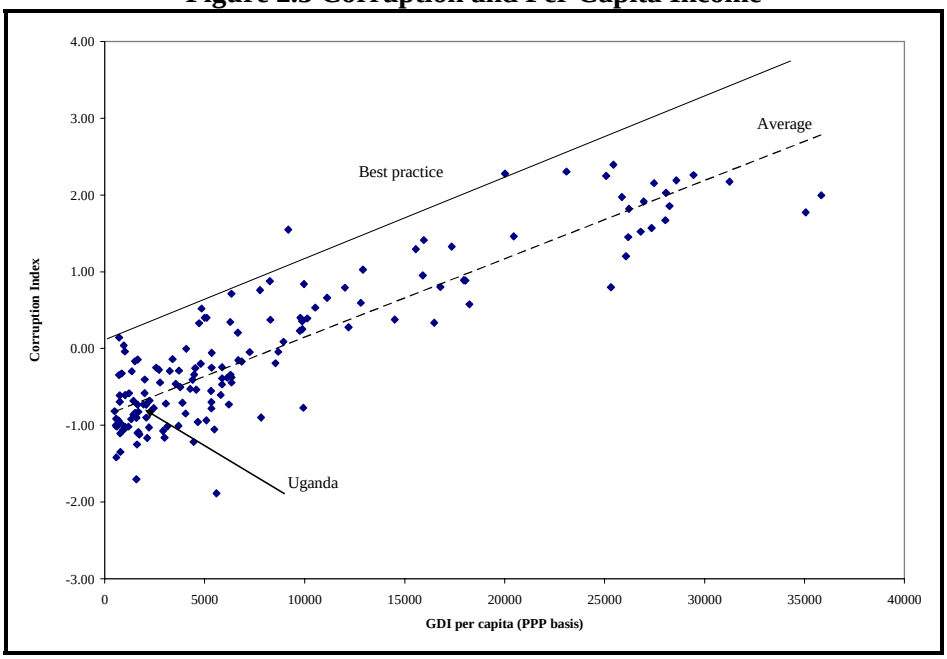
[21] This section highlights the key investment climate issues in Uganda. A more detailed discussion of these issues are found in the forthcoming 2006 Uganda CEM.

[22] Hesse (2006), background paper for the 2006 Uganda CEM, using firm survey data from the World Bank's Regional Program for Enterprise Development. The data is collected from 392 registered Ugandan private firms in commercial agriculture, construction, manufacturing, and tourism surveyed during November 2002-April 2003. The 2004 Uganda Investment Climate Assessment was based on this survey.

[23] World Bank 2006 Doing Business data base, which is based on expert assessments in 2004 to provide international benchmarks for business regulation.

inspectors, lower than the SSA average (17 percent), Middle East and North Africa (28 percent), South Asia (44 percent), and Latin America and the Caribbean (12 percent). Also, security and protection costs and the time to resolve a legal dispute are the average of most SSA countries whereas bureaucracy proxied by the time senior management spends with regulation requirements appears to be lower. However, small and middle-size firms and exporters are more affected by bribes and informal payments than micro or large firms, which could reflect the fact that micro firms have minimal assets while large firms may be politically well-connected. Further improvements in reducing corruption (and Uganda can certainly do so since a number of countries at similar levels of income as Uganda do significantly better) can undoubtedly improve Uganda's competitiveness by reducing the cost of doing business as well raise its attractiveness to foreign investors.

Figure 2.3 Corruption and Per Capita Income



Source: Corruption Index from World Bank Governance Indicators; GDI per capita (PPP) from IMF.

Power[24]

Power is the key constraint with respect to infrastructure. Cross country analysis indicates that Uganda faces considerable cost disadvantages from energy and indirect costs (the latter include land rent, transportation, telecommunications, and water). Compared with China and India, two high performing countries, net value-added (gross value-added less energy and indirect costs) as a share of gross value-added (sales less raw materials) are much lower in Uganda—63 percent compared with 85 percent in China and 71 percent in India. Although, in this regard, Uganda fares better than some other African countries such as Kenya or Nigeria where this ratio ranges from 42 to 51 percent. Uganda's productivity is around 47 percent of the Chinese benchmark, and only 30 percent when energy and indirect costs are taken into account (Figure 2.4).

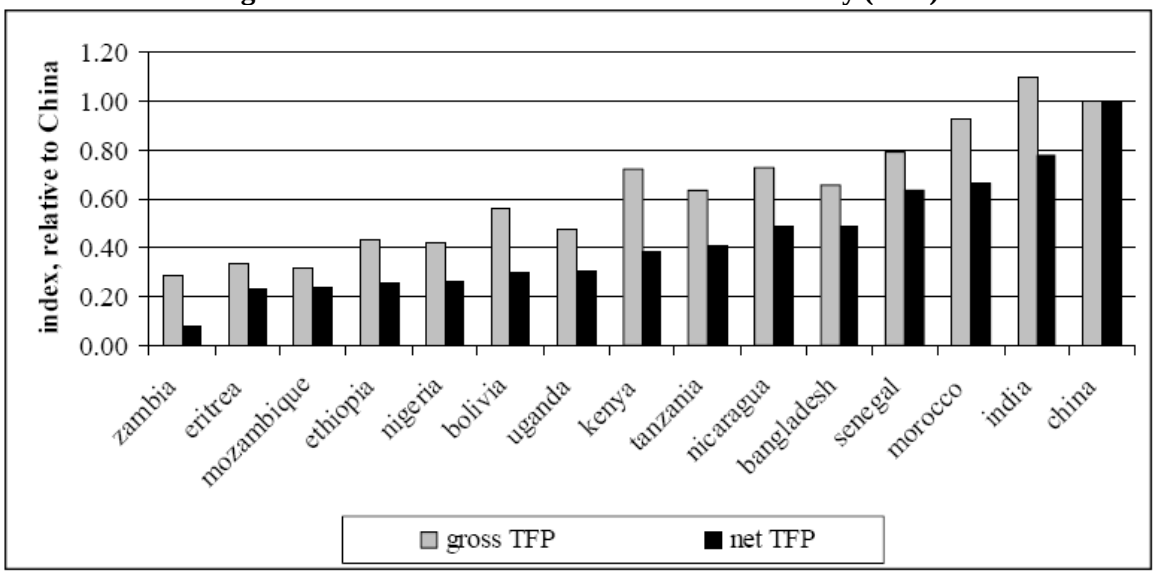
The power situation has worsened recently with the reduction of hydropower output because of low water levels in Lake Victoria—water levels are now the lowest since 1951. This is partially attributed to three years of drought, and growing electricity demand coupled with the lack of new

[24] The discussion in this section is drawn from Hesse (2006), background paper for 2006 Uganda CEM.

generation capacity (the Bujagali project) which has led to over-abstraction for hydropower generation.[25]

More permanent relief of the power shortage situation is not expected until 2010, when the Bujagali dam is expected to be operational. In the interim, GOU is planning to remedy the situation by installing thermal power, which will be expensive. The current situation in Uganda, together with the world oil price increase, is imposing serious costs on private sector firms, which are requesting GOU to provide tax exemptions on diesel for their generators (60 percent of medium and 93 percent of large firms have their own generator). Since running a generator is 2 to 6 times more expensive than obtaining electricity from the public grid (2 times for larger firms and 6 times for smaller firms),[26] a case could be made for tax exemptions to partially alleviate the severe competitive disadvantage Uganda already faces in this regard. Appropriate modalities would need to be worked out to ensure that exemptions are time-bound, and that they are not abused.

Figure 2.4 Net and Gross Total Factor Productivity (TFP)



Source: Eifert et al (2005).

Finance[27]

Ugandan firms suffer from very low credit market participation and high costs of finance (with costs of borrowing reportedly averaging 20 percent). The latter appears to be mainly driven by very high overhead costs, which in turn are a function of both wages and indirect costs including electricity and telecommunications.[28]

Private sector lending in Uganda is significantly lower than that in comparator countries (Kenya and Tanzania) as well as the averages for SSA and low-income countries (Table 2.1). Deficiencies in the contractual and informational frameworks in Uganda have contributed

[25] World Bank (2006).
[26] Hesse (2006).
[27] The discussion in this section is drawn from Beck and Hesse (2006), background paper for the 2006 Uganda CEM.
[28] Beck and Hesse (2006).

substantially to the low level of credit market participation. With respect to the former, improving land and company registries, overhauling the insolvency legislation, and increasing the capacity of the Commercial Court can strengthen creditor rights and reduce the cost of credit. With respect to the latter, Uganda does very poorly—according to Doing Business, Uganda has a score of zero on the credit information index out of a maximum of 6, with 6 representing the highest level of information sharing). There is no credit information sharing in Uganda, which maybe because banks are more interested in maintaining their dominance of certain market niches than sharing information. Analysis has indicated that if Uganda had the average level of credit information of developing countries, it would have enjoyed 21 percent private credit as a share of GDP rather than the 5 percent it had over 1999-2003. The establishment of a credit reference bureau, which has been under preparation for sometime, would certainly help in this regard, and the establishment of a national identification system would also be critical.

Table 2.1 Financial intermediation across countries, 2004

	Liquid Liabilities/ GDP	Private Credit/ GDP	Loan-Deposit Ratio	Bank Deposits/ GDP	Overheads	Net Interest Margin
Uganda	19.03%	5.92%	41.89%	14.82%	9.14%	13.41%
Kenya	37.80%	25.69%	78.88%	30.35%	5.74%	7.58%
Tanzania	20.21%	5.70%	38.06%	14.81%	6.90%	7.32%
Sub-Saharan Africa	27.67%	16.98%	72.30%	21.31%	6.29%	8.00%
Low income	26.39%	13.65%	70.76%	18.90%	5.82%	7.46%

Source: Beck and Hesse (2006).

A deficient legal system and limited credit information sharing also explain the high interest rates and margins in Uganda. However, even compared with comparator countries, the interest spreads and margins are very high in Uganda (Table 2.1), which is due to high overhead costs. Among the factors explaining high overhead costs are investment in increased outreach (modernization and expansion of bank branch networks and in ATMs), as well as high costs of power and telecommunications. Hence, addressing infrastructure problems will at the same time help reduce the cost of finance, relieving both binding constraints to growth at the same time.

3. TRADE POLICY AND REGIONAL TRADE ARRANGEMENTS

The Ugandan trade regime has undergone substantial changes over the past decade. The country has significantly liberalized its market since the mid-1990s, such that weighted average tariffs fell below those in several relevant comparator groups (Table 3.1). However, the medium-term liberalization trend was reversed in 2005 when the introduction of the CET of the EAC raised average tariffs.

Table 3.1 Uganda and Worldwide Trends in Tariff Protection
(Weighted averages, in percentage)

Standard Industrial Classification (SIC) Group	1994	2000	2002	2003	2004	2005
Uganda	16.82	7.28	7.07	6.64	6.22	13.49
Agriculture, Forestry, and Fishery Products	17.25	2.49	2.81	3.07	3.89	11.06
Mineral Commodities	9.25	6.41	5.56	6.89	6.06	4.43
Manufactured Commodities	18.48	8.11	8.16	6.74	6.66	18.59
Manufactured Commodities not identified by type	15.62	7.04	6.91	6.66	5.99	11.07
Least Developed Countries	67.17	15.58	13.47	13.02	12.21	10.92
Agriculture, Forestry, and Fishery Products	37.84	5.80	6.63	6.36	6.50	10.12
Mineral Commodities	52.35	18.77	12.33	11.68	11.63	3.25
Manufactured Commodities	77.07	18.35	16.25	15.50	14.39	14.16
Manufactured Commodities not identified by type	65.61	14.11	12.09	11.73	11.10	10.04
Sub-Saharan Africa	18.25	16.33	14.03	11.01	7.12	6.52
Agriculture, Forestry, and Fishery Products	8.36	14.10	8.23	12.35	8.24	8.90
Mineral Commodities	16.11	20.96	11.35	7.74	1.91	1.08
Manufactured Commodities	17.99	17.90	16.15	11.59	9.79	9.65
Manufactured Commodities not identified by type	19.94	14.43	13.85	11.19	7.14	6.52
Developed Countries	6.40	2.83	2.87	3.48	2.84	3.32
Agriculture, Forestry, and Fishery Products	7.54	3.52	3.61	6.41	4.33	5.63
Mineral Commodities	1.10	1.36	1.26	0.92	1.83	1.21
Manufactured Commodities	9.64	5.38	4.85	5.08	4.52	4.64
Manufactured Commodities not identified by type	5.58	2.13	2.26	3.03	2.24	2.99

Source: UNCTAD Trains database accessed through WITS.
Note: MFN import duties only; para-tariffs and surcharges (such as excise duties and import commission fees, which were applied in Uganda up to 2004) are not included. Tariffs in 2005 are weighted with 2004 trade data.

3.1 IMPORT POLICIES

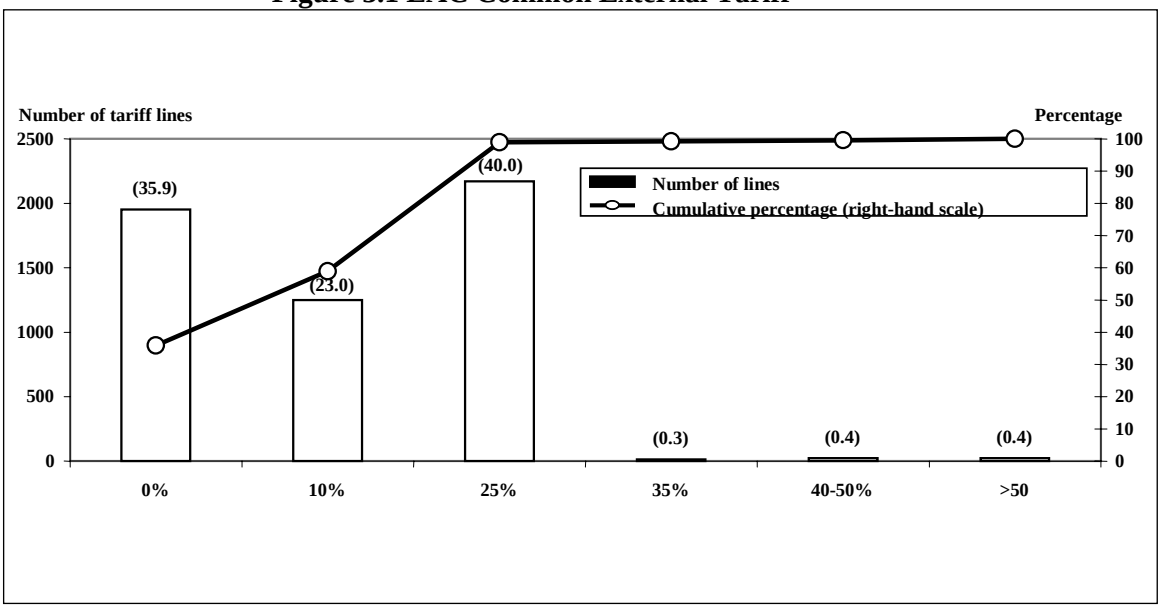
Tariff Regime

Uganda's trade regime changed when it joined the Customs Union of the East African Community (EAC) in January 2005. Together with its EAC partners, Kenya and Tanzania, Uganda adopted the EAC Common External Tariff (CET).[29] At the same time, Uganda discontinued a 2 percent import commission fee and a 4 percent withholding tax.

[29] In addition to adopting the CET, customs procedures, rules of origin, import prohibitions, and trade remedy regulations have been harmonized between the EAC partners (although more work needs to be done with respect to customs procedures—see Chapter 7).

The CET has an escalatory three-band structure, with a zero rate for raw materials, capital goods, and meritorious goods such as medical, pharmaceutical and educational supplies; a 10 per cent rate for intermediate goods, and a 25 per cent maximum rate for finished goods. These 3 rates apply to around 99 percent of all tariff lines. The customs union protocol provides for a revision of the top rate five years after the customs union entered into force, and it is expected that the top rate will at that point be reduced to 20 per cent. Almost 40 per cent of all tariff lines are subject to the maximum rate (Figure 3.1). In addition to import duties, protection is also accorded by excise duties which are higher for domestic than on imported product for two goods: beer and wine.[30]

Figure 3.1 EAC Common External Tariff



Source: WTO Secretariat calculations based on data provided by the EAC country authorities.

58 tariff lines (for "sensitive products") diverge from the CET. For these 58 items, "special tariffs" apply, about a fifth of which are combined duties, consisting of an ad valorem and a specific element. The *ad valorem* tariffs range from 35 to 100 per cent, with the highest duties applying to sugar imports. Other sensitive products include milk, grains, cigarettes, kitenge, and used clothing. Since for most of the sensitive products, the special tariffs exceed the previously existing national import duties, adverse economic effects, notably higher consumer prices, are likely. Some analysts point out that it seems questionable whether regional producers will be able to increase production or offer substitutes in comparable quantity, quality and price to offset the protection-induced reduction in third country imports.[31] Higher prices will notably hit low-income consumers, who depend for their livelihood heavily on the basic products included in the sensitive list. An aggravating factor is that these regressive effects will be felt most intensively in countries which have lower import protection prior to EAC formation, such as Uganda. In this context, the government of Uganda should press its partners to establish a timetable that calls for the imminent phase-out of the special tariffs.

[30] Other goods subject to excise duties on both imported and domestic products include tobacco products, petroleum, and motor vehicles. All goods are subject to a value-added tax (VAT) of 18 percent.
[31] Stahl (2005).

Internal tariffs between the 3 EAC countries have largely been abolished; they remain in place for exports from Kenya to Uganda for 443 items, and for exports from Kenya to Tanzania for 880 items, which are to be phased out by 2010. The asymmetry in liberalizing intra-regional trade is intended to give Uganda and Tanzania, which have less developed industrial sectors and large trade deficits with Kenya, additional time for structural adjustments. The 443 products on Uganda's list are subject to import tariffs of 10 per cent that will be reduced to zero in five annual steps. With this 10 per cent import duty, Kenyan exporters of listed products face (temporarily) higher import barriers under EAC preferences than they did previously under COMESA preferences.

Impact of CET

Adoption of the CET raised Uganda's listed average duty rate (inclusive of excise duties and import commissions in 2004) from 11.3 percent to 12.9 percent. Tariffs were raised for most product categories, with tariffs on food and live animals experiencing the largest increase, while tariffs on beverages and tobacco experienced the largest decline (Table 3.2). However, the protective effect of the higher tariffs has been offset to some extent by the fact that the CET is now applied to the value of imports at Mombasa whereas previously tariffs were applied to the value of goods at the Ugandan-Kenyan border, which were higher than that at Mombasa because of transportation costs.

Table 3.2 Import-weighted and simple average tariffs, 2004 and 2005

	Simple average		**Import-weighted**	
	2004	**2005**	**2004**	**2005**
Food and Live Animals	18.0	24.3	13.3	29.0
Beverages and Tobacco	86.3	25.2	69.7	25.0
Crude Materials, Inedible	10.3	4.4	20.1	32.6
Mineral fuels & lubricants	7.1	11.6	0.3	0.7
Animal and Vegetable Oils & Fats	13.8	12.6	17.3	16.0
Chemicals and Related Products	4.7	3.3	4.8	6.2
Manufactured Goods	13.1	16.3	8.5	15.9
Machinery and Equipment	5.5	6.2	7.2	6.0
Miscellaneous Manufactures	13.7	19.0	11.2	15.0
Others	13.3	18.8	17.0	25.0
All categories	11.1	12.8	8.8	12.3

Source: World Bank calculations based on UNCOMTRADE database (for imports) and UNCTAD trains database (for tariffs).
Note: the 2004 tariffs include excise taxes and import commissions.

The tariff regime has also become more escalatory with the adoption of the CET, as evidenced in the greater divergence between effective rates of protection (ERPs) and nominal rates of protection (NRPs) (Table 3.3).[32] For most sectors, both NRPs and ERPs have increased. In 2005, the highest protection, as measured by ERP, is granted to producers in agro-industry, beverages, and textiles.

[32] An escalatory tariff regime which accords greater protection to final goods than intermediate goods results in effective rates of protection that are larger than nominal rates of protection (the former takes into account protection on both inputs and outputs while the latter only takes into account protection on outputs).

Econometric analysis based on firm-level data suggests that in the short-term, adoption of the CET will change profit margins, productivity, wages and employment only slightly overall (Table 3.4). The predicted effects vary across sectors, with the metals and textiles sectors being generally subject to more pronounced impacts.

Concerns have been raised over the ability of Ugandan manufacturing firms to compete against their more developed and sophisticated competitors from Kenya in light of the phase-out of intra-EAC trade barriers. A recent study[33] indicates that in several industries, Ugandan firms are more competitive than their Kenyan counterparts than generally assumed, and that while Ugandan manufacturing firms are not generally cost-competitive with Kenyan companies, they have benefited from a more business-friendly environment. According to the study, industries that have an advantage in Uganda are fish processing, auto batteries and footwear, whereas Kenyan industries are relatively more competitive in dairy production, grain milling, textile & clothing and metal products.

Table 3.3 Nominal and Effective Rates of Protection in Uganda's Manufacturing Sector

	Nominal rate of protection		Effective rate of protection	
	2002	2005 (CET)	2002	2005 (CET)
Agroindustry	20.5	42.1	27.1	59.5
Bakery	13.2	24.2	13.4	11.9
Beverages	25.7	25.0	102.6	96.7
Chemicals & Paints	19.7	23.2	26.9	28.0
Construction Materials	13.3	15.5	13.9	15.7
Furniture	16.1	24.9	17.1	32.9
Metals	14.6	18.4	16.0	23.5
Machinery	0.9	1.5	-9.9	-8.1
Paper, Printing, Publishing	17.3	17.6	20.7	14.6
Textiles	15.0	25.0	50.8	91.9
Garments	15.0	25.2	11.0	33.4
Wood	23.9	23.7	26.4	26.6
Miscellaneous	23.4	26.6	27.9	32.4
Repair & Maintenance Services	16.9	22.3	18.8	38.4

Notes: Data based on findings of a survey of 228 manufacturing firms. Nominal rates of protection reflect tariffs plus discriminatory excise duties as listed in the tariff schedule.
Source: Rajhi, Marchat and Webster, 2005.

Table 3.4 Short term impacts of the CET (in percent)

Sector	Price-Cost Margin	Productivity	Employment	Wages
Agro-industry	-0.39	-0.85	0.70	0.19
Chemicals and Paints	-0.22	-0.63	0.63	0.00
Construction Materials	-0.46	-0.63	0.37	0.13
Metals	-1.35	-1.80	0.73	0.21
Paper and Publishing	-0.73	-0.55	0.73	0.19
Textiles and Leather	-1.85	5.70	0.62	0.37

Source: Rajhi, Marchat and Webster, 2005.
Note: Calculations based on listed overall average tariffs. Not all estimates were statistically significant.

[33] Siggel and Ssemogerere (2004), who derived competitiveness indicators from firm level data.

Entry into the EAC customs union is estimated to lead to trade diversion for Uganda, that is, it would lead to greater trade between EAC partners than with third countries. This would be welfare-reducing, as Uganda will be substituting more expensive imports from its EAC partners for less expensive imports from more efficient producers in third countries. One study estimated that compared to 2002 levels, formation of the customs union would increase Ugandan imports from EAC partners by 0.15 percent with temporary tariffs on Kenyan imports in place, and by 6.1 percent following the complete phase-out of intra-regional tariffs.[34] Imports from third countries would fall, respectively, by 1.3 and 3.3 percent. Overall, imports are expected to decrease by 0.9 percent (with and without temporary tariffs), with customs revenues falling by 2.9 percent with temporary tariffs and 8.6 percent without. Most of the revenue losses are estimated to be from crude material and chemical imports (Table 3.5). These findings are broadly in line with those from an earlier study[35] that projected economic welfare losses for Uganda due to trade diversion as the country's average MFN-tariffs increase with the adoption of the CET. The study argues that Uganda faces the danger of reduced industry competitiveness due to EAC's higher tariff protection for the country's nascent import competing industries, which reduces the incentive to innovate, bring down production costs, and improve marketing capabilities. The study voiced concerns that the economic growth momentum that Uganda has enjoyed since the mid-1990s as a result of trade and macroeconomic reforms is being partially undermined, and recommended that Uganda strive for lower external tariffs in the EAC.

The EAC customs union protocol provides for a revision of the top CET rate five years after the customs union entered into force. In light of the risks of trade diversion and reduced competitiveness discussed above, it would be in Uganda's interest to ask its partners for a reduction in the highest band tariff duty from 25 to 20 percent, as well as consideration of reduction in the middle tariff band given the importance of intermediate goods for building productive capacity as discussed in Chapter 1.

Table 3.5 Changes in Customs Revenues following CET Adoption

	million USD	Percent of 2002 revenues
Food and live animals	2.0	1.09
Beverages and tobacco	0.0	0.01
Crude materials, inedible, except fuels	-4.7	-2.47
Mineral fuels, lubricants and related materials	-0.5	-0.28
Animal and vegetable oils, fats and waxes	-1.6	-0.88
Chemicals and related products.	-2.5	-1.34
Manufactured goods classified chiefly by material	-1.0	-0.56
Machinery and transport equipment	1.2	0.67
Miscellaneous manufactured articles	1.8	0.96
Commodities and transactions not classified elsewhere	0.0	0.00
Total	-5.3	-2.90

Source: Castro, Kraus, and de la Rocha (2004).
Note : Estimates assuming temporary tariffs on imports from Kenya are in place.

[34] Castro, Kraus, and de la Rocha (2004), based on a partial equilibrium model that takes into account the response of producers and consumers to tariff and price changes.
[35] DeRosa, Obwona, and Roningen (2002), who used a computational general equilibrium model to assess the economic effects of EAC formation.

Non-Tariff Measures

Uganda has few non-tariff measures that restrict imports. One of them is the requirement that approval needs to be sought from the Agrochemicals Board for imports of agro chemicals. This is particularly pertinent for flower exporters. Some accommodations have been made, however, in this regard, by allowing the use of selected agro chemicals for two years (for "testing purposes") prior to their formal registration. This could be facilitated even further if Uganda were to move to an arrangement of collaboration with pesticide regulation authorities in Kenya and Tanzania to register chemicals which have undergone supervised tests in any one of the 3 countries.

With respect to standards, to date Uganda has not applied any SPS measure on imports of agricultural or food products. Rather, its challenge in this area is to build up its capacity in SPS management to avert risks of export bans (which it experienced with respect to fish exports to the EU in the late 1990s), and to enhance the competitiveness of its exports (see detailed treatment of this issue in Chapter 5). Finally, with respect to customs procedures and regulations, Uganda has made significant progress recently with the introduction of its customs modernization and reform program. This program needs to be sustained, and more progress is needed in areas of improving client services and introduction of risk management principles into operations (see more detailed treatment of this issue in Chapter 7).

3.2 EXPORT POLICIES

Uganda has a generally liberal export regime, although in a few areas there are some restrictions or impediments the removal of which would help facilitate exports.

First, while export procedures are relatively simple[36] and are further being facilitated by the introduction of the new customs automation system (ASYCUDA++), the requirement for physical inspection of export shipments unnecessarily slows down the operations of the exporter. Replacement of this by a risk-based approach would certainly help facilitate exports (see analysis and recommendations in Chapter 7).

Second, in some instances, depending on export product and destination, an exporter may require other documents such as phytosanitory certificate, certificate of origin, verterinary health certificate, certificate of analysis (government chemist), packing list and commercial invoice. In the case of fish exports, for instance, every shipment of fish requires testing (and certificate) for pesticide residues, even though it is not a European Union requirement (the EU is the main destination for Ugandan fish exports). While there may have been a historical reason for this (the practice dates back to a single episode in 1998 when some fish were reportedly killed through deliberate use of pesticides in the lake), replacement of mandatory testing by a surveillance approach would produce substantial savings for exporters, and hence facilitate exports (see Chapter 5 for details).

Third, a 20 percent export tax on raw hides and skins has been levied since 2001, the principal aim of which is to assist the development of a domestic tanning and leather industry by discouraging exports of raw hides and skins and making a larger number of domestically

[36] Export enterprises are required to have a certificate of registration, a trading license, and a tax identification number, on presentation of which to MTTI, the exporter is issued an application form for export permit, which is usually issued in 24 hours at a cost of USh 1500 (less than US$1). Source: WTO, 2006.

produced hides and skins available for local processing.[37] However, the success of this strategy is uncertain, since the major issue confronting the sector is the poor quality of hides and skins. This deficiency is in turn the result of problems that pervade the entire supply chain, beginning with poor nutrition and husbandry of animals, to livestock diseases, poor slaughtering practice, poor physical infrastructure, and deficient post-slaughter practices.[38] Also, it is unclear whether export taxes will succeed in discouraging exports of raw hides and skins rather than just enticing producers to trade informally. Importantly, export taxes frequently have adverse distributional impacts, since it is the producer that has to bear the bulk of the economic costs as prices for his/her produce are depressed. In Uganda, an export tax on raw hides and skins is likely worsening poverty since livestock holders are among the poorest in the country (as discussed in Chapter 1).

3.3 REGIONAL TRADE ARRANGEMENTS

Uganda is engaged in two regional trade agreements: in addition to the EAC, it is a member of the Common Market for Eastern and Southern Africa (COMESA) (Box 3.1). Uganda is also a member of the Regional Integration Facilitation Forum, and has a number of bilateral agreements, even though the latter are not always thoroughly implemented.

Additional impetus for regional integration comes from the Economic Partnership Agreement (EPA) negotiations with the European Union. The Cotonou Agreement signed in 2000 by the EU and 77 African, Caribbean, and Pacific (ACP) States calls for the establishment of economic partnerships between the EU and regional groupings of ACP members based on reciprocal market access preferences. In order to facilitate the negotiation process and to enhance the development impact of the agreements through increased intra-regional trade, the EU intends the EPAs to be signed with free trade areas or customs unions rather than individual countries. Since early 2004, two country groupings for the negotiations have established themselves in Eastern and Southern Africa: the ESA-EPA group of 16 COMESA members, including Uganda, and the SADC-EPA group of seven South African Development Community (SADC) members (Figure 3.2).

Regional trade flows

As mentioned in Chapter 1, regional trade plays a very significant role in Uganda's external trade; within regional trade, trade with COMESA countries is the most important. Most of the regional trade occurs under preferential market access conditions within COMESA or EAC, which totalled (sum of imports and exports) 8.1 and 7.7 percent of GDP, respectively. Trade with SADC-only countries, that is, countries in the region that are neither members of COMESA nor EAC, such as South Africa, amounted to 2.2 per cent of GDP (Table 3.6).

Regional trade in manufactured products is relatively more important than regional trade in agricultural commodities. This is due to a significant share of Uganda's manufactured imports originating in other countries in the region, notably Kenya and South Africa. For agricultural products, Uganda has a trade surplus *vis-à-vis* Eastern and Southern Africa, which in 2004 exceeded the corresponding surplus with the rest of the world.

[37] In addition, there is a cotton cess of 2 percent, a coffee cess of 1 percent, and a proposed levy on fish exports of 2 percent which go to funding the activities of the Cotton Development Organization, the Uganda Coffee Development Authority, and the proposed Uganda Fisheries Authority, respectively.
[38] See Jaffee et al (2006).

Uganda has been running trade deficits with its two EAC partners, Kenya and Tanzania. In 2004, these amounted to US$3.2m. *vis-à-vis* Tanzania and a more substantial US$267m. *vis-à-vis* Kenya (Table 3.7). However, most of Uganda's imports of petroleum products originate from overseas, which means that the US$155m. imports of coke and refined petroleum (ISIC-3 code 23 in above table) in 2004 were erroneously attributed to Kenya; in other words, Uganda's true trade deficit with Kenya was around US$112m. in 2004.

Uganda is a net exporter of agricultural products and electricity to both of its partners, but imports large quantities of manufactures. Taking into account the informal trade with its regional partners, however, improves Uganda's trade balance with them given the much larger informal exports to than imports from these countries as discussed in Chapter 1.

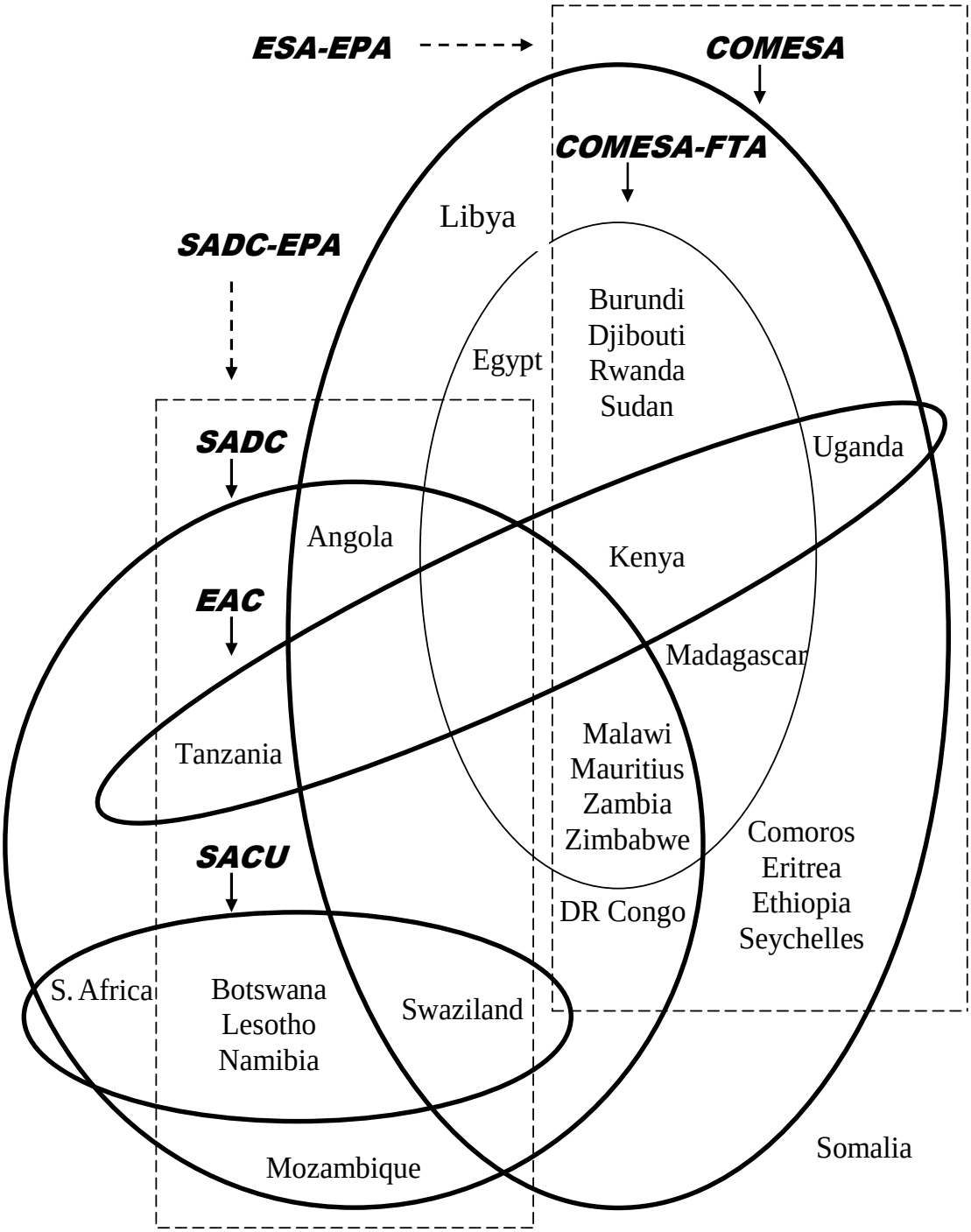
Box 3.1 Uganda's Regional Integrated History

East Africa has a long history of regional integration. Kenya and Uganda first formed a customs union in 1917, which the then Tanganyika (later Tanzania) joined in 1927. Subsequently, the three countries had close economic relationships in the East African High Commission (1948-1961), the East African Common Services Organization (1961-1967), the East African Community (1967-1977), and the East African Co-operation (1993-1999). In November 1999, the Treaty for the establishment of the (new) East African Community was signed, and entered into force in July 2000.

The EAC Trade Protocol was signed in March 2004. After subsequent ratification in national Parliaments, the customs union was launched in January 2005, establishing a common external tariff and removing all intra-regional trade barriers during a five-year transition period. Once the customs union is completed, the EAC partners envisage further integration steps with the creation of a common market, a monetary union, and ultimately a political federation, although no time table has been established yet.

Uganda is also an active member of COMESA, which was founded in 1994 to replace the region's former Preferential Trade Area. In addition to Uganda, there are 19 other COMESA members, namely Angola, Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Zambia, and Zimbabwe. One of the main objectives of this regional arrangement was to establish a free trade area, which was (partly) achieved in October 2000, when nine COMESA's members (Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Sudan, Zambia and Zimbabwe) removed their intra-regional trade barriers. Burundi and Rwanda joined the free trade area in January 2004, bringing the number of participating countries to eleven. A further integration step in the form of the establishment of a customs union, which had originally been planned for 2004, has been postponed, as the final structure of the common external tariff has yet to be agreed upon.

Figure 3.2 Major Regional Trade Arrangements in Eastern and Southern Africa



Source: World Bank Staff.

Table 3.6 Structure of Uganda's Merchandise Trade within the Region

(percent of GDP)

	Total trade			Exports			Imports			Net-Exports		
	1994	1999	2004	1994	1999	2004	1994	1999	2004	1994	1999	2004
All Goods												
World	28.3	25.5	33.6	11.3	8.5	9.4	17.1	17.0	24.2	-5.8	-8.5	-14.9
- Africa	6.9	8.0	11.0	1.5	2.6	3.2	5.4	5.4	7.9	-3.8	-2.7	-4.7
- Countries in E & S Africa	6.9	7.7	10.7	1.5	2.3	2.9	5.4	5.3	7.8	-3.8	-3.0	-4.9
COMESA	6.5	5.9	8.1	1.5	1.7	2.6	5.0	4.2	5.5	-3.5	-2.5	-2.9
ESA-EPA	6.4	5.7	7.7	1.5	1.6	2.5	5.0	4.1	5.2	-3.5	-2.6	-2.6
EAC	5.4	4.9	6.6	0.5	0.6	1.3	4.9	4.2	5.3	-4.4	-3.6	-4.0
SADC only	0.2	1.5	2.2	0.0	0.6	0.1	0.2	1.0	2.1	-0.1	-0.4	-1.9
- Other Africa	0.0	0.3	0.3	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.2	0.2
- Rest of World	21.4	17.5	22.6	9.7	5.8	6.2	11.7	11.6	16.4	-2.0	-5.8	-10.2
***Agriculture* (HS 1-24)**												
World	13.3	9.4	10.2	10.6	7.0	6.1	2.8	2.4	4.1	7.8	4.5	1.9
- Africa	2.4	2.3	2.6	1.2	1.8	1.8	1.1	0.6	0.7	0.1	1.2	1.1
- Countries in E & S Africa	2.4	2.1	2.5	1.2	1.5	1.8	1.1	0.6	0.7	0.1	1.0	1.0
COMESA	2.3	1.7	2.1	1.2	1.3	1.6	1.1	0.4	0.5	0.2	0.9	1.2
ESA-EPA	2.3	1.6	2.0	1.2	1.2	1.6	1.1	0.4	0.4	0.2	0.8	1.2
EAC	1.4	0.8	1.2	0.4	0.4	0.8	1.0	0.4	0.4	-0.6	0.0	0.4
SADC only	0.0	0.3	0.3	0.0	0.1	0.1	0.0	0.1	0.2	0.0	0.0	-0.1
- Other Africa	0.0	0.3	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.3	0.1
- Rest of World	11.0	7.1	7.7	9.3	5.2	4.3	1.7	1.9	3.4	7.7	3.3	0.8
***Manufacturing* (HS 25-99)**												
World	15.0	16.1	23.4	0.7	1.5	3.3	14.3	14.6	20.1	-13.6	-13.1	-16.8
- Africa	4.6	5.7	8.5	0.3	0.9	1.3	4.3	4.8	7.1	-4.0	-3.9	-5.8
- Countries in E & S Africa	4.5	5.6	8.3	0.3	0.8	1.2	4.3	4.8	7.1	-4.0	-3.9	-5.9
COMESA	4.2	4.2	6.1	0.3	0.4	1.0	3.9	3.8	5.1	-3.7	-3.4	-4.1
ESA-EPA	4.1	4.1	5.8	0.3	0.4	1.0	3.9	3.7	4.8	-3.6	-3.4	-3.8
EAC	4.1	4.0	5.4	0.1	0.2	0.5	3.9	3.8	4.9	-3.8	-3.6	-4.4
SADC only	0.2	1.2	1.9	0.0	0.4	0.1	0.2	0.8	1.9	-0.1	-0.4	-1.8
- Other Africa	0.0	0.1	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1
- Rest of World	10.4	10.4	14.9	0.4	0.6	2.0	10.0	9.8	13.0	-9.6	-9.1	-11.0

Note: E & S Africa is taken as all countries that are members of COMESA or SADC. Regional Trade Blocs (COMESA, ESA-EPA, EAC) are aggregated from individual country data according to the membership structure (Figure 3.2). "SADC only" refers to Botswana, Lesotho, Mozambique, Namibia, and South Africa.

Source: UN COMTRADE database.

Table 3.7 Structure of Uganda's Trade with its EAC Partners, 2004
('000 USD)

ISIC-2 Code	Sector Description	Kenya				Tanzania			
		Total trade	Ex-ports	Im-ports	Net trade	Total trade	Ex-ports	Im-ports	Net trade
11	Agriculture and Hunting	361461	313789	47672	266117	29985	20091	9894	10197
12	Forestry and logging	1408	502	906	-404	288	0	288	-288
13	Fishing	11106	11066	40	11026	256	57	199	-142
21	Coal Mining	40	0	40	-40	7	6	1	6
22	Petroleum & Natural Gas	9563	0	9563	-9563	37	12	25	-13
23	Metal Ore Mining	1903	1891	12	1880	0	0	0	0
29	Other Mining	103062	193	102869	-102677	571	235	336	-101
31	Food, Beverages and Tobacco	256634	17246	239388	-222142	26760	5495	21265	-15770
32	Textiles and Leather	102506	30529	71978	-41449	12004	5940	6064	-124
33	Wood and Furniture	33228	189	33039	-32849	565	112	453	-341
34	Paper and Publishing	143148	777	142372	-141595	1736	508	1228	-720
35	Chemicals, Rubber and Plastic	1326608	5174	1321434	-1316260	29876	11790	18085	-6295
36	Non-Metallic Minerals	244089	1621	242469	-240848	44760	512	44248	-43736
37	Basic Metal Industries	269359	1580	267779	-266199	14960	1203	13758	-12555
38	Machinery and Equipment	266179	24024	242155	-218131	25130	7854	17276	-9422
39	Other Manufacturing	8671	751	7920	-7169	768	532	236	296
41	Electricity, Gas and Steam	59813	59813	0	59813	8507	8507	0	8507
	Total	3199480	469634	2729846	-2260212	196238	62860	133378	-70517

Source: UN COMTRADE database.

Overlapping Membership in Regional Agreements

Uganda and Kenya are members of COMESA, but not of SADC, while their EAC partner Tanzania is a member of SADC, but not of COMESA. This asymmetric configuration is creating confusing and conflicting situations which are bound to intensify over time as the respective integration agendas of EAC, SADC and COMESA deepen. In particular, the EAC customs union is now in effect, while both COMESA and SADC are also hoping to form customs unions in the medium-term.[39] Since one country cannot realistically apply two different common external tariffs, let alone implement the customs and fiscal integration (for example revenue-sharing) that are basic components of fully functioning customs unions, Uganda and its EAC partners are sooner or later bound to face the choice about which agreement they want to go with.

Another problem from overlapping RTA-membership relates to conflicting commitments and potential trade deflection. The COMESA Treaty (Article 56.2) states that "Nothing in this Treaty shall prevent a Member State from maintaining or entering into new preferential agreements with third countries provided such agreements do not impede or frustrate the objectives of this Treaty and that any advantage, concession, privilege and favour granted to a third country under such agreements are extended to the Member States on a reciprocal basis." The SADC Trade Protocol (Article XXVIII, paragraph 2) contains a similar provision. Since upon joining the EAC customs union, Uganda (and Kenya) granted market access preferences to Tanzania that exceed those given to its COMESA partners, the literal reading of the provisions implies the requirement to extend the EAC free intra-regional trade benefits also to all COMESA and SADC countries.

[39] The discussion of the prospective COMESA-CET has not yet been finalized, but top rates of up to 40 per cent are under consideration, and sensitive products might receive even higher protection. Source: COMESA (2005).

Yet, after deliberating on the matter, the EAC Council decided not to extend the EAC market access benefits to other COMESA and SADC partners. However, the EAC members were allowed to continue with their existing obligations to SADC and COMESA and imports from the respective countries were exempted from the EAC's common external tariff. This continuation of member-specific preferences within the customs union could result in trade deflection, unless border controls are maintained for strict intra-EAC policing of trade, notably verification of rules of origin. Otherwise, Egyptian traders, for example, could export goods to Uganda under COMESA preferences and the local importers could then ship them duty free on to Tanzania under the EAC regime. Conversely, SADC members could use Tanzania as a transit route to Kenya and Uganda. To counter any unintended extension of preferences, border controls will need to continue. *Indeed, as long as the situation of overlapping membership remains, the EAC will not be able to become a fully functioning customs union and its members will not be able to reap the benefits of free internal movement of goods.*

Over the past years, SADC, COMESA and the EAC have been working more closely together in areas such as regional trade analysis, capacity building, and transport facilitation. So far the economic integration schedules and the move towards freer intra-regional trade have not resulted in any major inconsistencies. Yet, the formation of the EAC customs union and the possibly resulting problems of trade deflection highlight the emerging integration conflicts, as the individual trade initiatives deepen their status.

Given the potential drawbacks of RTAs including trade deflection and potential conflicts that might arise (including those pertaining to rules of origin—see Chapter 9), the Ugandan authorities should try to follow a paradigm of open regionalism by continuing to push for lower external trade barriers (by pushing for lower CET of the EAC, and by joining the COMESA Free Trade Area—see Chapter 9 on a discussion of the latter), and to maximize the benefits of RTAs through harmonization of trade standards and behind-the-border regulations to pursue deeper integration.

3.4 TRADE POLICY AND POVERTY

Changes in trade policy can have strong implications on poverty. If changes in the domestic tariff structure reduces anti-export bias, they can promote exports, and hence growth, and in turn reduce poverty. Conversely, changes in domestic tariff structure that increase anti-export bias would have the opposite effect. Changes in the domestic tariff structure can also affect poverty by changing the prices paid and received by the poor, and the returns to the factors of production that the poor have to offer.

This section presents estimates of the impact on household income and poverty levels arising from changes in the tariff structure through the adoption of the CET of the EAC, as well as those from lowering of the CET, as envisioned by the EAC. It is important to note that these estimates represent short-term effects only, that is, those arising from price changes. Over the longer-term, there will also be production changes in response to the changes in prices, which will affect the incomes of households. The simulation results therefore overestimate the losses and underestimate the gains over the long-term.[40] Nonetheless, it is important to ascertain the short-term effects, in case there is need for measures to alleviate potential adjustment costs, including through review of the CET with EAC partners.

The recent change in trade policy regime in Uganda—the adoption of the CET of the EAC—has been anti-poor. Specifically, the average tariff on household consumption baskets has increased

[40] Methodological details are given in Appendix 2.

under the new tariff regime by more than the increase in protection on production[41] (or in other words the net income effect has been negative), and more so for poor households (Table 3.8). This outcome is not surprising given the large increase in tariffs on food and beverages under the CET (Table 3.2), and the fact that expenditures on food generally make up a larger share of the expenditures of the poor than the rich (Table 3.9). Further, the simulations indicate that the anti-poor effect is more severe in the urban areas than the rural areas, which is consistent with the fact that the rural poor is more likely to consume own produced food.

Table 3.8 Average Tariff on Household Consumption Basket, Incomes, and Net Incomes by Expenditure Deciles, under 2004 MFN rates and 2005 EAC CET rates

Decile	Cons'04	Cons'05	Inc'04	Inc'05	NetInc'04	NetInc05
1	14.30	18.26	10.44	13.02	-3.86	-5.24
2	13.98	18.39	11.90	15.06	-2.07	-3.33
3	14.52	18.90	12.58	15.88	-1.94	-3.02
4	14.41	18.89	12.43	15.86	-1.98	-3.03
5	14.10	18.74	11.68	15.30	-2.43	-3.44
6	14.56	18.97	12.16	15.89	-2.40	-3.07
7	14.37	18.90	11.19	14.57	-3.18	-4.33
8	14.22	18.34	10.33	15.39	-3.89	-2.95
9	13.67	17.73	10.37	13.13	-3.30	-4.60
10	11.87	14.47	7.45	9.46	-4.42	-5.00
Poor	14.24	18.50	11.67	14.71	-2.57	-3.79
Non-Poor	13.88	17.98	10.74	14.18	-3.14	-3.81
Rural	14.35	18.63	11.86	15.57	-2.49	-3.06
Urban	11.65	15.04	5.66	6.32	-5.99	-8.72
Kampala	10.40	13.21	3.77	4.00	-6.63	-9.21
Central	12.32	16.76	10.32	13.27	-2.00	-3.49
Eastern	14.77	18.75	9.87	14.30	-4.90	-4.45
Northern	15.53	18.89	10.94	13.38	-4.59	-5.51
Western	13.97	18.58	13.22	16.38	-0.75	-2.20
All	14.18	18.01	10.48	13.45	-3.69	-4.55

Source: Duygan (2006); calculations using 1999/2000 UNHS and the HS2-HS8 level tariff data based on UNCTAD Trains Database and the EAC secretariat.

The poverty headcount is estimated to have increased from 33.8 percent in 1999/00 to 34.6 percent under the CET (Table 3.10). Given the harmful effects of trade diversion of the CET (discussed earlier) on the poor (as seen here), it is all the more important that the maximum tariff of the CET be reduced at the 2009 review. According to simulations performed for the DTIS, the larger the reduction of the maximum tariff, the greater is the reduction in poverty, with the poorest regions—Northern and Eastern—enjoying the greatest reduction (Table 3.9).

[41] The average tariff on the consumption bundle is calculated as the consumption-weighted average tariff imposed on the consumption bundle of each household. The average tariff on net household income is derived as the average tariff on income sources minus average tariff on consumption bundle.

Table 3.9 Expenditures Shares on Food and Beverages in Uganda, 1999/00

By Income Deciles							
1	63.7%		All	60.0%		Rural	61.9%
2	63.0%		Poor	63.3%		Urban	47.6%
3	63.9%		Non-Poor	58.3%			
4	63.4%						
5	62.1%						
6	62.4%						
7	61.1%						
8	59.0%						
9	56.2%						
10	45.4%						

Source: Duygan (2006) based on 1999/2000 UNHS.

Table 3.10 Poverty Rates (headcount ratio) and tariff policy

	2004 MFN Tariffs	**CET**	**CET Max. Tariff 20%**	**CET Max. Tariff 15%**	**CET Max. Tariff 10%**
Urban	9.63%	10.59%	8.93%	8.12%	8.05%
Rural	37.44%	38.26%	36.48%	36.29%	36.11%
Central	19.76%	20.42%	19.22%	18.81%	18.85%
Eastern	34.93%	35.63%	33.56%	32.94%	32.60%
Northern	63.66%	63.59%	61.46%	61.35%	60.99%
Western	26.23%	28.12%	26.30%	26.41%	26.35%
Overall	33.80%	34.64%	32.87%	32.60%	32.44%

Source: Author's calculations using 1999/2000 UNHS and the HS2-HS8 level tariff data, based on UNCTAD Trains Database and the EAC secretariat.

4. INSTITUTIONS FOR TRADE POLICY AND EXPORT DEVELOPMENT

Enhancing global integration requires institutions that can effectively participate in trade policy-making at the multilateral, regional, and national levels, and institutions that can effectively and efficiently promote exports. These two types of institutions in Uganda are reviewed in this chapter.[42]

4.1 INSTITUTIONS FOR TRADE POLICY

Trade policy decisions are made at the political level, and then implemented and reviewed at the management level of government, primarily within ministries. The Ministry of Tourism, Trade, and Industry (MTTI) is the primary institution for trade policy in Uganda, but because of capacity constraints, other ministries have played important roles in trade policy, notably the Ministry of Finance, Planning, and Economic Development (MFPED). In addition, the Ministry of Foreign Affairs (MFA), the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), the Ministry of Justice (MOJ), and State House also take part in trade policy making in Uganda.

Trade policy operates in three areas in Uganda. First is national trade policy, which concerns regulations governing imports & exports. Uganda's national trade policy is now largely determined by its membership with the customs union (CU) of the EAC, which it joined in January 2005. In addition to implementing measures agreed under the CU, a key task is monitoring the impact of such measures, based on which to propose changes of the trade regime to its EAC partners to ameliorate potential negative effects on the Ugandan economy.

Second is regional trade arrangements (RTAs), which concerns groupings of countries within the region involving special coordinated arrangements regarding imports & exports. In this area, Uganda's membership in the EAC clearly dominates. In addition, Uganda is also a member of COMESA, and given the different CET that COMESA eventually entails, this could lead to trade policy conflicts which would require the capacity to understand the impact of, and formulate responses to, different trade policy options.

Third is international trade policy, which concerns Uganda's trading relationships outside these regional groupings, including wider groupings such as the WTO and the EU.

The Current Institutional Framework for Trade Policy

Historical Perspective. The primary institution concerned with trade policy is MTTI, the present structure of which dates from a major restructuring in 1998. During the period when Uganda started on its path of private-sector led growth, the expectation was that this ministry would have a much-reduced role. Separate trade and industry ministries could be combined, and total staffing could be considerably reduced. The old responsibilities in managing parastatals, and in tight licensing controls over private commercial activity, were clearly to go.

It appears that, in the area of trade policy, the downsizing went too far. It was perhaps not recognized that, even in a private sector-led economy, the government must inevitably play the

[42] The work in this chapter builds on the extensive analytical work available, notably Maxwell Stamp (2003), and Price Waterhouse Coopers (2004).

main role in trade policy. And, within the government, the ministry with direct responsibility for trade must play the lead role.

While MTTI has hired new staff and there has been substantial training of staff in trade policy matters, the capacity of MTTI to play the required leadership role in trade policy remains weak. As a result, other ministries have stepped in to fill this vacuum. This has resulted in a vicious circle whereby the filling of the vacuum by other ministries led to MTTI stepping back even further, resulting in even less money being made available for MTTI.

2004 Functional Analysis. The MTTI capacity problem has been recognized for some time, but it was not until recently that more attention has been drawn to it in the form of the 2004 Functional Analysis.[43] This exercise resulted from the recommendations of an earlier report[44] which highlighted the current institutional weakness of MTTI. The Functional Analysis put forward a comprehensive and detailed plan for restructuring and strengthening the trade policy capacity of MTTI.

Despite its strong criticisms of MTTI management, the Functional Analysis plan has been accepted by MTTI as representing its best opportunity for being supported to develop into its proper leadership role in trade policy. Following GOU procedure, MTTI has submitted the Functional Analysis plan to the Ministry of the Public Service (MPS), the approval of which is required before MFPED can approve funding of the plan. MPS approval is taking some time, which could be due to the fact that the plan entails substantial funding requirements.

Current Functioning of Trade Policy work within MTTI

The mandate of the Department of Trade of MTTI is to "develop, promote, and facilitate both internal and external trade with particular emphasis on export promotion and diversification". This chapter addresses institutions pertaining to external trade. Pertinent issues and institutions related to supply side constraints and supply chains (that is, those that are considered as internal trade issues) are covered in the rest of the DTIS.

The Department of Trade[45] is headed by a Commissioner who is assisted by two Assistant Commissioners, below whom are 6 professionals working on fixed responsibility areas and another 6 who go where they are needed, essentially "fire fighting." This staffing level, which is already higher than before, appears to be inadequate for proper coverage of all the various trade policy areas of continuing interest to Uganda.

Uganda does not yet have a definitive statement of National Trade Policy (NTP) to drive the activities of MTTI. The Ministry has been developing a NTP for some years. A draft is currently being circulated, with the hope of taking an agreed version to the Cabinet for approval in early 2006 (to date this has not yet happened).

According to MTTI management, the Ministry is so under-funded that there is almost no money available for activities, the funds being absorbed by regular running costs (salaries, rent, and so on). Notwithstanding, there appears to be funds for MTTI staff to attend large numbers of

[43] Price Waterhouse Cooper (2004).
[44] Maxwell Stamp (2003).
[45] This is one of five departments in the Ministry.

meetings abroad, although much of this travel is funded directly by donors,[46] in particular for attending conferences where Uganda needs to be represented.

The combination of very low professional staffing levels, plus a large element of foreign travel, seems to present serious problems. Even those professionals who are supposed to have fixed responsibility areas find themselves having to "back-stop" regularly for colleagues abroad. Currently, the capacity of MTTI is further strained with 2 of the 12 professionals being away on long-term training, although when the training is completed they will strengthen the Ministry's capacity.[47]

Some members of the private sector have expressed their frustration at dealing with the trade policy group. They report that emails tend not to be replied to, and that, much of the time, only a handful of officers are in Kampala, trying to cover for everything.

The overall impression is that management is not effective in using formal planning to ensure that the very low staffing levels and low funding available (other than for travel) are used to maximum effect. Activities appear to be driven by external meetings where it is felt Uganda should show itself—hence the emphasis on spending on travel.

There appears to be a wider variation in the capacity of officers in MTTI. Some are clearly very capable, and can handle trade policy analysis work well, but others less so. Further, trade policy staff are spread between three floors of the ministry building, and lack basic equipment such as a scanner.

Current Role of MFPED

In Uganda, MFPED is clearly viewed as a "core ministry," with a status in the hierarchy superior to line ministries such as MTTI. Its control over the funding allocated to line ministries gives it a dominant role, and it is said to attract the best staff.

Within MFPED, the Tax Policy Department has a clearly defined interest in trade policy. Although it can no longer set tariffs in isolation, it is responsible for monitoring the impact of the EAC CET on the economy, and making recommendations for future negotiations accordingly. The Department for Economic Policy and Research is responsible for monitoring the economy overall and has also become strongly involved in the detail of trade policy and is, in practice, taking the leadership role in particular areas of current interest.

Given the key importance of the EAC to the Ugandan economy, MFPED appears now to effectively play the lead role in analytical work regarding its the impact and in developing Uganda's negotiating positions. With respect to the EPA negotiations, which cover more than trade issues, MFPED has again stepped in, partly to fill a perceived vacuum.

Current Role of MFA

The main current role of MFA concerns political diplomacy. However, certain key overseas missions are used to link into particular regional or international groupings. Where these

[46] Most of the funding comes from the EU-funded Uganda Programme for Trade Opportunities and Policy (UPTOP).

[47] The training is funded by donors. The trainee is required to sign an agreement to come back to the Ministry and work for a specified period of no less than 2 years.

groupings handle a range of topics, covering the areas of responsibility of a number of Kampala ministries, then MFA is the natural choice to play the role of coordinator. It ensures that communications through these key overseas missions are directed to and from the correct line ministries. With respect to trade policy, this co-ordination function is particularly important for the EAC, and for the ACP-EC groupings based in Brussels.

Until 1998, MTTI had staff seconded to particular overseas missions where trade policy workload was heavy, notably in Geneva for the WTO. Thus, although MFA had overall responsibility for the operation of each mission, there was a direct technical link from MTTI to the person overseas dealing with the WTO. This arrangement apparently worked well but was dropped because of MTTI budget cuts.

Since then, although MTTI remains the responsible ministry for WTO links, MFA sees itself as "responsible for negotiations at WTO." MTTI staff claim that, in reality, MFA mission staff have no real leeway when it comes to negotiations, or voting, but take their directions in all cases from MTTI. Others see the situation as less clear-cut.

Currently, MFA appears to be making serious efforts to expand its role. It has recently submitted to MPS a "Memorandum on the Restructuring of MFA." One of the main themes is the growing importance of "commercial diplomacy." By this is meant the promotion of exports, tourism and inward investment by MFA itself, primarily using its overseas missions. The proposed restructuring would enable MFA to develop specialist departments and staff cadres who would become experts in commercial diplomacy. MFA would be reorganized more along functional lines, rather than primarily along geographical lines as at present.

There is clearly a case for utilizing expensive overseas missions not just for political diplomacy, but also for commercial diplomacy, which is the case for many countries. However, the MFA proposals go beyond commercial diplomacy and appear to give MFA a lead role, and an expanded specialist staffing, to deal with elements of trade policy primarily with respect to the WTO and the EU. If implemented, the effect would be that MFA would have more capacity in these trade policy areas than MTTI. This is not a desirable situation and would clearly negate the separate and distinct mandates already assigned to the two ministries.

Current Role of other Ministries

MAAIF works closely with MTTI on WTO issues related to agriculture, which is an area of major WTO importance. A senior official from MAAIF participates in WTO agriculture negotiations, financed within the overall trade policy budget of MTTI. This official also heads up the sub-committee on agriculture of the Inter-Institutional Trade Committee (see later).

MOJ is involved when it comes to the need for changes in Ugandan legislation arising out of international trade agreements. Other ministries become involved in trade policy issues in specific instances, as appropriate. For instance, the Ministry of Health becomes involved when matters of health controls on food products are discussed.

Current Role of the AGOA Office

The Export-led Growth Strategy & AGOA Country Response Office was set up under State House three years ago with a professional staff of 5. The justification for the separate office was that neither the Uganda Export Promotion Board (UEPB) nor MTTI were effective to deal with an opportunity as important as AGOA. The main recent focus of the AGOA Office has been

helping Ugandan exporters into the U.S. market through assistance with trade fair participation, with a focus on organic products. The coverage of the Office has now extended beyond AGOA, with assistance now being extended to exporters trying to break into the Iran market for tea.

The funding for the AGOA office comes through the MTTI Budget. In the Adjusted Budget for 2004/05, this office received more than the total Wage & Non-Wage Recurrent Budget for MTTI. This Office appears to be treated almost as a project office, and is expected to have a limited life. However, there appear to be no plans currently to absorb this office either into UEPB or into MTTI.

Inter-Ministerial Co-ordination and Dialogue with Stakeholders – Current Institutional Framework

The Inter-Institutional Trade Committee (IITC) covers both the functions of inter-ministerial co-ordination, and dialogue and consultation with stakeholders, particularly the private sector. IITC was set up originally to deal with the various WTO obligations and issues facing Uganda as a result of membership. It was clearly found to be effective, so that now it operates as the single, undisputed coordination and dialog institution for all trade policy matters.

The main IITC committee is large, consisting of 50-60 members. The real work is done by sub-committees, which focus on specific issues of particular current interest, and are generally of a more manageable size. The function of IITC and its sub-committees is to coordinate, consult and develop advice to GOU. MTTI is the Secretariat for IITC and its sub-committees; the Permanent Secretary of MTTI chairs IITC. Meetings are chaired by senior managers within MTTI.

Under IITC is the National Development Trade Policy Forum, the objective of which is to develop a group of people with particular areas of expertise who can participate in negotiations at the detail level where required. This is likely to be useful as detailed negotiations are proceeding with the EU regarding the EPA.

MTTI is responsible for taking forward advice generated from IITC within the GOU system. The effectiveness of the IITC mechanism, however, is undermined by capacity weaknesses within MTTI. Each sub-committee links into the most appropriate responsible officer within MTTI's Trade Department who is also expected to be the secretary to that sub-committee. Some officers clearly support their sub-committees effectively; they prepare informative papers ready for sub-committee meetings, call meetings at appropriate intervals, and ensure that members are kept fully informed. Other officers are less effective in this role; meetings are spasmodic and less well prepared for.

The private sector is generally supportive of the concept of IITC, although it is critical of the uneven support from MTTI. There are also probably more meetings than can realistically be attended by an appropriate number of private sector representatives. Only the Private Sector Foundation appears to have staffed up to attend most meetings. Private sector respondents were also doubtful as to the degree to which IITC deliberations actually led to real changes in GOU positions, which dampens their enthusiasm in participating in IITC. The situation would probably only change if ITTC achieves real changes that are valuable to the private sector, which would then encourage the latter to participate more actively.

Beyond the meetings of IITC and its sub-committees, there appears to be little pro-active effort in support of dialog and consultation with the private sector. Visits to exporters and their factories do not appear to be a feature of the work of MTTI trade policy staff.

There is currently a move to give IITC full legal status which would apparently make it easier for donor funds to be utilized directly in support of its activities. Some are hoping that this also might mean the IITC having its own dedicated secretariat and its own dedicated budget. This is, however, not envisioned in the draft WTO Agreement [Implementing] Bill 2005 (which formalizes the GOU relationship with WTO) which proposes "a secretariat within the Department of Trade" and not a separate IITC secretariat nor a separate budget. A dedicated secretariat with its own budget runs the risk of weakening the position of MTTI still further. The current difficulties faced by IITC stem from capacity weakness and lack of budget within MTTI, and will not be solved by separation from the Ministry and having its own budget. If there is to be an IITC, then the co-ordination and the link to the Cabinet must be the direct responsibility of MTTI if it is to be taken seriously as the responsible ministry for all matters of trade policy.

Link to the National Development Agenda – Current Institutional Framework

Until recently, the capacity weakness within MTTI meant that its voice was not effectively represented in deliberations regarding national economic development priorities. This has now begun to change. MTTI management has recognized that unless trade policy was given its proper importance within the national economic development plan, the Ministry would continue to be sidelined and under-funded. These efforts are helped by the fact that Uganda now operates one single national development plan, the PEAP.

MTTI was properly represented—by one of its younger trained economists—in the appropriate Pillar Working Groups that worked on drafting the current version of the PEAP Annual Policy Actions Matrix, which is the most important part of the PEAP. Trade is now featured in 2 of 5 pillars of the PEAP (as discussed in Chapter 1). Since the PEAP Matrix is in reality a "wish list," the challenge now is to ensure that MTTI's proposed actions obtain financing.

Conclusions & Recommendations

<u>Start from a rational separation of functions</u>. The manner in which trade policy functions and responsibilities are divided between ministries at present is largely a result of MTTI's history. Wrong expectations of a greatly reduced role led to it being under-resourced, with others stepping in to fill the vacuum, leading to a vicious circle.

In the longer term, the division of functions and responsibilities between ministries should be on a clearly-defined rational basis rather than driven by current institutional strengths and weaknesses. Managing trade policy well is an important function within government, and has now been recognized as an important element within the national development agenda. This requires one ministry to have a clear, unambiguous responsibility for all aspects of trade policy. MTTI must become that ministry.

<u>A credible forward plan exists. Build on it.</u> The 2005 Functional Analysis represents a credible plan for addressing the current capacity weaknesses within MTTI which, over time, will enable MTTI to fulfil its rightful leadership role in all matters of trade policy. The plan covers all the main components required for effective capacity building. It has already gained the support of MTTI management, and appears to have the support of MFPED, which would need to arrange the required funding for its implementation.

The next step is not more analysis of the problem, but immediate and full implementation of this plan. This will require an early decision by MPS followed by approval of funding by MFPED.[48] It is recommended that an external change management consultant be hired to implement the plan.[49]

The National Trade Policy can help this process**.** Progress on agreeing and adopting Uganda's first National Trade Policy (NTP) statement has been slow. More effort should now be directed at achieving agreement and adoption as early as possible in 2006. The terms of this policy statement could, alongside implementation of the Functional Analysis, greatly help in driving real change. Together, these changes could build on what MTTI has already achieved within the PEAP.

First, were the NTP to contain a clear, unambiguous statement to the effect that MTTI was now to be the GOU agency responsible for managing Uganda's trade policy, and was to take the lead role in all matters of trade policy, then this would certainly help drive the process. Second, the NTP could clarify which elements of trade policy were agreed to be the national priorities over the coming 3-5 years, and would thus require most efforts. This would also help in driving change, and obtaining realistic funding.

These major changes must be given time**.** It will take time for the plan within the Functional Analysis to be implemented, and for capacity to be built. It will also take time to build acceptance by other ministries that the lead role in all matters of trade policy should be returned to MTTI. What is recommended here is a two-stage process. Stage One should focus on implementation of the Functional Analysis plan, supported by adoption of the NTP. This may take two to three years, perhaps longer. Stage Two starts when MTTI capacity has improved significantly, and that this improvement is being recognized within other concerned ministries. This is when the current division of responsibilities is changed, with MTTI taking its full place of leadership in all matters of trade policy. Stage Two will then hopefully become the "steady state" situation.

Below, the main features of the proposed eventual "steady state" (Stage Two) are described, followed by a description of the main elements in Stage One, the transitional stage required to get there.

The core elements of the recommended "steady state" (Stage Two)

1. MTTI will be recognized as having primary responsibility for managing the trade policy of Uganda. It will take the lead role in all matters of trade policy, and will direct the process of coordination with other ministries, agencies and stakeholders. This status will be recognized by explicit statements within the NTP.

2. MTTI will return to the pre-1998 arrangement for overseas representation. It will post specialist staff to key overseas missions, where there is a significant and ongoing trade policy workload. MTTI overseas staff will report back to MTTI management on all technical matters, but will report to the MFA head of mission, usually the Ambassador, on all local

[48] It is understood that one donor has had money allocated for this purpose for some time.

[49] MTTI could get short-listed consultants to propose how they intend to implement the proposals of the Functional Analysis, as well as what this chapter is proposing, based on which to select the consultant for the task.

administrative matters. It is likely that this will take place in Geneva (WTO) and Brussels (ACP-EU), plus possibly Arusha (EAC), and Lusaka (COMESA), depending on assessments of workload.

3. In all specific matters of trade policy, MFA will coordinate the GOU relationship to regional and international groupings that are about more than just trade policy (for example EAC). It will channel communications via its overseas missions to and from MTTI, when these communications deal with trade policy. It will continue to take directions from MTTI when its overseas staff attend trade policy deliberations on behalf of MTTI. It will not be seen as "responsible for trade negotiations," but merely seen as an overseas agent, acting on behalf of MTTI, and under its instructions. These arrangements will be confirmed, within the NTP.

4. The "Memorandum on the Restructuring of MFA" will be modified to reflect these arrangements. A clear distinction will be made between the use of overseas missions for commercial diplomacy and their use for trade policy work.
5. MFPED will continue to be responsible for overall monitoring of all aspects of economic policy. MTTI will, however, take the lead role in all matters of trade policy. Specifically, MTTI will be responsible for developing and implementing positions for all regional and international trade policy negotiations. It will develop these positions in full co-ordination with other ministries, including MFPED. Where negotiations cover more than just trade policy, then it is likely that MFPED or some other agency of GOU will take the lead, with MTTI participating, and deferred to on all matters of trade policy specifically.

6. It is hoped that the adopted NTP will include a full analysis of the various trade policy issues facing Uganda, covering, say, the next three to five years.[50] On the basis of this analysis, it is hoped that the NTP will contain a clear statement as to where MTTI will be expected to concentrate its resources over this period. Once approved at high level, such an analysis will form the basis of detailed activity planning within MTTI. Either within the NTP itself, or separately, this analysis will then be repeated annually, on a rolling basis.

The core elements of the recommended Stage One (implementation of the Functional Analysis plan)

1. MTTI will hire a consultant with specialist skills in public sector change management to implement the Functional Analysis plan.

2. MTTI will introduce a Medium-Term Strategic Plan drawing substantially on the detailed work undertaken within the 2004 Functional Analysis.

3. As per the 2004 Functional Analysis, the present Department of Trade will be split into two new departments, one being a new Department of External Trade where all external trade policy matters will be handled.

4. Particular attention will be given to ensuring that the new Department of External Trade is strongly managed, and that it makes the maximum possible use of the external staff training in trade policy matters currently being undertaken.

[50] The findings of the DTIS could be helpful in this regard.

5. The Export-led Growth Strategy & AGOA Country Response Office will either be wound down, or will be transferred into the management of MTTI. All activities funded within the MTTI budget will become the direct responsibility of that Ministry.

6. The basic structure of IITC and its sub-committees will remain unchanged. IITC will continue to be the single advisory body dedicated to trade policy matters. There will be no separate IITC Secretariat nor a separate budget. IITC secretariat functions will continue to be provided by MTTI, and secretariat activities funded within the MTTI budget.

7. IITC will be given the required legal status to allow it to raise donor funds for specific studies and projects, as appropriate.

8. Staff training will be extended, beyond what is in the 2004 Functional Analysis Plan, to improve the quality of all IITC sub-committee secretariat functions.

9. The proposal in the 2004 Functional Analysis to set up a separate liaison group, the Export Growth Group, will not be implemented. The emphasis instead will be on improving the functioning of IITC and its sub-committees. In this connection, consideration will be given to having committee meetings chaired by members drawn from outside GOU, and thus wholly independent from the secretariat.

10. Activity planning and staffing arrangements will be based on an assumption that MTTI involvement in PEAP Pillar Working Groups will become a continuing ongoing activity. MTTI will be fully involved in all work to develop regular revisions of the PEAP Matrix. As the work on the NTP moves forward, MTTI will ensure that the terms of the NTP and of the PEAP Matrix are fully consistent.

4.2 INSTITUTIONS FOR EXPORT DEVELOPMENT

This section is concerned with institutions and actions aimed directly at expanding the volume of trade. In nearly all countries, as in Uganda, the focus in practice is almost exclusively on expanding and developing exports, hence the use of the term "export development" (which has also been called "trade support" or "trade development").

Export development has historically focused on helping exporters, both actual and would-be, to break into new foreign markets. Governments have provided them with information on foreign markets, extending from desk research to full-blown market surveys. They have helped to organize group participation in foreign trade fairs and group missions, and have used trade attaches in their embassies to provide on-the-ground help when they arrive. The attraction of this approach was that it subsidized the indirect costs of exporting, not the direct costs of supplying a product. It therefore was, and still is, generally acceptable within the rules of the multilateral trading system.

This approach was very actively promoted in the 1960's and later, primarily by the ITC, following an UNCTAD conference decision to set up "trade promotion organizations" (TPO's) in almost all developing countries. Most of these continue to this day, still being assisted by ITC.

As access for developing countries into the rich target markets of the industrialized countries has steadily improved, and preferences have become increasingly generous, developing countries

have still not been able to significantly expand their exports.[51] It is by now widely accepted in many developing countries that access is not really the problem. The problem always has been the various supply-side constraints within the developing countries themselves that have held back exporters' capacity to exploit preferences.

This has an important implication for "export development." It means that government actions should not be focused, as in the past, on export market entry services, but rather on dealing with the various supply-side constraints. In Uganda, for instance, infrastructure, in particular energy, is the binding constraint, while transportation is also another constraint.

When it comes to the usual established export development activities, which are about the direct provision of services to individual exporters, it becomes much more difficult for governments to provide what is needed. One firm needs help on factory layout. Another needs help installing a laboratory to test for impurities. Another needs help deciding on what packaging material is best for his needs.

These are areas way beyond the competence of TPO's or government institutions in general. No government can be expected to staff up to deal with all these kinds of problems. Moreover, services that help exporters enter into foreign markets are typically better provided by providers located in the target country than those located in the exporting country. GOU can help exporters tap into this huge world-wide reservoir of skills and know-how available for hire, within the private sector, by adding funds to the existing matching grant scheme, Business Uganda Development Scheme (EU-supported) and even earmarking them for exporter market entry services.

These changes in orientation have another important implication. Dealing with supply-side constraints, whether regulatory or within the individual firm, is aimed at improving competitiveness, which is really an important component of private sector development (PSD). What this means is that "export development" can no longer be seen as a separate activity, with its own separate institutional framework, but should be seen as the responsibility of the institutional framework for PSD.

Current Institutional Framework for Export Development

Uganda Export Promotion Board

There is only one GOU institution set up to do substantive work in this area, UEPB. This was set up in 1969, following the standard TPO model, as the Uganda Export Promotion Council, which became UEPB in 1983. It has the status of an agency of MTTI, and is headed by an Executive Director and organized into three Directorates. It has 23 staff, 9 of whom are professionals.

UEPB is organized around the usual mix of TPO activities, such as trade fair participation, market surveys, product surveys, publicity and trade information library services. In addition, it has, for the past two to three years, been preparing Uganda's first National Export Strategy (NES).

Its ability to deliver services is severely constrained by the manner in which it is funded. It receives from GOU only around 25-30 percent of the funding applied for, which effectively only

[51] There are notable exceptions, such as China, Malaysia, and Mauritius.

covers basic running costs, such as rent and wages. There is virtually no GOU funding of activities or services, for which UEPB has to rely on outside donors. Thus, the activities and services undertaken by UEPB are largely determined by what donors are willing to offer.[52]

The UEPB library, known as the Trade Information Center, reflects the impact of this funding problem. For two years, there has been no budget available to purchase new library materials. Apart from what donors provide, the collection is gradually becoming less relevant for exporters. The one computer in the library has been reserved for internal staff use, and is no longer available to outside library users.

The actual usage by active exporters of this library service seems very low. The visitor book for a recent month indicated about 20-25 active users, of which around 6 were students. The library makes a nominal charge of Ush1000 (around US$0.60) for helping traders to use data sources on international commodity prices, such as the ITC database. Even with charges so low, it reports about 1-3 users each month.

Members of the private sector confirm this picture, doubting the relevance of what UEPB is able to offer. Firms appear to rely instead on what their own representative organizations can provide, particularly in the few industries where exporting is of real importance (for example, floriculture). This demoralizing situation has taken its toll on UEPB, particularly in the form of high staff turnover. 5 of the 9 professionals have been in their present posts less than one year. Morale has been further weakened because of the continuing uncertainty as to the merger of UEPB with the Uganda Investment Authority (UIA) and the Uganda Tourism Board (UTB). The merger plan has been approved by Cabinet but, so far, no budget has been made available so as to implement the plan. The merger remains in limbo, which is the least desirable scenario.[53] It is recommended that either GOU goes forward expeditiously with the merger, or officially announce that no such merger will take place.

UEPB, like other TPOs, faces a broader issue regarding its role. The present TPO focus on market-entry services cannot continue indefinitely. Even the senior management of UEPB accepts this. The focus of government intervention now needs to shift to dealing with supply-side constraints, within the broader context of PSD, which brings into question the role for a TPO such as UEPB.

Bank of Uganda

BOU is involved in supporting export development through a small unit within its Development Finance Department which operates the Export Credit Guarantee Scheme (ECGS) and two lines of credit oriented towards exports, the Export Refinance Scheme (ERS) and APEX.

ECGS was established in April 2001 with USAID support. Following the model of such schemes, it enables commercial banks to offload a large proportion of the pre-shipment non-performance risk of extending credit for export supply. The objective is to overcome the initial reluctance of commercial banks to extend such credit, given the unfamiliar nature of the risks involved. ECGS, currently funded at a level of Ush7.6bn., provides 75 percent cover with the commercial bank retaining the remaining 25 percent of the risk.

[52] There could be a vicious circle here. Because of weak capacity of UEPB (due to funding), it has not been able to devise a clearly laid-out plan to re-orient its activities, based on which to seek full funding of such a plan. Further, as long as donors continue to fund activities, the incentive for GOU is to cover only basic operating costs.

[53] The merger would involve a once-off cost of around US$4m., so it is claimed.

Take-up of the scheme since 2001 has been modest. Only 5 of the 9 accredited banks have used the scheme, with two of these accounting for about 80 percent of total uptake. Only 24 companies have been assisted, with an average of five guarantees per company over the four-year period. Current usage is down to a rate of around 3-4 guarantees per quarter.

The main reason for this low take-up appears to be that there are very few sizeable firms in Uganda with an active interest in exporting. Most are small and are of little commercial interest to the banks, which have other more attractive and less risky uses for their available funds. Export finance requires specialist banking skills, particularly in the area of risk analysis. Most banks do not see this as a worthwhile activity. ECGS by itself does not provide enough of an incentive to overcome these realities. Until the level of competition between banks intensifies substantially, this situation appears unlikely to change.

ERS was set up in 1991 to support the development of non-traditional agricultural exports at a time when commercial banks were short of liquidity. With bank liquidity improving steadily since 1996, ERS has lost its attraction to banks which prefer to use their own funds. The number of loans approved declined, from 100 in 1994 to one in 1998. There are only six loans still outstanding currently. The scheme is virtually inactive, and appears to continue to exist solely to extend the available term of export financing to five years. Whether this is sufficient justification for continuing the scheme appears doubtful.

APEX is a general line of credit for loans to private firms with funds coming from the European Investment Bank. It is not export-specific, but has the advantage of extending the term of loans available from commercial banks to 12 years. It provides 100 percent refinance, and has financed 168 projects worth Euro 80m. since its inception in 1995.

APEX also included an Export Promotion Fund which provided financing for "soft" activities in support of exports, such as training, trade fairs, or advertising. No collateral was required for this, and unsurprisingly, defaults have been a significant problem.

Uganda Development Bank (UDB)

BOU has been encouraged by the IMF to offload non-core activities. The decision has therefore been made to transfer ECGS and the two lines of credit from BOU to UDB. This transfer could result in further losses in uptake. These schemes are intended to provide funding and risk cover to commercial banks. UDB is itself in the business of extending loans to private companies. The danger is that it will therefore prefer to utilize these schemes for its own loans, rather than extend the benefits of these schemes to its competitors.

Current Institutional Framework for Private Sector Development (PSD)

Given that export development is to be viewed as an element of PSD, the adequacy of the existing institutional framework for PSD becomes important. Although Uganda appears to have a strong and well-established national commitment to encouraging the private sector, there is no high-level institutional framework devoted to PSD. There is no specific PSD inter-ministerial committee, nor is there a strong PSD line function within a responsible ministry.[54]

[54] There is a small two-person PSD unit within the Economic Development Policy & Research section of MFPED, but it appears to be almost inactive.

The MTCS Secretariat

Among the various PSD-oriented strategies and policies in Uganda, the nearest one to a broad national PSD strategy is the Medium-term Competitiveness Strategy for the Private Sector (MTCS), launched in 2000, and about to enter its second five-year phase.[55] MTCS is implemented by the MTCS Secretariat.

The MTCS literature suggests a very wide coverage, and a leadership role for the Secretariat in the PSD area. However, the reality appears very different, with the MTCS Secretariat seeming to have the status of a project office, attached to MFPED, rather than that of a key line department. It is currently staffed by one full-time professional with some part-time help. The secretariat's role is to coordinate, facilitate, and educate other GOU institutions rather than direct and lead PSD activities.

Other PSD Initiatives

A feature of PSD support in Uganda is the number of separate initiatives, in addition to the MTCS, all aimed at strengthening the private sector in some way, and all seen, and administered, as separate initiatives although they overlap. The **Presidential Investors Roundtable** (PIRT) does more than promote high-level discussions to inform the President. It agrees on actions in support of PSD, which are then implemented by the Ministers which form part of PIRT. For instance, PIRT is currently overseeing the modernization of 15 key pieces of legislation affecting the private sector. The **Plan for the Modernisation of Agriculture** (PMA) covers more than the title suggests, concerning itself, for instance, with improving the efficiency of MTTI, and with the finalization of NTP. The **Strategic Exports Programme (SEP)**, begun in 2001, focuses on a short list of mainly agriculture-based products. It mobilizes donor resources in support of specific interventions to address supply-side constraints. Apparently, funding has now reduced, and there appear to be no plans for a second phase of this particular initiative.

It is not clear how these and other PSD-related initiatives inter-link. Uganda's formal private sector (reportedly employing perhaps only 100,000) is probably too small to support active involvement in so many initiatives, and has become weary of being invited to participate in yet another initiative, especially given the low expectation of it achieving significant change. Leading players have come to prefer informal lobbying on specific interests.

Link to Development Planning

Private sector development should be seen as one pillar of national economic development, for which the primary vehicle is the PEAP. Wealth creation is dealt with within Pillar 2 of the PEAP, "Financing, Production, Competitiveness & Incomes". However, this pillar is a collection of various disparate actions, covering many industries. There is little sense that it has been built on a strong analysis of what constitute the key cross-cutting constraints to PSD, and thus to wealth creation. Nor is there much evidence of a focus on those industries already exhibiting growth (such as fish and flowers).

The institutional set-up regarding development planning has recently seen significant change with the establishment of the National Planning Authority (NPA) by an Act of Parliament in 2002. The Act states that the NPA "shall be the national coordinating body of the decentralized

[55] The name is to be changed, apparently, to UP3, the Uganda Public-Private Partnership, but so far, it is still referred to almost exclusively as MTCS.

planning system." The assumption is that it will eventually take over the planning functions currently undertaken by MFPED, which will then become just the Ministry of Finance. NPA is also expected to take over responsibility for the PEAP, currently under the chairmanship of the Prime Minister's Office.

In earlier years, planning came under the Ministry of Planning, which had subsequently been merged with the Ministry of Finance with the apparent intention of linking planning and policy making more closely to the budget allocation process. The establishment of the NPA could be seen as going back to this previous separation.

NPA, with a staff of 41, has begun its work by focusing on the long-term national vision for the year 2035, and appears to be a long away from taking over the leadership role of planning from MFPED, or from being in charge of the PEAP. It is also not clear how NPA is to link into the Cabinet. Since NPA intends to move down in stages from the 2035 Vision to the Ten-Year Plan, and then to the Five-Year Plan, it could be some time before this uncertainty is resolved.

Conclusions and Recommendations

Transform UEPB into a new body with increased independence and a clear supply-side focus

Both the present activity focus and funding arrangements for UEPB are unsustainable. Fieldwork indicates that there is very little real private demand for a public-sector service provider dedicated to export market entry services. Limiting GOU funding to basic staff and rental costs, in the hope that donors will come along and fund a meaningful and worthwhile set of activities, also makes little sense.

UEPB management accepts these fundamental problems, and has attempted to direct some efforts into sub-sector level work on supply constraints, notably for maize. It continues to press, so far without success, for more realistic GOU funding.

Best practice in TPOs has changed, with the focus now on the supply side, and with the private sector having an increased role in governance.[56] UEPB should now be transformed into a new independent body, such as a corporation, to reflect these trends. Its board would be made up primarily of active exporters. However, it would continue to rely almost exclusively on public funding for some years to come.

The first step will be for GOU to make a clear policy decision that it is willing to provide a realistic level of ongoing funding to the new body, to include funding for activities and services, and not just for core costs. Without this change in policy, UEPB will continue without clear direction, dependent on the changing priorities of outside donors.

Combine the various PSD initiatives into one National PSD Strategy

Pillar Two of the PEAP Matrix includes actions to "harmonize" the various PSD and export development initiatives such as the PMA, MTCS and SEP. It would be useful, at the same time, to consolidate these initiatives—in particular the MTCS and the SEP—into a single National PSD Strategy, eventually supported by, and linking into Pillar Two of the PEAP.

[56] See, for instance, Boston Consulting Group (2004).

Whichever institution eventually emerges into the leadership role in overall development planning will clearly have to take over leadership of the PEAP, including Pillar Two. Wealth Creation will continue to be a main pillar of development planning. It would therefore make sense for overall responsibility for the development and implementation of a new National PSD Strategy to be undertaken by a dedicated line unit within this institution.

One implication of this approach would be that MTCS would be subsumed and absorbed into the new, more strongly placed National PSD Strategy. A further implication might be that the PIRT restricts itself to consultations at the highest level, and that these then also feed into the National PSD Strategy when it comes to actual implementation.

Support the new PSD Strategy with a mechanism for coordination & dialog which builds on the experience gained with the IITC

The National PSD Strategy will inevitably cover a range of areas which are the responsibility of different line ministries and agencies. The PSD Strategy will require a high-level co-ordination mechanism to ensure the involvement of all these ministries and agencies. The IITC provides a useful model of how this might be structured.

As with IITC, the co-ordination mechanism is likely to involve a number of sub-committees. Some would deal with specific sub-sectors or industries, having good growth potential, and having specific supply-side constraints. Others would deal with cross-cutting supply-side constraints. As with IITC, co-ordination should extend beyond GOU ministries & agencies, to include representative organizations of the private sector.

Review transfer of ECGS and APEX to UDB

Review the transfer of ECGS and APEX to UDB given the clear conflict of interest that would arise, as discussed earlier.

5. SANITARY, PHYTOSANITARY AND OTHER STANDARDS

As Uganda seeks to expand and further diversify its food and agricultural exports, it will increasingly encounter more stringent regulations and private standards in relation to food safety and plant and animal health. Suppliers of such exports to high-income countries will increasingly need to demonstrate compliance with environmental and social regulations or protocols. Compliance with these standards will form an increasingly important part of Uganda's international competitiveness.

Most of these emerging requirements were of little importance to Uganda's exports in the past, which were dominated by agricultural commodity exports. The primary requirements for trade in such commodities (coffee, tea, cotton, tobacco) had long centered on achieving acceptable quality at competitive cost. By contrast, the non-traditional products that dominate Uganda's exports now (mostly fish and floriculture/horticulture, but also spices, hides/skins, and honey) are strongly governed by food safety and/or agricultural health requirements in international trade. Even for some of Uganda's traditional agro-food export commodities, there are growing challenges—and opportunities—associated with food safety, agricultural health, and environmental/social standards.

For the most part, such issues were "off the radar screens" of most public institutions, private companies, and primary producers in Uganda until quite recently. The restrictions placed on Uganda's exports of fishery products to the EU during the late 1990s served as a wake-up call for Ugandan stakeholders, alerting them to the potential challenges and opportunities posed by the evolving system of food safety standards in international markets. Uganda—with the assistance of the development community—successfully responded to the challenges posed by the EU ban and has been able to considerably expand its fishery product exports in recent years.

In some other areas, Ugandan producers and exporters are also beginning to adopt and benefit from higher international food safety and quality standards. Yet, these developments represent outliers and Uganda's overall capacity to manage food safety and agricultural health risks—in both the public and private sectors—remains quite limited in both international trade and domestic markets. In certain sub-sectors, such as maize, this limited capacity has confined Uganda's exports to informal cross-border trade. As commercial objectives evolve from supplying commodities to supplying differentiated and value-added products, the demands for product and process standards—and related conformity assessment capacity—will increase although other constraints on growth and competitiveness will also need to be overcome at the same time (see Chapter 8 for a discussion of such issues for selected sub-sectors).

This chapter provides an overview of the emerging challenges and opportunities which Uganda is facing in relation to food safety, agricultural health, and other standards impacting agro-food market development and trade. Primary attention is given to 'non-traditional' agricultural and food exports. The chapter does not aim to provide a comprehensive review of Ugandan sanitary and phytosanitary (SPS) management capacity. Rather, it draws on expert and stakeholder perspectives and builds on existing analyses to provide a strategic framework for Ugandan policy-makers, donors and other stakeholders to assist in better planning and prioritizing actions and capacity-building measures in this field.[57]

[57] For a more elaborated discussion of pertinent issues and additional case studies, see Jaffee et al (2006).

5.1 STANDARDS, SPS MANAGEMENT AND TRADE: A FRAMEWORK

Standards have become crucial elements facilitating transactions and trade within and between countries. Standards and technical regulations stipulate what can or cannot be exchanged, and define the procedures that must be followed for exchange to take place. The ability to comply with standards in regional and overseas markets is a major factor determining access to those markets.

This important role that standards play in trade and—in turn—development arises for a number of reasons, including:

- Standards are instrumental in facilitating the flow of information between consumers and producers, particularly providing information on unobservable characteristics such as food safety. Thus, standards can reduce uncertainty for consumers and indicate to producers the expectations and requirements of consumers in terms of quality and safety.
- Standards provide an important mechanism for technology transfer to developing countries. Technology is expressed through standards which help to diffuse technical information concerning products or processes.
- Standards are crucial in allowing firms in developing countries to integrate into global production chains, by ensuring the compatibility of components and traceability of products and/or raw materials made in geographically dispersed places. Harmonized standards between countries and/or industries can reduce transaction costs by reducing duplicative conformity assessment functions, including testing and certification.

The applicable standards for international trade in food and agricultural products have evolved from quality standards covering physical and visual characteristics, tolerances for foreign matter, and so on, to increased emphasis on SPS standards aimed at the protection of human, animal and plant health. To manage risks associated with the potential spread of pests and diseases or the risks to human health from contaminants or disease-causing organisms, a wide range of measures have been employed including outright bans, standards laying down the conditions under which products must be produced and/or the characteristics of the end product, or labeling and other information requirements.[58]

SPS standards and other measures have been traditionally promulgated and applied by public authorities and provide a minimum set of food safety and/or plant and animal health standards with which suppliers must comply. For example, importing countries frequently require guarantees, in the form of Phytosanitary or Animal Export Certificates, that exports are derived from areas that are free from certain pests or diseases, that minimum standards of hygiene have been applied in the manufacture of a food product, or that products are free of contaminants such as pesticide residues, heavy metals and mycotoxins. Increasingly, private standards have also become a dominant element of the standards landscape, applied by supply chain 'leaders' as a means to comply themselves with public standards, to ensure the quality and safety of their products and, sometimes, to differentiate their products from those of their competitors.

SPS management involves an agglomeration of basic and more sophisticated technical and administrative functions, including:

- Applying good agriculture practices (GAP), good manufacturing practices (GMP), Hazard Analysis Critical Control Point Program (HACCP), and quality management at farm and enterprise levels;

[58] World Bank (2005c).

- Registering/controlling agro-chemicals, veterinary drugs, animal feeds, etc.;
- Conducting basic research, diagnosis and analysis;
- Applying quarantine procedures, including for emergency situations;
- Carrying out epidemiological surveillance and information management;
- Developing/maintaining pest or disease-free areas;
- Inspecting and licensing food establishments, abattoirs, etc.;
- Testing products for contaminants and microbiological content;
- Verifying/certifying biological materials;
- Verifying/certifying imported/exported products related to known hazards;
- Maintaining the identify of products/raw materials (that is, traceability);
- Reporting possible hazards to treaty/trading partners; and
- Notifying WTO/trading partners of new SPS measures

Administrative and technical capacities for SPS management are embodied in institutional structures and procedures, physical infrastructure and human capital. While many crucial SPS regulatory, research and management functions are the responsibility of the public sector (including having a designated public sector 'competent authority' (CA) as required by importing countries), the private sector also has fundamentally important roles to play—in the process of standard-setting, and in the actual compliance with food safety and agricultural health requirements. Capacity building in the private sector can complement (or even substitute for) public sector capacity, as with the investment in accredited laboratory testing facilities.

There is wide variation in the extent to which regulatory, technical and administrative capacities represent a significant constraint on developing country agro-food exports. Weaknesses in the management of plant and animal health issues are more likely to act as an absolute barrier to trade than lack of food safety controls. Many developing countries lack the capability to undertake effective epidemiological surveillance and to conduct rigorous risk assessments which are acceptable to overseas trading partners. Thus, regardless of capacity within the private sector, for example to meet the food safety and quality requirements of overseas customers, the country as a whole will be unable to gain market access.

The array of SPS management functions and the associated institutional, technical and capacities (see Box 5.1) is rather daunting for many developing countries. *Given the generally low levels of capacity and limited available resources, as well as high opportunity costs associated with investments in enhancing SPS management capacity (there are countless other potential uses that compete for scarce resources*[59]*), there is a need to prioritize capacity building efforts in terms of the integral functions of SPS management. At the same time, priority-setting is complex, necessitating trade-offs between competing and multiple deficiencies. This underlines the need for a strategic approach to capacity-building that focuses on areas with the largest potential pay-off and the related need to avoid capacity development in a mode of 'fire-fighting'—that is, reacting to adverse events, including trade bans. And, strategic planning for trade and SPS management should not be a one-off event.* It needs to be re-visited on a periodic basis, taking into account new challenges and opportunities as well as lessons from on-going implementation.

[59] This is especially evident in Uganda where administrative attention to food safety must 'compete' with resource allocations for malarial control and control of communicable diseases.

Box 5.1 The 'Hierarchy' of SPS management Functions

The concept of a hierarchy of SPS management functions provides a useful framework for the development of priorities (World Bank, 2005). The foundation of any SPS management system is broad awareness among participating stakeholders about the relevance and importance of food safety and agricultural health to the competitiveness of their country/sector/firm and recognition of their own role in this system. Where this awareness is especially weak, any system of regulatory enforcement will almost certainly be overwhelmed. Awareness of major SPS challenges and opportunities is needed at several levels, including among: (i) senior agricultural and trade officials, in order to assign appropriate priorities for public programs and expenditures; (ii) owners and managers of producing/exporting firms and their industry organizations who make pertinent investment, personnel and other decisions; and (iii) the large number of producers, and farm and industry workers, who produce and handle agricultural raw materials.

Another core set of building blocks that proceed from broad awareness is the application of basic and recognized risk and quality management practices at the farm and processing levels of supply chains, including HACCP, GMP and GAP. This mostly involves training staff and family members in basic hygiene, the proper use and storage of potentially hazardous substances, improved record-keeping related to production practices, and the ability to conduct risk assessments, etc.

With broad awareness and common application of good practices, many potential SPS risks can be effectively managed at the enterprise (or farm) level. Yet other risks cannot be fully controlled on such a decentralized basis. These are more systemic in nature and require broader oversight or collective action, requiring basic research, risk analysis, surveillance systems and quarantine and emergency management systems. In such contexts, even if individual farms and firms apply good practices, they may not be able to control all hazards, thus the need for scientific testing and verification systems. Many of these higher-order functions require particular technical skills, often specialized equipment and well-defined procedures, supported by recurrent funding. Some of these functions need to be mandated by law in order to ensure that they are implemented appropriately. An effective regulatory framework and transparent institutional structures is therefore placed in the middle of the hierarchy.

At the top of the hierarchy is 'SPS diplomacy', which includes the international obligations of individual WTO members but also relates to engagement in the technical and political realms of official and private international standard setting, negotiations with bilateral trade partners and with regional integration partners on matters dealing with harmonization, equivalence, joint programs, special considerations, etc. The ability to have an effective 'voice' in such international fora is something that few lesser-developed and small countries have yet perfected.

Having established some level of SPS management capacity, this needs to be sustained in terms of effectiveness, scientific and technical relevance and access to financial, physical and human resources. In turn, this requires that sufficient political and economic priority be given to the maintenance of this capacity, both from the perspective of trade promotion, and also the welfare of domestic producers and consumers. There may also be a need for cost recovery, for example user fees, where appropriate. This emphasizes the need for SPS management capacity to be viewed from a dynamic perspective; the efficacy of the integral functions must be reassessed and updated in light of developments in science and technology, changes in standards applied by major trading partners, and changes in the reference points provided by the Codex Alimentarius (for food safety), OIE (for animal health) and IPPC (for plant health).

5.2 TRADE AND RELEVANCE OF SPS AND OTHER STANDARDS FOR UGANDA

Uganda has generally not faced market access constraints for its traditional agricultural commodities on the basis of either food safety, plant health or other technical requirements. Even while some international attention has being given to pesticide residues in tea and the incidence of ochratoxin in coffee, neither of these concerns have (yet) posed significant problems for Uganda. Additional, non-quality standards have been mostly applicable in the specialty segments of these commodity markets, including for organic or 'fair trade' cotton, coffee, and tea.

In contrast, for many of Uganda's emerging non-traditional agro-food exports, issues related to food safety, agricultural health and/or environmental standards are of comparatively greater importance in international trade.[60] For example:

- Major OECD importing countries have tightened their product and process standards related to fishery products, with increased attention to hygienic conditions at fish landing sites and in processing facilities and to the regulatory framework for fish quality and safety controls.[61]
- For fresh fruits and vegetables, some governments and private players have raised food safety product and process standards and also required their suppliers to adopt certain environmental and social protocols. Particular attention has been given to the use and storage of agro-chemicals and the presence of pesticide residues in fresh produce. Both in this trade and that for cut flowers, increasing attention has also been given to phytosanitary controls and the possible international transmission of plant pests.[62] Environmental and social standards are now rigorously monitored in the cut flower trade.
- For live animals and livestock products, there have been long-standing concerns about the possible transmission of contagious and economically significant animal diseases through trade. With the emerging links between certain animal diseases and human food and health risks, far more stringent sanitary measures have been adopted by many industrialized and developing countries. The presence of several endemic animal diseases in Uganda has been one factor restricting its trade in livestock products, especially beyond East Africa.
- For cereals and oilseeds there has been growing international attention to microbiological contamination, plant health risks and, for certain markets, the need to identify and label genetically modified varieties. Uganda does not export these products (other than sesame seed) outside of the region and thus has not have to face some of these more stringent standards.
- For several other Ugandan non-traditional agricultural and food exports—including honey, hides and skins, vanilla, and silk—there are also applicable food safety, agricultural health or other standards which may come into play when certain external markets are targeted.

Table 5.1 provides a summary of the types of standards which, depending on the market destination, could most affect Uganda's major traditional and non-traditional exports. Ugandan producers, processors, and traders deal in a broad spectrum of commercial settings, with different sets of operative regulatory and/or private standards, including the following:[63]

[60] See World Bank (2005c).
[61] See Henson and Mitullah (2004).
[62] See Jaffee (2003).
[63] Reliable statistics on the market destinations of Uganda's exports are difficult to come by due to various factors including: (i) under-reporting of cross-border trade in staple foods, live animals, etc.; (ii) Uganda's land-locked status and use of Kenya as a transit point or point of commercial transactions (that is tea sold at the Mombassa auctions); and (iii) other exports which are channeled through transit points abroad (that is flowers sold through Dutch auctions; commodities channeled through Dubai.).

Table 5.1 Uganda Trade in Agro-Food Products: Illustrative Standards and Technical Requirements

Product Group	Standards, Regulations or Private Protocols Related to:				
	Food Safety	**Animal/Plant Health**	**Quality or Technical Attributes**	**Environment**	**Social**
Fresh Fruits and Vegetables	Pesticide residue limits Microbiological standards Traceability req. Hygiene require.	Plant material quarantine Pest risk analysis Fumigation requirements Phytosanitary certific.	Quality grades General labeling requirements Packaging standards	Pesticide use restrictions Water/soil contamination reg. Codes for organic practices/certification	Monitoring of child labor Occupational health standards
Fish and Fish Products	Microbiological and foreign matter standards Pesticide residue limits HACCP checks	Restrictions on antibiotic use in aquaculture Animal health certificates	Quality grades Labeling require. Packaging stand. Quality Mgt. Certification	Fish catch restrictions Environmental management certification	-
Live Animals and Meat Products	Vet. drug residue limits Microbiological standards	Disease-free areas Disease surveillance Restrictions on vet. drugs Animal traceability	Quality grades Labeling requirements Packaging standards	Codes for organic practices and certification Regulations on animal waste effluent	Animal welfare monitoring
Hides and Skins	-	Animal health status for raw hides/skins	Quality attributes	Water effluent regulations Chemical use restrictions	-
Honey	Pesticide + antibiotic residue limits Microbiological standards Hygiene require.	Pesticide and antibiotic surveillance Antibiotic use restrictions Export certificates	Quality grades General labeling require. Packaging standards GMP conform.	Codes for organic practices and certification Antibiotic use restrictions	
Spices	Limits on Pesticide residues + mycotoxins Microbiological standards	Fumigation requirements and restrictions	Quality grades Consumer pack labeling requirements Packaging standards	Codes for organic practices and certification	-
Cereals, Oilseeds, and Animal Feed	Microbiological standards Limits on Pesticide residues + Mycotoxins	Fumigation requirements or restrictions	Quality grades GMO labeling Restr. on animal feed ingredients Nutritional labels	Biosafety/GMO regulations Codes for organic practices and certification	-
Cut Flowers	-	Plant material quarantine Phytosanitary certific. Pest risk analysis needs Fumigation req.	Quality attributes Packaging standards	Pesticide use restrictions Regulations on water/soil contamination	Monitoring of child labor, Occupational health stand. Fair Trade provisions
Coffee, Tea, Cocoa	Microbiological standards Pesticide residue limits	Fumigation requirements	Quality attributes Packaging standards	Codes for organic practices and certification Biodiversity code	Monitoring of child labor Fair Trade provisions
Cotton	Pesticide residue limits in cotton seed oil	GMO variety approval	Quality attributes	Codes for organic practices Restrictions on pesticide use	Occupational health standards

- *Mainstream domestic market*: combining considerable informal trade and some formally registered/monitored activities. In this market there is limited application of basic grading systems and minimal market surveillance or enforcement of standards related to food safety and agricultural health. Some 80-90% of the domestic food market falls into this category.
- *Regional/EAC market*, combining considerable informal trade and some formally monitored movements of goods. Enforcement of SPS and quality standards is non-existent for informal trade and is variable for formal trade.
- *Instability/humanitarian market*, involving supplies under tender and other arrangements to the World Food Programme (WFP), other elements of the United Nations and other humanitarian relief programs to feed refugees, other displaced people, or peace-keeping troops in neighboring countries. These tenders are ostensibly governed by specific quality and food safety standards, although enforcement is variable.
- *Extra-regional developing countries*, buying Uganda's traditional or non-traditional agro-food commodities. Enforcement of standards is variable, though typically stronger for such matters as animal health, food spoilage, and labeling.
- *Ethnic food market segments in Europe*, where commercial attention focuses on product variety and quality at reasonable cost and where little if any (enforced) requirements exist for food safety management systems, product traceability, etc.
- *Upper end domestic market*, involving supply of food to an emerging modern retail and fast food sector, higher end hotels and restaurants, and selected other catering services (such as for airlines). Stricter attention is given to quality parameters and good hygienic practices than the mainstream domestic market.
- *Mainstream, supermarket-led marketing channels in Europe and other high-income countries*, which are associated with a combination of private 'code of practice' and other protocols and a higher level of official monitoring of food safety and phytosanitary risks for raw materials and intermediate and finished products.

5.3 INSTITUTIONS AND CAPACITIES FOR MANAGING STANDARDS

Numerous public agencies and private organizations play a role in the management of food safety, agricultural health and/or quality standards in Uganda. The most important government entities in this area are:

- Uganda National Bureau of Standards (UNBS)
- MAAIF, Department of Livestock and Entomology
- MAAIF, Department of Animal Production
- MAAIF, Department of Crop Protection (DCP)
- MAAIF, Department of Fisheries Resources
- Ministry of Health (MOH), Environmental Health Division
- Crop Development Boards (i.e. UCDA; CDO)
- Others (i.e. Uganda Cleaner Production Center; National Agricultural Advisory Services)

Among these entities, those with the most direct involvement in the adoption or enforcement of standards for traded agro-food products are UNBS, the crop development boards, and the various listed MAAIF departments. The specific mandates and existing policy-making or implementation capacities of these agencies are examined more fully elsewhere.[64] Many of these entities need to work closely with health, veterinary, or other officials employed at the district government level, presenting considerable challenges of coordination. A national TBT/SPS (Technical Barriers to Trade/Sanitary and Phytosanitary) Coordinating Committee, comprised of various public sector

[64] See Jaffee et al. (2006).

agencies and private associations, seeks to identify and address gaps, overlaps, and duplications of functions and responsibilities in this field.

Many private sector institutions also play key roles in the management of trade-related quality, food safety, agricultural health, and other standards in Uganda. Obviously, individual farmers/fishers, traders, and agro-food processing companies play the most central and active role in generating raw materials and finished products that meet commercial and/or regulatory requirements for quality and safety. There are also private service institutions which assist these supply chain players to improve their methods or products, or provide conformity checks on management systems and/or products via inspection, testing, or certification services. For example, subsidiaries of two European domiciled companies operate internationally accredited laboratories in Uganda. Industry associations provide basic training in quality management and offer other business development services to their members. While the existing market for such services is relatively underdeveloped in Uganda—compared, for example, with Kenya or South Africa—the depth and breadth of such services will certainly expand over time in response to growing demand (and the ability to pay for services).

Pertinent Legislation

Uganda's body of legislation pertaining to food safety, agricultural health, and compliance with international SPS and TBT matters is in a state of transition, with many areas covered by obsolete legislation, other areas facing a legal or regulatory vacuum, and a large queue of draft bills and policies positioned at various points in the national legislative process. Some draft legislation was introduced to Parliament more than three years ago and actions are still pending.[65] This legal limbo is a source of concern, for the private sector and for those units in GOU which are responsible for program implementation and regulatory enforcement related to SPS matters.

Only the fisheries-related legislation and association regulations are reasonably up to date—although even here significant changes are being proposed under a Draft Fisheries Bill. Current plant health legislation does not make provision for many of the functions now considered central to modern phytosanitary management—including pest risk analysis and developing pest free areas—nor does it designate a national plant protection organization. The existing Food and Drugs Act is obsolete and does not take into account a wide range of technological and administrative developments in the food industry over recent decades. In relation to biosafety and biotechnology, the industry has been operating in a virtual legal vacuum, although research and development activity in this area ostensibly falls under the Uganda National Council for Science and Technology Act (1991).

Awareness-Raising and Promotion of 'Good' Agricultural and Manufacturing Practices

In Uganda, awareness of food safety and agricultural health issues is generally low although it has been marginally heightened as a result of the fish trade restrictions in the late 1990s. Because of the overwhelming impact the embargo had on trade, segments of public and private sector stakeholders are more aware of the potential impact of non-compliance with regulatory or commercial standards. Awareness in the various departments of MAAIF has certainly increased and MAAIF has sought increased budgetary resources to carry out its regulatory enforcement and other responsibilities. The Department of Fisheries Resources (DFR) has put in place standard operating procedures for inspection and quality assurance in the fisheries supply chain. UNBS

[65] Examples include: a draft Food Safety Bill, a draft Plant Protection and Health Bill, a draft Control of Agricultural Chemicals Bill, and a draft Biosafety Bill and associated Biosafety Regulations.

has also received additional budgetary support to carry out laboratory testing and other functions. Within MOH, however, attention to food safety remains marginalized by the dominant foci on infectious diseases and malarial control. Within the private sector, awareness about the importance of quality, food safety, and/or agricultural health has spread into certain industries, mostly at the level of food processors and export traders, although this awareness generally remains very weak among fishers, farmers, and intermediary traders.

In recent years, there have been several specific campaigns to increase consumer or industry awareness about food safety risks. These initiatives appear to have been successful but short-lived due to resource constraints. A more sustained program of awareness-raising has been implemented by the Uganda Cleaner Production Center, targeting firms in various industries. Some of the larger companies in these industries have gone on to implement improved environmental management practices and attain ISO 14000 certification. More widespread have been private industry and service provider efforts to promote improvements in quality management systems, with more than 100 Ugandan companies now certified under ISO 9000. In contrast, the adoption of GAP and/or more hygienic practices among primary producers and food supply intermediaries is not at all widespread, reflecting a combination of weak incentives, limited reach of extension services, and insufficient attention given to these matters.

Risk Assessment and Management

In the context of food safety and agricultural health, risk assessment is the process that provides estimates of the probability, severity, and likely impact that a particular hazard may present to human, plant or animal health. Risk management involves the identification and implementation of strategies to control hazards, and entails risk evaluation, assessment of alternative options, implementation of selected strategies, and on-going monitoring and review of implementation.

Underlying capacities for risk assessment and risk management on SPS matters are very limited in Uganda. Systematic data collection and analysis in the pertinent areas is rare and normally not sustained over time.[66] Responsibilities are seemingly fragmented among various institutions, at the levels of central and local government. Crisis management rather than preventative surveillance and risk management has been the norm, and even much of the crisis management effort has been dependent upon external financing. The array of existing problems and future challenges for capacity building and coordination are illustrated below in the example of animal disease surveillance and animal health management.[67]

Uganda once had a vibrant system for animal health management which, like most other systems, collapsed in the 1970s and 1980s with political and economic disarray. The single most important constraint is the weak capacity for livestock disease control. Presently, the country is struggling to control several of World Organization of Animal Health (OIE)'s 'List A' diseases. Many of the animal diseases are endemic, contagious and their presence has limited the scope for increasing farmers' incomes as well as access to regional and international markets. Obstacles to effective animal disease control include confusion of central and local government roles,

[66] The current laws make no provision for food safety risk assessment. While considerable epidemiological data is gathered by MOH, this is rarely analyzed and not effectively maintained.

[67] Analysis has also been done of the capacity weaknesses in phytosanitary management. For example, Songa (2003) emphasizes the lack of an official pest list, of retrievable plant health information, and of basic facilities. There are no institutionalized pest surveillance activities. Reference is made to the need for staff training—related to inspections, pest diagnostics, and pest risk analysis. Uganda has undertaken IPPC's Phytosanitary Capacity Evaluation, but the conclusions and priorities from this remain unclear.

persistent under-funding and stagnation of public investments in the livestock sector, high cost of veterinary drugs, decayed livestock and animal health infrastructure, and weak animal health delivery service among others. With only some limited exceptions,[68] Uganda's current disease control approach tends to be outbreak-driven (that is, crisis management) as opposed to on-going promotion of good practice, prevention, and emergency preparedness through effective and continuous disease surveillance.

It is now generally agreed that the shift from centralized to decentralized government since 1997 has resulted in much confusion over animal health management. Currently, there is no harmonized livestock movement control system as each district has its own priorities, guidelines and livestock control program. The Directorate of Animal Resources (DAR) has invested substantial human resources in enhancing its legislative and policy direction capacity but the laws have not been translated into effective public investments for livestock development. The old reporting system between the districts and the center has almost collapsed and, not surprisingly, discussions are underway to recentralize the animal disease reporting and control program.

Some of the more general limitations were highlighted in the *MAAIF Animal Health Strategy, 2005/6 -2007/8*, namely:

- good animal husbandry practices are not widely adopted;
- the system for veterinary drug inspection and certification suffers from inadequate infrastructure, laws, regulations and law enforcement;
- quarantine stations, stock routes, checkpoints, holding grounds and livestock markets are either non-existent or grossly inadequate;
- the ministry has inadequate veterinary staffing;
- there are no internationally acceptable abattoirs, most slaughter houses are in a poor state, and only a few district laboratories have the basic facilities to remain functional;
- the National Diagnostic Laboratory is functional only to a limited extent and does not meet international standards in relation to staff, procedures, or equipment;
- the handling of meat (slaughter, transportation and display for sale) is generally poor and unhygienic; and,
- in conclusion, "the status of veterinary public health countrywide is appalling".

Testing/Diagnostic Capability

In determining and signaling compliance with certain trade-related standards, one of the critical supporting infrastructure lies in testing or diagnostic capacity. Testing provides the buyer with the confidence that the product they are purchasing meets the specifications for product attributes (that is taste and color), quality, and food safety. Diagnostic testing is important not just for exports; the ability to test for chemicals, pathogens, and other contaminants and to determine if drinking water is safe are fundamental to all areas of a country's agribusiness and public health.

Currently, some $1.4 million of testing revenue is generated from the testing of Ugandan food and agricultural products, 60 percent of which is accounted for by testing of Nile Perch for exports and maize for regional sale or sale to WFP. The testing of bottled water also generates significant revenues for certain laboratories. Most other testing is for quality parameters, in relation to coffee, tea, cotton, seeds, and other products. Except for fish, there is little testing for pesticide residues in food or beverage products. *Overall, Uganda appears to have ample testing*

[68] For example, for surveillance and control of Rinderpest, supported under the regional Pan African Program for the Control of Epizootics.

capacity to meet today's requirements and able to support some significant future growth without additional investment. Private agribusinesses in Uganda do not report that their production and/or sales have been impeded by a lack of timely test results.

The three main laboratories (ChemiPhar, SGS and UNBS) provide the bulk of the laboratory services in Uganda. All 3 have similar capacity and capabilities—they have ISO certification, provide similar services, and support an array of clients. While at times the sample load may be high and result in some delays, in general the laboratories are operating at about half of their capacity. All three laboratories compete for scarce clients and revenues. While it is not unusual for a government laboratory to provide commercial testing especially if it has a unique capability or to perform confirmatory testing (these being key roles of a national standard laboratory), UNBS has gone a step further and is directly competing with the private sector. UNBS provides the same services as ChemiPhar and SGS for essentially the same fees, but unlike the private sector it also receives funding from donors and GOU.

There is little information sharing between UNBS, ChemiPhar and SGS. While this is not unusual in the private sector given the competitive nature of the market, it is very unusual between the private sector and public sector. It is important that all testing organizations have a forum to discuss new technologies, methods and standards. While UNBS tries to accomplish these tasks, it is also inherently hindered by the competitive nature of the business. Other opportunities for joint action are also missed. One is for UNBS to conduct inter-laboratory testing to achieve a degree of consistency among all the laboratories (currently, each of the main laboratories is conducting such tests with groups outside but not within Uganda). Another is for the laboratories to negotiate a general service contract with a laboratory equipment maintenance company (there is currently none in Uganda) where prices are fixed based on volume. Yet another one is for the companies to join forces and create a supply system—there is currently no laboratory supply company in Uganda, with each laboratory having to keep reagents, supplies and gases on site to support their work.

Many different departments in government want to operate laboratories to meet their own specific mandates or financial needs, and donors are being asked to provide funds for multiple facilities, new equipment, and manpower to support these proposed operations. Yet, many activities and analyses being performed are quite similar. One recent example is in the area of pesticide residue testing. The equipment needed to perform this analysis (GC-MS) is sophisticated, expensive and requires a lot of support and training. The equipment requires an air-conditioned space, back-up power supplies, a source of carrier gas (that must be shipped in from Europe) and associated training in sample preparation, method development, and equipment operation. It takes about 6 months of training to develop a technician to run the analysis which is then evaluated by a senior scientist. This is very expensive and laborious process. Yet in 2005 Government Chemists, Animal Health, UNBS, and ChemiPhar all purchased the GC-MS equipment—while there is evidently not—at the present time-- enough demand for pesticide residue testing to fully utilize even one of these systems.

In relation to diagnostic testing capacities, donor agencies could:

- Coordinate with UNBS, SGS, ChemiPhar, and MAAIF to develop a laboratory plan that rationalizes existing capacities and creates a central laboratory that can perform the specialized plant and animal health testing that would be used by all the organizations in the Ministry. This will rationalize requests, provide for appropriate funding and support, and create less stress on the limited resources in Uganda. The non-specialized testing (microbial pathogen testing, zoonotic disease identification, and product conformance) should be undertaken solely by private sector laboratories.

- Work with Ugandan universities to create a laboratory technician course to provide hands-on testing and training in laboratory management, and support internships and cooperative programs that allow students to work in industry under a grant. This will provide further training to students and prepare them to work in industry. Support could also be provided for a lecture series that brings in trainers in management techniques, equipment use, and method development for specific products or areas of interest.

5.4 KEY SUBSECTORAL SPS ISSUES

Uganda's Fish Export Trade

With the measures it took in response to the EU fish export ban in the late 1990s, Uganda's fish safety system was deemed to be 'equivalent' to that of the EU in 2001. Since then, the industry has experienced few official problems in sales to this market,[69] although there has not been an official inspection mission to Uganda by the Commission's Food and Veterinary Office since 2000. More regular issues have arisen within the private sector on quality grounds—related to the freshness, color, and/or sizing of consignments. Still, demand has remained robust and exports have increased considerably in recent years.

Uganda has attained a level of procedural compliance with EU requirements, especially in relation to inspectorate checks on factory operations and the conduct of required testing and other measures of conformity assessment.[70] Yet, fish destined for export may be handled a dozen or more time, over a period of multiple days, before it reaches the factories, by which time the cold chain may have been broken several times. This fragmented supply chain frequently results in rather high rates of product wastage, inconsistent quality, and contamination of raw materials, necessitating thorough washing with chlorinated water prior to being filleted and processed.

Industry players and available documentation point to a situation in which the bulk of the artisanal fleet has no access to ice or proper insulation, is provided little or no incentive to preserve the quality of fish—being paid the same for iced as for non-iced fish—and having relatively little awareness about the need and suitable approaches for quality management and proper hygiene. If the artisanal nature of Uganda's Nile Perch fishery industry is to be maintained, then there is a need to pursue *a program of awareness raising, promotion and demonstration of low-cost and effective technologies for preserving fish quality and hygiene in the critical period from its being caught to its loading into the iced/insulated holds of collection boats. Such a program could involve a public-private partnership, involving the Fish Processors and Exporters Association, the Uganda Fisheries and Fish Conservation Association, DFR, various lakeshore local councils, and perhaps selected NGOs and research organizations. Additional efforts might be made in designing more appropriate fishing canoes and boats, in using solar or other energy sources to enable ice-making in more remote areas, and deploying a range of other potential technologies and materials.*

In parallel, there is a need to design workable systems of raw material and product traceability. At present, the industry is able to trace its raw materials only back to specific batches of supplies provided by particular trading intermediaries or, in some cases, to collection boat operators, but no further. The fish landed by collection boats is typically comprised of supplies from some 100 to 300 fishers, with the collections having been made over several days of travel in and around

[69] In 2003 there were two cases of interceptions of Ugandan Nile Perch under the EU Rapid Alert system due to exceedence of microbiological limits. There were no such cases in 2004 and 2005.
[70] Ponte (2005).

off-shore islands. None of this fish is separated and it would be difficult if not impossible to trace the source of contaminated, undersized or otherwise problematic raw materials.

Uganda's fish processors believe it is inevitable that, in the future, a growing number of their buyers will be requesting full traceability of their products and raw materials. Again, if the artisanal fishing basis for the industry is to be maintained, this will necessitate changes, perhaps to the design of the collection boats, but also to the use of crates or other materials to separate supplies and systems of tagging and record-keeping which presently are not employed in the supply chain. *Technical assistance could be provided to examine the feasibility and potential approaches to implementing (over time) a system of traceability into the fish supply chain.*

There are several issues or challenges related to standards and Uganda's fishery trade. One pertains to the landing sites, and is discussed in Chapter 8 of this report. Another relates to the *approach to testing in the industry*. Most of the processing companies have in-house laboratories in which they carry out very regular microbiological and chemical tests on water, ice, fish raw material, factory contact surfaces, and final product. They also undertake a range of external tests, including periodic (typically monthly) tests of water and ice for microbiological parameters. In addition, every batch of final product is subjected to testing for various microbiological parameters and for (some 15) organochlorine pesticides, including DDT. This testing for pesticides is unusual in capture fisheries industries and the testing of each consignment of fish for pesticides is not a EU requirement. The practice dates back to a single episode in 1998 when some fish were reportedly killed through deliberate use of pesticides in the lake. DFR subsequently made mandatory the testing of each consignment for pesticides.

Industry and laboratory sources indicate that there has not been a single instance in the past five years where an export consignment of Nile Perch was found to have detectable levels of pesticide residues. Current industry expenditures on such testing are considerable. Substantial savings could be made by moving to a surveillance approach, whereby the CA would take periodic random samples of water, ice, raw materials, and finished product and have these tested for pesticide residues—with any detected problems addressed through a risk management plan.

Another set of issues relates to the fact that Uganda may export fishery products to the EU but only from capture fisheries. Additional requirements are set out for aquaculture products, but no attempt at compliance has been made so far by the CA. Until the appropriate controls are developed and introduced, Uganda will not be able to supply fishery products from aquaculture to the EU. *Technical assistance may be needed for the development of an appropriate regulatory framework, the training of the competent authority to monitor and enforce those regulations, conducting necessary risk assessments, and promoting the adoption of 'good aquacultural practices' in this nascent industry. Visits to other countries to examine regulatory, technical and institutional advances in this area could be undertaken.*

Re-Introducing DDT: Conflict between Trade and Health Objectives?

The incidence of malaria is widespread in Uganda and is the leading cause of death and illness. Approximately 93 percent of Uganda's population is at risk from malaria and, on average, 80,000 Ugandans die from malaria each year, half of which are children under 5 years of age. According to MOH, malaria accounts for up to 40 percent of all out-patient care, and families can spend up to 25 percent of their income on the direct or indirect costs of the disease. Some $50 million is spent annually in Uganda on malaria treatment. In accordance with the goal set during the African Summit on Roll Bank Malaria in 2000, Uganda's objective is to cut in half morbidity and mortality due to the disease by 2010.

Because of its proven effectiveness in killing mosquitoes, DDT[71] is considered by many countries to be (one of) the most effective weapons in the fight against malaria. It is relatively cheap, easy to produce and, when used in indoor residual spraying, only has to be applied two times per year, in diluted formulations, to effectively control mosquitoes in residential areas. Although DDT has been banned for agricultural use in most countries, the Stockholm Convention on Persistent Organic Pollutants permits the production and use of DDT strictly for disease control. The World Health Organization (WHO) includes DDT among the twelve insecticides that it recommends for indoor residual spraying for malaria vector control. While the Stockholm Convention advocates the use of 'best available techniques' and 'best environmental practices' when using DDT and other insecticides for vector control, WHO has issued its own set of recommended guidelines and procedures for such use.[72] Some 31 of the 91 countries that signed the Stockholm Convention have requested exemptions for DDT use in malarial control programs.

In the early 1960s, DDT had been used to control malaria epidemics in several districts of Uganda with considerable success. However, its use was phased out during the 1970s, in large part due to global concerns about the adverse environmental impacts of DDT (especially when used as an agricultural pesticide). Recently, several countries—including South Africa, Zambia and Zimbabwe—have reintroduced DDT to control malaria, with apparently positive results. For example, in early 2000, South Africa began using DDT for malaria control in the province of KwaZulu Natal. Household spraying, in conjunction with improved use of anti-malarial drugs, led to an 80 percent reduction in the incidence of malaria over a two year period.[73] Such experiences, together with Uganda's ongoing problems in controlling the incidence and costs of malaria, led Uganda's MOH to announce in April 2004 that the government planned to re-introduce DDT use as part of the National Malaria Control Program.

Following the announcement, local representatives from the EU warned of potential adverse affects on Uganda's trade should residues of DDT show up on any Uganda's produce sent to Europe. A February 2005 meeting organized by several international and local NGOs and involving representatives from many export-oriented industries concluded with the issuance of a proclamation that called on GOU to reconsider the policy due to its potential adverse impact on both trade and investment. These stakeholders implicitly expressed a lack of confidence that DDT could be re-introduced in Uganda in conformity with WHO or other safety guidelines.

The policy debate on the re-introduction of DDT has seemingly stalled within Uganda. An environment impact assessment on DDT's re-introduction has been commissioned and completed, though its findings have yet to be made public. In the absence of analysis (or its publication), fears, anecdotes, and assertions have filled the void. In recent months, the 'debate' on this subject has gone to the western media, where ideological and other positions and counter-positions are being taken up, with Uganda seemingly relegated to just a bit player in its own play.

Eradicating malaria is of critical importance for human development, poverty reduction and economic growth in Uganda. Controlled use of DDT has the potential to save thousands of lives in Uganda. *Based on scientific studies, there is fairly broad agreement that when properly deployed for residual spraying indoors, DDT poses very little risk to human health and the environment. However, questions about the effective management of such a program in Uganda*

[71] The organochlorine compound *dichlorodiphenyltrichloroethane.*
[72] WHO (2000).
[73] "Is DDT Safe? Considering Its Use for Malarial Control in Uganda", Health Policy and Development; Vol. 2, No. 2, August 2004.

abound, even though several other African countries, including some with as limited administrative capacity as Uganda, have managed successful spraying programs for years.

How the properly managed re-introduction of DDT for vector control would affect Uganda's agro-food exports would depend more on perceptual factors than actual risks of residues in fresh produce, fish, or other products. These risks can be managed through more frequent pesticide residue testing. Already, as mentioned, all consignments of fish are tested for pesticide residues. Comparatively little other produce destined for Europe is tested for pesticide residues. Additional testing could be re-introduced with some type of cost-sharing given the origins of this concern. However, given the media and popular coverage of this issue in relation to Uganda, it is certainly possible that some international buyers or foreign consumers might shift their purchases away from Uganda should DDT be re-introduced. While this might not represent rational behavior—especially given much wider pesticide-related and other concerns—it cannot be fully ruled out. There needs to be a more careful analysis of this risk and the potential costs involved.[74]

"Mind the GAP": Putting Horticultural Standards in Proper Perspective

Since the mid-1990s, Uganda has developed a very modest export trade in fresh fruit and vegetables and a more sizeable trade in flowers.[75] Uganda's fresh produce trade has a current estimated value of about $6m. Some 80 percent of this consists of air-freighted supplies of hot pepper, matooke, okra, and selected other commodities, destined primarily to wholesale markets in the UK and Holland and servicing immigrant/ethnic food distributors and restaurants. There are currently 17 small companies involved in this trade and an estimated 1500 (mostly) smallholder farm suppliers. This 'industry' is fragmented, lacks an organizational body for collective action, and has featured on-going entry and exit over time.

Uganda's current horticultural exports to Europe are encountering few or no significant problems related to compliance with standards. The trade in specialty commodities directed to 'ethnic'/immigrant communities in Europe (especially the UK) is primarily governed by considerations of produce variety and taste, with practically no official attention to or private buyer concern about pesticide residues, product traceability, or other parameters which have become increasingly important in the more mainstream segments of the EU fresh produce market or, more specifically, for sales channeled through the leading supermarket chains. Some selected downstream buyers (for example caterers) have begun asking for additional record-keeping on the sourcing and oversight of the produce supplied, yet this is the exception rather than the norm.

An argument could be made that Uganda is 'stuck' in the lower margin ethnic produce segment because of a failure of farms and firms to upgrade their operations to become compliant with prevailing supermarket requirements for GAP and the application of certified HACCP systems. Yet, this is not fundamentally an issue of standards compliance. There are many reasons—climatic and logistical (see Chapter 8)—why Ugandan products and supply chains cannot competitively supply fresh fruits and vegetables to the higher-end European supermarkets which are more demanding in terms of standards. The ability of the smaller scale exporters to continue

[74] On the surface, it would seem that the risk of consumer or buyer product shifting would be very small. Most European consumers of Ugandan Nile Perch do not know its origin and this fish is referred to by different names in different markets. As noted below, Uganda's fresh produce trade is directed at the ethnic food segment in the U.K. where relatively little attention is focused on matters of pesticide residues.

[75] The discussion here focuses on the smaller trade in fresh fruit and vegetables due to on-going policy concerns. The larger cut flower industry does face selected SPS issues, but these are generally being managed quite well. See Volume 2, Chapter 3, for more elaboration.

to supply any fresh produce to Europe has, in part, depended upon the virtual absence of attention to specific product or process standards in parts of the European market.

Over the past year, a task force, led by DCP in MAIFF, has formulated draft plans to raise the applicable standards within Uganda's fresh produce industry and to substantially increase the level of official oversight and inspection of this industry. These plans have included the following draft documents: (i) a Manual of Standard Operating Procedures for Horticultural Commodity Inspection and Quality Assurance; (ii) Procedures for the Inspection of Horticultural Commodities for Export; and (iii) a Code of Practice for the Production, Handling, and Processing of Fruits and Vegetables in Uganda. While undoubtedly based on good intentions, this effort seems to be based on a misunderstanding of the external commercial and official requirements which the Ugandan industry actually faces. For example, there is apparent confusion about the nature and relevance of EUREPGAP, with some parties seemingly confusing this private protocol—involving a limited set of European supermarkets—with the requirements of the EU.[76]

Thus, the Task Force has distributed a set of plans geared toward "Quality Assurance for Horticultural Products to Comply With the EUREPGAP" under the current situation in which there is virtually zero demand for EUREPGAP compliance/certification from the commercial partners of Ugandan exporters. The proposals call for an extensive range of requirements—for quality management, HACCP systems, waste management, etc.—and an attendant inspection, control, and/or testing regime, to be carried out primarily by the recently expanded DCP.

Given the current structure, state of development, and primary commercial orientation of Uganda's fresh produce export industry, the Task Force's proposed set of 'requirements' and proposed administrative controls and oversight measures would appear to be most inappropriate. If strictly followed, these recommendations would lead, in the short run, either to the termination of the existing fresh produce trade (as firms would be unable to meet the requirements or see their small margins further contract as buyers do not compensate them for added expenditures), or to widespread petty corruption, as inspectors are given inducements to issue phytosanitary certificates. The current proposals would have the issuance of such certificates being contingent upon firms demonstrating compliance with the various 'requirements' which, of course, extend well beyond plant health matters.

Rather than implement a stifling system of command and control—which is not being requested by Uganda's external trading partners and buyers—the medium-term objective should be to promote a 'quality culture' in Uganda's fresh produce industry and to facilitate the broader adoption of better agricultural, post-harvest, and packing practices, and associated systems for supply chain management, record-keeping, traceability, etc. For the foreseeable future, adoption of these practices should be voluntary rather than mandatory; supported by incentives and support services rather than imposed by inspectors and sanctioned by fines or other penalties.

The medium-term strategy should be to define and achieve implementation of a UgandaGap, a more modest and less stringent version of EUREPGAP. Industry, government, academe, NGOs

[76] For example, the draft Code of Practice (dated August 2004) states that "More than 95 percent of Uganda's fruit and vegetables are exported into the EU. Uganda, therefore, has to comply by January 1, 2005, with EUREPGAP regulations in order not to suffer loss of the EU market." EUREPGAP is a private protocol and not a set of regulations. The reference to 1/1/05 seems to reflect a confusion here, since it is the EU's Food and Feed Act that comes into play on January 1, 2006. But the requirements under that regulation have also been misinterpreted, especially in relation to the issue of traceability.

and others could participate in developing and applying such a UgandaGap. In the future, should the external buyers of Uganda's fresh produce require compliance with more stringent technical standards or management systems, then the movement toward UgandaGap compliance will serve as an effective stepping stone plus elements in that protocol can themselves be refined to maintain its relevance to the evolving marketplace.

Coffee: Future Food Safety Challenge?

Coffee has historically been Uganda's largest export product. During the last several years, this sector has been adversely affected by a combination of low international market prices and large production losses due to coffee wilt disease (which have infected around half of the country's Robusta trees) and poor implementation of the coffee replanting program (needed for replacing low yielding robusta trees that are over 40 years old) (see Chapter 8). All this has resulted in a dramatic drop in farm incomes, leading most farmers to neglect basic tree maintenance and many farmers to plant alternative crops, including upland rice and vanilla, rather than replace lost trees. Coffee exports have declined from a peak of around 4.5m. (60 kg) bags in 1996 to 2.5m. bags in recent years. While elements of the international coffee industry are just beginning to recover from the price-induced crisis in the late 1990s, most Ugandan farmers—who were unable or unwilling to replant in recent years—have not benefited from the recent recovery in prices.

The Ugandan coffee industry also faces a challenge related to compliance with emerging food safety regulations. Fungi in coffee can lead to the emergence of ochratoxin A (OTA). In recent years, the EU has proposed lower tolerance levels for OTA in various foods including green coffee, which raised major concerns among developing country coffee exporters. Estimates by the European Coffee Federation found that if proposed limits of 5ppb were established and enforced, rejection rates for lots of coffee would be around 7 percent, and as high as 18 percent for some African producers.[77] Because of the obvious negative impacts, the EU has agreed to postpone imposing the OTA limits and support prevention measures in problem regions.

To address the problem, the FAO, the International Coffee Organization (ICO) and the European coffee industry worked with the Uganda Coffee Development Authority (UCDA) as part of the global project "Enhancement of Coffee Quality through the Prevention of Mold Formation" which began in 2001. Project activities included instruction of farmers in better coffee drying, storing, and fungus monitoring, as well as training technicians in OTA analysis and monitoring. There has been a reduction in the amount of coffee rejected for wetness, which contributes to OTA formation. UCDA now carries out random checks for OTA and a local laboratory conducts diagnostic testing of certain samples. Over the past four years, only two Ugandan coffee consignments were rejected due to OTA (the most recent being in 2004 by Slovakia).

However, the absence of more regular rejections of Ugandan coffee may stem more from the minimal enforcement of the regulations than from Ugandan compliance. Exporters are apparently not very concerned, as they manage the problem by sorting out diseased and discolored grains, and ensuring that the product purchased from dealers is dried to the required moisture level. The majority of farmers and intermediate traders are, apparently, unaware of the risks associated with OTA and additional extension and other efforts on proper post-harvest and storage techniques are needed.

[77] FAO project, *Reducing ochratoxin A in coffee*, www.coffee-ota.org/proj_background.asp

Certified Organic Production

Demand for certified organic products in developed countries continues to outpace supply, making organic production one of the fastest growing areas in agriculture. With suitable agro-ecological conditions and low labor costs, there is considerable interest in having Uganda become a major player in this high value segment of international agro-food trade. The majority of farms in Uganda use no chemicals and the traditional small-scale farming methods are compatible with organic practices. Thus their products are essentially "organic by default," making the conversion to (certified) organic production relatively simple.

Certified organic production in Uganda is relatively recent, having only really taken hold since the mid-1990s. Much of the early pioneering and more recent work has been supported and subsidized by donor agencies—with help provided for feasibility studies, development of internal control systems, demonstration plots, input supply to outgrowers, certification, etc.[78] With this assistance, Uganda has established itself as a 'leader' in Africa in organic production. About 125,000 hectares (or 1.4 percent of Uganda's agricultural land) is in certified organic production and there are an estimated 40,000 'certified organic farmers'. Most of the certified production is either of cotton, coffee, or sesame. Nevertheless, current exports of certified organic products are still quite modest, estimated at $6.2m. in 2004-05 (that is, 1 percent of Uganda's exports). There is a very small domestic commercial market for such products. Depending upon the sector and the firms involved, a significant proportion of certified organic production is not actually sold as organic produce and thus receives no premium over so-called conventional products.

While there is certainly potential for future growth in the production and trade of certified organic products, this is no panacea and there are many issues constraining this development and limiting its impact on poverty reduction. Important issues include the following:

- The absence of a national organic development policy as a sub-component of the country's broader agricultural development strategy;
- Continued low productivity of organic growers due to lack of soil fertilization options, high crop losses from pests, and the lack of local research on organic cultural practices;
- Commercialization problems stemming from unreliability of supplies, non-compliance with quality and/or food safety requirements, and/or declining price premiums in certain markets for organic products;
- The distribution of those premiums which do exist between firms and farmers. Organic certifications are generally paid for and held by the buyers/processors rather than the farmers themselves, limiting the sales options and bargaining power of the latter;
- Relatively high management and certification costs, especially for the smaller and more recent entrants into the organics product trade.

Several of these constraints are quite fundamental and, if not effectively addressed, could undermine much of the momentum that has already been generated in the organics movement in Uganda, let alone limit future growth. The level of donor interest in promoting certified organic production in Uganda is very impressive. However, the underlying economics of (unsubsidized) certified smallholder production have not been firmly demonstrated in Uganda. Perhaps a more cautious and coordinated approach and one putting considerably more emphasis (through research and extension) on the productivity, product quality, and other technical dimensions (rather than on group formation and certification dimensions) is warranted.

[78] All but two of the 23 organic product exporters interviewed by Gibbon (2006) have received support from donor agencies, the majority from more than one agency.

Tourism and Managing Food Safety Risks

In Uganda there is little or no official oversight of tourist or restaurant establishments in relation to food hygiene and safety. MTTI has a very small inspectorate unit which makes periodic visits to hotels, but this unit has no food technologists on its staff and does not generally address food-related issues. The unit also has no effective enforcement capacity in this area under the existing Hotels Act. Local government authorities are involved in licensing food establishments, but more for revenue raising than for regulatory purposes. There is no surveillance of tourists to Uganda to determine the incidence of food- or water-borne illnesses. No analysis has been done of the food sourcing policies and experiences of tourist-grade hotels and restaurants, although discussions with several food managers suggests regular concerns about either the quality (for fresh fruit and vegetables) or the safety (for certain fish and meat items) of important food products.

As part of a broader program to begin classifying Ugandan hotels and restaurants, a team from the inspection and registration division of MTTI conducted a survey of existing establishments. In relation to food services, this team found, among other things:

- a very low level of professionalism, adversely affecting the quality of services; mostly low skilled personnel are employed and only limited on-the-job training is provided;[79]
- that the majority of hotels and restaurants in the lower to middle end of the market have been converted from homes or shops and are characterized by limited space and facilities and generally poor functionality;
- with the exception of larger establishments, that there has been limited investment in modern kitchen equipment, cold stores, etc. to preserve food or for hygienic conditions in food preparation.

One MTTI analysis concluded that "this state of affairs has been (one of) an amorphous and discordant growth of hotel and restaurant establishments in the country with little or no regard to standards. This has and will cost Uganda's competitiveness as a premium tourist destination."

At the EAC level, agreement has been reached on a set of criteria to classify hotels and restaurants. In Uganda, new tourism legislation has been introduced and the Uganda Tourism Board will be responsible for registering and licensing such establishments. MTTI is presently developing the regulatory instruments that would underpin this registration, licensing, and classification system.

There is a need to strengthen the capacity of various stakeholders to enhance the level of food hygiene and safety in the hospitality industry. MTTI, the Consumer Education Trust and other parties, have put together a draft proposal seeking technical assistance to carry out a public-private partnership that would involve:

- Conducting a comprehensive baseline survey and needs assessment on food safety in tourism;
- Developing and disseminating food safety user manuals for hotels, restaurants, and regulators;
- Enhancing capacity of district authorities to conduct food safety and hygiene inspections;
- Sensitizing and training hotel and restaurant operators on the importance of food safety and the adoption of HACCP systems in all gradable establishments; and
- Conducting training for regulators and other experts in this field and the development of monitoring and evaluation tools for use by regulators.

[79] Several stakeholders noted the limited effectiveness of MTTI's training school in Jinja and the need to send staff to places such as Kenya's Utalii College for serious training in food safety management.

In pursuing this agenda, it would be valuable to draw upon the experiences of other countries—including perhaps Jamaica and Mauritius—which have employed better practices in this field.

Honey: Food Safety Standards and Prospects for a Sweet Success

Uganda's honey is natural and organically produced. It is trapped from beehives strategically positioned within the jungle and rich-flora forests scattered all around the country. There are an estimated 3300 active producers, most of which employ traditional methods. Most of them are members of district-level associations and form part of the umbrella organization The Ugandan National Apiculture Development Organization (TUNADO). There are currently two industrial processing operations for honey in Uganda, both of which are operating at well below capacity. Production is estimated at some 1200 tons per year, with a value of $1.8m. There is some regional exports of honey, although little of this trade is officially recorded.

Uganda's honey industry has received considerable external assistance since the later 1990s. In 1999, the UNIDO-supported Uganda Integrated Program (UIP) set out to collect, analyze and characterize Uganda's honey nationwide, which set the stage for a long process of data collection, analysis and discussion with a number of stakeholders in the bee-keeping industry. It was then realized that the prevailing Uganda honey standard had to be revised as did pertinent legislation. Meanwhile, the EU had placed an outright ban on Chinese honey, ostensibly presenting Uganda with a new market opportunity.

TUNADO exerted pressure on government officials and agencies to comply with the requirements for exporting honey to the EU. This led to the development of Uganda's honey standard and DAR was designated as the official CA for all matters concerning honey and other bee products. In addition, MAAIF developed a national policy on apiculture and a sector development strategy with stakeholder participation. MAAIF also developed a draft legal framework although the bill has not yet been approved by Parliament. All these developments provided a much needed boost to the structure of the sector.

One of the requirements for exporting honey to the EU is the development of an annual Residue Monitoring Plan (RMP) by the CA. However, approval of the annual RMP would only allow exports for the coming one year with the implication that export approval was to be renewed annually. This would be a costly undertaking as it would require training, re-training and equipping of decentralized inspectors to undertake the monitoring and collection of samples. It would also require the development and annual renewal of strategies to deal with performance deficiencies within the honey supply chain as well as unanticipated difficulties.

With support from UIP, the Development Finance Company of Uganda, Shell Foundation and NAADS, a survey was undertaken early in 2005 to collect samples from all the honey producing regions of Uganda. Local personnel received training in sample collection and inspection and a RMP was prepared. This first RMP was sent, along with the samples collected, to a Germany-based laboratory for biological, physical and chemical testing and analysis. Nine months later, in the second half of 2005, Uganda received official notification from the EU confirming Uganda's short-listing onto the list of honey exporting countries, making Uganda only one of five SSA countries to have gained such approval.

This has opened up a new window of opportunity for Uganda to diversify its exports into organic and unique honey to the EU market. But it has also put the prevailing weak commercial and SPS management capacities to the test as the necessary commercial arrangements for an effective response are not yet in place. With the approval of market access to the EU, the CA now needs to

implement the RMP. Yet, no computerized surveillance system is in place, nor has a system for issuing sanitary certificates, bee movement permits and quarantines been established.

Besides looking at this new development simply as an emergent opportunity to access the EU market, both the public and private sector need to be cautious and aware of the potential commercial and official consequences of a rushed and opportunistic choice that could expose the commercial vulnerabilities of the sector (such as missed deliveries due to the limited supply of honey). The country and sector could also find themselves working in a damage control mode, struggling to restore reputation, succeeding in some aspects but failing to build the necessary structural linkages through the chain and between the chain and other key sectors and players.

The biggest challenge is increasing the supply of high and consistent quality product in an industry dominated by small holder beekeepers using traditional methods. Bee keepers need to access affordable and appropriate beekeeping equipment, and training of participants in the supply chain on quality and handling must be widespread. Donor efforts in the honey sector have been focused on assisting the industry to become authorized by the EU for export and to maintain safety and quality standards.[80] Yet, questions on the phasing and prioritization of support for the sector remain.

In sum, the honey sector is still small and struggling. Bee keeping is largely a smallholder based activity, though there has been entry of relatively large and better resourced investors, coupled with efforts of some public and donor agencies to grow the sector. Standards for the production, processing and marketing of honey, statutory instruments to establish a functional inspectorate, and an apiculture policy and sector development strategy have been produced with stakeholder participation. Nonetheless, the major elements of an effective food safety control program for the sector are not yet in place.

Most things are still on paper and many capacities are missing, such as the capacity to effectively address production and post-harvest deficiencies. *One way of tackling this is to support TUNADO and MAAIF in identifying and contracting selected NGOs, community-based organizations or private agencies that could assist TUNADO to upscale the production and collection system of honey. This would likely involve mobilization of outgrowers, group development or strengthening, awareness building of good practices, provision of relevant and modern production and protective equipment, and the provision of training to bee keepers, small scale processors and fabricators of hives. Meanwhile, efforts are needed to coordinate the support required by TUNADO, MAAIF and other stakeholders to develop an effective and nuanced strategy for sustained and profitable access to the more remunerative markets for Uganda's organic honey. External technical assistance will be required to support this.*

In addition, the capacities of the CA will have to be urgently enhanced. The apiculture unit at MAAIF receives almost no budgetary allocation from the government yet most donor agencies have taken the stance that it is the government's responsibility to finance the annual RMP process. This stalemate needs to be broken. Coordination is needed to pool the financial, technical and other assistance necessary to prepare the RMP, set up systems of inspection, export certification, bee movement regulations, disease surveillance and sanitary certificates as well as a computerized data and information system both at TUNADO and at MAAIF.

[80] Currently, the EPOPA project of SIDA is assisting honey processors in the industry to become certified organic and DANIDA is setting up an in house quality lab with one of the leading processors for testing of samples and residue monitoring. This company is also working with UNBS to become ISO 9000 and HACCP certified.

Maize: Quality and Food Safety Management for the Regional (and Instability) Market

Maize is one of the leading non-traditional export crops, with estimated formal and informal revenues of around $25-$30m. per year over the last decade. Maize is exported to neighboring countries, with informal exports exceeding formal exports in volume terms while being more or less the same in value terms (informal maize fetches a lower export price). Kenya is the major export destination for Uganda's informal maize exports.

At harvest time, the corn generally has a moisture content of 20 to 25 percent. The de-husked cobs are loosely piled for drying and shelled after 2 to 4 weeks. Shelling is done by placing the cobs in a bag and then beating the bag. Once shelled, the grain is sun dried on the ground or on mats. After sun drying, the gain is stored for use or sale. At this point, the grain normally contains 16 to 17 percent moisture. Some maize is sold wet with traders consolidating supplies and applying their own drying and storage methods.

These post harvest methods play a significant role in Ugandan's difficulty in meeting regional quality and safety standards. As recently as 2004, both Rwanda and Kenya have refused shipments of Ugandan grain due to quality problems. The shelling process contributes to broken and damaged grain, which enhances the growth of mold leading to Aflatoxin contamination. The lack of adequate drying (below 14 percent) leads to discoloration and supports further growth of mold. Drying on the ground or mats leads to the incorporation of dirt, filth and other matter in the product.

Uganda's grain traders and the industry are faced with a difficult challenge. To meet export or World Food Program (WFP) quality standards, the grain must be separated based on quality standards, or face potential rejection at the border or at time of sale to WFP. Inadequate separation (because it is costly) has reduced the profitability of maize sales and lowered farm-gate prices. To bridge the quality gap, a program has been undertaken to provide farmers with training and technology that can improve drying, and reduce cracks, discoloration, and foreign bodies.[81] WFP has instituted a quality program that will begin in 2006, and better quality grain will fetch premium prices.

Further measures are possible. One would be to develop low-cost on-farm post-harvest drying techniques, which will contribute to better quality grain and reduced spoilage. This can be conducted in collaboration with NARO, which has experience developing a broad range of on-farm post-harvest practices. Another is to adopt and adapt quick, low-cost methods for detecting aflatoxin in maize. These have been utilized in other parts of the world.

Uganda is witnessing a record demand for maize in 2006. Drought conditions in Kenya and Ethiopia, coupled with large purchases by Tanzania and Zambia, mean that demand for maize in east and southern Africa will continue to be high. In December 2005/January 2006, there were indications that Kenyan and Tanzanian traders were purchasing large quantities of wet maize, directly from farmers, and then shipping this by truck or ferry to their own countries. Overall regional shortages of supply were leading them to disregard EAC maize quality standards. The long-distance transport of wet maize also presents the risk of Aflatoxin development.[82]

[81] Under the Agricultural Productivity Enhancement Program supported by USAID.

[82] Aflatoxin may pose serious health risks. For example, in April 2004, Kenya experienced a large outbreak of acute aflatoxicosis. The outbreak, linked to contaminated maize, resulted in 317 hospitalizations and 125 deaths.

These recent developments seem to be part of a longer pattern of instability in the regional (and humanitarian) maize market in which the effective demand for quality (and food safety) gyrates from year-to-year, sending confusing signals and incentives to farmers, intermediate traders, and millers about their management of quality and food safety risks associated with maize.

5.5 CONCLUSIONS

Although Uganda has successfully overcome the issue of non-compliance with EU standards regarding its fish exports in the late 1990s, relatively weak capacities in SPS management and the incidence of low or inconsistent product/raw material quality pervade large segments of Uganda's food and agricultural trade, weakening its overall competitiveness and reducing the returns to primary producers, processors, and traders. Currently Uganda faces a looming challenge with respect to its fish system in light of the imminent inspection mission by the EU's Food and Veterinary Office. Other more readily manageable challenges are the risks of mycotoxin contamination in its coffee and maize.

There are major weaknesses throughout the standards management hierarchy. The level of consumer, primary producer, agro-enterprise, and policy-maker awareness about the importance of quality and SPS management, the available techniques and methods, and their own role in the broader system, is limited. The same can be said with respect to 'good practices' in agriculture, manufacturing, and regulatory functions. Uganda's pertinent legislation is obsolete, while an extensive range of proposed laws and legal revisions remains unfinished parliamentary business. Some technical agencies have clear mandates; others do not, or have overlapping roles. Many pertinent public agencies have inadequate human, financial, and other resources to effectively perform their regulatory or facilitative functions.

There exist pockets of enhanced SPS/quality management capacity that have evolved in response to particular problems complying with export market requirements (for example, for fish and fishery products) or the emergence of acute SPS problems (for example, outbreaks of specific animal diseases). But most efforts to upgrade supply chain or regulatory capacities have been in reaction to events or external pressures, rather than part of concerted strategies to use standards management as a basis for improved competitiveness. With only limited exceptions (for example, among investors in the honey and cut flower industries), many of the initiatives to adopt more rigorous (and market-rewarding) standards have been driven by external financial and technical support—from donors, NGOs, and others. *Except at the very micro (companies or industry groups) level, Uganda essentially lacks a strategy to utilize agro-food standards to enhance its international competitiveness and to further objectives related to protecting human, plant and animal health.*

With respect to the competitiveness of its agro-food exports, there are other issues beyond standards management that require attention. In such a context, it is difficult to effectively draw attention to standards management needs, except in circumstances of crisis, such the (threatened) interruption of an important trade into a major destination market. The EU trade ban effectively got standards compliance 'on the radar screens' of policy-makers, technical specialists, and the private sector. Since then, other players have sought to utilize the fisheries ban experience to draw attention to other, parallel needs, such as in relation to quality and phytosanitary management in horticultural supply chains. However, these rather different circumstances likely call for rather different approaches and divisions of institutional responsibility compared with those adopted in the fisheries supply chain.

Uganda needs a coherent and agreed upon vision for the promotion and management of standards in the contexts of trade and broader economic development. Periodic efforts of coordination or consensus-building have been undertaken—as with the drafting of a national food safety strategy, and more recent efforts to develop sub-sector strategic plans—yet overall there is fragmentation of effort and a lack of coordination among government agencies, the private sector, and the donor and NGO communities. Despite the enormous amount of development assistance geared toward promoting Uganda's agro-food exports and/or strengthening related support or technical services, there has only been modest and isolated success in fostering the development of sustainable SPS/quality management capacities.

Some incremental technical assistance and investment is needed to strengthen SPS management in Uganda, yet many prevailing weaknesses cannot be primarily explained by shortages of financial or technical resources. Of equal or greater importance than incremental resources is: (i) the development of improved strategies for managing SPS risks; (ii) more clearly prioritizing investments and other capacity-building needs; (iii) shifting resources towards awareness-raising and the promotion of basic/good practices among primary producers, enterprises and regulatory agents; (iv) better defining the roles and responsibilities of different players; and (v) intensifying the levels of collaboration—within the private and public sectors, between them, and among donor agencies—in the implementation of agreed strategies and programs. Uganda certainly has important 'hardware' needs—for example, reliable sources of electricity or the upgrading of selected fish landing sites—yet the effectiveness of existing (or new) hardware has and will be undermined without major gains in the 'software' of standards management—in the forms of awareness, proper legislation, strategic and coordinative consultations, data and information management systems, stronger business and product associations, etc.

Recommendations have been made in this chapter in relation to priority strategy (re-) development, policy, legal, or institutional reforms, or additional technical assistance/capacity-building support for implementation over the short- or medium-terms. The highest priorities are:[83]

- Additional measures to improve food hygiene and safety in the fish export supply chain and changing the policy/strategy for investment in landing site upgrading which currently envisions this as a public sector responsibility;
- Adopting needed measures (investments, advisory services, field testing) to minimize the risk of mycotoxin contamination of Ugandan maize and coffee;
- Developing a laboratory plan that rationalizes existing capacities, more clearly defines institutional roles, and enables collaborative networking;
- Reconsidering policies related to the mandatory adoption of certain GAP protocols in horticulture and their linkage to government issuance of phytosanitary certificates; this should be a voluntary, facilitated process unlinked with regulatory requirements.
- Completing needed assessments and consultations to reach final policy decisions regarding the proposed re-introduction of DDT for malarial control;
- Completing analysis and consultations needed to finally enact several important pieces of pending legislation; and
- More explicitly incorporating SPS management considerations, priorities, and responsibilities in on-going efforts to develop sub-sectoral development strategies.

Some incremental resources may be needed to implement the priority agenda outlined above. However, most efforts could be pursued through a re-allocation of existing donor and government

[83] There are several other measures, of lower priority than those listed here, that can and should be undertaken—see Jaffee et al (2006).

budgetary commitments. Some important strategic re-directions are needed by both GOU and its development partners and a much higher level of collaboration is needed to attain better and more sustainable results.

6. TRANSPORT AND TRADE FACILITATION

6.1 BACKGROUND

The key factor underlying the TTF issues that Uganda faces is its landlocked status. Studies have shown that the distance to a seaport affects a geographical area's economic growth performance adversely,[84] with the effect being compounded if the country is landlocked. Landlocked countries have significantly higher transport costs because of greater distances to a seaport and the need to cross national borders. Transaction costs of crossing borders are generally high, and the existence of a border often also imposes further infrastructure costs if transport corridors on either side of it are not well coordinated.[85] The result is a lower volume of trade flows for landlocked countries compared to those not similarly handicapped, which has negative effects on economic growth.[86]

Being landlocked, Uganda has low trade integration and high transport and trade facilitation (TTF) costs in external trade. These costs comprise charges for transport in Uganda along the main road arteries (there is negligible transport by other means within the country), international road freight, railway and rail ferry transportation, airfreight, sea freight, Customs operations, Clearing and Forwarding (C&F), insurance, port services and telecommunications.

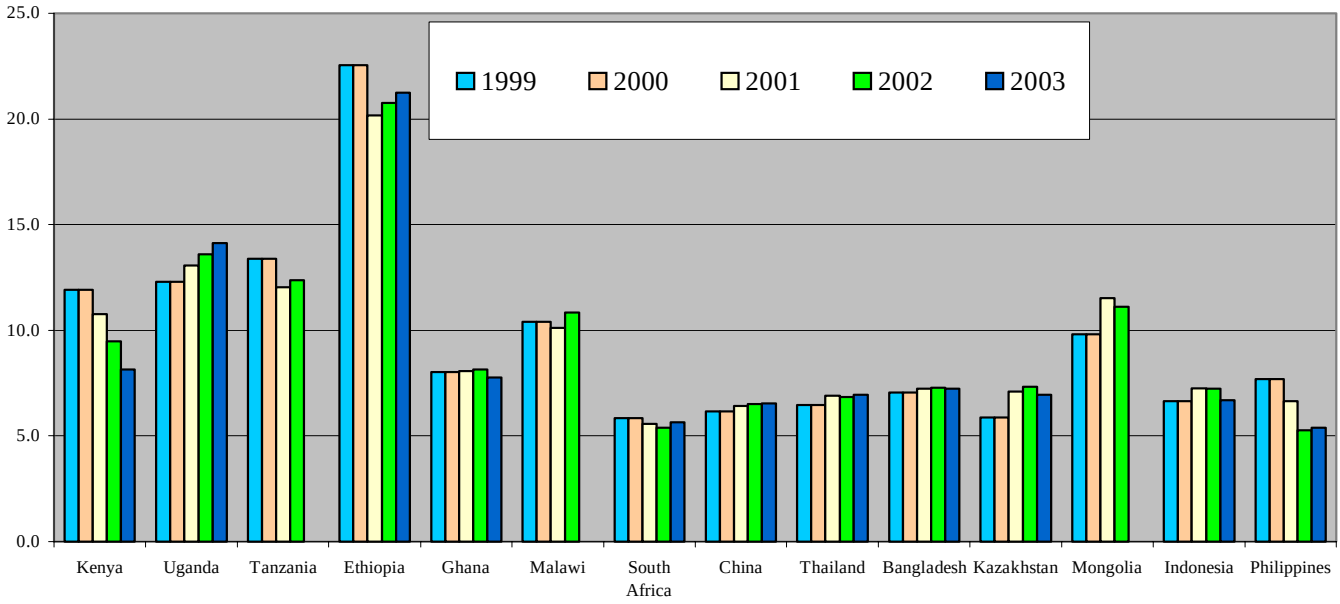
Being landlocked, Uganda is critically dependent on its littoral neighbors—Kenya and Tanzania—in TTF as they provide it access to the sea and TTF services. In analyzing TTF issues in Uganda, this chapter differentiates those that are not under Uganda's control and those that are, which generally correspond to activities outside and inside the country, respectively. The analysis indicates that TTF issues outside of Uganda's control by far outweigh those within its control, which highlights two points. First is the importance for Uganda to work with its EAC partners to address those TTF issues that affect Uganda but are outside of its control. Second, it is all the more important for Uganda to address those TTF issues under its own control. Within Uganda, GOU has given considerable attention to TTF infrastructure during the past decade to improve basic physical facilities such as the road network. This chapter focuses on how Uganda can further reduce its TTF costs. This would benefit Uganda's exports by increasing the competitiveness of the commodities that are also exported by other countries in the region—in particular fish and floriculture. Reducing TTF costs would also reduce the costs of imports, which would increase competitive pressures on domestic production in Uganda as well as potentially lead Uganda to producing and exporting goods it has not done hitherto.

[84] Krugman (1991), Gallup et al (1998), and MacKellar et al (2000).
[85] Hausmann (2001) and Raballand (2003).
[86] Limao & Venables (2001) and Radelet & Sachs (1998).

TTF costs and value to weight of trade

Uganda's freight transport rate[87] is high even among land-locked countries. For a select group of countries including those in SSA (Figure 6.1), Ethiopia was the only one which had higher freight transport rate than Uganda during 1999-2003. All the other landlocked countries shown—Malawi, Mongolia and Kazakhstan—had lower freight transport rates. The contrast is even starker when compared with exporting countries in Asia.

Figure 6.1 Freight Transport Rates of Selected Countries (in percent)



Source: Derived from IMF data.
Notes: Data is not available for 2003 for Tanzania, Malawi and Mongolia.

TTF facilities and costs are influenced more by the volumes of traded products than their values. Import volumes have grown much faster than export volumes (Table 6.4), in line with a widening trade deficit. This, together with the shift in export composition from dominance of traditional exports to dominance of higher value to weight non-traditional products (Table 6.1) many of which are air freighted,[88] has resulted in a high import to export tonnage ratio in surface transport in 2004 of 5:1.

[87] Freight transport rate is given by (freight credit + freight debit + other transportation services credit + other transportation services debit + insurance credit + insurance debit) / (merchandise exports + merchandise imports), using IMF Balance of Payments Statistics.

[88] Gold, fish and horticultural product that are not transport intensive (and electricity that is transported by a grid).

Table 6.1 Value of Exports by Weight (US$/ton)

	1998	1999	2000	2001	2002	2003	2004
Specific Value of Exports by Weight*							
Coffee	1,500	1,249	831	533	479	685	777
Traditional Exports	1,518	1,256	994	719	667	887	964
Maize	282	228	279	298	178	228	198
Fish	2,715	2,580	2,069	2,779	3,445	3,326	3,247
Flowers	4,929	4,688	4,491	4,001	3,958	3,917	4,337
Gold per kg	0	0	7,303	8,001	8,479	11,054	11,205
Non-Traditional Exports	2,711	2,146	2,574	2,075	2,003	2,203	2,082

Source: Raman (2006) based on Uganda Bureau of Statistics (UBOS) (2004a) and UBOS (2005).
Notes: *In US$ per tonne (t) except for vehicles that shows price per unit imported (across a range extending from two wheelers to heavy trucks), and gold that is shown in $ per kg.

As will be discussed in this chapter, high TTF costs in Uganda are due mainly to transport activities on land rather than on sea, despite the longer distance that goods travel by sea. For imports, sea transportation costs amount to only around 10-15 percent of the value of goods, while port, C&F and land transportation-related TTF costs amount to 13-19 percent. Land transport costs are high mainly because less expensive railway transportation capacity (at around 60 percent of road costs) is not presently available to cater to traffic demand.

External Trade Routes and Throughputs

Europe is a significant export and import partner for Uganda. Few Ugandan exports go to Asia, which exacerbates the import export imbalance in demand for shipping services between Uganda and that region. The importance of regional trade, both with Kenya and the hinterland states, implies that regional as well as overseas transport links are important for Uganda.

The main routes used for Uganda's external trade (Figure 6.2) are: -

- The Northern Corridor with road, rail (including rail ferry) and pipeline transport services between the hinterland countries and the Port of Mombasa in Kenya
- The Central Corridor that comprises similar services, other than pipeline, pertaining to the Port of Dar Es Salaam in Tanzania
- An air corridor out of Entebbe International Airport
- Road services between Uganda and countries further inland

The Northern Corridor is the main route for Uganda's external trade flows,[89] carrying an average of 88 per cent of the traffic in the period 1998-2004 (Table 6.2). This follows from the fact that Mombasa is Uganda's closest ocean port (Table 6.3) and from the history of transport links

[89] Estimated using data from Kenya Ports Authority (KPA) and URC for Uganda's overseas cargoes transiting Mombasa by rail, rail ferry and road, and pipeline transportation. To obtain total Northern Corridor traffic Mombasa port throughput was enhanced by 25 per cent to cater for Uganda's trade with Kenya. The basis for this was that Uganda's trade *by value* with Kenya was 28 per cent of its trade (excluding electricity) with all other countries in the period 1998-2004. URC data was used to establish throughput on the Central Corridor by rail. This was increased by 15 per cent for road traffic between Tanzania and Uganda, based on TAHAL (2005). In the year 2002-03 road traffic from Tanzania using Mutukala border post was 496 trucks with dry cargo and 92 trucks with wet cargo, together with 263 dry cargo trucks going back. This translates to 34,000 t of traffic by road or 15 per cent of the 229,000 t carried by the URC during the calendar year 2003 on the Central Corridor.

between Uganda and Mombasa.[90] 95 percent of Uganda's overseas imports and exports transited Mombasa in 2003, while Dar es Salaam catered for 3.5 percent,[91] and 1.5 percent were air freighted (Table 6.4). Uganda's traffic through Mombasa grew at 17 percent a year during 2000-03, while airfreight grew by 8.8 per cent annually and its traffic through Dar es Salaam fell by 21 percent per year.[92] The share of railways in Corridor traffic has nearly halved (from 48.2 per cent in 1998 to 26.7 per cent in 2004) and the reduction has been particularly sharp on the Northern Corridor (from 45 per cent to 19 per cent in the period).

Figure 6.2 Main Regional Road and Rail Routes

Source: Raman (2006) based on Mulavu (2002). The map is not drawn to scale.
Notes: Rail routes shown include the Kasese line of Uganda Railways Corporation (URC) that is closed and its Northern line to Gulu and Pakwach that has nil or very few services running presently.
The TAZARA line from Dar-es Salaam to Zambia is a different gauge from the rest of the network in East Africa.

[90] See Raman (2006), background paper for this report.
[91] Albeit understated, see notes to Table 6.4.
[92] Uganda's traffic is important for Mombasa Port, providing 15.9 percent of all traffic and 77 percent of transit traffic in 2003. It is less important in Dar es Salaam with Uganda only providing 1.3 percent of all traffic and 6.9 per cent of transit traffic that year.

Table 6.2 Uganda's External Trade Movements on the Two Corridors ('000 t)

Traffic Stream	1998	1999	2000	2001	2002	2003	2004
All Surface Modes on Corridors							
Northern Corridor across K border	1,053	1,266	1,393	2,087	2,138	2,367	2,762
Central Corridor	98	260	251	278	284	263	348
Total all Surface Modes	1,151	1,527	1,644	2,366	2,422	2,630	3,111
N Corr Share of Corr Traffic	**91.45%**	**82.95%**	**84.75%**	**88.24%**	**88.27%**	**89.99%**	**88.80%**
Flows by Rail							
Northern Corridor	469	514	563	566	623	595	528
Central Corridor	86	226	218	242	247	229	303
Rail sub-total	554	741	781	808	870	824	831
Rail share of total traffic	48.16%	48.52%	47.51%	34.16%	35.93%	31.33%	26.71%
Rail share of N Corridor traffic	44.53%	40.61%	40.41%	27.12%	29.14%	25.14%	19.11%

Source: Raman (2006) based on UBOS, KPA, Tanzania Ports Authority (TPA), and URC.
Notes: K: Kenya; the data shown above does not reflect the regional movements accurately (see footnote 7).

Table 6.3 Distances from Mombasa and Dar es Salaam (km)

Destination	Mombasa	Dar es Salaam
Kampala Road	1,170	1,826
Kampala Rail	1,331	
Kampala Rail/Ferry	1,211	1,550
Kigali Road	1,670	1,485
Bujumbura	2,024	*1,374
via Isaka Rail/Road		1,469
Juba via Kenya	2,026	
Juba via Uganda	1,767	
Rumbek via Uganda	2,325	

Source: Raman (2006) based on World Food Programme (WFP), Port Management Association of East and Southern Africa (PMAESA), and Michelin.
Note: * this distance is via Kigoma. Rumbek is a major town in South Western Sudan and was the base for Southern Sudan forces during the recent years of conflict in the country.

Because import volumes of dry cargoes have grown much faster than export volumes (18 percent per annum during 1998-2004 compared to 7.5 percent),[93] this has significantly changed the directional balance in road transport on the Northern Corridor. The result is a more than fourfold increase in the ratio of import to export volumes of dry cargo traffic, from 1.2 to 5, between 1998 and 2004[94] (Table 6.5). As mentioned, this directional imbalance on surface transport routes has been exacerbated by the fact that the important growth segments of exports such as flowers and most of the fish[95] are air-freighted. At the same time, the imbalance is reversed in the case of airfreight with exports exceeding imports (Table 6.4). However, it is only high value imports that

[93] Whereas imports (tonnage estimated) increased by 18 per cent a year in the period 1998-2004, export volumes only grew by 7.5 per cent a year during the period 1998-2004, and that too from a lower base.
[94] These are average figures for a year. The ratio varies during each year depending on fluctuations in the flows of imports and exports.
[95] 20,097 t of the total fish exports of 31,808 t in 2004 were air freighted.

could take advantage of the capacity available in the inward direction and not all of Uganda's imports would so qualify.[96]

Table 6.4 Uganda's Overseas Trade Flows Through Three Nodes ('000 t)

Traffic Stream	1998	1999	2000	2001	2002	2003	2004
Uganda Imports in Mombasa	651	777	899	1,452	1,427	1,677	1,988
Uganda Exports in Mombasa	191	235	216	217	283	217	221
Total Uganda traffic in Mombasa	842	1,013	1,115	1,670	1,710	1,894	2,210
Transit traffic in Mombasa	1,127	1,310	1,454	2,117	2,215	2,453	2,891
Total Traffic Mombasa	8,561	8,188	9,127	10,601	10,564	11,931	12,920
Uganda's share of Mombasa traffic	9.83%	12.37%	12.21%	15.75%	16.19%	15.87%	17.10%
Uganda Imports in Dar es Salaam		146	116	87	24	53	
Uganda Exports in Dar es Salaam		36	22	25	16	17	
Total Uganda traffic in Dar		182	138	112	40	70	100
Transit traffic in Dar es Salaam	964	839	660	875	950	1,016	
Total Traffic Dar es Salaam	4,041	3,964	3,675	4,363	4,693	5,416	
Uganda's share of Dar traffic		4.59%	3.76%	2.57%	0.85%	1.29%	
Entebbe Imports	17	14	14	14	13	12	14
Entebbe Exports	14	12	12	23	21	23	33
Total Uganda Air Freight	31	26	26	37	34	36	48
Total Uganda traffic in the three nodes		1,220	1,279	1,819	1,785	2,000	

Source: Raman (2006) based on KPA, TPA, URC, Civil Aviation Authority (CAA), and Murithi (2004).
Notes: This data does not include informal trade.
Uganda's imports through Dar es Salaam could be understated because POL and some grain imports are not completely reflected in the TPA statistics. These are brought into the country by Tanzania based companies and re-exported to Uganda. See Central corridor traffic in Table 6.2.

Regional Trade

Uganda's exports to Rwanda, DRC and Sudan have grown rapidly in the last six years. Exports to Sudan and DRC have grown particularly fast, at 98 per cent a year and 95 per cent a year respectively over the last two years. Sudan is of particular interest because it is civil strife in northern Uganda and southern Sudan that has prevented traffic from using existing transport links.[97] In fact, the route from southern Sudan (Juba) to Mombasa through Uganda is 260 km shorter than the route that transits Kenya (Table 6.3), which would make Uganda the main transit route for this traffic were it not for the civil unrest in northern Uganda. The recent signing of the peace agreement in Sudan, together with the establishment of new government structures (a national government was formed in Sudan in September 2005) could lead to a revival of these links. Signs of this can already be seen in Uganda's trade with Sudan, with export tonnages

[96] Further, airfreight movements are often triangular e.g. Europe to the Far East or Johannesburg, Far East to Nairobi (with an empty run to Entebbe) or Johannesburg empty to Entebbe, and exports to Europe. In such cases there may not be sufficient high value cargo from the intermediate point (from Johannesburg or the Far East in the examples) to allow loaded aircraft movements in the incoming direction.

[97] There is an all road route from Mombasa to the western part of Southern Sudan near Rumbek through Gulu, Pakwach, Arua, Oraba (frontier post) in Uganda, and Yei. Though subject to disruption, it has been used for the transport of WFP goods from their Kampala and Tororo warehouses, using Ugandan transport companies. For the rail/road option (transhipment at Tororo or Kampala) on this route Kenya Railways Corporation (KRC) and URC do not have the capacity to carry Uganda's own imports presently, let alone goods for Sudan.

growing by 55 per cent a year since 2002, albeit from very a small base (Table 6.6), as insurgency declined in the area over the last three years.

Table 6.5 Northern Corridor Dry and Wet Cargo Movements ('000 t)

Traffic Stream	1998	1999	2000	2001	2002	2003	2004
Exports							
Total Exports	301	336	293	381	417	382	463
Northern Corridor Rail Exports	26	40	79	72	70	25	24
Northern Corridor Road Exports	247	264	174	246	256	301	350
POL Imports							
Total	404	428	412	438	457	496	507
Ex Dar es Salaam	71	50	38	40	27	29	15
Ex Mombasa	333	378	374	398	430	467	492
Of which by Pipeline/Rail N corr	46	30	20	8	15	18	21
Of which by Pipeline/Road N corr	287	348	354	390	415	449	471
Total Imports Both Corridors	864	1,202	1,363	2,007	2,026	2,272	2,681
Of which POL	404	428	412	438	457	496	507
Of which dry cargo	461	775	951	1,569	1,568	1,776	2,174
Dry Cargo Northern Corridor							
Northern Corr Imports by road	584	752	830	1,521	1,515	1,772	2,234
of which dry cargo	297	404	476	1,131	1,099	1,323	1,763
N Corr Road Import:Export	1.2	1.5	2.7	4.6	4.3	4.4	5.0

Source: Raman (2006) based on UBOS, KPA, TPA, URC, and CAA.
Note: The data shown above does not reflect the regional movements accurately, see note 13.

Table 6.6 Uganda's Exports to Sudan 2002-04

Item	2002			2003			2004		
	tons	$'000	$/ton	tons	$'000	$/ton	tons	$'000	$/ton
Coffee	11,402	4,806	421	14,230	11,890	836	24,861	19,002	764
Cement	664	81	121	1,874	246	131	3,826	482	126
Soaps	241	116	481	433	200	463	838	433	517
I&S, constr. mat., mch. tools*	38	82	2,158	137	205	1,500	272	360	1,322
Sub total	**12,345**	**5,085**		**16,673**	**12,541**		**29,798**	**20,277**	
Share of total	96%	88%		94%	91.11%		96%	90%	
Total	**12,843**	**5,763**	**449**	**17,687**	**13,765**	**778**	**30,982**	**22,616**	**730**

Source: Raman (2006) based on UBOS.
Note: * Iron and steel, construction materials, machine tools.

Informal Cross Border Trade

As discussed in Chapter 1, informal cross border trade (ICBT) in the region is substantial in terms of value and volumes of goods traded. The informal traffic is mainly taken across borders by non-motorized means including bicycles and head loads[98], or by small motorized vehicles and motorcycles. There appears to very little interference with movements crossing the Uganda Kenya border at Malaba by customs and other border control staff.[99] From the viewpoint that

[98] 71 per cent according to UBOS (2004a).
[99] Based on observations at a field visit to the border post during the DTIS mission in July 2005.

such controls and inspections hamper free trade, their absence implies a high level of trade facilitation.

6.2 TTF OUTSIDE UGANDA - THE NORTHERN AND CENTRAL CORRIDORS

On the Northern Corridor, the main TTF issues are the time spent in Mombasa Port by imports, the cost of customs bonds for transit import and export cargoes, the poor performance of rail transport that necessitates intensive use of higher cost road services (which exceed rail rates by 38 to 56 percent) (see Table 6.9), and excessively high prices for the transportation of POL by pipeline. On the Central Corridor too, rail services are poor,[100] increasing container dwell time in Dar es Salaam Port, and customs bonds further add to costs. Because of these problems, as well as the longer distance from Uganda and the historical links between Uganda and Mombasa, the latter is the main port handling the majority of Uganda's trade despite the recent efficiency improvements at the Dar port with the concessioning of the container terminal (port charges are broadly similar for the two ports).[101]

In general, export cargoes meeting shipping deadlines do not face delays in either port but incur costs related to customs bonds. Uganda has almost no control over all these matters, except to bring these issues to the table for discussion with its EAC partners. While Uganda also has little control over other important areas of shipping and road services, these are not problematic areas because competitive markets exist in both sectors. The poor state of road infrastructure in the Northern Corridor is currently being addressed with assistance from the international community, while roads in the Central Corridor have improved significantly and continue to receive attention.[102]

Cargo Delays in Ports

A time-release survey conducted by Kenya Revenue Authority (KRA)[103] showed that transit cargo spent 12.3 days in Mombasa port. However, analysis conducted by the present study has found that the average port stay was 17.9 days for 802 import containers in the first 14 days of October 2005, based on KPA data of containers railed from the port. For a sub-set of 177 boxes destined to Uganda and beyond, the dwell time was much higher at 37.5 days, while that of the 625 Kenyan boxes was 12.4 days[104] (port dwell time refers to the time taken from unloading containers to exiting ports and from entering port to loading on ships). These figures are very high compared with those for some other developing countries compiled by the World Bank (Table 6.7). (Since for containerized cargo for which all the paperwork has been done before the ship's arrival, it should not take more than one working day in addition to customs clearance time to transit port, one day should be added to each of the numbers provided in the table below to arrive at the right comparators for the 37.5 and 12.4 days indicated above). Based on these

[100] Unlike the Northern Corridor the availability of road services is limited. This could be a reason for the reduction of Uganda traffic in Dar Es Salaam Port (Table 6.4).
[101] See Raman (2006) for discussion of the ports and charges.
[102] See Raman (2006) for a review of shipping services, tariffs, and travel time; road infrastructure on the two corridors, and road transport services.
[103] KRA (2004).
[104] Without a longer time series (this has been requested from KPA) one is unable to comment on whether this is an unusual data set, for example peculiar to rail transport, or due to particular problems in clearing cargoes at that time etc. Nonetheless, the information is informative. Details of the analysis conducted are: average in port 17.9 days, standard deviation (SD) 20 days and Kurtosis (*K*) of 13.4; sub-set of 177 boxes destined to Uganda and beyond average in port 37.5 days, SD 27.8 days, *K* 5; 625 Kenyan boxes average in port 12.4 days, SD 17 days, *K* 32.9.

comparators, a dwell time of 7 days instead of 37.5 days for cargo at Mombasa destined for Uganda would be reasonable.

Long delays in Mombasa have also been found in a recent comparative country assessment[105] of average time[106] taken for an import transaction. The time taken for imports in Kenya was 62 days compared to 34 days for South Africa and 51 days for Tanzania. Some landlocked countries achieved the same or even better performance on this indicator than Kenya–Botswana 42 days, Ethiopia 57 days, Malawi 61 days and Zambia 62 days. Since both Mombasa and Dar es Salaam have shipping services linked to the same hub ports, the difference is a strong negative statement about Kenya's facilitation for itself and for Uganda,[107] compared to Tanzania. The objective for improved facilitation in Kenya should clearly be to get closer to South African performance levels (plus 5-6 days for feeder shipping time) instead of what prevails presently. Even though Tanzania's performance is better than Kenya's, it too could aspire to reduce transaction time in a similar manner.

Table 6.7 Customs Processing Times (in days)

	General	Green Channel*	Yellow Channel	Red Channel	Period
Bolivia	2.2	1.6	2.0	3.0	Jan-June 2003
Ghana KIA Airport	75 per cent clearance the same day				
Ghana Tema Port	44 per cent clearance in two days				
Morocco	0.025				March 2003
Mozambique	8				mid 2002
Peru		0.1	0.5	1.0	2002
The Philippines		0.8	1.0	0.8	December 1997
Turkey	Within one day: 71.5 per cent of imports Within 2 days: 82.5 per cent of imports				2002
Uganda	Up to one week Under simplified procedures: Single item cargo: one day Mixed cargo: three days				

Source: Customs Modernization Handbook, 2005, the World Bank.

Substantial indirect costs are incurred due to these delays. There are inventory holding costs caused by goods waiting in the ports, with each 10 days of delay being equivalent to about 0.6 percent of the value of goods in additional inventory costs.[108] There are also costs resulting from goods not being available for use. One study[109] has estimated that this amounts to 0.8 percent of the value of goods per day, based on a study of what exporters are willing to pay for reducing transit time of manufactured goods.

There is optimism that document-related delays for goods at Mombasa, as well as for goods at the Kenya-Uganda frontier posts, will be addressed by the community based system (CBS) being developed by KPA and KRA. CBS will allow Electronic Data Interchange (EDI) of transit

[105] World Bank 2005(h).
[106] This being the time from when a shipment is initiated until it is completed; in the case of imports, this is the time from where the shipment leaves its point of origin until it clears Customs and is received by the firm in the destination country.
[107] Notwithstanding that other factors combine to make the Central Corridor less preferable for Uganda compared to the Northern.
[108] Based on assumption of 20 percent interest rate.
[109] Hammels (2001).

related information, facilitating the submission of documents without the physical and tiresome visits that are normally considered inevitable in a customs clearing process (and allow the user community online access to relevant data). KPA and KRA intend to work with shipping agents to exchange the manifests electronically (Figure 6.3). KPA also plans to enhance electronic activities at Mombasa, including a tracking system at the container terminal.[110] And, as part of its current modernization program, KRA is introducing new electronic software for transactions, which is said to be compatible with the Automated System for Customs Data (current version ASYCUDA++) that is being introduced in Uganda and Tanzania. Since this replaces what is essentially a manual process, it could result in drastic reductions in time through improved facilitation.[111] KRA also plans to use Global Positioning Satellite (GPS) based systems to track transit cargo movements inland.

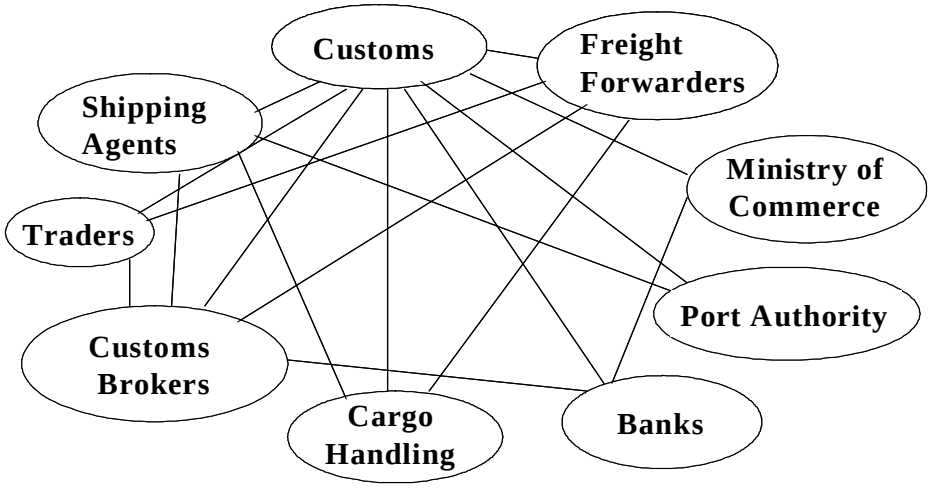
A focus of the ongoing/forthcoming computerization of customs transactions in the EAC countries described above is to displace the previous control mentality with the use of risk management and assessment tools which will speed up the processing of the majority of transactions that normally are of a routine nature. Improvements in this area could provide the Central Corridor a real advantage over the Northern in competition for Uganda's traffic (since the Dar es Salaam Port is much more efficient than the Mombasa Port), if other aspects of transit, such as rail performance, improve simultaneously.

[110] In Dar es Salaam, TICTS introduced such arrangements immediately after taking over the container terminal.

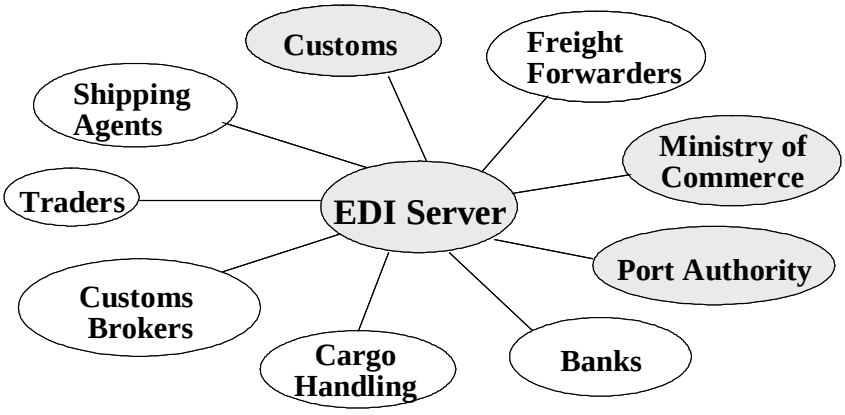
[111] However, in July 2005, the trial runs completely dislocated activities in the Port and a section of stakeholders obtained a stay order from the Courts to restrain KRA from implementing the system until all staff were better trained. See also discussion in Chapter 7 on Customs of this report.

Figure 6.3 Impact of EDI on the Flow of Information

Existing Situation



Situation After EDI is Introduced



Source: KPA

Customs Bonds

In all three East African countries, transit goods require customs bonds as a surety against loss of duties from the leakage of cargo into the domestic economy. Bonds add to the costs of transit and are passed on to customers in Uganda. This could be 4 per cent of the cost of an import or export commodity[112], which is a substantial amount. Such arrangements are also prevalent in revenue administrations in many other countries. Various measures have been discussed periodically to

[112] C&F companies maintain bonds with the customs, the quantum of which is related to their turnover. When a consignment transits safely its bond is retired and the amount involved is available again for another transit operation. One Ugandan firm that handled about 2,500 TEU in 2004 posted a bond with KRA worth US$5m. If one considers the opportunity cost of capital as 20 per cent this would be equivalent to US$400 per box or about US$25/ t. This is not an inconsiderable sum compared to cargo costing, say, US$650 per tonne i.e. 4 per cent of product cost.

increase the efficiency of the system, although doing away with bonds is not one of them. These measures include reducing the time taken to retire bonds,[113] removing the bond requirement for carriage by rail, and making bonds applicable over several countries of transit.[114]

The majority of goods travel under bonds provided by established C&F companies which are under customs supervision (and armed escorts in the case of road traffic in Kenya). Though no statistics are available regarding the number of cases of bonds actually being called, it is clear from information provided by these agencies that there are very few incidents of cargo loss in transit. If an established C&F firm organizes the transport of transit cargo, it would be a relatively simple matter for customs to obtain its dues if cargo is lost, since most of these companies would have substantial fixed assets that could be seized. Therefore, there is a case for doing away with the bond system for a large percentage of transit cargo.

The introduction of EDI and the customs reform programs in the region mentioned in the previous section provides an opportunity for addressing this issue. Since most Kenyan trucks that are used for transit traffic already have GPS-based locating equipment on board, the provision of these could be made a mandatory requirement for firms that are given dispensations on customs bonds. The movement records of such vehicles could be tracked and monitored by customs authorities.[115]

Rail Transportation

Rail services in the two corridors are a major problem. Although there is enough track[116] and rail ferry[117] capacity to carry all of Uganda's external trade by rail, this mode's share of total traffic is only 27 per cent (Table 6.4). Though KRC and URC infrastructure have a backlog of maintenance, the general condition and permitted axle loads are better than those prevailing on the Tanzania Railway Corporation (TRC). For container traffic there would be sufficient wagons on the Northern Corridor if these were utilized properly. All three railways suffer from poor financial conditions, over-staffing and lack of institutional incentive structures which prevent them from competing effectively for traffic with road transport. Operations are inefficient, and the availability and reliability of rolling stock and infrastructure are poor.[118] Estimates of average wagon cycle time for Port-Kampala-Port on the two corridors in the period 2001-2005 are about

[113] It is not uncommon for the process to take as much as 60 days, locking up funds in the process for the period.

[114] The latter would benefit goods that transit more than one country, those of Rwanda for example.

[115] The forthcoming World Bank Regional Trade and Transit Facilitation project World Bank (2005g) is ideally suited to provide the means of extending such arrangements in the region. The project does not specifically address this issue (since Customs bonds are not being questioned) but provides several sets of regional investments, e.g. integrating cargo tracking systems, one stop border crossings, aligned computer databases, etc., which could provide the requisite framework for gaining acceptance for these soft improvements in trade facilitation regionally.

[116] On the Northern corridor alone up to 26 pairs of trains per day ran in 1971 on the Mombasa-Nairobi section that has the most traffic, according to World Bank (1983). In 2002 KRC was only running 7 pairs of freight trains per day, about a quarter of the track capacity that is available, and that too with train loads of 17-20 wagons (1,000 t) though the infrastructure permits 35 wagon trains.

[117] If the four ferries are run efficiently there is large traffic carrying capacity available for the Central Corridor link through these ferries. Each vessel could carry 160,000 tonnes of traffic in each direction per year, but these levels of utilization have never been achieved.

[118] This also manifests itself as accidents. For example, there were 167 derailments in Kenya in 2001, 160 in Tanzania in that year with 185 cases of rail fracture, and 107 main line accidents in Uganda in 2002, all very high figures for railways with relatively low traffic.

34 days for the Northern Corridor, double or three times what is easily achievable,[119] and 43 days on the Central Corridor (Table 6.8). Presently, wagon cycle times are about 40 days on both corridors. In contrast, imports to Kampala by road take about 7 days to travel from either port, and exports on the Northern Corridor take about 3 days to Mombasa.[120]

Table 6.8 Estimated Wagon Cycle Time on the Two Corridors

Corridor	2001	2002	2003	2004	2005	Average
Northern	35.7	33.3	31.4	31.0	39.3	34.1
Central	44.6	43	46.8	38.9	40.3	42.7

Source: URC and Raman (2006).
Notes: Information for 2005 pertains to six months.
These are averages of monthly data for the period 2001-05, not weighted by the number of wagons involved, based on monthly interchanged wagon days between the railways.

In Kenya and Uganda, the railways are being concessioned jointly to a single entity[121] as a vertically integrated freight railway for a 25 year period. TRC too is to be concessioned very shortly[122] in a similar manner. It is expected that with private sector participation (PSP) in railways, capacity to carry traffic efficiently will increase rapidly leading to substantial traffic shifting to this lower cost mode (Table 6.9) on the corridors.[123] It is generally considered that one of the major traffic streams that could benefit substantially after the concessioning of the KRC-URC line is containerized dry cargo pertaining to Uganda's external trade (both exports and imports). POL movements could also benefit, as an efficient railway could provide the threat of strong competition to pipeline transportation between Mombasa and Kampala based on the prevailing rail tariff for containerized goods. The current tariff for a wagon carrying two 20 ft containers between Mombasa and Malaba on KRC is equivalent to US cents 3.18 per tkm. If this rate was applied to the entire rail journey from Mombasa to Kampala for the haulage of POL, the railway would charge US$50-57/t, including profit margins.[124] Pipeline transportation would then have to match this rate (currently the prevailing pipeline/road rate is US$86.7/t and the pipeline/rail rate—used sparsely at present because rail capacity is poor—is US$77/t.), which could result in cost savings to Uganda of about US$15m. per annum for the current throughput of

[119] In July 2004, one of the container unit trains covered the distance between Mombasa and Kampala in 3 days and 16 hours and left for Mombasa on the 6th day.
[120] Most imports move in organised convoys unlike exports, and this is the main reason why land transit times for imports are higher than for exports on the Northern Corridor.
[121] The financial bids were opened on 30th September 2005. The two Governments hope to complete the transaction by March 2006.
[122] The decision to concession the railway was taken in mid-2001. The Government cancelled the first transaction. This has been re-tendered and financial bids were opened in June 2005. Owing to a legal dispute with the losing bidder, the railway is likely to be handed over to a concessionaire only by mid-2006.
[123] Road services are increasing on the Central Corridor due to improvements in the Tanzanian trunk road network. A privatised TRC would also be able to compete for transit traffic more efficiently.
[124] There is no reason for the tariff per tonne to be very different between tank and containerised cargo on this Corridor. The two railways have always charged higher tariffs for POL. The lowest current transport rate by pipeline and rail on the Northern corridor is US$77/t (however the pipeline-road truck transport method is preferred and costs US$86.7/t) and an all pipeline tariff would be lower, say US$65/t (based on discussions with GOU's Petroleum Supplies Department). Therefore, the KRC container tariff, if applied to POL, is likely to make rail transport competitive with the proposed pipeline, which would have to match these lower rail rates. Further, based on Chakra Infrastructure (2001) TRC (a railway with infrastructure in poorer condition than KRC-URC) was close to breaking even in 2001and its long term variable costs were 3.14 US cents per tkm, not very different from the KRC container tariff. This underscores the point that (beneficial) railway competition is feasible in the future on the Northern Corridor for POL traffic.

approximately 0.5m. tons. However the pump price for diesel would only reduce by about USh53 per litre compared to the April 2004 price of USh1,540 (that is, 3.5 per cent) (see discussion later in this chapter on POL cost in Uganda).

Table 6.9 Import Traffic Freight Rates on Corridors in 2001 and 2005 (US$)

2001 Tariffs	N Corr Rail	N Corr Road	Rail/Road %	C Corr Rail
Conventional (per Tonne)	65	90	72%	64
Container (per box)				
20-ft (light)	1,270	1,650	77%	1,154
20-ft (heavy)	1,675	2,650	63%	1,535
40-ft	2,540	2,850	89%	2,305
2005 Tariffs				
Conventional (per Tonne)	62	100	62%	62
Container (per box)				
20-ft (light)	1,080	2,300	47%	1,125
20-ft (heavy)	1,675	3,800	44%	1,310
40-ft	1,960	3,950	50%	2,250

Source: CANARAIL et al (2003), URC, Road Transporters and Raman (2006).
Note: The 2005 data pertains to September. The road tariffs increased in the second half of the year by about US$200 per 20 ft container owing to higher fuel costs.

The Kenya Uganda railway concession will be subject to regulatory control through structures in the two countries that have not yet been established. As a start, this will largely be safety regulation, while economic regulation will be passive. If rail services improve to the extent that the mode has substantial market power, it may be necessary for the regulators to ensure that this does not lead to abuse.

Kenya Pipeline Corporation

Kenya Pipeline Corporation (KPC) is a public corporation owned by the Government of Kenya (GOK) that operates a network from Mombasa to Kisumu and Eldoret via Nairobi and Nakuru. When the extension west of Nairobi was commissioned in 1996, GOK prohibited road operators from transporting POL[125] in competition with the pipeline, and established tariffs that were in line with truck tariffs. Presently, KPC charges US$50/t for transporting petrol and diesel to both Eldoret and Kisumu (equivalent to US$0.65 and US$0.63 per tkm), which is similar to KRC's base POL tariff, although the cost of pipeline transport should be much lower.[126] As discussed earlier, with concessioning the cost of POL haulage by rail could be half this rate.

Only Kenyan entities have title to products in the KPC pipeline and this changes hands only at Eldoret/Kisumu. This could become an issue in times of shortage because Kenyan priorities could determine the availability of POL, leading to a crisis in Uganda.
GOK and GOU plan to build an 8-inch pipeline from Eldoret to Kampala (320 km) at a cost of about US$110m. with PSP in a build, own operate and transfer format.[127] A joint venture company is envisaged to own and run the pipeline for a fifteen year period, with each Government holding 24.5 per cent of its equity, and the balance to be owned by the private sector entity. Provided that the pipeline will not be given exclusive rights for POL transport after

[125] There are no restrictions presently.
[126] It could be that for relatively small volumes transported annually, KPC is unable to give customers better tariffs on the pipeline extensions west of Nairobi.
[127] Bids were invited from short listed firms in July 2005.

concessioning, this could lead to competition for POL transportation from Mombasa to Kampala between modes and reductions in the present price structure of products in Uganda. Regulation of pipeline transport would prevent abuse of market power; this would require that the independence of the proposed Multi-sector Transport Regulatory Authority (MTRA) (see discussion later in this chapter) is ensured.

6.3 TTF WITHIN UGANDA

Within Uganda, the main TTF issues are traffic congestion around Kampala, which is the transport hub for most of Uganda's exports and imports; the high cost of road transport (due to high POL costs, the old age of the trucking fleet, and high taxes on vehicle purchase and high interest rates); the absence of cohesive information and data monitoring regarding transport flows; the need to establish a surface transport regulator to control anti-competitive behaviour (ensuring that ferry services continue on the Central Corridor even after rail privatisation, and ensuring equitable access to rail services for all inland container depots (ICDs) in the event that the rail concessionaire establishes its own ICD); and enhancing the quality of transport services (vehicle inspection arrangements and improved drivers' training). Accelerating the program to improve rural roads would help improve farmers' livelihoods if donor funding is available.

Sector Policies and Priorities

GOU's transport policy framework emphasizes:

- Provision of sustainable infrastructure and preserving existing assets with GOU taking a leading role
- Active PSP in the provision of transport services, with GOU restricting its activities to establishing the regulatory framework[128] and oversight of the sector
- Free market access and allowing market forces to determine tariffs
- Connectivity to rural areas

In consonance with this policy framework, priority activities and investments in the transport sector have concentrated on the roads sector because it is the most widely used and important surface transport mode in the country. This is because distances between major centres within the country are relatively short resulting in road transport becoming the preferred mode.[129] Further, many of the internal transport links that existed earlier through other modes, including rail lines and ferries, have fallen into disuse[130] leaving road services as the only available means of transportation. Internal rail services are unlikely to revive unless large new traffic streams emerge (such as Sudan transit and trade traffic or minerals for export).

The major institutional reform over the past seven years has been the establishment of the Road Agency Formation Unit (RAFU) as the nucleus of the forthcoming Uganda National Roads Authority (UNRA) to undertake road construction and maintenance of the National Road network. This involves reorganizing and right-sizing the Ministry of Works, Housing and Communication (MWHC) by transferring several functions to RAFU/UNRA including

[128] The ongoing MTRA study is recommending a revised formulation of this aspect of transport policy to clarify the roles of GoU, the Regulator and sector participants.
[129] The average road distance between all the districts in Uganda is about 367 km and between Kampala and other districts is 272 km, TAHAL (2005).
[130] See Raman (2006) for a discussion of the historical transport links of Uganda.

construction and maintenance of roads. Emphasis is also being given to privatizing URC, developing water transport and supporting the liberalized air transport sector.

Road Infrastructure

According to GOU's draft transport sector policy,[131] enhancing rural road connectivity will be emphasized at the same time that the National Road network infrastructure is being upgraded. The draft National Transport Master Plan (NTMP)[132] recommends investments of US$3.1bn. between 2003/04 to 2018/19. National roads carry most of the road traffic in the country as they have been developed to cater to the major traffic demand streams. The average daily traffic of the paved National Road Network is 6.6 to 8.7 times greater than that of the unpaved National Road Network, at 2,664 vehicles per day and 406 vehicles per day, respectively.[133] Responsibility for rural roads lies with institutions other than MWHC and RAFU (Figure 6.4).

Kampala is the hub for consolidating traditional crops for exports through Mombasa. The National Road network provides good connections between Kampala and the major production centres (a review of the National Road Network in 2003 indicated that only 16 percent of it was in poor or bad condition), and travel time is within one day for most of these. Coffee is grown in most parts of the country, though the major production areas are Mukono (21 km from Kampala), Masaka (139 km), Mubende (163 km) and Mpigi (37 km), while the crop from Mbale (224 km) and Kapchorwa (287 km) goes to Mombasa for export without transiting Kampala in every instance. For cotton, the main growing areas are Apac (295 km), Lira (342 km), Gulu (356 km), Kitgum (454 km), Tororo near the Kenya border, Nebbi (393 km) and Arua (445 km). Cotton grown in the north transits Kampala when it is exported. The main tea growing areas are Kabarole (393 km), Mubende (163 km), Mukono (21 km), Bushenyi (324 km) and Fort Portal (322 km), and all tea transits Kampala to reach Mombasa.

An important road infrastructure issue pertains to the Greater Kampala Metropolitan Area (GKMA). The increasing congestion of road traffic in GKMA needs to be addressed urgently given the importance of Kampala as a hub for Uganda's exports (except for those that are air-freighted) and imports.[134] A Master Plan for GKMA has been prepared in the context of the NTMP.[135] The Master Plan proposes measures to increase the efficiency of available road space use in Kampala through encouraging operations of public transport vehicles larger than the 14-seat buses used in Kampala today. A fleet of larger sized buses (30-50 seats) of more recent vintage (say, less than 6 years old) would be more fuel efficient and would substantially reduce congestion of Kampala roads. There are several proven methodologies by which competition for

[131] These are the Transport Sector Draft Policy and Sector Paper, and the Draft Policy on District, Urban, and Community Access Roads.

[132] This is TAHAL (2005), a consultant report that has not yet been adopted by GOU.

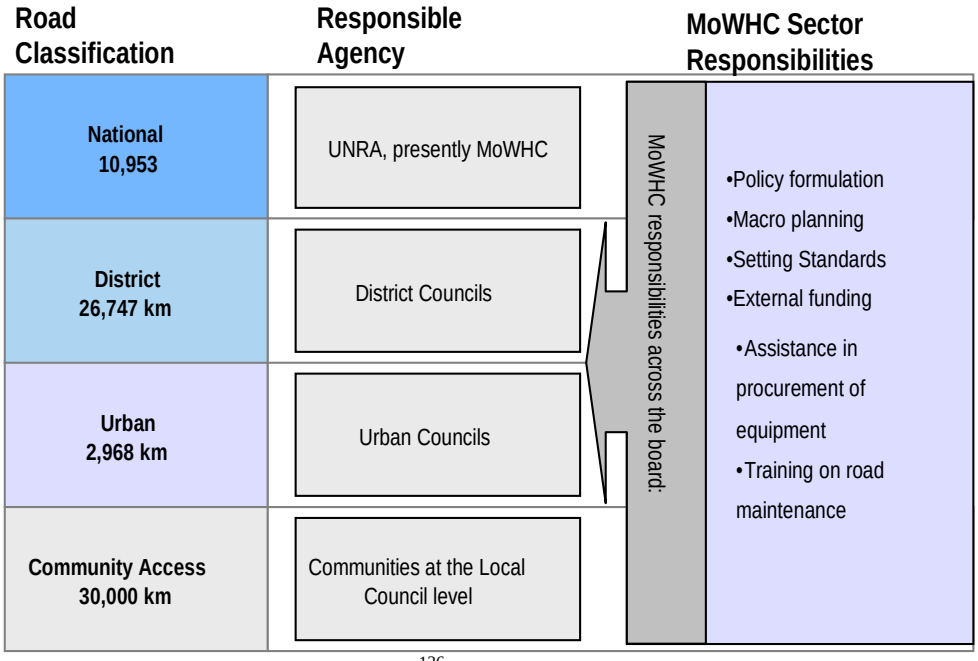
[133] Parkman (2000) indicated that a realistic assumption was that overall ADT on the next hierarchical level of district roads would be near to the weighted average ADT on unpaved National Roads carrying less than 50 vehicles a day. This weighted average was 25 vehicles a day and this ADT level was used as the representative ADT across the whole district road network to estimate traffic. That report even considered the use of this ADT to be an over estimate.

[134] A World Bank-financed Kampala Institutional and Infrastructure Project currently under preparation would be supporting, among other things, investments in infrastructure and service improvements for traffic management and road maintenance and upgrading in Kampala.

[135] TAHAL (2005). GoU has not yet formulated its position on all the recommendations made by the Consultant. Its objective was to prepare a long term investment plan and assist GoU in the rational and complementary development of all transport modes. Institutional arrangements for implementing the Master Plan at the National and GKMA levels have also been recommended.

the bus market can take place through tendering rather than by competing for passengers on the streets, thus reducing chaotic traffic conditions and accidents. The proposed MTRA could be the regulatory body for such activities.

Figure 6.4. Road Infrastructure Responsibilities



Note: Road network distances[136] are from TAHAL (2005)

GKMA has yet to be adopted, pending decision by GOU. Given the urgency of economic regulations of urban transport particularly for Kampala, it is proposed[137] that as an interim measure, a cell could be established within MRTA to perform these functions, with its activities hived off to a future transport authority for Greater Kampala if such an entity is established by GOU later on.

With respect to rural roads, given their importance for farmers' livelihoods and hence poverty reduction, a case can be made for accelerating rural road connectivity if donor funding could be secured for this purpose. This could also provide employment to rural areas which would lower construction costs (rural wages being lower) and increase local ownership.

With respect to Uganda's international links on the Corridors, there are stretches of the route to Rwanda and DRC that need to be upgraded, and RAFU has formulated project proposals for the links to Goma in DRC at Bunagara from Kyanika near the Rwanda border, as well as the main link from Mbarara to Katuna[138]. Also, growing trade with Sudan has led to growth of traffic[139] on road links with that country (as discussed earlier) and these are to be upgraded (Table 6.10). A reasonable standard road will be available to the Sudan border from Gulu when these projects are

[136] The Community Access Road network could be as extensive as 46,450 km, Ocayaya (2005).
[137] This is proposed in the MTRA study.
[138] Kampala to Mbarara is being upgraded presently.
[139] Particularly on the road to Oraba (which connects to Yei and Rumbek/Juba, and has very little insurgency on it affecting traffic) the most recent traffic count indicated a high Average Daily Traffic (ADT) of 784 without two wheelers.

completed, and a good standard road all the way from Kampala and Tororo. The Arua-Koboko-Oraba road (78 km) and the Gulu-Atiak-Bibia link (104 km) are also being considered for feasibility studies and designs for upgrading in the context of regional integration.

A specific road that is receiving attention is the Kapchorwa-Suam link near Mount Elgon that would be used by the horticulture export industry seeking to develop new farms to grow higher value products than hitherto.[140] A regional link is also planned to upgrade this road and extend it to Entebbes (in Kenya). Further, the Mount Elgon area has some tourism traffic and the regional road could provide an alternative connection from Mombasa to the Northwest bypassing Malaba and Tororo.

Table 6.10 Road Projects Linking Southern Sudan

Section	Details
Gulu-Pabo, 37 km	USh350m. contract was recently completed
Pabo-Atiak-Nimule, 69 km	Advertisement for resealing ongoing
Atiak-Ayugi, 14 km	Routine maintenance contract ongoing
Minakulu-Gulu, 31 km	Resealing contract ongoing
Atiak-Moyo, 97 km	Upgrading to bitumen standard. Procurement for consultant ongoing
Soroti-Lira road, 125 km	Upgrading to bitumen standard. Procurement for consultant ongoing

Source: RAFU

Road Transport Services in Uganda

The road freight market in Uganda can be broadly considered to be traffic pertaining to: -

- Uganda's overseas trade and that of other landlocked countries in the region using Mombasa and Dar es Salaam ports
- Regional trade between Uganda and Tanzania and Kenya
- Regional trade with other countries that are further inland than Uganda
- Movements of goods within Uganda

Uganda's internal road freight is much larger than external traffic. In 2003, there were about 7.6bn. tonne kilometre (tkm) of internal road freight movements compared to 2.5bn. tkm of movements of Uganda's external trade on the Northern and Central corridors outside the country to the respective ports.[141] Rail freight and rail ferry movements within the country are only a fraction of road freight movements; in 2003 they totaled about 0.21bn. tkm from the marine/rail borders to Kampala[142].

Although the internal market is larger, the external road freight attracts bigger and more capable firms because of relatively long hauls compared to domestic movements. Also, the traffic available, particularly containers, is generally in truck loads and conducive to the use of larger

[140] From Kapchorwa there is a good road to Mbale and Iganga Thereafter this meets the main Northern corridor to Kampala and Entebbe for air transportation. As mentioned earlier the upgrading of the latter section is ongoing but is under a legal dispute.

[141] Estimates based on data from NTMP surveys. Approximately 2.5 percent of this would have been transit traffic of other countries moving on Uganda's roads, together with Uganda's external trade movements between the Kenyan border and Kampala.

[142] 91m. tkm (0.4m t) on the land route through Malaba, 45m. tkm (0.18 m t) by ferry on the Kisumu route and 75m. tkm (0.23m. t) by ferry on the Mwanza route, according to URC's Operating Department. Local traffic carried by URC was negligible.

and more efficient vehicles. Domestic traffic is often in smaller lots that attract lower capacity freight vehicles to this business. Further, unlike import transit traffic, much of the agriculture-oriented freight movements in Uganda have peaks and troughs in demand in parallel with cropping patterns and this discourages larger firms.

Regional transportation by Uganda-based firms has grown significantly over the past five to seven years as a result of the increase in the WFP activities in the region with Uganda as a hub. WFP has responded with humanitarian assistance to the needs of the Great Lakes Region arising from conflicts, droughts and disruptions of food supply chains. This has entailed establishing warehouses for goods in Uganda to be distributed to relief camps both in Uganda and in neighboring countries. Much of the sourcing of the relief aid goods has shifted from overseas to Uganda.[143] This has resulted in a considerable dry cargo transportation requirement based in Uganda for trucking from collection points to WFP warehouses in Tororo and Kampala, followed by movements of consignments to relief camps in Northern Uganda, Sudan, Burundi, Rwanda and Eastern DRC. Presently 550 Ugandan trucks are involved in this activity.[144]

The main trucking companies in the Northern Corridor sub-contract some of their activities to Ugandan truckers. This functions through integrated transport entities like Inland Container Depot (ICD) operators who have their own truck fleets partly based in Kenya, partly registered in Uganda, and hire trucks (from other parties) for peak movements from both countries. About 3,000 trucks participate in this traffic, of which about 200 are based in Uganda.

There were about 17,500 freight vehicles in Uganda in 2004. The majority of the trucks work within the country, with about 800-1000 participating in the regional carriage of dry goods, and about 400–500 tankers involved in POL movements.[145] The fleet is old—based on surveys conducted in 2003, the average freight vehicle was 13 years old and larger articulated trucks were marginally more recent, averaging 11 years. Higher maintenance and operating costs and pollution are problems associated with old vehicles.

There is limited participation of Uganda-based trucking firms and vehicles in the carriage of its overseas trade and regional trade with Kenya. This is because of the earlier mentioned imbalance between import and export sea borne trade that gives transporters based at Mombasa the advantage as they would normally be at their home base waiting for import traffic, while trucks based in the hinterland States coming with exports to Mombasa would have to wait for return cargoes without a confirmed booking in Kenya.

The last five years have seen an increase in the participation of Uganda-based road transporters in regional trade with Rwanda and the Eastern provinces of DRC. There is potential for Ugandan-based trucking firms to substantially increase its activities in the regional market in light of the recent signing of the peace accord in Sudan, which could lead to a rapid increase in Uganda's trade with southern Sudan. In particular, Sudan is the recipient of a program of rehabilitation and reconstruction funded by the international donor community to the amount of US$1billion a year for each of the next six years. While some of the traffic generated will be on account of goods sourced regionally in Kenya and Uganda, it can be expected that Sudan's overseas traffic through Mombasa Port will also increase substantially. Proximity with the port has always given Kenyan transporters the edge in the haulage of this traffic inland, and presently volumes are not large

[143] About 40 per cent of the 200,000 tons disbursed annually is currently procured by WFP in Uganda, costing about US$28 m.
[144] Of which only nine have fleets of 30 or more vehicles.
[145] The numbers of trucks are estimates by DTIS team based on interviews and TAHAL (2005).

enough to generate interest in using multi-modal services through Uganda.[146] This could change with the traffic increase in the coming years, since an efficient railway concessionaire could create rail capacity for the railway portion of the multi-modal corridor to cater for this traffic stream, using existing infrastructure. If the volumes were large they would be attractive owing to the long haul.[147] If this were to come about there could be an opportunity for Uganda-based trucking companies to grow considerably. The next two sections discuss measures that could be taken to strengthen the Ugandan trucking industry to increase its participation in this regional traffic—specifically reducing the cost of POL, and reducing road transport costs.

Cost of POL in Uganda

The price of POL in Uganda has been an issue of concern to users for several years. For the period 1998-2002, Uganda had the 5th highest gasoline prices of 25 African countries and the 23rd highest in the world.[148] Diesel prices in Rwanda, a landlocked country to the west of Uganda, have generally been more than 10 percent higher than those prevailing in Uganda, which may be explained by additional transport costs to deliver fuels to Rwanda. However, for motor spirit, there have been instances when prices in Rwanda were somewhat lower than in Uganda over the last decade. This implies that transportation costs alone do not decide differential regional pump prices of POL.

The market structure of the industry appears competitive. In 2003 three multinational oil companies had 53 per cent of the Ugandan petroleum market, eight regional companies had 35 per cent, and the remaining 12 percent was shared between 74 independent retailers.[149] While the number of oil companies operating in Uganda is not small, they have been enjoying high margins relative to Kenyan companies. In March 2004, oil company margins for diesel oil (the main product used for transporting road freight) in Kampala were USh382 per litre, compared to USh147 per litre in Nairobi, and USh44 per litre in West Kenya (Table 6.11).

Higher taxes in Kampala also contribute to the higher diesel oil price compared to Kenya (USh420 per litre in Kampala compared to USh392 per litre in Kenya), although by far not as much as oil company margins. It would be difficult for GOU to drastically reduce the tax on POL, given that it is an important source of GOU revenues (contributing to 16 percent of GOU tax revenues in 2003-04, down from 19 per cent in 1998-99).[150] Furthermore, it would not be possible to limit a fuel tax reduction to only the transportation business while excluding passenger traffic, and it is the former that would generate economy-wide benefits.

The third factor that raises diesel oil prices in Kampala compared to Kenya are transport costs, although these are also small compared with oil company margins. The pipeline/road tanker transport cost Mombasa-Eldoret-Kampala is US$72 per m^3 equivalent to US$86.7/t (USh140/1 in 2004). As discussed earlier, transport by rail (or by pipeline matching this potential rail tariff) can be undertaken between US$50-57 per *tonne* between Mombasa and Kampala, which would

[146] This would involve rail transportation on the existing KRC and URC lines to a rail/road transfer point as close to the Sudan border as possible, with connecting road services to Sudan. Without the Sudan traffic CANARAIL et al (2003) said that low traffic potential on the Northern Line made rail operations on it unviable.

[147] Up to 1,600 km if there is enough traffic to justify re-using the Northern URC line to Pakwach. However, even slightly shorter hauls from Mombasa to Gulu, Lira, Soroti or Mbale as potential modal transfer nodes on the Northern line, or the 1,347 km haul to Kampala could interest the concessionaire.

[148] Source: PDC (2005), a recent report prepared for GOU and the World Bank.

[149] PDC (2005)

[150] Based on data from UBOS.

have reduced the April 2004 retail price by about USh53 per litre. Larger shipping packets through pooling arrangements by the oil companies can also reduce ocean freight costs. In 2004 this would have been US$7 per tonne or USh11/liter.

Table 6.11 Diesel Prices in Kampala, Nairobi and West Kenya in 2004 (USh/litre)

Cost Item	Kampala	Nairobi	West Kenya
CIF depot price	639	542	578
Local distribution	4	10	10
Station margin	25	25	25
Dealer margin	70	54	54
Tax and duty	420	247	247
Petroleum development levy		2	2
Road maintenance levy		143	143
Delivered service station	1,158	1,023	1,059
Retail price	1,540	1,171	1,104
Oil company margin	382	147	44
% margin	33.0	14.4	4.2

Source: PDC (2005).

Note: The CIF depot price includes transportation by the pipeline – road tanker method that is normally used. However the report has an error of US$7/m^3 (USh14/l) in the pipeline cost calculations and therefore overstates the oil company margin by USh14/l. This does not detract from the main thrust of the analysis regarding high margins.

Another factor that has contributed to higher costs of POL in Uganda is the low volume of the Ugandan market,[151] coupled with small storage capacity in the country which covers only sixteen days supply. There is scope for increasing and pooling of storage and sea freighting arrangements by oil companies although this would only reduce costs by a small amount, around Ush11 per litre.[152]

While transport cost reductions are likely to come about through competition after concessioning the railway[153], more analysis is required to understand the reasons behind the high oil company margins.[154] The margins indicated in Table 6.11 are those for one point in time (March 2004) which may not reflect the general situation regarding diesel prices in these countries; further, the margins may reflect costs to the oil companies that have not been properly accounted for.

Road Transport Costs

For internal freight movements, only road transport costs are relevant since, effectively, there are no other modes carrying traffic within the country. The quoted trucking rates of firms generally fall with increased distance and truck (consignment) size. Freight rates are negotiable between trucking companies and their clients, with the final agreed rate being determined by market conditions at the time of the movement, including availability of trucking, kind of consignment, destination, discounts for higher volumes, and so on. Many cost components in the transport

[151] It is one sixth the size of Kenya's.

[152] Shipping costs for a 25,000 tonne package would be about US$7 per tonne more than for a consignment of twice that size. This would translate into an increased base price of about USh10 per litre.

[153] A spin off from increased POL transportation by rail or pipeline would be avoidance of serious road accidents involving tankers in Uganda. There were 173 fatalities in the three worst cases during 2001-04.

[154] The World Bank plans to undertake more detailed analysis on this issue, given its importance.

business are US dollar related, but basic freight rates have not changed for the past two years in shilling terms despite the fact that the Uganda shilling has appreciated by approximately 12 per cent against the US dollar.

The lowest base rate (before discounts) in July 2005 was around 6.8 US cents per tkm, which is relatively high for a developing country, even taking into account its landlocked status. For instance, road transport costs in Ethiopia—another landlocked country—for a selection of routes (not weighted by traffic carried)[155] in 2002-2003 were about 3.7 US cents per tkm, about 68 per cent of those in Uganda in that year. This can generally be explained by the cost of fuel (the ages of the trucking fleets operating in the two countries being similar), which was 32 US cents a litre in Ethiopia compared to 70 US cents per litre in Uganda. The reasons for high fuel costs in Uganda have been discussed in the previous section.

In addition to the higher cost of fuel, the relatively older age of the trucking fleet in Uganda also adds to road transport costs because of lower fuel economy and higher maintenance costs. One study[156] estimated that in the case of mini buses, operating costs could be lower by 30 percent over a five year period if new vehicles were used,[157] and this would apply to freight vehicles as well.

One of the reasons for the use of older vehicles in Uganda is high interest rates[158] on loans from commercial banks (much higher than those signaled by the Bank of Uganda). Another reason is high taxes—import duty (25 percent) plus value added tax (VAT) (18 percent) together add around 50 percent to the cost of the vehicle. Whilst trucking companies can claim back the VAT paid on vehicle purchase, such repayments typically take 2-3 years (although this may have improved recently with the reforms in URA), negatively affecting the cash flow and competitiveness of the trucking industry (especially with respect to Kenya). The import tariff on trucks has been raised from 9 percent (7 percent import tariff plus 2 percent import commission) prior to the implementation of the CET of the EAC to 25 percent presently. This adds significantly to the cost of trucks which: (i) raises transportation costs and reduces competitiveness of Uganda's exports; (ii) reduces margins to farmers as higher transportation costs are passed onto them (Uganda being a price taker in the world market for most of its exports); and (iii) induces trucking companies to purchase older trucks with the attendant problems of higher maintenance costs and lower fuel economy. In light of these adverse effects of higher tariffs on trucks, a case can be made for GOU to work with its EAC partners to adjust the tariff slab for trucks from the category of final goods (25 percent) to that of capital goods (0 percent). Based on 2004 imports, this would imply a revenue loss of around USh22.6bn. or around 1.2 percent of total tax revenue. This is not an insignificant amount, so the tariff reduction should only be undertaken in conjunction with other fiscal measures to take into account the broader macroeconomic/fiscal implications of such a measure.

While internal road transport costs are relatively high, they are actually lower than the costs for the transit part of the market. The current tariff for a 40-foot container between Mombasa and Kampala is about 10.6 US cents per tkm (equivalent to 8.5 US cents per tkm for a 40 t truck)

[155] Raman et al (2004).
[156] Benmaamar et al (2002).
[157] This analysis was based on Hine and Chilver (1994) that discussed research work undertaken in Pakistan, where vehicles are relatively better maintained than in Sub-Saharan African countries, and showed that the overall serviceability of used trucks decreases on average by 10 per cent per year while labour and spare parts maintenance costs increase respectively by 15 and 20 per cent per year.
[158] Commercial banks charge as much double the Central Bank's rates of 11 per cent.

which is higher than internal movement tariffs of 6.8 US cents per tkm, despite the use of newer heavy trucks on the Northern Corridor and less expensive fuel sourced in Kenya.[159] Since there is no specific evidence of cartelization in the Northern corridor transit traffic market, a plausible explanation[160] is that back loading ratios are higher for movements within Uganda than for transit traffic on the Northern Corridor.[161]

As mentioned earlier, WFP has contributed significantly to the growth of regional trucking activities amongst Uganda's road freight operators. The capabilities of such operators have also been strengthened, as WFP has provided higher rates (around 25-35 percent higher than market rates in 2005) for the kind and quality of service that it requires, in response to which some Ugandan trucking firms have become better organized and managed.[162] Between 2002 and 2005, WFP rates increased by about 20 per cent over 41 destinations in the country.[163] Without this premium it is unlikely that this higher quality segment of the industry could have been established in Uganda.

Inland Container Depots (ICDs)

Containerization of seaborne traffic is a worldwide phenomenon, and much of Uganda's dry cargo overseas trade through Mombasa and Dar es Salaam Ports moves in containers on land as well. In the past ten years, ICDs have developed to cater to this traffic and are an important feature of transport and commercial activities in the country. Each facility has required investments of US$3-5m. There are 19[164] ICDs in the Kampala area licensed by customs (URA), of which five are both road- and rail-served. Seven of the ICDs are depots that only receive vehicles and do not handle other products such as containers. (There are a further 15 customs licensed entities that receive POL in the Kampala area.[165]) An analysis of customs data of 2003 regarding distribution of dry cargo imports by road in the Kampala area indicated that the four that handled the most traffic received about half of all the imports. However, no ICD had a market share of more than 15 per cent, which is indicative of a competitive market.

An issue that has arisen in connection with ICDs is the recent GOU plan to establish a Kampala Inland Port (KIP) as a common user facility ICD at Namanve, where an export promotion zone and industrial park is being developed. An earlier initiative to establish this as a private public partnership had failed because the private sector entity desired exclusivity for routing all imports and exports through the KIP, and sought an exclusive franchise to run container trains from the

[159] By about 15 per cent compared to prices in Uganda.
[160] Tariffs could also be lower if there were higher truck utilization through reducing waiting time for cargo loading at Mombasa Port and fewer delays in transit, as fixed costs per loaded trip would come down. However, the current utilization of trucks in the Northern Corridor transit traffic is between 60,000 and 120,000 km per year, and this is not unsatisfactory compared to European and U.S. utilization, being about a third lower.
[161] In Ethiopia too the prices on the transit transport market were higher than internal freight rates in 2002-03 by about 13 per cent, also possibly owing to imbalanced traffic patterns.
[162] These are: (1) the distribution of humanitarian assistance has to take place in a timely and efficient manner in order to support people living in camps; (2) many of these activities cannot be planned with precision and therefore the movements always have an aspect of urgency inherent in them.
[163] Just the rates quoted themselves, not weighted by tonnage transported on the respective routes. In three routes there has been a reduction. If these were not taken into account the average increase in rates would be 24 per cent over 38 routes.
[164] All of these are in the private sector except for one owned by URC. In addition there are privately owned ICDs at five other locations in Uganda.
[165] There are five at other places in the country.

facility to Mombasa Port. The current plan has been revived in the context of the joint concessioning of URC and KRC, and envisages providing funds to rehabilitate URC's existing container terminal or to establish a new container handling facility for the railway after privatization, if the concessionaire considers this desirable and finds it a commercially viable proposition. However, one of the main objectives of developing this new infrastructure—the issuance of Through Bills of Lading (TBLs) for Uganda's imports and exports—has already been overtaken by events, since TBLs are already provided by the existing ICDs.

This activity started about two year ago. In some cases, ICDs only handle TBL traffic exclusively. Other ICDs handle both TBL and non-TBL traffic and would arrange for the issue of TBLs even if they themselves are not connected with a shipping line. Although in theory any service provider in a transport chain can issue TBLs, in practice shipping lines invariably issue these because they are attuned to issuing ocean Bills of Lading anyway and the TBL simply becomes an extension of this activity to or from an inland point, so long as there is confidence in the reliability of the inland transport link. TBLs also provide the benefit of insurance cover for the land component of the journey, normally without an extra charge compared to ocean insurance. Another reason for the growth of TBL traffic in Uganda could be that, in order to obtain higher market shares of transit transport activities, companies owning ICDs have started arranging TBLs on their own as an additional service to customers. The three ICDs with the highest market shares all provide and handle TBLs.

So long as the proposed ICD at Namanve with the railway concessionaire competes for its market share of container traffic, this facility will not cause problems. However, any tendency to capture the market through limiting access to rail services for the existing ICDs would need to be curbed by the proposed MTRA.

Air freight

The airport at Entebbe serves international air traffic for Uganda. This and 21 other airports in the country are regulated by the CAA, which also owns and operates most of them.[166] After the sector was restructured in the early 1990s, the country ceased to have a national carrier. Passenger traffic is entirely served by foreign carriers. There are a number of direct flights from outside the region and, in addition, the larger airport and air services centre at Nairobi provides further international connections through feeder flights. All freight handling facilities at Entebbe are in the private sector.

There has been impressive and sustained growth of air freighting for perishable and high value exports, albeit from a small base (Table 6.4). Between 1999 and 2004, the volume of air freight grew by 23.6 percent (it grew by 21.6 percent between 1994 and 2004). If the growth continues, it will be necessary to enhance facilities at Entebbe to cater for the additional cargo.

The CAA has developed a capital program to enhance facilities at Entebbe and other airports, and plans to spend about US$41m by 2009/10 at Entebbe, by which time CAA expects the cargo throughput to rise to 115,000 tons per year, three times that in 2004. The investments would cater for traffic until 2022 when the cargo throughput is likely to be 300,000 tons per year. The main features related to freight facilities are airside and landside civil works (US$9 m), cargo centre and customs facilities (about US$10m.), handling equipment and cold storage (US$4.3m), and improvements, shared with passenger traffic such as runways, radar, communications and fire fighting equipment (US$18m.). In addition, a new Free Trade Zone is planned through a PSP

[166] CAA manages 14 airfields in all. The country has over 60 licensed landing strips.

initiative. CAA has already conducted a feasibility study of the investment program. Support for this capital investment programme seems warranted given the importance of expanding cargo capacity to accommodate the expansion of fish[167] and horticultural exports, which are the most important non-traditional exports from Uganda (see also Chapter 8).

The cost of air-freighting flowers and fresh fish by chartered aircraft[168] is nearly one-third of the sale prices of these two commodities in overseas markets. In July 2005, prices for air freighting flowers were US$2.10 per kg (sale price US$6.50/kg for medium varieties), and for fish about US$1.80/kg (sale price US$5.40/kg) for movements to Ostend from Entebbe. In comparison, frozen fish in reefer containers was being shipped to Rotterdam at a price of US$0.45/kg in a twenty foot unit and US$0.36/kg in a forty foot unit (it takes 25 to 28 days by surface compared to one day for airfreight). Transport amounted to approximately about 10 per cent of the price of frozen fish (US$4/kg). Reduction in air freight costs would certainly contribute to the competitiveness of these exports.

One of the reasons for the relatively high air freight costs in Uganda is the imbalance in air freight, with empty planes coming in because of low use of air freight by importers. Such costs would be lowered if Entebbe becomes a regional hub by making use of empty incoming cargo capacity to supply goods to neighboring countries such as DRC and Rwanda. Currently, Jomo Kenyatta International Airport, which has five times the cargo throughput of Entebbe, is the regional distribution hub for imports to countries that have imbalances in favor of import traffic – DRC, for example – and it is difficult to compete with such a large volume competitor. One option that some Ugandan-based air freight companies are exploring to create a viable competition against Kenya is to use lower priced freighter aircraft from the former Soviet Union. However, some of these specific aircraft have dubious records of maintenance and reliability and the CAA is reluctant to allow them to use Uganda as a base.[169] However, if future volumes of traffic at Entebbe were to increase to Nairobi's current levels (this will depend on expanding export volumes), some economies of scale could develop and a small regional hub might result.
Another reason for high air freight costs in Uganda is the high cost of aviation fuel in Uganda (air transport is very fuel-intensive). The cost of aviation fuel in Uganda is higher than that in neighboring countries; in the middle of 2004, it was US$0.45 per litre in Uganda, compared to US$0.39 per litre in Tanzania, and US$0.34 per litre in Kenya.[170] The price differentials cannot be explained just by the higher price of transporting (duty-free) fuel from Mombasa to Entebbe compared to Nairobi (US$0.11 per litre to the former and US$0.04 per litre to the latter). This points to high margins charged by oil companies though it is possible that the small volume of off-take in Entebbe is responsible for some part of the higher price that has to be paid there.

[167] Expansion of fish exports will be predicated on development of aquaculture, given the resource constraints of capture fisheries—see Chapter 8 of Volume 1, and Chapter 2 of Volume 2, for details.
[168] Airfreight services are provided at Entebbe both in cargo holds of scheduled passenger flights and by dedicated and regular freighter services using a variety of aircraft types. Costs for air freighting cargo to Europe by scheduled passenger flights vary but are generally US$0.10-$0.15/kg higher than those of chartered freighter aircraft
[169] The CAA works on the basis of the International Civil Aviation Organization's certification structures using an established system and methodology for internationally recognized safety systems in all aspects of the aviation industry. This has worked well worldwide over the past sixty years, leading to excellent safety in civil aviation.
[170] Ponte (2005).

Transport Regulation in Uganda

Many facets and segments of the public freight and passenger road transport market are not only de-regulated but also bereft of any form of regulation in Uganda. Yet, public transport requires regulation owing to its impact on society at large. It is in this light that GOU is planning to establish a Multi-Sector Transport Regulatory Agency (MTRA).[171][172]

It is proposed that MTRA be independent and undertake new activities that are not being undertaken hitherto and its functions would increase as its capacity grows. A priority would be regulation of the privatized railway and new areas of mandatory vehicle and emission control testing, and drivers training, through authorization and monitoring of PSP to deliver these services. This could also provide MTRA with major new sources of recurring income for its finances. In addition, there needs to be regulation of the proposed pipeline to ensure that transport of POL is not restricted to this mode by fiat. MTRA also needs to ensure competition in transit transport services in particular if closure of Central corridor ferry services is proposed by the railway concessionaire (since the latter will also concession the ferry services that serves the Central Corridor), and monitor equitable access to rail services for all the rail-served ICDs. Finally, MTRA should enforce measures to reduce the incidence of road accidents in Uganda, or at least hold them at current levels.[173]

There is a paucity of data related to transport flows in Uganda and this will get worse with the privatization of URC. MTRA should establish methods of obtaining data to keep the transport market under observation, in particular by establishing links with URA for data emanating from URA's licensing and customs control of transport of external trade[174]; and with UNRA for axle load control and road traffic monitoring activities data, vehicle counts and other transport sector information from MWHC.

6.4 SUMMARY AND RECOMMENDATIONS

TTF Outside Uganda

Uganda has high TTF costs even compared to other landlocked countries mainly due to transport activities on land rather than on sea. Land transport costs are high mainly because less expensive railway transportation capacity is not presently available to cater for traffic demand. Besides these direct TTF costs, there are substantial indirect costs arising from delays in the transport chain. These are inventory holding costs caused by goods waiting in the ports or delayed in transportation inland, and costs from goods not being available for use. Uganda has limited control over both the direct and indirect TTF costs.[175] There are few transport hindrances to exports because excess transport capacity is available in the export direction. However, transport

[171] A study has been undertaken and stakeholder workshops have been held to discuss its conclusions.

[172] There is no competition authority in Uganda or for the EAC presently. The draft final report of the proposed Uganda MTRA study mentions that when a competition authority is established, the MTRA would be obliged to refer to the competition authority those matters under the latter's authority and take into account the latter's opinion in giving decisions.

[173] Uganda has a poor safety record in comparison to other SSA countries. It has been estimated in the MTRA study that the accidents have resulted in losses to the Ugandan economy of about USh440 billion at current prices in 2004, equivalent to US$252 m or approximately 3.67 per cent of GDP in that year.

[174] Completed truck movements and rail movements as well after the railway is concessioned.

[175] Except through completing the joint concessioning of the railway system which will expedite the creation of additional rail capacity.

costs for exports could also be lower if rail services were more efficient. The impact of customs bonds is felt by both by exports and imports.

Recommendations

- Use regional fora to address problems of delays in ports including placing emphasis on the use of EDI and improved cargo tracking (see related recommendation in Chapter 7 for Uganda Customs regarding establishing an advance shipping information system in ASYCUDA++).
- Finalize concessioning of railway and ensure regulation of railway service provider to prevent abuse of market power in niches (like container traffic) that railways could dominate.
- Use regional fora to remove or reduce the requirement for customs bonds, particularly when major C&F firms are involved in transit. This can be facilitated by using monitoring arrangements such as mandatory requirements of GPS systems on transit trucks.

TTF Within Uganda

Increasing traffic congestion around Kampala, the transport hub for most of Uganda's exports and imports, is fast becoming a constraint on trade expansion. The cost of road transport is high, due to the high price of POL products, the high CET tariff on freight vehicles, and delays in VAT refunds. Road transport costs are further raised by high operating costs resulting from old age and poor quality of vehicles, as well as poor driving standards and practices which have increased road accidents. The independence of the proposed MTRA needs to be ensured to control potential anti-competitive behavior regarding POL transport, ferry services, and ICD access to rail services. Air freight infrastructure and facilities require approximately US$ 41 million of investments over the next 5 years to cater to a tripling of traffic by 2022. Though the investment plan has been formulated it is not yet funded. Finally, there is a need to improve the collection of transport information, in particular regarding transit transport flows, to provide the authorities with an overall view of trends, as well as to highlight issues in regional fora for a co-operative solution to emerge when problems arise.

Recommendations

- Finalize concessioning of railway to provide competition to the current pipeline/truck transportation or the future all pipeline transport of POL products from Mombasa to Kampala.
- Ensure independence of MTRA to regulate potential market power abuse of pipeline POL transportation after pipeline extension to Uganda; to ensure continued competition between the Northern and Central Corridors after rail concessioning since rail concessionaire (of the Northern Corridor) will also concession ferry services that serve the Central Corridor; and to ensure equal access to rail services for all ICDs in the event that the rail concessionaire establishes its own ICD
- Together with EAC partners, consider applying the capital good tariff slab for heavy freight vehicle imports taking into account fiscal implications
- Expedite refunds of VAT payments (on truck purchase)
- Expedite approval and implementation of the Master Plan for Greater Kampala Metropolitan Area to address traffic congestion in the Area.
- Accelerate rural road connectivity contingent on donor funding.
- Implement proposed investment plan of CAA for freight infrastructure and facilities at Entebbe Airport.

- MTRA to undertake vehicle inspection and drivers' training rigorously to improve the quality of vehicle and driving practices, and reduce the incidence of accidents and maintenance costs.
- MTRA to collect data on Uganda's regional transport flows from URA, UNRA and MWHC.
- URA to maintain computerized data base of completed transit truck movements and rail movements after the railway is concessioned and share data with MTRA.

7. CUSTOMS

The importance of efficient and effective customs administration to the economic and social objectives of developing countries has increasingly been recognized in recent years. The WTO Trade Facilitation negotiations launched in August 2004 comprise a significant customs agenda. Not only do customs administrations have to adapt to trade-related policy changes, but the way in which they modernize their activities will have a direct impact on the effectiveness of trade policy reforms. For example, a fully modernized and effective customs administration will be the prime source of information for all trade-related statistics. Almost all customs administrations have this responsibility and their support is crucial for an effective trade policy function. In addition, customs administrations are required to provide important inputs on the extent to which trade policy changes can be administered and enforced. The effectiveness with which customs administrations carry out their most basic functions such as classification, valuation, and origin determination will have a major impact on the effectiveness of trade policies.

Modernization of customs administrations can reap significant benefits in terms of more effective and efficient tax and trade policy administration. Based on international experience, the many benefits associated with the reform and modernization of customs administration include:

- improved revenue performance;
- more equitable distribution of the tax burden across the community, including a 'level playing field' for domestic and international trade;
- greater ability to attract investment and promote economic development;
- greater ability to implement fiscal reforms;
- more consistency, transparency and fairness for business and individuals;
- reduced compliance costs for taxpayers *and* traders;
- reduction in tax evasion, smuggling and fraud; and
- improved services to taxpayers and /traders

Successful reform will require a significant redeployment of resources and energies towards new or revised functions: a strengthening of valuation capabilities; a reduction in physical inspections with the introduction of risk profiling and targeting systems to support post-clearance audits; improved origin determination; and major improvements in monitoring exemptions and suspensive regimes. Furthermore, customs administrations will have to continue to strike an appropriate balance amongst a broad range of obligations that includes trade facilitation, revenue collection, societal protection, and national security.

Many factors are contributing to the need for change in customs administration:

- heightened international awareness and quantification of the high transactional costs associated with inefficient, time consuming and outdated border formalities;
- increased investment by the private sector in modern logistics, inventory control, manufacturing and information systems, leading to increased expectations for prompt and predictable processing of imports and exports;
- greater policy and procedural requirements associated with the implementation of international commitments;
- increased regional and international competition for foreign investment;
- proliferation of regional trading agreements which significantly increase the complexity of administering border formalities and controls;

- increased awareness of the importance of transparency, good governance and sound integrity within customs; and
- following the terrorist attacks of 11 September 2001, a significantly heightened awareness of the need for customs administrations to play a more effective role in guaranteeing the security of the international trade supply chain.

Customs modernization and reform involves fundamental changes in the overall customs environment and in the way in which customs administrations discharge their mandates. Based on best international practice,[176] changes are normally required in four key areas:

- Establishing coherent trade policies and clear legislation. There needs to be well-designed policy measures and simple and transparent legislation that clearly describes the obligations and entitlements of traders and the powers, authorities, and responsibilities of the customs administration.
- Adopting modern, simple procedures. Well-designed procedures are critical for ensuring the effective application of policies, particularly where there can be threats to revenue or other policy objectives. Such procedures would cover aspects such as goods in transit, exemptions, and temporary imports.
- Increasing self assessment by traders, supported by a movement away from physical and toward post-release controls. With the introduction of voluntary compliance, self assessment by the trader needs to be established, which is the critical component of modern revenue administration. Traders declare and pay the taxes due, and the customs administration adopts a system of risk-based, ex-post checks on the declarations. This means a de-emphasis on physical inspections at the point of entry with effective control after the goods have been cleared.
- Ensuring organizational structures and human resources practices are conducive to effectiveness and integrity in customs administration. The customs administration must be free of political interference, have a clear mandate in the law, and be organizationally placed so that it can interact in concert with other branches of revenue administration. Customs should have a leading role at the border on behalf of other agencies. The human resources regime, including issues such as remuneration, code of conduct, and discipline, must be clearly articulated and rigorously applied.

All these challenges are being faced by the Ugandan Customs and Excise Department (CED). Under the overall umbrella of reform and modernization of the Uganda Revenue Authority (URA), a major program has been launched to improve customs administration. These reforms will take years to complete, and will require sustained commitment at both the political and administrative levels.

7.1 CUSTOMS MODERNIZATION

A key objective of the program is the reduction of non-tariff barriers to trade. The main priorities under customs modernization are:

- Implementing appropriate, simple and transparent international trade tax processes;
- Business process re-engineering of all major customs business activities;
- Continued implementation of automation in customs, based on a phased roll-out of the ASYCUDA ++ system;

[176] See Keen (2003).

- Implementation of risk-based strategies throughout customs operations;
- Development of juxtaposed or joint border stations with neighboring countries;
- Improvements to the EA Customs Management Act and its regulations;
- Reform of refund processes, passenger clearance, duty deferral schemes, and licensing;
- Review and reform of tariff and valuation decisions;
- Improved relations with all stakeholders.

This is a comprehensive reform program which is in its early stages. Sustained commitment at all levels will be needed to ensure results. The current vision for URA, including customs, is a revenue administration characterized by voluntary compliance; a balance between strong enforcement and comprehensive services to taxpayers focusing on their rights and obligations; motivated, committed and qualified staff; fully automated; and using modern practices and processes. The realization of this vision is in the direct interest of other Ugandan departments and agencies involved in international trade and of private sector representatives and business interests. Significant progress has already been made in some areas, and commentary from various private sector groups has been positive. The general direction, scope and content of customs modernization are realistic and soundly based. They conform to international best practice and standards, including the World Customs Organization (WCO) Revised Kyoto Convention on Simplification and Harmonization of Customs procedures, and need the full support of the international trade community.

CED has been reorganized under the customs modernization program. The new organization[177] is led by a Commissioner supported by five assistant commissioners (for field delivery, trade, enforcement, audit, and arrears and objections) and should provide a good basis to support modernization and the adoption of contemporary approaches to customs administration. CED has approximately 640 staff. There are three border regions (Eastern, South Western and Northern) comprising about 40 border stations, plus separate regions for Entebbe and Kampala.

7.2 EAC CUSTOMS UNION

URA administers the customs tariff, which is based on the harmonized commodity description and coding system. When Uganda joined the EAC customs union in January 2005, it adopted the CET of the EAC, as well as the *East African Community Customs Management Act* which standardizes and modernizes the respective customs legislation of the 3 EAC partner countries. The Act empowers the three national customs administration to continue to manage their customs processes in their respective countries.

A small new customs directorate has been established at the EAC secretariat in Arusha to coordinate customs legislation and issue rulings regarding tariff classification, valuation and origin. Collection of tariff revenues will continue at the final port of destination for five years, at which time the issue will be reviewed and the potential for EAC point-of-arrival collection will be determined.[178] In addition, all 3 EAC partners have adopted the WTO valuation rules although implementation of these rules in Uganda is problematic (see discussion on valuation issues later).

[177] This responds to almost all the recommendations of the IMF in 2004.

[178] Point-of-arrival collection means the collection of all duties and taxes only once for the EAC countries at the point where goods enter the EAC. This is one of the longer-term objectives of the customs union and it is hoped that it would eventually facilitate a revenue sharing arrangement for duties and taxes among partner states. It is also a very important trade facilitation measure.

Harmonization of customs forms will be facilitated as all the parties already utilize the single administrative document (SAD).

The key issue here is that EAC Customs Management Act still needs improvements, and regulations have not been issued. While the EAC Customs Management Act is broadly supportive of the needs of customs modernization for electronic commerce, selectivity, and post release audit, some experts have identified potential weaknesses relating to a lack of specificity in record keeping requirements and in the sufficiency of penalties. A series of potential law improvements are being considered (with DFID assistance) but there are no draft proposals at this stage. In addition, regulations under this act have yet to be issued (under the EAC management act, there are provisions for regulations to be made by the EAC council of ministers or by the respective commissioners of customs of the partner states). Publication of these regulations by the member states is a priority for the proper functioning of the law (until they are published, previous regulations from the old national laws continue to apply). The regulations cover a very broad spectrum of administrative and operational issues common to customs laws worldwide.

Some of the potential benefits of the customs union, such as joint border posts, improved transit processes, and the harmonization of exemptions could require further changes to the institutional and legal/regulatory framework of EAC customs. The harmonization of exemptions is an obvious example, but there may also be legal issues in areas such as joint border stations (for instance, there may be sovereignty issues in the physical application of non-customs national laws—laws relating to illegal drugs could be a case in point—that take place in another country's territory). Overall responsibility for these issues rests with the secretariat in Arusha but member customs administrations need to be actively involved.

It is recommended that priority attention be placed on developing and issuing regulations under the EAC Customs Management Act, preparing any proposed improvements to that act, and resolving any remaining institutional issues for joint border posts including matters related to sovereignty.

7.3 INFORMATION TECHNOLOGY

The customs modernization plan relies heavily on improved automation to achieve all major objectives including trade facilitation. Specifically, this means the implementation of a modern customs automation system called ASYCUDA++. With this system, the majority of transactions from importers/exporters and their agents, shippers, transporters and licensees are received and responded to electronically. Likewise, banks and other government departments are or will be linked to ASYCUDA++ and other URA departments will have online access to its data. The treatment an individual client receives from customs is based on the risk associated with their transactions and their past levels of compliance. Customs will be able to demonstrate that it is accountable in its approach to compliance by managing client and transaction risks (using risk management techniques) and where appropriate by conducting post transaction audits (using specially tailored audit techniques).

ASYCUDA++ replaces the outmoded ASYCUDA 2.7 system, and has many advantages over its predecessor. Some of the key features of ASYCUDA++ include: a selectivity system that directs the entry to one of four lanes (*green*—where the entry is automatically assessed and released, *blue*—the entry is automatically assessed and released but selected for post-clearance verification, *yellow*—entry is selected for documentary check prior to release, and *red*—entry is selected for physical inspection); a document tracking system allowing traders/agents to identify documents within the clearance process from a monitor; an automated transit system with bond write-off;

direct trader input (DTI) of entries using various options (for example direct transmission, data entry kiosk in the customs offices, etc.); the facility for shipping agents to key in, tally, and deconsolidate the manifest; and post-clearance accounting.

The implementation of ASYCUDA++ has the potential to streamline and strengthen customs processes, reduce opportunities for corruption, improve release times, and improve revenue performance if accompanied by a redistribution of human resources. Fewer staff will be required to perform relatively low skill level jobs at the front end of the process (checking and rechecking import, transit and export documents; checking bond security; gate control; and data entry). Instead, new or retrained staff will be needed for the more highly skilled activities at the back-end (post release verification, intelligence, audit, and investigations).

A key element of the ASYCUDA++ system is the development of client profiles to support the selectivity module. This work is overseen by a selectivity committee, which decides which profiles to use and reviews the results of existing profiles, amending them where necessary. The current (revised) plan for the rollout of ASYCUDA++ is as follows: Kampala (completed September '04); Malaba (September '05); Busia (October '05); Jinja (by December '06); Entebbe (by August '06); Mutukula (awaiting completion of civil works and new network); Katuna (August '06); and northern corridor (not likely before '08).[179] All 52 licensed bonded warehouses and 7 inland container depots are now connected to ASYCUDA++.

The Kampala Customs Business Center (CBC), which generates the majority of customs revenue, was opened in September 2004 as the first application of ASYCUDA++. The system incorporates self-assessment with DTI. The remaining six sites were to have been implemented by July 2004, but the rollout was behind schedule due primarily to budget allocation difficulties.[180] Initial results at the CBC were excellent, with revenue rising significantly, release times improving substantially, examination and pre-release verification activity reduced, and human resources significantly reduced. For example, in November 2004, URA reported 60 percent green channel releases averaging one hour, 21 percent yellow channel averaging 2 days, and 19 percent red channel averaging 3 days. This compares to previous release times averaging up to 10 days with a goods examination frequency of 100 percent.

CBC has also publicly posted a customs client service standards notice committing itself to release times standards for all types of transactions.[181]

There is a major issue with respect to the inter-connectivity of the customs systems for the EAC, an important aspect of the customs union. Both Uganda and Tanzania have ASYCUDA++, while Kenya has a different system (Boffin) and plans to implement a new system that is not ASYCUDA++. The EAC partners have discussed the issue and have decided that the customs systems did not need to be identical in all 3 countries. However, these systems do need to be based on open architecture principles that would permit the necessary inter-connectivity.

[179] Malaba, Busia and Jinja are in the eastern region, and together with Kampala and Entebbe cover 80-85 percent of import declarations. Mutukala and Katuna are in the south-western region.

[180] At the time of writing this report, funds for completing the rollout either from within the URA budget or from donors are still in the process of being identified.

[181] The September 25, 2004 notice promises three hours for electronically lodged green lane entries, one day for yellow lane entries, two days for red lane entries, and 20 minutes for export entries lodged electronically.

ASYCUDA++ is such a system, and it is incumbent upon Kenya to ensure its new system meets this requirement.[182]

Uganda faces four key issues with respect to information technology.

First is the need to secure full funding for the rollout of ASYCUDA++ to all major border stations and Entebbe, since ASYCUDA++ is the single most important customs development for trade facilitation, and its implementation is critical to the URA and customs modernization plan.

Second relates to the implementation of the transit module, a critical component of ASYCUDA++ for both trade facilitation and enforcement which requires implementation at certain key border stations. The transit module will be implemented when the large border ports on the eastern and southern border come on line (Malaba, Busia, Tororo, Jinja, and Mutukula). However, this will only cover in-bond movements from and to these border stations and Kampala. Transit movements through Uganda to other countries such as Rwanda and DRC will not be covered until ports in the north and west are on line. Transit leakage is a serious problem and a threat to revenues and current procedures are costly and inefficient, and constitute a barrier to trade. These issues can be effectively addressed by ASYCUDA++.

Third, developing capability of direct electronic submission of import information by traders at point of embarkation would improve services and enforcement. It is recommended that in the long run, and in cooperation with EAC partners, URA employ technologies to allow traders to input customs information at the point of embarkation (for example, Rotterdam) well in advance of import arrival to facilitate enforcement decisions, provide intelligence, and allow customs to make appropriate preparations for expedited clearance. This kind of operation could be facilitated by the latest system (ASYCUDA World) which utilizes web-based technology, as well as ASYCUDA++ which includes an email feature and direct line options. In the short run, however, it will be more important to ensure that the basic ASYCUDA++ system is fully operational and well understood. It is recommended that in the immediate term, once ASYCUDA++ is fully operational, URA investigates whether some of the shipping companies which already provide consignment information in Mombassa could be encouraged to do so for Through Bills of Lading (TBL) for Ugandan traffic to URA Customs.

Fourth, ASYCUDA++ operations should be regularly evaluated, based on which to update the risk-based selection criteria. There are concerns that the impressive results obtained by CBC may be slipping. Although up-to-date information about release times and channel selection at CBC is not available, many officers indicated the percentage of green channel selections may have slipped possibly to below 50 percent (it was 60 percent in October 2004). Basic parameters of the selection criteria are meant to be reviewed on a regular basis by a committee that takes into account recent experience and other intelligence, although the URA committee charged with this task has apparently not met in months.

7.4 IMPORT AND EXPORT PROCEDURES

Basic customs procedures for imports have been re-aligned with the introduction of ASYCUDA++. At CBC, for example, self-assessment declarations are electronically submitted

[182] Processing bottlenecks continue to plague the port of Mombassa. The Kenyan press reported in July 2005 (at the time of the DTIS main mission) that following even more delays caused by the implementation of a new computer system, the High Court ruled that the Kenya Revenue Authority would have to revert to its old system as it had not provided appropriate training for its staff and clearing agents.

by brokers or clearing agents who receive a printout and make payment at one of two authorized banks. The goods themselves have already proceeded in bond to one of some 20 internal container depots (ICDs) or the over 80 bonded warehouses in the Kampala area. The agents lodge the payment advice from the bank and other required documents with CBC. Selectivity is activated in a control section and the channel type is determined. Agents are able to monitor the progress of their entries on a screen at CBC. It is noted that the quality control section, to which all entries are referred after the fact, is finding very few anomalies with the green channel (immediate release) selections. This suggests the green channel criteria could be widened.

The valuation of imports is a particular problem. All EAC countries have signed onto the WTO valuation provisions which use transaction value as a basis for calculating duties and taxes (the EAC Customs Management Act reflects this requirement in full). However, full implementation of transaction value has been slow largely due to problems with under invoicing. All developing countries are faced with widespread under-invoicing complicated by a large volume of imports in second hand goods. Strict application of WTO valuation provisions in these circumstances is difficult and time consuming. As a result Uganda, like many countries, makes use of reference prices as guidance to assist in valuation, but these are not formalized on a national basis. Nor do they represent minimum prices, according to officials. Furthermore, the reference prices are often incomplete, outdated and unreliable. The recommendation is to review valuation practices at all border stations to ensure effective application of WTO valuation rules, as per the 2004/2005 URA Business Plan.

Export declarations are similarly processed under the new system. There are three categories of exports: (a) direct (these are bonded because they have been processed and may be eligible for VAT refunds or duty drawback, or not-bonded because they are unprocessed); (b) re-exports (not-bonded if taxes are already paid, such as motorcycles imported but now destined for sale in DRC, or bonded, that is, warehoused); and (c) temporary exports (goods exported for a temporary use or purpose, such as construction equipment). Entries are lodged using DTI and are physically inspected in many cases, particularly where they involve refund or drawback claims, regardless of the compliance record of the exporter. This can unnecessarily slow down the operations of the exporter and inefficiently use Customs resources. The recommendation is to implement a risk-based approach (see later section on risk management for the principles of such an approach) for physical inspection for exports involving duty drawbacks and VAT refunds.

7.5 TRANSIT PROCEDURES

The Ports of Mombassa in Kenya and Dar Es Salaam in Tanzania are major gateways for transit shipments to countries in the region. For some of these countries, such as Rwanda and DRC, goods travel under bond through Uganda. Control over transit goods is maintained by the use of customs seals, bonds, and by forcing vehicles to use approved routes controlled by customs checkpoints. URA is concerned with the control of in-transit shipments due to the real possibility of leakage into the Ugandan economy and the resultant loss of revenue.

Current customs controls on in-transit shipments are inefficient and constitute a serious non-tariff barrier to trade. The customs checkpoints and mandatory weighbridges (along with poor roads and other infrastructure) for goods in transit contribute greatly to transportation costs and serve as a real impediment to international trade. Unrealistic time limits for movement and outmoded documentation requirements also contribute to inefficiencies. A number of factors should reduce the need for these customs checkpoints: implementation of the ASYCUDA++ transit module (as discussed earlier); development and implementation of a regional cargo tracking system; interconnectivity of EAC customs electronic systems; and the establishment of joint border

controls between EAC countries and major regional trading partners.[183] All these measures and others such as extended hours of operation will lead to increased transit controls, thereby reducing the requirement for internal checkpoints. In the long-term, it is recommended that the use of internal customs checkpoints be eliminated and replaced with more reliable and effective measures based on automation, modern technologies, and intra-EAC cooperation.

7.6 OTHER CUSTOMS OPERATIONS

Post-release verification

The key Customs processes of cargo control, transit, entry processing, warehouse control and accounting are being implemented with ASYCUDA++. The subsequent and equally important processes of verification and audit are lagging behind. There is a growing consensus that revenue leakage regarding international trade is primarily one of false documents, fraud, undervaluation and mis-classification. Traders are getting more sophisticated in subverting the system. International experience has demonstrated that addressing this problem is most effectively done after release with well-trained experts who have the time to review documents, access databases and audit the books and records of traders.

A fully operational customs post-release audit capability in URA has not been effectively established. The Ugandan customs post audit unit was established in November 2003 with 15 staff, none of whom was a professional auditor. Only ten of them actually took up duties in audit, and none has yet received the training management believes they need. The new customs structure provides for a post-release audit function with a substantial increase to 34 authorized auditors. The unit is supposed to be established with industry specializations and an audit quality assurance capability. There has as yet been no significant progress in implementing this new unit and training has not yet been delivered such that an effective post-release audit function does not yet exist.

It is recommended that the post-release audit unit be made operational on a priority basis by acquiring staff with the right set of academic qualifications and experience and by securing necessary training.

Risk management principles

Risk management is not just a concept that applies to the selection of channels for processing customs declarations. Most organizations, including customs administrations, apply risk management concepts to all aspects of their operations. In this context, management of risks often means dealing with different situations, and different clients, differently. In other words, based on an assessment of risk to compliance with the law, more leeway can be granted to more compliant clients. This kind of approach demands strong sanctions when clients abuse the leeway granted.

One relevant issue here is the requirement that traders provide bonds as security for shipments in transit, which is expensive and adds to transport costs. (While this is allowed for under the EAC Customs Management Act, the act actually does not "require" it). Furthermore, the acquittal processes for these securities (such as occurs when the in-transit goods actually leave the country) are inefficient and time consuming (although with ASYCUDA++ this should improve a lot). In

[183] These initiatives are being pursued under the East Africa Trade and Transport Facilitation Project supported by the World Bank.

reality, very few of the bonds are defaulted on by traders. Many of the importers and exporters and freight forwarders, especially the larger ones, have been in business for some time and have a good compliance record with customs. If bond obligations were eliminated for this group, it is unlikely there would be any missing shipments that would require customs to take action for outstanding duties and taxes. If the situation did arise, customs could always hold goods coming through for these companies to secure payment of outstanding arrears. It is therefore recommended that URA consider removing or lessening the requirement for in-transit bonds for clients meeting acceptable risk-management criteria.

Another issue is that licenses to operate internal container depots (ICDs) are for one year which is a short period of time for investment planning for operators. Customs requires ICD and warehouse licenses to be renewed each year based on a new application. A number of operators suggested that longer authorization periods would not only reduce administrative burden but would provide more certainty where operators are considering sometimes sizeable capital investments in their facilities. URA officials have advised the renewals are often perfunctory and that longer license periods could be considered for compliant operators. It is therefore recommended that consideration be given to extending ICD and warehouse license periods from one to five years, based on risk-management criteria and appropriate monitoring.

Data and information sources

All customs administrations need to develop information sources that can help them improve operations and provide for a more effective and efficient administration and enforcement of the law. Often this data and information can serve important ancillary purposes including providing valuable information on trade facilitation and transport.

Improved information on clearance times could assist management in many areas of customs operations. There is a clear lack of detailed information on the time URA and other agencies take to clear goods through customs or to move goods through ports. As discussed in Chapter 6, in the case of Uganda, with most imports arriving overland from Kenya (Mombassa) or Tanzania (Dar Es Salaam), major bottlenecks are actually occurring outside the country. While external bottlenecks will have to be addressed in the context of EAC customs union priorities, Uganda should improve its own time release baseline information. This could provide reliable baseline information for later comparison and constitute a rich source of information on bottlenecks in the current process. Experience elsewhere suggests that such bottlenecks are frequently the result of a range of non-Customs factors including port management practices, infrastructure constraints and the involvement of various other government agencies. Identifying the true cause of bottlenecks can assist not only customs but also other agencies in designing appropriate solutions. It is therefore recommended that a WCO time release study be undertaken to provide diagnostic information on processing and clearance bottlenecks and clearance times.

Up until 2003, transit shipments in Uganda (border to ICDs *or* border to border) were closely monitored to ensure that this particular customs regime is respected and that the goods arrive as planned and the bond process is appropriately acquitted. The information from this process was used to prepare summaries of road truck vehicle flows, which is not only a valuable source of information for transport sector analysis, but also of interest to URA as part of its intelligence and risk assessment efforts. In addition, there is archival information on consignments (or containers) from the time of arrival in Mombassa to the time of arrival at the Ugandan border, as well as from the Ugandan border post to other in-transit destinations, that is, ICDs or other Ugandan borders. This data also constitute very valuable time-related information for both URA and general transport analysis purposes. The recommendation is to re-instate the systematic collection of road

truck vehicle flow information, and develop a new program to use archival information to collect time release information for goods coming to Uganda from Mombassa and for goods continuing in-transit in Uganda.

7.7 COOPERATION WITH OTHER BORDER AGENCIES AND THE PRIVATE SECTOR

Increasingly important in customs administration is cooperation with other government agencies at the border. In the case of Uganda, these include police (drugs), national drug enforcement, national bureau of standards, criminal investigation (military), immigration, and agriculture. The private sector is also a partner at some stations, including Malaba, as a provider of port management services including such responsibilities as perimeter security and maintenance. The Uganda border stations demonstrate a generally high degree of cooperation between customs and its various partners.

Stakeholder consultation is considered critical in most countries to ensure the fullest possible support for reform and modernization initiatives. URA recognizes the value of consultation with the private sector, and recent customs consultations have taken place with refund and drawback claimants, motor vehicle importers and fish processors.

There used to be monthly meetings with stakeholders but these appear to have lapsed. Consultation between the customs executive and traders is currently limited to ad-hoc meetings and to official information sessions to discuss specific developments. While the current approach can be satisfactory for dealing with a range of time-sensitive, transaction-based issues, it is recommended that more formal and broadly based consultative mechanisms be established to ensure customs officials interact on a regular basis with relevant sectors of the trading community. Such meetings should go beyond merely communicating changes but should focus on consultation prior to making decisions and genuine information exchange and the development of a constructive partnership dialogue. Consultation events should be organized in advance and follow a mutually agreed agenda. Information and data should be provided in advance to the extent possible. All issues should be followed up and progress reported at the next meeting.

7.8 SUDAN

While trade relations with all the regional partners are important (see Chapters 1 and 3), Sudan requires special attention with respect to customs in light of the recent peace accords and the possibility of increased international trade which would be transported through Uganda.

Uganda's northern border with the Sudan is not equipped to respond to increased trade volumes (although URA customs have good relations with their counterparts in the Sudan and are considering the provision of technical assistance to customs officials in southern Sudan). URA is planning to seek assistance to upgrade its facilities along its border with Sudan. There is an expectation that larger volumes could come through Koboko, and that a full station at Arua could be required. It is recommended that a comprehensive plan be developed to augment border stations (staff and infrastructure) to deal with potential increases in traffic with Sudan, as any funding support for this would be contingent on such a plan.

7.9 MANAGEMENT AND HUMAN RESOURCES ISSUES

A critical element of the URA modernization plan deals with management and human resources (HR) issues, including matters related to integrity. Human resource capacity building will

include a full review of the current training policy, both technical training and management training, to develop a program that will ensure that modern structures and procedures can be both implemented and sustained. The ultimate goal is a skilled, professional and committed workforce who are valued and treated equitably by the organization. Change management training has also been recognized as essential for a modernization effort of this magnitude.

Corruption and lack of integrity within the URA have been a concern for some time, with a public perception that corruption in the URA is widespread. The donor community has been so concerned with this issue that it strongly supported the establishment of a judicial commission of inquiry into allegations of corruption in the URA. However, the report handed down by the commission has been challenged in the courts and it has been determined to have no legal standing, and accordingly has not been made public. Reported leaks have featured prominently in the press, causing much speculation and debate inside and outside the URA, and with the strong likelihood that an atmosphere of uncertainty and low morale now exists, particularly amongst those officials who are ethical and doing their job properly. As recent IMF studies have pointed out, whatever the outcome of the commission, integrity and ethics must remain at the forefront of every aspect of the URA if confidence in the institution is to be rebuilt.

Some institutional and structural measures recommended by the IMF to strengthen governance and transparency have begun to be acted upon. A critical recommendation was the establishment of a single internal affairs/internal audit function reporting directly to the Commissioner General. This group would be responsible for all internal audit of revenue and expenditure systems across URA and investigation of staff fraud allegations and other disciplinary offences, and copies of all their reports would be available to the board. At present, these functions have been combined under a single assistant commissioner who also has responsibility for regular tax investigations. This is an inappropriate mix, and also presents complications for board access. It is expected that URA will make the necessary structural adjustments to respect the important governance principles involved.

Development of a comprehensive integrity program is a priority in the URA modernization plan, although progress has been slow and needs to be accelerated. The assistant commissioner responsible for modernization has identified a number of key components for the integrity program: a revised code of conduct to be based on the WCO's revised Arusha Declaration; a corporate staff charter on ethics in the workplace; a program of continuous training in integrity; development and monitoring of leadership and accountability standards; a revised taxpayer/trader charter of rights and obligations; development of appropriate sanctions and rewards for behavior; training of ant-corruption role models; an asset declaration system; and integrity indicators for performance assessment. The program will also include a corruption hotline, newspaper advertisements, and references on the URA website. This is an ambitious plan, but action needs to be immediate to restore institutional confidence. Several private sector representatives indicated that they felt URA, and customs specifically, was improving in the area of integrity and that Uganda's performance was significantly better than other countries in the region; this momentum needs to be sustained.

8. SELECTED SUB-SECTOR ISSUES

8.1 BACKGROUND AND RATIONALE

Addressing the issues identified in the preceding chapters will help provide an enabling economic and business environment for higher export growth, including for the diversification of exports. However, addressing cross-cutting constraints may not be enough if there are sector or sub-sector specific constraints. For this reason, the DTIS has selected certain sub-sectors for more in-depth analysis.[184] These are: agricultural export crops (coffee, cotton, tea), fish, floriculture and horticulture, tourism, and ICT. These sub-sectors have been selected based on two criteria: their importance for poverty reduction; and/or Uganda's competitive advantage in them. It should be noted that these sub-sectors do not represent an exhaustive list of those in which Uganda has competitive advantage; however, they can provide "quick wins" since Uganda has already demonstrated export potential in them.

With respect to poverty reduction, the large share of the population in the rural area, the large share of the employed in agriculture, and the large share of the poor in agriculture, mean that continued reduction of poverty in the country would require higher growth in agriculture (Chapter 1). Among those whose main source of income is agriculture, those engaged in fishing are least likely to be poor. Within crop agriculture, export crops—in particular maize and coffee—are especially important for reducing poverty since those engaged in their production are less likely to be poor than those engaged in other kinds of crop farming. As also discussed in Chapter 1, poverty reduction also requires expansion of non-agricultural sectors given the lower poverty rates of those employed in such sectors; in this regard, expansion of exports in sectors in which Uganda has competitive advantage is important.

With respect to competitiveness, two factors are important for Uganda: its landlocked status which adds to the cost of transportation of both exports and imports, and which has been exacerbated by trade facilitation problems (as discussed in Chapters 6 and 7); and second, its natural advantage in agro-based products. Based on these two characteristics, Uganda's competitive advantage can be usefully distinguished into two categories—that in the international markets and that in regional markets.

With respect to international markets, Uganda would not have a competitive advantage in products that are heavily dependent on imported inputs, given the additional costs incurred for transporting imported inputs into the country. This narrows the set of products in which Uganda has an international competitive advantage to those that rely mostly on domestic inputs and raw materials, that is, those that are agro-based. Further, given the distance to markets, Uganda's competitive advantage in these products lies in those that have high value-weight ratios. This is reflected in the presence that Uganda's fish and floriculture exports has already established in Europe, both having high value:weight ratios[185] which allow them to be economically viable despite the high cost of air freight (both products are air freighted).

Other agricultural or agro-based products in which Uganda has a competitive advantage in the international markets are coffee, cotton, and tea. They also have relatively high value-to-weight

[184] These sub-sectors have been selected after extensive consultation with various stakeholders in Uganda, including GOU, the private sector, and donors. The Aide-Memoire for the Preliminary Mission of the Uganda DTIS conducted in May 2005 provides the list of organizations consulted.
[185] See Chapter 6, Table 6.1.

ratio (though not as high as fish and floriculture). Uganda has the highest quality robusta coffee in the world for which it has consistently fetched a premium in the international markets. Uganda also has high quality cotton, which falls in the upper tier of the "medium long to long" staple groups. While coffee exports have declined tremendously from the peak levels reached in the mid-1990s (because of falling international prices but also production problems), exports of cotton and tea have been steadily rising reflecting the competitive advantage Uganda has in them.

With respect to regional markets, Uganda has a competitive advantage in some manufactured products including those that require imported inputs, as well as in certain agricultural products. With respect to manufactured products, four neighboring countries—DRC, Kenya, Rwanda, and Sudan—are among the top ten destinations world-wide for Uganda's exports, and iron and steel products are among the top Ugandan exports to some of these countries. With respect to agricultural products, maize and horticulture are important exports to the neighboring countries, a significant part of which are informal. Addressing the cross-cutting investment climate issues (see Chapter 2) will ease constraints facing production and exports of manufactures and could also lead to emergence of new manufactured exports, while improving the quality of maize (see Chapter 5) will raise returns to farmers as well as reduce the risks of Ugandan maize being rejected at the borders with neighboring countries.

Finally, another implication for Uganda, based on the distinctive characteristics described above, is that it could aim to develop a competitive advantage in service exports, for which high transport costs would not be such an important constraint. Tourism development could contribute towards poverty reduction by generating employment and incomes through sourcing goods and services locally, as well as through involvement of local communities in the development of the tourism product (such as forest canopy walkways—see discussion later). Other service exports in which Uganda could develop a competitive advantage, drawing on its human capital, are Information Communication and Technology (ICT) exports.

Export performance and employment of selected sub-sectors

Table 8.1 presents data on exports and livelihood dependence of the selected sub-sectors. There are quite substantial differences in the number of households/employment between 1999/00 and 2004/05. The source of the former is the UNHS, which may underestimate the actual number of households engaged in the activity, since the figure reflects only those households which report the particular activity as its main one (hence households which are engaged in that particular activity, but does not report it as its main activity, would be excluded from the count).[186] Nonetheless, these figures seem consistent with developments in two particular sub-sectors—the decline in the number of households engaged in coffee would be consistent with the decline in production of that sub-sector, and conversely for cotton (see discussion later in this chapter on the two sub-sectors). For fish, however, the 2003/04 would be a more accurate reflection of actual numbers employed in fisheries, since they are derived from a frame survey (that went around the lake) and include the large numbers of essentially nomadic fishers who often live and work in locations very distant from their villages, or who live in fishing camps, who would not be included in the UNHS.

[186] At the same time, however, it is important to note that most households in Uganda are engaged in muli-cropping, such that a household that reports a particular activity as a main activity could be engaged at the same time in many other activities. This is reflected in the fact that around three-quarters of Ugandan farmers grow maize, around three-quarters grow beans, two-thirds grow matooke, around half grow sweet potatoes, and nearly half grow cassava. Source: Gautam (2006), background paper for Uganda CEM.

The livelihood dependence of the selected agricultural crops (coffee, cotton, and tea) is much greater for agricultural crops than for non-crop agriculture (floriculture, horticulture, and fish), although the contribution to export revenues of the two categories of products are similar. This underlines the importance of raising the production and exports of agricultural crops for poverty reduction.

Table 8.1 Estimated Exports and Livelihood Dependence of Selected Sub-Sectors

	2004/05 Exports (US$m.)	Number of households/ Employment		Average Household Size	Total Livelihood Dependence
		1999/00	2004/05		2004/05
Agricultural Crops					
Coffee	145	651,388	500,000	6	3,000,000
Cotton	41	98,044	250,000	5.7	1,425,000
Tea	33	n.a.	40,750	5.4	220,050
Subtotal	***219***		***790,750***		***4,645,050***
Non-Crop Agriculture					
Fish	170	62,410	266,000	4.5	1,197,000
Floriculture	32	n.a.	6,000	1	6,000
Export Horticulture [1/]	6	n.a.	2,900	5.4	15,660
Subtotal	***233***		***274,900***		***1,218,660***
Services Exports					
Tourism	197 to 444	157,949	21,000-240,000	3.6	560,000*

Source: Estimated export figures from BOU. Number of households engaged in sector/employment in 1999/00 from UNHS, and in 2004/05 from DTIS team estimates. Average household size from 1999/00 UNHS; for tea and horticulture the average household size for crop agriculture is used, and for floriculture the average household size around Kampala and Entebbe is used.
Notes: total livelihood dependence in 2004/05 = number of households/employment in 2004/05* average household size (except for tourism for which number of households in 1999/00 is used). For floriculture, an average household size of 1 is used because employment in that sector is dominated by single women.
1/ Employment estimates are for international export horticulture only, and excludes employment in horticulture for regional exports or for domestic consumption.

8.2 ILLUSTRATIVE POVERTY REDUCTION POTENTIAL OF SELECTED SUBSECTORS

Export expansion has the largest, or most direct, impact on poverty reduction if the poor are directly involved in this expansion. Currently, and as expected, the regions producing cash crops for export generally have the lowest poverty rates of all agricultural regions.

Simulations were undertaken to estimate the poverty reduction potential of raising the production and exports of the selected sub-sectors (see Appendix 2 for methodology). Under these simulations, production (as measured by total value of output) could be raised either by households shifting into a particular activity (from livestock or non-cash crops, which are the poorest households), or by households increasing the production of a particular sub-sector if various constraints are addressed (discussed in the rest of this chapter).

Simulations of 20 percent increase in production for coffee, cotton, fish, and tourism indicate that the impact on overall poverty would be largest in the case of coffee (a decline in the poverty incidence of around 0.2 percentage points), quite small in the case of fishing and tourism (a decline in the poverty incidence of around 0.02 and 0.01 percentage points, respectively), and

negligible for cotton (Table 8.2). These results reflect the larger numbers of people engaged in coffee than in fishing and tourism. The results are also consistent with the fact that cotton is not a very profitable crop; as mentioned in Chapter 1, it is mostly grown in the more arid north where farmers have few more profitable alternatives. Finally, it should be noted that the results of these simulations are only illustrative of the *relative* impact of production increases on poverty reduction between the different sub-sectors. In other words, the estimate of the impact on each sub-sector should be used with care, especially since they reflect only short-term effects.

Table 8.2 Poverty Headcounts: impact of 20 percent increase in production

	All	Rural	Urban	Central	Eastern	Northern	Western
Initial	33.80%	37.44%	9.63%	19.76%	34.93%	63.66%	26.23%
Coffee	33.60%	37.21%	9.62%	19.72%	34.79%	62.90%	26.20%
Cotton	33.80%	37.44%	9.64%	19.85%	34.97%	63.35%	26.34%
Tourism	33.78%	37.43%	9.56%	19.76%	34.90%	63.66%	26.19%
Fishing	33.79%	37.43%	9.62%	19.77%	34.93%	63.60%	26.23%

Source: Duygan (2006); simulations based on 1999/00 UNHS.

8.3 AGRICULTURAL EXPORT CROPS

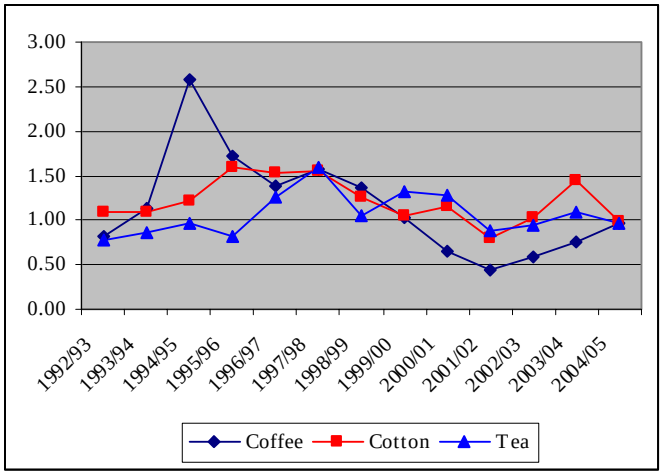
The importance of agricultural export growth to long-term economic growth is supported by the very successful experience of many of the currently middle-income countries, including Brazil, Chile, Morocco, and Thailand.[187] Further, while diversification from agricultural crop exports (as is already happening) is important in light of the trend decline in international commodity prices, such exports will remain important in Uganda for some time to come because of the large numbers of people who depend on them as a source of income.

Of the main agricultural export crops in Uganda, coffee is by far the most important in terms of export earnings, being Uganda's single largest merchandise export to international markets fetching US$145m. in 2004/05, and in terms of its importance for poverty reduction. Cotton is the second largest agricultural crop export in terms of foreign exchange earnings, bringing in US$41m. in 2004/05, which made it the fourth largest single export item from Uganda (after fish, coffee, and gold). Tea is the fourth largest agricultural crop export (the third is tobacco), and fetched US$33m. in 2004/05.

Of the 3 agricultural crops, export prices of coffee had been the most volatile over the last decade or so (Figure 8.1), as had export values (Figure 8.2). Coffee prices have been trending downwards (notwithstanding their increase in the last 3 years) while cotton and tea prices have been fluctuating around a relatively flat trend over the last decade. The value of coffee exports has been trending downwards and remains far lower than the peak reached in the mid-1990s, while cotton and tea exports have been fluctuating around an upward trend with cotton exports in 2004/05 actually reaching its highest level in a decade. These trends in export values are tracked by trends in export volumes, with cotton and tea export volumes trending upwards while that of coffee trending downwards.

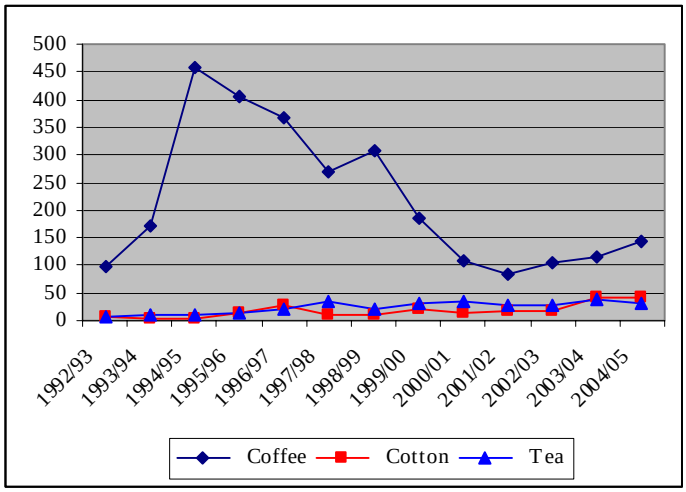
[187] Such experiences have led some researchers to view export-led growth as part of an economic growth cycle that begins with exports of primary goods. Over time, economic growth and knowledge change the structure of the domestic economy, which propels the more technology intensive domestic industry to begin exporting.

Figure 8.1 Export prices of coffee, cotton, and tea (US$/kg)



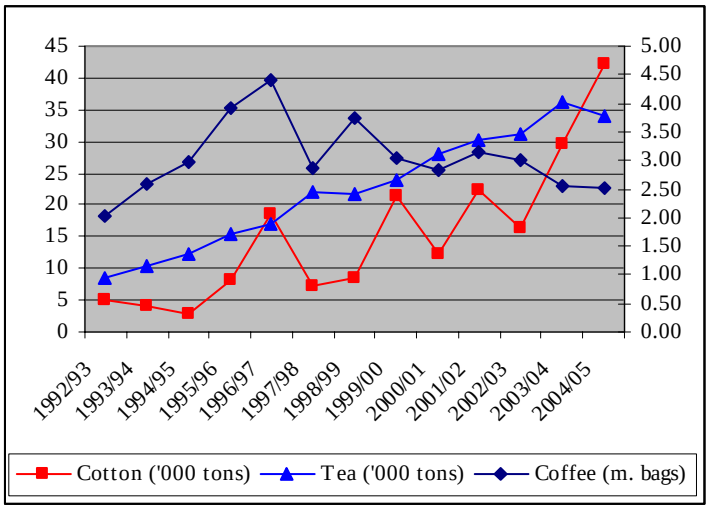
Source: IMF.

Figure 8.2 Exports of coffee, cotton, and tea (US$m.)



Source: IMF.

Figure 8.3 Volume of coffee, cotton, and tea exports



Source: IMF.

The differing performance of these exports reflects only in part the different trends in international prices of these commodities; more importantly they reflect crop-specific issues that require different ways of addressing. What is pertinent with respect to these crops is the appropriate role of the government, which differs according to the crop and according to the issue.

Over 80 percent of the **coffee** exported from Uganda is robusta, with Arabica making up the remainder. Uganda's robusta is one of the best in the world, and commands a considerable premium. Currently, the most important issues facing the coffee sector are coffee wilt disease (CWD) and the failure of the coffee replanting program. CWD, which only affects robusta varieties, was first confirmed in Uganda in 1993 and has by now affected all 21 robusta-producing districts in Uganda. However, there is considerable variation among districts, with infection rates ranging from a low of 12 percent (Rakai) to a high of 67.2 percent (Mukono, the district accounting for 22 percent of Uganda's robusta area). 122,400 of the total 240,000 hectares in these districts have been infected, equivalent to about 136m. robusta trees, and representing about a 51 percent cumulative infection rate.[188] It is estimated that 61,200 tons (1.02m. bags) of coffee may have been lost to CWD, equivalent to around 44 percent of 2005/06 output, or US$42.8m. in export revenue loss (in 2003/04 prices), which is around one-quarter of annual coffee export revenues in recent years. Because of CWD and the failed coffee replanting program, coffee production has continued to decline in Uganda even though international prices have been rising since 2003.

The only long-term solution is the development of coffee wilt resistant varieties, the research for which is being undertaken by the Coffee Research Institute (CORI), although it is not clear when commercially viable CWD resistant varieties will be available. Furthermore, even under the assumption of complete success, producing plantlets at large quantities and finding effective ways to distribute them to coffee growers will be a monumental task, especially in view of the limitations of the existing replanting program, which has been one of the reasons for the poor containment of the coffee wilt disease.

The coffee replanting program was introduced in 1992/93 with the objective of enhancing the productivity of the sector by replacing old robusta coffee trees with newer, high yielding varieties (free of charge) at the rate of 5 percent per annum, and to expand the area under arabica. A further objective was added in 2002/03, which was to help contain the coffee wilt disease. The program has been administered by UCDA, which contracted out the production and delivery of seedlings to numerous nurseries (about 900).

The program has not been successful—in particular, only 50 to 60 percent of the seedlings given to farmers survived. The main reasons for the low survival rate include poor growing conditions at the nurseries (hence low quality of plantlets) and distribution during the wrong season. In turn this could be attributed to delays in reimbursing nursery operators; on some occasions nurseries have not been paid at all and they have abandoned their operations. The most recent estimate is that UCDA owes nurseries some Ush5-7bn. (equivalent to US$2.7-3.8m.). Further, it appears that the new trees are affected by the wilt disease at the same rate as the old trees, which may explain why despite the fact that 101m. robusta trees have been distributed under the replanting program, an estimated 136m. robusta trees have been destroyed by the wilt disease.

Although the replanting program is officially still in place, it has been effectively terminated in May 2004 (see Volume 2, Chapter 1 for details). This has led to the worst possible scenario of

[188] UCDA (2003), p.29.

farmers still waiting for free seedlings which are not coming, which means that little replanting is going on. GOU should either formally announce the termination of the program, or it should restructure the current program that corrects its many drawbacks including:

- ensuring that only good quality seedlings are distributed (that is, seedlings that are raised from good quality seeds under good conditions in nurseries);
- distributing seedlings at the right time of the year;
- ensuring farmers know what to do when they get the seedlings so the latter can become well-established; and
- ensuring nursery operators are paid adequately and on time so they continue to grow seedlings for distribution in future seasons.

Various strategies have been proposed for diversifying market and product (including value addition) for coffee. The strategy to increase specialty coffees or to target new markets (such as China and the Middle East) does not seem to be a priority in light of the fact that Uganda is producing only half of the coffee it can sell to existing European partners without any loss in the price premium that Uganda robusta fetches. Further, while adding value (such as through roasting or producing instant coffee) may generate some income through employment generation, the welfare on farmers will be unchanged as they will be paid the same price regardless of whether they are selling coffee to exporters or to domestic producers. Moreover, most roasted coffee requires blends with types of coffee not necessarily produced in Uganda. Also, roasted coffee must be consumed relatively quickly, a major impediment for a country where it takes green coffee as much as 4 weeks to reach the port of Mombasa. Finally, instant coffee exports to the region (the most likely destination) may face stiff competition from neighboring countries, most of which are coffee producers with similar ambitions and marketing strategies.

The **tea** industry is performing well, having recovered from the devastation during the 1970s, with most nationalized estates having now been returned to their owners. Policy reforms including liberalization and privatization have stimulated production to record highs of 37,000 tons in 2004. The key issue facing the tea sector now is the appropriate role of the government, particularly because the recently completed Draft National Tea Development Policy is proposing a larger role for the government. Some of the proposals in the Draft policy seem to infringe on private sector management and decision-making such as encouraging labor-based technology to create employment; or ensuring tea factories continue to establish ample woodlots for tea processing. Another area where the role of the government may come into conflict with the private sector is the institutional framework to oversee and coordinate the tea industry. In particular, the Draft Policy states that "An institutional framework, clearly defining the roles of stakeholders involved in the tea industry is a pre-requisite for the successful implementation of the tea-sub-sector programmes", and that "The implementation of the Tea Development Policy shall be the responsibility of both public and private sectors." If approved in its current form, the Draft Policy would give the Government new authority over the industry, hence partially reversing the liberalization that has allowed the industry to recover from the lows of the 1980s.

The other issue facing the tea sector which is related to the role of the government is research. Research is important for raising competitiveness of the sector since over the longer term, international tea prices are likely to decline as production and exports by major producers (Kenya and Sri Lanka) and emerging exporters (Vietnam) grow faster than import demand. No tea research has been done for the tea sector in Uganda since 1978 when the Tea Research Institute of East Africa collapsed. Restarting tea research is a high priority for the competitiveness of the sector, and especially for small holders who have no alternative access to planting materials. A closely related issue is how to multiply and disseminate improved planting materials. The efforts

of GOU to disseminate high yielding clonal varieties obtained from Kenya and distributed under the Strategic Export Program in 2001 met with partial success, but many of the participating nurseries were not paid for their planting materials and will not be willing to participate in another Government program. A more sustainable approach to both research and dissemination of improved planting materials is needed and the best approach appears to be to rely on the industry to fund and direct the program. The research station at Rwebituba in western Uganda is reported to be in good repair and ready to begin tea research and would be an excellent facility to center the research and planting materials dissemination activities. Access on tea sales could be used to fund such these activities, and the Uganda Tea Association, which represents 95 percent of the producers, has expressed a willingness to fund tea research if it is done under industry control. GOU recommended[189] using a combination of government and donor monies to kick-start tea research and this would be an excellent place to begin, but the industry should direct the research and oversee expenditures of funds collected by any tea cess.

The **cotton** sector which collapsed as a result of the economic and political turmoil from the early 1970s through the mid-1980s, has been recovering. Recovery began in the mid-1990s with output reaching 20,000 tons (from the record low of 2000 tons in 1987), thanks to reforms (liberalization, privatization) and enhanced support for research and extension. Introduction of zoning in 2003, which allowed full credit recovery of inputs provided to farmers (see Volume 2, Chapter 1 for details), together with post-2002 price recovery, led to considerable supply response, with production more than doubling over a few years to 45,000 tons in 2004/05.

The main issue facing the cotton sector is low profitability, for which low yields are partially responsible. This could be attributed to the shift of cotton to less productive areas since World War II, as well as limited use of fertilizer which may have contributed to soil depletion. The key recommendation for raising yields is for Uganda to introduce genetically modified (GM) cotton. Certainly more intensive use of fertilizers would raise yields, but the impact of this on profitability is not clear, and would require more analysis.[190]

GM cotton has been widely adopted by major cotton producers worldwide. Such cotton plants are resistant to pests, insects, and weeds, and hence are likely to have higher yields especially in developing countries where growers generally apply pesticides much less than is required. China has experienced a 19 percent increase in yields after adopting GM cotton, and India 80 percent. Research has shown that on balance, GM cotton users are much better off compared to users of conventional cotton. A recent study has argued that the benefits from the full adoption of GM cotton by African cotton producing countries may even be greater than the benefits of the removal of all cotton subsidies by the U.S. and the EU.

Since most cotton producing countries have already embraced the technology, those that have not are in a disadvantageous position. Furthermore, GM cotton does not face the negative consumers' reaction that GM food crops face.[191] Therefore, Uganda should consider moving quickly into using this technology, particularly since it would take reportedly about 3 years for locally developed varieties to be converted into GM varieties and even longer for the technology

[189] GOU (2001).

[190] The World Bank will be separately undertaking a broader analysis of fertilizer use and profitability for agriculture.

[191] In terms of consumer's reaction, GM and organic cotton may be identified as mirror images of each other: To the extent that consumers do not see health benefits in organic cotton, they do not see health problems in GM cotton.

to be disseminated among cotton growers.[192] Lack of policy on GM cotton has been identified by several reports as a factor constraining the sector's growth.[193]

The other issue facing the cotton sector is the practice of announcing indicative prices. At the start of each marketing season, the Cotton Development Organization, in consultation with all industry stakeholders, including the Uganda Cotton Exporters Association (UGCEA), announces indicative prices, the objective of which is to provide information to smallholders to make their marketing decisions. However, for 4 recent seasons (1999/00 to 2002/03)[194] farmgate prices were only close to indicative prices at the beginning of the season, but deviated (sometimes substantially) from indicative prices later in the season, when they appear to have been dictated by market forces, moving broadly in line with the world price of cotton.

At the same time, if indicative prices are meant to be guarantee prices (which they appear to be de-facto, since with a few exceptions, indicative prices were below the monthly average farmgate prices in all the cotton growing regions during those 4 seasons), then there could be severe adverse effects on ginners should world prices fall dramatically at cotton delivery time, unless ginners hedge, which they do not currently.

There are two ways in which the current practice of announcing indicative prices could be improved, depending on the objective. First, if the objective is to avoid exploitation of growers, then it should be updated frequently, such as once a month or whenever circumstances warrant it. Alternatively, if the objective is to guarantee a minimum price to growers, then indicative prices should clearly become guarantee prices, and announced as such, in which case the ginners should hedge their exposure (see Volume 2, Chapter 1 for details).

Finally, as in the case of coffee, various strategies have been proposed for adding value to cotton. Again, as in the case of cotton, the welfare of farmers will be unchanged as they will be paid the same price regardless of whether they are selling cotton to exporters or to domestic producers. And, while adding value may generate some income through employment generation, the deciding factor should be the competitiveness of the sector. A Ugandan garment and textile industry is not likely to be competitive in the world market[195] in light of the large shift of such industries in the last decade to Asia (from Europe and the US, which used to have large clothing and textile industries) due to: (i) low wages; (ii) these countries being major producer of synthetic fibers (the most competitive textile industries in the world use a combination of synthetic and cotton fibers); (iii) inexpensive energy; and (iv) (perhaps most importantly) these countries have transport infrastructure for timely delivery of end products to consuming countries. Being land-locked, Uganda is further disadvantaged by having to bear high transport costs for importing essential inputs (dyestuffs and chemicals for making fabrics; or fabrics themselves). Opportunities may exist in niche markets such as clothing with heritage/craftsmanship characteristics. Uganda may also be competitive in cotton yarn, but would require an efficient power supply and qualified and skilled labor to ensure consistent quality.

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[192] ICAC (2002, p. 6).

[193] See, for example, SCOPE (2005, p. 22).

[194] Data is from CDO Annual Reports, for which earlier issues are not available to the DTIS team.

[195] A recent study showed that even after cost saving efforts, it would cost $2.29 to produce a T-shirt (one of the simplest textile products) in Uganda compared to $1.80 in China, a 23 percent cost advantage; see World Bank (2004e).

8.4 FISH

During the last decade, exports of fishery products from Uganda have grown rapidly to nearly US$170m. in 2004/05 (including both international and regional exports), making it the single largest export item from Uganda. The fishery sector sustains significant numbers of rural livelihoods in fishing (employing over 250,000 people in lakeside communities) as well as in fish processing and distribution (with at least 5,000 employed in urban areas, mainly Kampala). Taking into account the average size of families in fishery communities (4.4), fisheries contribute to most, or all, of the livelihood of over 1.2m. people in Uganda, or 5 percent of the population.

Although landlocked, Uganda is well endowed with fishery resources in lakes and rivers. Capture fisheries are based on the five major lakes, with an estimated yield of 330,000 tonnes/annum, of which some 70,000 tonnes are destined for export, mainly in the form of fresh chilled fillets of the Nile perch (*Lates niloticus*). Tilapia is also exported, accounting for 3.5 percent of export volume in 2003. Lake Victoria is by far the most productive fishery, accounting for some 75 percent of national production in 2003. Aquaculture production is presently negligible, although some significant investments are underway.

Fish for export are landed at around 552 "landing sites" around Lake Victoria. Fish for export is iced at this stage, with ice delivered by the insulated vehicles which transport the product to the processing establishment. Post harvest losses are reported to be high (20-40 percent, lower in Lake Victoria). There are 17 fish processing establishments in Uganda, of which 15 are approved for export. Export establishments are required to meet conditions set out in the Fish (Quality Assurance) Rules 1998, considered to be equivalent to those set out in EU legislation.

Uganda's market share of the global fish market is about 0.2 percent. The main market for Ugandan fish exports is the EU, accounting for some 73 percent (in value terms) in 2004. The U.S. and the UAE are the only other export markets of note. The EU market is also supplied with nile perch products from the other two riparian countries of Lake Victoria, with Tanzania being the largest supplier of the EU market among the three countries (57 percent), followed by Uganda (31 percent), and Kenya (12 percent).

Uganda also exports fish to neighbouring countries. Some of the fish caught by Ugandan fishers on Lake Victoria is landed in Kenya (and to a much lesser extent, Tanzania). Prices offered to fishers are reported to be significantly higher in Kenya, principally due to the lower costs of export distribution in Kenya. The higher export distribution costs in Uganda compared to both its riparian fish exporting competitors, Kenya and Tanzania, are because of higher freight charges. In the case of fresh chilled products, these are due to the higher cost of aviation fuel and the higher level of empty space on inbound flights. For frozen products they are due to the high road freight charges to Mombasa. This "fish smuggling" trade contravenes current GOU policy, which requires fish to be landed within the District issuing the licence, so as to retain fiscal revenues and economic value added within the region. About 25,000 tonnes of fish are also exported informally across land borders.

The central element of GOU fisheries policy is institutional reform, with the creation of an autonomous Uganda Fisheries Authority to take over many of the sector management functions of the Department of Fisheries Resources (DFR). DFR, which has been responsible for fisheries policy development and implementation, has not been able to adequately perform its functions because of inadequate funding and lack of capacity to perform flexibly. In the interim, however, there is a need for implementation of specific measures to address three critical bottlenecks where policy has, until now, failed to have a significant impact on the sector. These are:

- ensure sustainable exploitation of capture fisheries
- develop alternative supplies and diversified species of raw material from aquaculture
- improve quality, reduce losses and avoid fish bans by ensuring landing sites are rapidly upgraded to meet hygiene requirements.

Sustainable exploitation of capture fisheries

Whilst Uganda has substantial capture fishery resources, these are not effectively managed, with the result that existing levels of exploitation are considered to be excessive, threatening stock collapse and loss of supplies for export. Resource management is focused only on technical measures (such as fish size and mesh size limits). There has been no serious attempt to address the fundamental open access nature of the fishery, with the result that fishing capacity (number of vessels and their capacity to catch fish) is increasing, with no effective control. Even if effective policies for resource management were put in place, the implementation capacity of the existing fisheries control institutions is weak.

There is a need for a much clearer regional policy initiative (involving Kenya and Tanzania) to bring fishing capacities within sustainable limits. This means devising a system for the determination of capacity limits and allocation of access rights. The proper mechanism for the introduction of such an approach is through the implementation of the Lake Victoria Fisheries Management Plan (LVFMP). It is strongly recommended that GOU promote this regional approach, which should draw on existing European Development Fund technical assistance projects. Meanwhile, it is also in Uganda's interest to unilaterally adopt a national policy with respect to fishing capacity limits, thus publicly demonstrating the adoption of the principle of responsible fishing. However, a key condition is the existence of community management mechanisms involving the beach management units (BMUs), which provides the only feasible and politically justifiable means of rights allocation. Fishing opportunities, in the form of a fixed number of licences, should be set at the national level. This should be a political decision based on scientific advice of the Lake Victoria Fisheries Organization. Thereafter, the allocation of access rights to districts, sub-counties, BMUs and individual fishers should be undertaken by the community management structures. Such concepts of co-management are clearly expressed in the National Fisheries Policy, but are not developed or applied in practice on Lake Victoria. Until now, however, GOU has not been effective in creating the enabling environment for the emergence of strong and functional BMUs and there is a need to address this issue.

There has been a proposal to impose capacity limits on fish processing. However, these would likely result in a high grading approach by export processing establishments (that is, conserving quota for premium fish and rejecting greater proportions of lower quality fish), which would lower first sale price to fishers who in turn would likely intensify fishing efforts, thus resulting in the opposite to the desired effect. GOU has resisted these proposals and it is recommended that it continues to do so. In addition, in the longer term, the relative costs and benefits of the requirement to land fish in Uganda should also be reviewed, since it appears to provide value added and employment in processing in urban and non-fisheries dependent regions, at the expense of the income of more dependent livelihoods of rural fishers. The policy on so-called "fish smuggling" impacts negatively on fishers' incomes, and furthermore occupies valuable fisheries monitoring, control and surveillance resources, which might be better employed focusing on resource conservation. There is a need to assess the costs and benefits of regulations governing where fish may and may not be landed.

Develop aquaculture

Whilst the industry has been very successful in penetrating international markets, 97 percent of exports are a single product (Nile perch) and 73 percent to a single market (the EU), which will remain the main target export market for the foreseeable future. However, since 2003, the industry is experiencing strong competition in the EU market from Vietnamese catfish from aquaculture. Furthermore, resource constraints and poor resource management have resulted in a situation in which only about 40 percent of the capacity of fish processing sector is utilized. There is a strategic need to diversify raw material sources and products to provide a broader product range.

Aquaculture provides a clear opportunity to meet this requirement. Uganda, with good water resources and a range of ideal climates, provides excellent opportunities for aquaculture development. Potential production could reach several hundred thousand tonnes, supplying national, regional and international markets. The Egyptian aquaculture successes in the last decade provide a model for development. Presently a number of national and foreign investors are advancing with plans for development of hatchery, feed mill and grow out facilities. These are likely to address current lack of key inputs identified as barriers to development (fish fry, feed).

However, the regulatory regime for establishing a fish farm is only weakly developed, especially for lake-based cage aquaculture systems (where potential conflicts with capture fisheries need to be addressed). In some respects, the existing Aquaculture Rules are too onerous; in others they do not address key requirements. There are too many permits required. In particular, the fish transfer permit requirement is unnecessarily strict and should only be applied where specific disease controls zones have been announced by order of the Minister (of MAAIF). Also, whilst NDA implements a control system for veterinary drugs, none are specifically approved for use in aquaculture, an essential requirement if the products are to be exported to the EU. Aquaculture Rules be revised as soon as possible to provide a streamlined system of permits, whilst improving controls over the potential hazards arising from feeds and veterinary medicine inputs.

There is also lack of adequate numbers of trained people to provide the skills at managerial and operator level for the emerging aquaculture sector, and the trained personnel that do exist are not utilized properly. There are also insufficient technical training, consultancy and extension services. Experience in other regions indicates that such technical services are more effectively delivered by private sector input providers (such as feed suppliers, credit suppliers, hatcheries and processor led grow-out schemes) rather than the public sector. A supply of well-trained and qualified candidates from university and training institutions is required to ensure that these services are delivered effectively in future. GOU is recommended to invest in a significant upgrading of fisheries education and training activities with a much greater focus on practical aquaculture skills, at the technical management and operator levels. Facilities and syllabus should be developed to reflect national strategic priorities (for example monosex tilapia, feed formulation, pond management, water quality monitoring, fish health etc).

Lack of investment finance may also be a limiting factor to aquaculture development, especially in terms of hatchery development. The potential for a credit scheme directed at hatcheries and small/medium sized grow out facilities should be assessed. Such a scheme could be launched within the frame of the current African Development Bank Fisheries Development Project. To avoid distorting investment, GOU should withdraw from planned investments in hatchery activities and leave this to the private sector. Also, the Uganda Investment Authority can help by promoting joint ventures in aquaculture. Potential lake use conflicts in the development of cage

farming should be minimised by applying the co-management principles already clearly expressed in the national fisheries policy, empowering properly constituted BMUs to lease cage sites to investors (see next section on upgrading landing sites).

With respect to sustainable aquaculture development, GOU should undertake a GIS based aquaculture mapping exercise and designate aquaculture development zones (ADZ) on the basis of meeting suitable environmental criteria for aquaculture (climate, water supply characteristics, soil conditions, production technology – both ponds and cages), as provided for in the provisional Fisheries Sector Strategy Plan. ADZs could be the focus of rural infrastructure development (roads, electricity, supply canals), and could be subject to generic environmental impact assessments, thus facilitating small and medium scale investments.

Upgrade landing sites

Uganda has had a turbulent experience in meeting EU food safety conditions during the last decade. Export of fish has been disrupted by several EU "fish bans", when export to the EU market was either prohibited or restricted due to lack of compliance with EU sanitary requirements, resulting in significant losses in the late 1990s. However, since 2000, the date of the last inspection mission by the European Commission, the fish export sector and the Competent Authority (the Department of Fisheries Resources, DFR) have worked hard to improve controls. Significant public and private sector investment in facilities and improved technical capacities have successfully stabilized the situation, to the extent that rejections are now rare, and the last EU rapid alert notified for Ugandan fishery products was in 2003.

Notwithstanding a world class fish processing sector, with 15 well capitalized establishments applying modern processing techniques alongside HACCP control systems and being fully compliant with international requirements, the majority of landing sites in Uganda, from which export product is sourced, fail to comply with even basic hygiene requirements. Exports, particularly to the EU, are threatened by the risk of future bans due to persistent non-compliance with hygiene and food safety conditions at landing sites.

GOU has recognized the importance of upgrading landing sites. Current policy considers landing sites to be public infrastructure, and Government and donors have assumed responsibility for the capital investment required to develop them. Financing is in place for the upgrading of 39 locations. However, the approach is stalled and appears unlikely to deliver the improvements required in time. First, donor and public investment funds are insufficient to upgrade all sites, and they are mobilized too slowly to respond to the demands of a globally integrated export trade. Second, the locations, dimensions, and design of the landing sites will be centrally planned by civil servants and consultants, risking sub-optimal allocation and misdirection of capital. Third, the lack of any sense of ownership at the level of fishery results in poor management in the operation of the facilities. Fourth, Government's assumption of responsibility creates an effective barrier to private sector investment, by generating uncertainty regarding potential future competition. Fifth, the Government has a clear legal responsibility as the Competent Authority to enforce hygiene conditions at landing sites, which requires approval of compliant sites, and closure of non-compliant sites. At present there is a clear conflict of interest within DFR between the development and regulatory functions, which should be separated.

It is recommended that GOU publicly withdraw from the development of facilities at landing sites, and leave development and management of landing sites to the private sector in the form of BMUs. Public funding for fisheries infrastructure should be re-allocated to electrification and road schemes serving fisheries communities, with the public-private partnership boundary placed

at the gate of the landing site. BMUs should acquire legal personality and be genuinely and meaningfully empowered with legally enforceable resource usage rights, for example through long-leases for lake shore or lake bed, issued by the Local Authority (if required with restrictive covenants regarding alternative uses, assignment etc. to address concerns regarding loss of control of the lake shore and bed). BMUs should be assisted to become commercial enterprises, free to charge users of the landing sites market rates for goods and services, in competition with each other. Successful sites will attract landings and, crucially buyers. Others should be allowed to fail. The Competent Authority should be free to meet its obligations, and close down non-compliant landing sites which do not upgrade within a reasonable time frame.

Competition between BMUs is expected to reduce the number of landing sites, which will concentrate production, reduce road transport costs, encourage development of auctions, reduce the number of transactions in the chain, improve product quality, yields and traceability and improve tax collection efficiency, all contributing to improved international competitiveness. There would be costs sustained by the sector since small vessels have limited range and will be disadvantaged by the restricted landings. Support for these operators could include direct subsidies for transport vessels and landing sites in remote areas.

Over the long term, it is recommended that Local Government revenue collection from the fishery sector be through leases issued and based on direct payment of a single levy from each BMU (as proposed in the UFA business plan), in place of the current proposal of a levy on export processors. This should only be undertaken concurrently with reforms in Local Government finance, otherwise it would provide new opportunities for rent extraction and impact negatively on fisheries incomes. The suggested single levy from each BMU should entail a base level set centrally (as required for the UFA), with an additional local levy imposed and determined by the District Council (which could vary from District to District). Inter-district competition to attract more landings and optimize revenues would discourage Local Authorities from excessive tax extraction. The incentive of Local Authorities to adopt this approach would be provided through the mentioned reforms of Local Government finance with respect to improvements in tax collection efficiency and reduction in leakages.

8.5 HORTICULTURE AND FLORICULTURE

Floriculture has emerged as one of the main non-traditional exports from Uganda, estimated at around US$37m. in 2005, which makes it the third largest non-traditional export after gold and fish. Floriculture exports are dominated by cut-flowers (virtually all sweetheart roses), estimated at around US$27m. in 2005, with the remainder being made up of mostly chrysanthemum cuttings which are estimated at just under US$10m. Horticulture exports are much less important, with fresh fruits and vegetable exports estimated at around US$6m. in 2005 (US$1m. of which are cross-border, or “informal” trade), and processed fruits (mostly dried fruit) exports estimated at around US$360,000 in 2005.

The vast majority of floricultural exports are destined for Europe. With respect to fruit exports, Kenya was the most important destination in 2004, followed by the U.K., then Germany, Belgium, and UAE. By far the most import fruit export in 2004 was bananas; only very small amounts of pineapples and water melons were exported and most were to Kenya. Most of the vegetable exports were destined for the UK, followed by Kenya, then Belgium, Netherlands and Rwanda. Matooke (banana) exports to the UK wholesale market for sale to Ugandan and ethnic population have been the major Ugandan horticulture export to Europe until the last few years, when they were overtaken by hot pepper (Scotch Bonnet pepper) exports.

In 2005, floriculture is estimated to provide employment for around 6000 people, 5000 of whom in cutflowers and the rest in cuttings. Export horticulture is estimated to employ around 1700, while cross-border horticulture about 600. Finally, an estimated 600 people are employed in processed horticulture.

Floriculture

Uganda has established a very impressive floriculture industry from virtually zero in 1995, with substantial donor support, and through learning from experience as to the success criteria. The key success criterion was found to be climate, or understanding what varieties grew best in Ugandan climate. USAID, through its Investment in Developing Export Agriculture (IDEA) project, provided support for trials, through which sweetheart roses and chrysanthemum cuttings were found to be very well-suited to Ugandan climate. Uganda has now a dominant position in the European market with respect to sweetheart roses, and is also an important supplier of chrysanthemum cuttings to Europe. USAID also provided valuable market information and training for middle management, helped finance the building of a cold store at Entebbe Airport and provided staff to coordinate the logistics for export. In addition, the Dutch Government has been supporting the funding of an internationally recruited Chief Executive Officer (CEO) for the Uganda Flower Exporters Association (UFEA) who has obtained from GOU the classification of floriculture export firms as export processing zones (EPZs) which allow them access to duty-free inputs, and quicker VAT repayments.

Another key factor underlying the success of floriculture exports is the cooperation among the growers. This is reflected in the success of UFEA in particular in chartering regular dedicated freight aircraft for its members, which has significantly reduced freight costs. Further UFEA members have also formed their own company, Fresh Handling Ltd. (FHL), to manage the cold store at the airport and coordinate the loading and palletizing of exports which has been important for obtaining sufficient freight capacity at acceptable prices.

Currently, all the floriculture production is around Entebbe and Kampala, and much of the short-term expansion is expected to be in that area. The key for continued rapid expansion of floriculture is the establishment of a significant cluster of production at high altitude which will diversify the industry both geographically and by product. With respect to high altitude production, the issues that need to be addressed are:

- *Identification of best areas* – in conjunction with the growers and UFEA, the most suitable areas for high altitude production need to be identified.
- *Infrastructure* – if a significant cluster is going to be established it will be necessary to improve the feeder roads so farms that are away from the trunk roads can be developed. Also the main roads from the likely production area to Entebbe airport need to be assessed.[196] It is also important that the areas that are opened up are electrified.
- *Trials* – trials to identify the best varieties and agronomic practices need to be started.[197] The USAID-supported Agricultural Productivity Enhancement Program is funding some rose variety trials at Ntungamo; these need to be repeated at other potential sites.

[196] The main roads linking Fort Portal and Ntungamo with Kampala are reported to be adequate, but this needs to be confirmed. Also, the possibility of improving, or constructing a new road that would eliminate bring the produce through Kampala should be evaluated.

[197] It is not simply a matter of recommending the same varieties that are used in Kenya at the same altitude because the rainfall would be higher in Uganda, and hence sunlight levels would be lower, which could easily affect the intensity of petal colour.

- *Facilitation of purchasing land and other permissions* – the exporter who is about to invest at Ntungamo has received satisfactory support from local and national administrators to establish land ownership; donors have also supported with establishing agronomic trials. The same assistance needs to be given to other potential investors.

Another issue to be addressed is expansion of the cold store at the airport, which is currently too small for floriculture exporters' future requirements. The issue that needs to be first resolved is the sale by CAA of its shares of the existing cold store to exporters, as provided for under the original USAID funding agreement. Once this is done, then FHL can organize the finance to pay for the expansion. The growers have stated that they would fund the expansion themselves, but this would take away from the funds to expand their production. And, given the heightening of competition faced by producers of sweetheart roses (the considerable investments in rose production in Kenya and Ethiopia are resulting in decline in all rose prices, including those of sweethearts), expansion is necessary for them to maintain their profit margins. A strong case could therefore be made for donors to fund the cold store if it contributes to a serious increase in production: a doubling of flower output would create in excess of 6000 jobs and US$35m. in export revenues. (As with the Nairobi Horticultural Center, any investment to build the vegetable packhouse and cold store would not generate sufficient margins to repay any loans).

There continues to be training needs, especially if there is successful development of high altitude clusters. The anticipated support from the Dutch Government to develop 3 training courses for potential floricultural managers would contribute significantly to the continued success of the industry. To ensure that the initial investors at the high altitude sites make the correct agronomic decisions, it is important that research is supported where any new clusters are being developed. USAID's support (through the Agricultural Productivity Enhancement Program, APEP) at Ntungamo needs to be broadened to include crops other than roses, and research into cuttings production could also be undertaken. IDEA and now APEP have financed research on commercial farms to ensure that the results are truly applicable; this approach should continue as long as the results are made public.

There also continues to be a need for a CEO for UFEA, given the importance of cooperation between growers—through UFEA—in successful negotiations with airlines over freight rates, and with GOU over EPZ treatment of flower farms (as mentioned above). This is particularly so if a significant part of the CEO's work is on helping with diversification efforts, such as obtaining permission and land titles.

Horticulture exports to Europe

Uganda has limited competitive disadvantage on horticultural exports to Europe mainly because its climate prevents the growing of many high-value horticultural crops demanded by the European market. The climate around Lake Victoria is too warm for temperate crops demanded in Europe and, in many of the cooler areas, the rainfall is too high and too frequent for field crops. The climate in Uganda is suitable for a range of some more tropical vegetables such as okra, chilies, hot peppers, and Asian vegetables. However, there are other countries which have good locations for growing these more tropical vegetables, such as Ghana and Kenya. While the airfreight out of Uganda may be comparable with Kenya, it is much more expensive than West Africa, given countries like Ghana very significant comparative advantage. Finally, many successful horticultural exports from African have been started on large commercial farms, which have the technical and financial resources to get the industry established. Uganda does not have many large commercial farms to start a large horticultural export sector.

Despite the considerable support that has been provided to horticulture over the last 10 years by donors, in particular USAID (through IDEA and its predecessor, Export Promotion Analysis and Development Unit, EPADU) and the Dutch Government (Programme Cooperation for Emerging Markets, PSOM), only one vegetable has been successfully developed (with IDEA support)—Scotch Bonnet peppers—for which Uganda has become the market leader in Europe. However, the market size for this is limited.

Currently, the EU's Pesticide Initiative Programme (PIP) is helping farmers become EurepGAP accredited. This could help some growers access a wider market for their hot peppers and possibly their chilies, but EureGAP certification will not allow Uganda to significantly broaden its horticultural base.

Regional horticultural exports

Most of the cross-border horticultural exports over the last few years were bananas (matooke and desert bananas such as bugoya and apple bananas), mainly destined for Kenya. Smaller amounts of pineapples and water melons are also exported. The latter reflects the fact that some farmer groups have identified markets in neighboring countries for these products, and the National Agricultural Advisory Services Program (NAADS) is committed to helping these exports expand by improving production and marketing. This cross-border trade could be significant to some farmer groups, but overall, there is little indication that it will have a significant "national effect". This is because significant opportunities, if they existed, would have been recognized already by traders. This was the case for countries in East Africa where significant cross-border trade has developed (such as Tanzanian produce into Kenya): traders first recognized the opportunity, then donors and Government supported this opportunity to expand.

Processed horticultural exports

The competitive position of Uganda for processing of horticultural crops is not very attractive. However, despite the constraints, it has developed a small industry drying and exporting tropical fruit and small quantities of fruit juices are exported. There is also some processing for the local market, for example banana juice. The dried fruit and banana juice factories have received considerable donor support, which has contributed very significantly to their viability. They have also benefited from excellent management, which has to some extent helped overcome the lack of comparative advantage.

For the dried fruit industry, transport costs and raw material are much more costly than for companies located in competing countries. Most of the dried fruit supplied to Europe comes from countries that border the sea and they utilize reject fruit from the fresh export industry. With respect to the fruit juice industry, Uganda has several disadvantages. First is a very small local and regional market such that achieving economies of scale becomes very difficult. Second is expensive raw materials (that is, fruits). This is because for climatic reasons, Uganda does not produce much of the fruit that is required (apples, grapes) such that fruit concentrates have to be imported. Moreover, even if locally produced fruits are used, these are also expensive because they have to be transported for some distances since they are grown by small holders scattered over large areas rather than grown on large commercial farms. Also, there is not sufficient production to provide a steady throughput throughout the year at sensible prices. Third is expensive packaging, which has to be imported. And, finally, electricity is expensive and very unreliable.

These emerging industries have helped to create the equivalent of about 650 jobs, mainly in rural areas and, in the case of fruit juice, it has also reduced the country's need to import. However, opportunities for processing will always be constrained by lack of comparative advantages. There might be the opportunity for new businesses to emerge due to support from donors and NGOs, but these may well not be sustainable. Horticulture contributes to export earnings through supplying the tourism industry—expansion of the latter would certainly benefit horticulture.

8.6 TOURISM

Tourism is at a relatively nascent stage in Uganda, having only been re-started in the early 1990s after its collapse in the 1970s and 1980s due to the political and economic turmoil in the country. Prior to the collapse, Uganda was an important tourist destination in Africa, receiving in the 1960s a similar number of tourists as Kenya and certainly more than Tanzania.

There is much uncertainty over the current contribution of tourism receipts to the country's total foreign exchange earnings, with official data ranging from US$197m. (according to BOU) to US$444m. (according to UBOS) in 2004.[198] Yet, even the lower of these two would make tourism the top foreign exchange earner for Uganda, although World Bank estimates of actual number of tourists indicate that the official figures probably substantially overestimate tourism earnings in Uganda (see Volume 2, Chapter 4, for details). Regardless of the exact importance of tourism in Uganda, it has the potential to contribute much more to economic growth, employment and income generation, and poverty reduction in the country.

Uganda has a wide range of tourism assets which have been exploited to varying degrees. This includes 10 national parks, ranging from a traditional African savannah park such as Queen Elizabeth (which attracted the most number of foreign tourists in 2004), to the greatly under-exploited snow-capped Ruwenzori Mountains which offer year-round hiking and mountaineering comparable to Mount Kenya and Mount Kilimanjaro. It also includes the "Source of the Nile" in Jinja (the second most important city in Uganda) which has become a hub for adventure sports (dominated by white water rafting but also offers bungee jumping, kayaking, mountain biking, off-road driving, motor biking, and international triathlons), attracting the second largest number of foreign tourists in 2004. It further includes what is the most distinctive of Uganda's tourism assets, mountain gorillas, of which 360 out of the 600 total world-wide are found in Uganda, and which was Uganda's third largest tourist attraction in 2004 (limited by the restrictions on the number of tourists allowed per gorilla viewing). Other distinctive tourism assets include chimpanzees, Mbuti pygmies, and one of the richest African birding species in the world (having recorded over 1200 bird species, or one sixth of the world's 8000 or so species).

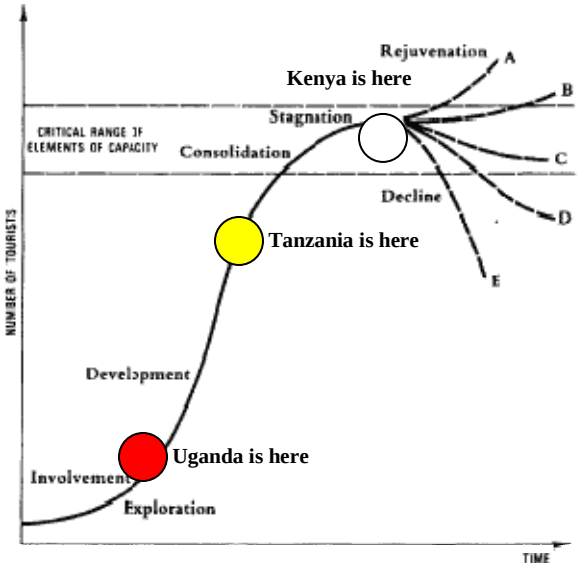
The collapse of the tourism industry—and supporting infrastructure—during the 1970s and 1980s had left Uganda's position as a tourist destination at ground zero in the early 1990s. While there have been sporadic efforts to rebuild the tourism industry since then, tourism in Uganda is still at a nascent stage with respect to the number of leisure tourists, service providers, trained personnel, access, tourism assets, level of organization of the industry, and levels of international awareness of the destination, having been very much stunted by its public image and recent political history. According to the Tourism Area Life Cycle (TALC[199]) (Figure 8.4), a tool for framing the

[198] World Bank calculations based on data gathered through interviews with tourism service providers and market surveys indicate a much lower figure in terms of number of visitors (and hence tourism receipts). See Volume 2, Chapter 4 for a more detailed discussion.

[199] Butlers' TALC model was developed in 1980 and describes a general picture of the life cycle of a tourism area.

development of a destination, Uganda would be at the *involvement* stage, where there are barriers to be surmounted before it could move to the *development* stage. Tanzania has moved to *development* in the same period that Uganda moved from *exploration* to *involvement*. There are signs that Uganda is now moving towards *development* with the acquisition of the Nile International Hotel and Conference Centre in Kampala by the Aga Khan Foundation's Serena Group.

Figure 8.4 Butler's Hypothetical Evolution of a Tourist Area diagram



Exploration stage is the beginning of the development of the area as a tourist destination. Only a small number of allocentrics or explorers visit the area and the tourism infrastructure is little or none.
Involvement stage comes with the increasing visitation that attracts local investment in tourism and public investment in infrastructure. The destination and market share come into being with the efforts of advertising and marketing (only just occurring in Uganda).
Development stage is a period characterized by increased FDI and a range of visitors and markets, driven by heavy advertising. Midcentrics replace explorers and allocentrics, and the majority of the population is accepting the destination (now occurring in parts of Tanzania).
At consolidation stage, the main income of the local economy comes from tourism and the visitation levels continue to increase but at a decreasing rate. Extensive efforts in advertising and marketing are made to overcome the seasonality and develop new markets. The importance of tourism is fully appreciated by the local people. At this stage, the least adventuresome "psychocentrics" are attracted and the growth rate is slowing down.
Stagnation occurs when visitor numbers peak and the capacity limits are reached, and the area is no longer fashionable. New visitors are few and the destination relies on repeat visitations and conventions for business (more or less where parts of Kenya have reached).

Source: Butler, R.W. 1980, "The Concept of a Tourism Area Life Cycle of Evolution: Implications for Management of Resources." The Canadian Geographer 24 (1), p. 8.

Uganda needs to address a few key issues with respect to its tourism industry to better exploit its tourism assets to generate employment, income, and growth.

First is *security*, which is the most important constraint facing the industry. The key security issue has to do with instability in the northern part of the country due to an insurgent group, the Lord's Resistance Army, which has been undertaking terrorist acts there from 1994 until the present. This, together with the legacy of conflict in DRC, have been cited by tourism service providers in Uganda (tour operators, hotel developers, airline managers) as the main reasons for slow growth of Uganda's tourist sector. Other security incidents—the "Bwindi Incident" in 1999;[200] the bomb threats of 1999-2000; repeated highway robberies and the negative publicity and travel advisories[201]--have also contributed to the image problems Uganda faces in its efforts to promote itself in international markets, impeding investment and growth on the ground.[202]

Although Uganda's 2003 National Tourism Policy and Strategy places central importance on increasing safety and security measures as a major issue for tourism, it does not propose any

[200] The "Bwindi Incident" occurred in March 1999 when *Interahamwe* rebels on the run in DRC crossed the Uganda border at Buhoma and abducted 10 tourists, murdering 6.
[201] Travel advisories are issued by foreign missions in Uganda for the purposes of informing travelling citizens and residents of those countries about conditions for travel in and around the country.
[202] This negative image of Uganda has been reported in The Guardian, October 21, 2001; the Mail, Sunday, January 4, 2000; The Sunday Telegraph Magazine, June 12, 2001; and The New York Times, March 4, 2004).

detailed strategy or action plan in this regard. GOU needs to formulate specific measures to improve security and safety in the country, particularly in the north. Development partners may have a role in assisting with the training of security personnel, and providing up-to-date equipment and communications systems. Without improvements in this area, Uganda will continue to have a negative image as a tourist destination in the rest of the world and tourism development will be inhibited.

The second main issue facing the tourism sector is the *need for stronger government commitment* to promote tourism. The recent promotional films produced by Cable Network News (CNN) featuring President Museveni leading a tourist on a gorilla walk is an important step in this direction, as is the passing of the Tourism Bill. However, a stronger case for tourism as a driver for growth and poverty reduction has yet to be made at the political level in Uganda. In comparison, countries which have successful tourism industries (Botswana, South Africa, Egypt, UAE, Mauritius and Seychelles) have governments (in particular ministries of finance) which have been instrumental in developing the tourism sectors through their support and commitment to a tourism growth path. In Kenya, for example, government support (through government funds matching an EU grant) of targeted marketing campaigns backed by solid research and based on sound positioning strategy has helped increase Kenya's tourism by 20 percent.

The weak coordination of GOU planning, implementation, policy development and institutions related to the tourism sector is symptomatic of this lack of commitment. Currently many government institutions are involved in tourism development, including MTTI, NPA, Uganda Tourist Board (UTB), Uganda Wildlife Association (UWA), Ministry of Local Government, MFPED, MWHC, and Local District Administrations. These institutions have overlapping mandates, and there are disconnects between the different arms of government at the national and district levels for planning and implementing tourism development. The Tourism Bill which has recently passed into legislation will help address some of these institutional changes; for instance it indicates new structures for UTB.

There also needs to be a much better understanding of the economic impact of tourism, including its linkages to poverty reduction objectives, to attain greater GOU buy-in at all political levels. In this regard, it is recommended that Uganda creates a system that: (i) collect and share information; and (ii) analyze and present the information within the National Accounts framework. Collecting information requires the institution of annual exit surveys (expenditure and motivation surveys), and an information sharing system needs to be established between UBOS, UTB, URA, MTTI, UWA, foreign visa-issuing nations, regional and district municipalities, and the private sector. Analysis of the information needs to be carried out jointly by MTTI, BOU (Balance of Payments Department), and MFPED (Tourism Desk). Collecting data in this fashion will allow some interpretation of the distributional aspects of tourism income at a regional level. A methodology similar to "poverty mapping" could be adopted to allow the economic impact of tourism to be measured at the district level.

Third, growth in the Uganda tourism sector requires focused and innovative *product and market development*. Currently, Uganda's top tourism products are close to saturation in terms of their ability to absorb further demand (relative to occupancy percentages elsewhere): white water rafting is at 50 percent of its potential; gorilla tracking is at 70 percent; and accommodations in Queen Elizabeth National Park have average annual occupancies of 60 percent. At the same time, however, other tourist areas such as Murchison Falls National Park (with the exception of the low cost Paraa Rest Camp that has occupancies averaging 75 percent), Rwenzori Mountains, Kibale National Park, and Ssese Islands, accommodation supply far exceeds demand with average occupancies below 20 percent.

Given the much higher demand and utilization of low cost accommodation than the "high-end" lodges, as shown by the example in Murchison Falls National Park, there is a need to expand the options for accommodation availability to include a mid-range one that caters to visiting friends and relatives (VFRs), foreign resident and domestic resident markets[203] which might not be willing to "rough it" in low cost camping-style facilities, but would be willing to pay a little more for higher standards.

Uganda has several tourist products that allow it to differentiate itself from its neighboring competitors (Kenya and Tanzania); these are also products that are attracting independent travelers and keeping "package" tourists away. Its product and market development needs to focus on these products both as "stand alone" Ugandan products as well as those complementary to the East African regional offer: mountain gorillas (Bwindi and Mgahinga Forests); easy access to chimpanzees (Kibale National Park); Murchison Falls; white-water rafting; River Nile; Lake Bunyonyi; biodiversity-rich tropical forests; Lakes Albert, George and Edward, all in or near national parks; Ruwenzori Mountains; Semliki Hot Springs; Lake Victoria and the Ssese Islands (boating, water sports, sport fishing).

There is some tourist activity in and around all of these product areas, but it is very basic. Accommodation, interpretation, visitor management, marketing and access are lacking to varying degrees, as well as in depth, imagination and innovation. Tourist infrastructure and appropriate investments around them have not been well planned.

It is recommended that GOU defines and implements a product development strategy that entails growth strategies for 5 market segments: adventure/activity-based tourism; regional packages; foreign residents and VFRs; domestic residents; and specialized activities (see next para.). Market analysis, detailed cost benefit analysis, and value chain research are required for each segment. Guided by these strategies, the private sector is expected to respond to the opportunities for mid-range accommodation through up-grading existing properties or more flexible market-oriented pricing policies.

Development of new tourism products will require stronger cooperation between UWA and the private sector. Specifically, it will require that for protected areas inside national parks, forests, and wildlife reserves, UWA:

- Implement existing concession procedures to develop concession opportunities for canopy walkway in Kibale; hot-air ballooning in Kidepo; mid-range accommodation chain; camping circuit; private management or co-management of revenue-losing national parks or wildlife reserves; houseboats on Lake Albert, and the Nile in Murchison Falls National Park; and improved mountaineering experience in Ruwenzori Mountains.
- Increase number of gorilla viewing permits and sales by undertaking research to review permit availability; drafting agreement for privatizing sales of gorilla permits; and reviewing option of larger tourist group size and "shift" viewing.
- Publicize sites identified for exclusive luxury camping (such as Ishasha at Queen Elizabeth National Park) and provide reliable booking system.

Similar products could be defined outside protected areas. It is recommended that district tourism plans (completed for 2 of the 10 focal tourism districts) are completed for all districts.

[203] While domestic residents do not spend foreign exchange and thus are not counted in tourism earnings, they nevertheless can play a useful role in developing the tourism sector in Uganda—see Volume 2, Chapter 4.

Further, it is also recommended that GOU undertake improvements in infrastructure and institutional changes as follows:

- Tourist rail journey from Nairobi to Jinja and Kampala
- Tourist ferry between Tanzania, Kenya, and Uganda
- Allow regional air charter services to fly into Kidepo, Murchison and Queen Elizabeth National Parks and tarmac runways and improve fencing in these National Parks
- Target two key roads for upgrade: the Ishasha road and Semliki Valley road
- Open immigration offices in Kidepo, Murchison, and Queen Elizabeth National Parks

The fourth main issue is the *low level of demand (regionally and internationally) for leisure tourism in Uganda*. The private sector in Uganda has typically undertaken little effort to research markets and develop professional marketing plans before embarking on tourism investments in Uganda. This could be due to the expense of market research, or low level of awareness of the workings of the international tourism industry. Uganda's presence in tourism markets is a series of ad hoc products that are picked up and promoted in a range of markets. 5 tour operators are actively marketing in a range of source markets, another 15 focus on one or two source markets or particular niches (such as bird watching), while the remainder do not make any effort to sell internationally and exist on sales to the local market and independent travelers. *This is too few to be making an impact*. This is because the tourism markets are flooded with offers from competing destinations, and weak products and messages have little chance getting through to consumers. Basically, "gorillas" is the only message getting through—a recent consumer survey[204] showed that the level of information and awareness about Uganda's tourism does not extend much beyond gorillas. Although Uganda has a strong appeal in the emerging "adventure" tourism segment which could grow significantly in the medium term (at least it could double based on white-water rafting capacity alone), this specific segment is not included in either the UGSTDP Marketing Strategy 2004-2008, nor is it discussed in the 2003 Tourism Policy and Strategy document. Finally, the private sector is also responding weakly to the domestic residents, foreign residents and VFR market (for example, scheduled transportation packages to national parks). These are an important source of consumption for visitation and accommodation in national parks, as well as an opportunity to contribute to year-round occupancies.

Uganda needs to do more to market its existing products. Without marketing and promotion, demand may never be generated for the product in sufficient quantity for it to be viable. Both the public (UTB) and the private sector (the service and accommodation providers) have a role in this, yet both are technically weak and financially constrained in Uganda. Sustained marketing resources are needed, as opposed to those that come with specific donor packages and last a couple of years. There is also a lack of marketing skills. Both finance and skills need to be addressed at four levels: (i) *destination* (Uganda and all it has to offer); (ii) *products* (product definition and pricing; packages including mountains, gorillas, chimpanzees, the Nile, the Lakes, national parks, etc.); (iii) *specific niche activities* (camping and adventure around Uganda, mountaineering in Uganda, luxury and exclusive safaris around East Africa, etc.); and (iv) *specific target segments* (for example foreign residents, VFRs, and domestic residents).

It is recommended that the *tourism levy* be partly allocated to this activity including the hiring of public relations firms in source markets. These contracts should be carefully negotiated to be results-oriented and based on column-inches of publicity, minutes of media coverage, and visits of journalists to Uganda. Since smaller firms (including hotels and lodges) have the most

[204] Undertaken under the Uganda Sustainable Tourism Development Programme (UGSTDP) Marketing Strategy Report 2004-2008, TTC Consultants, Dublin Ireland

difficulty in absorbing advertising costs, they should be assisted through the levy with joint promotion and marketing, combined with a joint computerized reservation system.

Tour operators (and to a large extent sales staff attached to hotels and lodges) in Uganda lack basic sales and marketing skills which is affecting their ability to enter and perform in international markets. Strengthening of training is needed in the following:

- Identification of profitable market segments
- Creation of appeals that resonate with visitor benefits
- Establishment of strategic alliances and public-private partnerships
- Preparation of action-oriented marketing plans
- Recognizing opportunities in tourist spending patterns
- Tracking preferences of target visitors
- Adding value to natural and cultural attractions
- Linking attractions together
- Benchmarking and countering competitor strategies
- Measuring the performance of marketing campaigns
- Determining returns on marketing investments

Finally, aside from sales and marketing skills, *tourism suppliers also have weak skills in a number of areas*. According to the industry operators interviewed for this study, training needs to be focused on the development and training of existing staff. The most urgent training requirements, in addition to sales and marketing, are in the areas of: food preparation and production; health, hygiene & safety; computer skills, including administration and front office programs; customer care and customer relations; supervisory skills; product knowledge.

8.7 ICT EXPORTS

ICT is a nascent sub-sector in Uganda, with most players in this field having been in operation only in the last few years. According to BOU, ICT service exports have increased tremendously since they emerged in 1997/98, from US$0.2m. that year to around US$25m. in 2004/05 (Table 8.3). Three-quarters of ICT exports—US$19m. in 2004/05—are exports of communication services (which consist of telecommunications exports including telephone, electronic mail, faxes, teleconferencing, business network services, etc). The remainder are exports of computer and information services, which include databases, data processing, software, etc.

Table 8.3 ICT Exports from Uganda

	'97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05
Communication	0.2	7.9	9.1	10.2	9.7	13.4	17.0	19.1
Computer and Information	0.0	0.0	0.0	0.0	0.0	2.9	5.7	6.3
Total	**0.2**	**7.9**	**9.1**	**10.2**	**9.7**	**16.3**	**22.7**	**25.4**

Source: Bank of Uganda.

A recent ICT survey by the Uganda Export Promotion Board[205] found that of a sample of 49 Ugandan ICT companies, 17 are exporting services; the range of services, destination of services, and estimated export revenues is provided in Table 8.4

[205] Uganda Export Promotion Board (2005).

Table 8.4 Selected Sample of Ugandan ICT Exports: type, destination, and revenues

Number of Exporting Firms	Type of ICT Services Exported	Destination of Exports	Estimated Export Revenues (US$ per annum)
1	Software development (micro finance, accounting) and training	Global (50 countries worldwide)	200,000
2	Software development (accounting) and training	East Africa	N.A.
1	Software development (customized software)	U.S.A.	N.A.
6	Internet and e-commerce related consulting services including website design	East and Central Africa	N.A.
2	General ICT consultancy services including design and implementation of LANs and WANs	East, Central, West, and Southern Africa	550,000
3	Telecom value-added service (convergence) including SMS	East, Central and Southern Africa	150,000
1	Data processing, book-keeping (online outsourcing)	North America (Canada)	100,000
1	Call center, CRM, and help desk outsourcing services	North America (U.S.A.)	N.A.

Business Process Outsourcing (BPO)[206]

The most back form of BPO is the call center. Experts project that the global call center market will exceed US$90bn. by 2006 and, according to a recent study by Datamonitor, Africa will see the fastest growth in the number of call center workers of any region between now and the end of the decade. Understandably, Uganda is anxious to capture a piece of this growing pie.

There is nascent BPO activity in Uganda, with Uganda's ICT Services Outsourcing Association currently having around 30 members. Uganda's Globenet obtained a contract to telemarket telecommunications services to potential customers for AT&T. Other meaningful investments include Interglobal Services, a US firm, that established a 150-seat call center in Jinja. After a thorough analysis, Uganda is deemed to be an attractive location due to the English-speaking, educated, service-oriented population. While these are positive signs, the experience of Cayman Consults in Uganda (Box 8.1) highlights some of the cautions to be considered for this business to prosper. More generally, some key issues for Uganda's BPO industry development include:

- Labor productivity—call centers from the U.S. will outsource operations if they are able to make at least 40 percent margins on labor costs; low wages are not enough, Uganda must also keep productivity high.
- High connectivity costs—this requires investments in improving the national backbone as the sector grows.
- Accents—although Uganda's English speaking population is an asset in its development of BPO services, those operating in the sector are making concerted efforts to reduce heavy Ugandan accents in response to consumer reactions. Research about call centers in other regions[207] indicates that trust in confidentiality is an issue for U.S. consumers when giving

[206] Discussion in this section is taken from OTF Group (2006).
[207] Infodev and OTF (2005).

out credit card and other information over the phone to agents with accents.

- Perception—the international perception of the location for outsourcing activities is an important factor, as highlighted by a recent interview in The Independent (U.K. newspaper) of a Datamonitor analyst, "We may see prevailing stereotypes of African countries as universally unstable, corrupt, and technologically limited replaced with a more nuanced, country-specific views." As discussed in Section 8.6 on tourism, Uganda has a negative international image due to the insecurity in the north. Recent investors in the sector have noted they believe that Uganda's negative international image is the largest challenge to overcome in selling Ugandan call centers to an international client base.

Box 8.1 Business Process Outsourcing: Experience of Cayman Consults

Cayman Consults provides bookkeeping and data processing for a Canadian client, a small accounting firm. The client provides the server, firewalls, and internet security infrastructure while Cayman provides the internet connection and work stations in Uganda. Cayman employs 5 full-time people for data processing and can tap into a group of 80 trained and certified professionals during "high seasons" (January until March in Canada) during which time there are multiple shifts to ensure 24-hour service. The Canadian firm provides a two-month training program for Cayman employees, focused on practical skills (typing), the more complex aspects of the Canadian tax system, and business basics such as time management and confidentiality. To date 80 Ugandans have been trained.

Although the Canadian firm has been very satisfied with the work attitude and skills of the professionals employed at Cayman, the partnership has been stressed by the slow speed of data transmission because of inadequate bandwidth. It often takes several minutes for the PDF files sent over by Canada to open on the Ugandan side. Since entering data entails opening up documents one at a time, and a typical file can have up to 1000 documents, the turn-around time is too slow especially during the peak months. The Canadian firm has started outsourcing its time-sensitive work to India, where prices are the same but the turnaround is much quicker. Unlike Uganda, most major cities in India have industrial parks equipped with fibre optic technology.

Software Development Industry[208]

While Uganda is unlikely to become a global player in software development exports, there is a domestic and regional market with some potential. According to the 2001/2 Uganda Business Register, 146 formal firms offer computer-related business services in this highly fragmented industry. According to the Uganda Export Promotion Board survey mentioned above, only 3 of the 17 ICT export firms surveyed are actively exporting software on the global market.

One of the firms, Cyrstal Clear Software (CCS), is a success story of a niche software development firm exporting products to a global client base. CCS sells an accounting software product for micro finance institutions that manages savings and loans. It has 170 active clients and the software, which can be tested on its website (hosted in the Netherlands though the firm is registered in Uganda), is available in 4 languages and is used in 50 countries worldwide. In a few of its key export markets, the firm hires local consultants to provide technical help to clients. Other Ugandan software companies are developing software solutions for the local market, such as Digital Solutions. Its first product was timing technology for cybercafés which it is offering

[208] Discussion in this section is taken from OTF (2006).

free for use in 130 cybercafés in Uganda, Tanzania, and Kenya, in exchange for having its banner on the cafes' computer screens. Its next step will be to sell advertising space as part of the software package it sells to cybercafés. Digital Solutions has also developed an SMS technology currently utilized by Uganda's telecom companies.

Although the experience of these companies does not guarantee that Uganda has a future in software development, they do indicate that it is possible for Uganda to develop technology domestically to serve the local and regional markets, and potentially to export niche software products. Several challenges face Uganda as it seeks to expand efforts in this area:

- Connectivity challenges—greater internet access at high bandwidth speeds is needed.
- Distribution—shipment costs make physical distribution of CDs unrealistic on a global level although in the short term this can be overcome by having primary hosting of websites in Europe or North America.
- Human capital constraints—in addition to a basic set of programming skills (which are offered at Makerere University), there needs to be ongoing training in the latest technological developments. In the short-term, Uganda firms can benefit from participation in organizations such as the Microsoft Users Group in Kampala which provides software developers with a forum for sharing ideas, technology, and training.
- Defining realistic market niches—identifying needs in the local Ugandan and East African markets which are going unmet or can be efficiently met at lower costs through locally produced software will provide the best short-term opportunities for Uganda's software firms to develop products that sell.

Infrastructure

A key issue with respect to the 2 types of ICT exports discussed is expanding internet access at higher speeds. This requires that Uganda develop a *national fiber optic backbone* that is able to reach the entire country with the help of microwave and wireless technologies. In addition, this national backbone needs to be connected to the *international backbone* so that the country's current reliance on expensive and erratic satellite technology can be reduced.

With respect to the *national backbone*, Uganda's existing fibre optic networks are very inadequate, concentrating primarily in urban areas with the backbone outside of the capital primarily based on microwave radio relay links which uses radio to provide phone service as opposed to copper wires or fiber optic cables. From the point of view that the country's long-term development goals hinge in part on the existence of a well-functioning, broad-reaching technological backbone, the proposed model for backbone development is that it should be considered a public good and made available for all to use at set prices, rather than just as a money-making venture. This is the so-called "open access" model whereby infrastructure provision is left in the hands of one entity (the government or a partnership between private sector and the government) while competition takes place in the form of service provision that feeds off of this backbone infrastructure. This model is considered the cutting edge of service and infrastructure provision, and is a major paradigm shift that requires a unified vision, a strong regulatory body, and an environment of transparency and trust between the various firms in the consortium.

Proposals to increase Uganda's national backbone include the development of a "fiber-optic" star reaching out from Kampala into the various districts of the country, with an estimated cost of US$45m. An alternative proposal is building a fiber-optic ring around Kampala and surrounding

urban areas, laying the foundation off which "last mile access" can be facilitated through the use of microwave and wireless technologies that facilitate higher-speeds of access. Before any decisions on medium- and long-term strategies are considered, a key first step should be the carrying out of a detailed feasibility study to help GOU determine where investments going forward should be made, and whether an open access model as described above should be adopted and how it should be structured. The feasibility study should look at the current state of infrastructure and services in Uganda—providers, the existing grid for various types of infrastructure, levels of access to services, and likely levels of demand on a district-by-district basis. A public-private-donor task force should be created to assess the creation of an entity to provide infrastructure development (in the context of the open access model), to explore models that have worked in other countries, and to develop specific recommendations. Activities and dialogue in this area should be centralized in the newly created Ministry of ICT, which needs to be empowered to drive the discussions and to take action.

The situation of Uganda's *international backbone* is worse than that of its national backbone. Unlike countries in western, southern, and northern Africa which are connected to submarine fibre optic cable systems that provide both intra regional and international access, east Africa (and Uganda) has no such connection. Uganda has to rely on satellites to access international data and communication systems, which is very expensive compared to connection via fibre optic cables. Moreover, satellites have limited bandwidth capacity, and experience transmission delays.

The East African Submarine System (EASSy) aims to provide high-capacity submarine fibre optic cables to increase international connectivity between Africa and the international community (Figure 8.5). The project involves the construction of a 9,900 km submarine fiber optic cable system that would link the East African seaboard from Durban, South Africa, through Mozambique, Madagascar, Tanzania, Kenya, ending in Djibouti.[209]

Linking into the EASSy network would enable Uganda to move away from its dependency on costly satellite technology and facilitate rapid access to non-locally hosted website content. It would also bolster regional trade by making regional communication easier and less expensive. Ugandan telecom operators, Uganda Telecommunications Limited (UTL) and Mobile Telephone Networks Uganda (MTN Uganda), have partnered up in laying a fibre optic cable connecting Uganda to Kenya in order to be ready when the undersea cable running from South Africa to Kenya is complete.

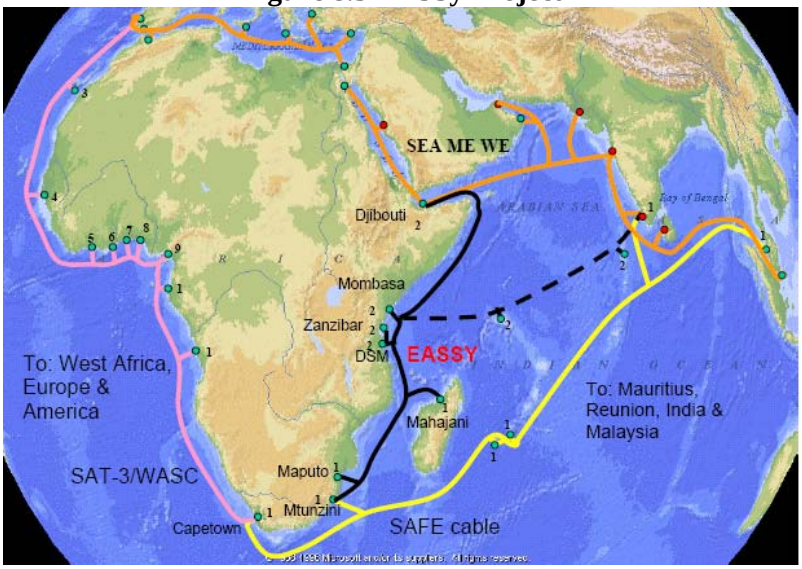
The EASSy project has been delayed because of disagreements over its financing and ownership structure. The dispute over the ownership structure is between the current EASSy consortium of 31 telecommunications companies which are in favor of a members-only ownership structure, and those who favor an open access model. Supporters of the open access model, including the New Partnership for Africa's Development (NEPAD) and the World Bank (which has offered to fund this project if that model is chosen), believe that the fiber optic cable is a public good for improving and expanding services available at the country level. The open access model would allow any operator to buy capacity at a standard cost price with profits made on the sale of auxiliary services and not on the infrastructure itself. This model would avoid the situation of SA3 cable, where a closed consortium model of ownership has resulted in no significant drop in international connectivity costs for Africans. Kenya, which objects to the open-access model, is

[209] The EASSy project would help to decrease the cost of connectivity, facilitate rapid access to non-locally hosted website content, and bolster inter-Africa trade by making regional communication easier and less expensive. A preliminary feasibility study estimates that the project would cost US$200m.

considering pulling out of the EASSy Project and constructing its own parallel cable to rival that of EASSy.

Uganda needs to continue to explore ways to participate in the EASSy project, including playing an active role in dialogues about how to encourage the project to proceed. It should also explore alternative solutions to international connection should EASSy not come to fruition, including the option of collaborating with Kenya on their own cable.

Figure 8.5 EASSy Project



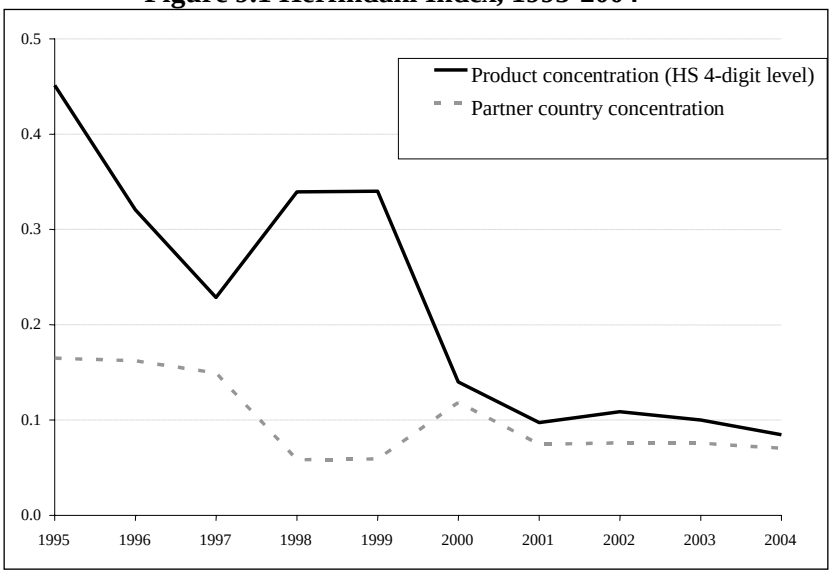
9. ACCESS TO EXTERNAL MARKETS

Addressing the cross-cutting and sub-sector specific constraints discussed in the preceding chapters may not be sufficient for promoting Uganda's exports if there are barriers to entry in Uganda's external markets. The analysis in this chapter groups these barriers into two sets: those pertaining to international markets, and those pertaining to regional markets. With respect to international markets, the dominant features of market access for Uganda are the preferential access granted by industrial country markets to Uganda and its ability to utilize such preferences, as well as its role in and the impact of the WTO negotiations and the negotiations of the Economic Partnership Agreement with the EU. With respect to regional markets, the dominant factors are Uganda's membership in various RTAs, complicated by the overlap between these.

9.1 ACCESS TO INTERNATIONAL MARKETS

As already been highlighted in Chapter 1, Uganda has made considerable progress in diversifying its exports. This is reflected in declining trend of the Herfindahl index[210] of export concentration for both the type of products exported and the foreign partner countries (Figure 9.1). The shift towards more broadly based export products and partners was particularly pronounced during the second half of the 1990s, and appears to be continuing.

Figure 9.1 Herfindahl Index, 1995-2004



Source: UN COMTRADE database.

Notwithstanding the encouraging diversification trend, Uganda's exports remain highly concentrated in a limited number of commodities and partner countries. The top-5 product lines, which are all commodities, accounted for more than 55 per cent of total exports. Diversification of both products and markets will reduce the vulnerability of Uganda's exports. It is therefore important to review the barriers to entry in the world markets for Uganda's main exports as well as its potential exports. This report discusses tariff barriers in the international markets; other

[210] The Herfindahl index H is calculated as the sum of the squares of partner country/product line market shares: $H = \sum_i s_i^2$, where s_i represents the share of partner country/product line i in total exports. Lower values imply less concentration.

barriers, specifically technical barriers to trade, were discussed in Chapter 5 of this report on Standards.

Trade Barriers in International Markets

According to a recent World Bank study that estimated a measure of aggregate barriers faced by exporters, Uganda ranks in the third of the sample of 91 countries that is facing relatively low tariff and non-tariff barriers to exports.[211] Notwithstanding these findings, Uganda's main exports (fish fillets, coffee, tea, tobacco, and cotton) face considerable MFN tariffs among the world's twenty largest importers of these products, especially in the medium income countries (Table 9.1). For instance, Mexico levies a 30 per cent tariff on fish fillets, India charges import duties of 100 per cent on coffee and tea, Sri Lanka has 75 per cent tariffs on tobacco, and China asks cotton importers to pay duties of 47 per cent. Furthermore, these high tariffs are not diluted by trade preferences which Uganda enjoys from industrial countries (see discussion in next section). Even in the absence of trade preferences, import duties on these products in industrialized countries are generally much lower and of a single digit magnitude, with the exception of fish and tobacco in the European Union, tea in Japan, and notably tobacco in the United States. While high tariffs in middle income countries for Uganda's main exports is currently not an issue, since such exports have not yet reached their full potential in existing (mostly European) markets because of production constraints, this would still be a useful area for Uganda to focus on at the Doha negotiations, particularly in light of their importance for poverty reduction.

Tariff escalation in both developed and developing country markets could also constrain Uganda's ability to diversify exports. Tariff escalation affords higher protection to final goods than intermediate goods, which confines the exporting countries to raw material rather than value-added exports. Uganda faces escalatory tariff regimes in both developed and developing country markets for some of its key exports (Figure 9.2) although preferential trade arrangements extended by many developed countries to Uganda also help dilute the effects of tariff escalation.

Impact of Trade Preferences in Industrialized Country Markets

Uganda's exporters benefit from reduced-tariff access to industrialized country markets under preferential treatment schemes, the main ones being the Generalised System of Preferences (GSP), the European Union's Cotonou Agreement and Everything But Arms Initiative (EBA), and the United States' African Growth and Opportunities Act (AGOA). The extent of duty reductions, product coverage, and rules of origin (ROO) specifications differ across the various arrangements (Box 9.1), but the largest benefits in these arrangements accrue to least developed countries. The potential advantages for Uganda of these preferential arrangements are considerable, since the country ships most of its exports to preference granting partners.

The actual value of the preference schemes to individual developing countries depends on several factors. Obviously, preferences are valuable only if there is a positive preference margin over non-eligible countries' supplies, that is if the importing country has non-zero MFN-duties in the tariff lines of interest. Moreover, the value of preferences depends on the costs involved in showing compliance with rules of origin requirements. If these costs exceed the MFN-duty, exporters will not bother to ask for preferential treatment, but pay the tariff. Finally, the benefits from preferences depend on the volume of goods the country is allowed to export to the target

[211] Kee et al (2005).

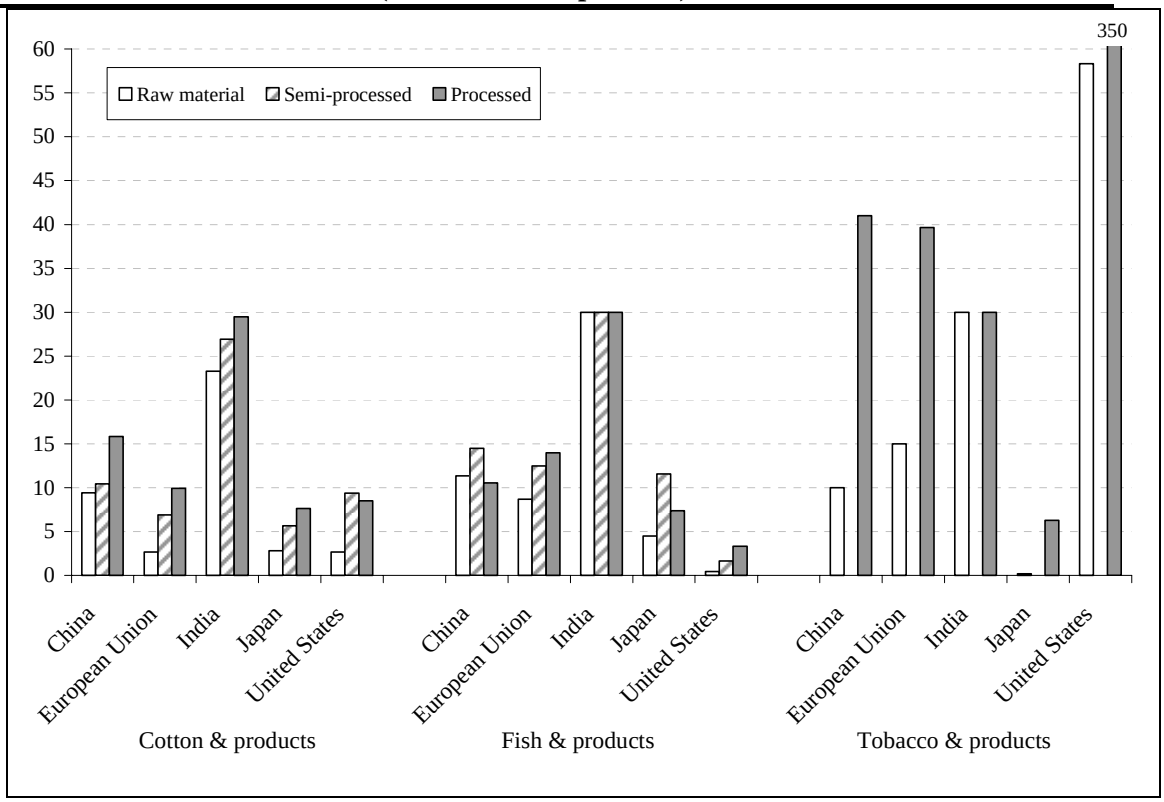
market, for example under preferential tariff rate quotas, as well as the supply capacities of the exporting country.

Table 9.1 Simple Average of MFN Barriers on Uganda's Main Exports in Potential Partner Countries, 2004

	Fish fillets (HS 0304)	Coffee (HS 0901)	Tea (HS 0902)	Tobacco (HS 2401)	Cotton (HS 5203)
Argentina	..	11.5	..	..	..
Australia	0.0	0.0	0.0	0.0	0.0
Bangladesh	..	..	..	..	0.0
Brazil	11.5	..	..	..	..
Brunei	..	..	..	..	0.0
Bulgaria	..	13.2	..	27.5	..
Canada	0.0	0.0	0.0	..	2.5
Chile	..	6.0	6.0	..	..
China	13.9	13.2	15.0	10.0	47.2
Colombia	20.0	..	..	11.7	..
Croatia	10.0	6.3	..	11.3	..
Cuba	10.0	..	..	..	..
Dominican Republic	20.0	..	..	..	0.0
European Union	10.9	5.3	0.8	14.5	0.0
India	..	..	100.0	..	30.0
Indonesia	5.0	..	..	5.0	5.0
Israel	0.0	0.0	0.0	..	0.0
Japan	4.4	6.0	11.7	0.0	0.0
Kenya	0.0	0.0	15.0	20.0	..
Macedonia	..	14.0	..	..	..
Mali	..	..	10.0	..	..
Mexico	30.0	52.4	..	51.1	10.0
New Zealand	0.0	3.3	0.0	..	..
Pakistan	..	..	17.5	25.0	..
Paraguay	..	..	..	14.1	..
Peru	..	..	..	12.0	..
Romania	23.2	9.0	..	46.7	0.0
Russian Federation	10.0	5.0	5.0	5.0	0.0
Saudi Arabia	5.0	0.0	1.5	..	5.0
Senegal	..	..	10.0	5.0	..
Singapore	0.0		0.0	0.0	
Sri Lanka	..	..	27.5	75.0	0.0
Switzerland	0.0	0.0	0.0	0.0	..
Tunisia	..	28.3	44.0	29.0	0.0
United States	1.0	0.0	1.6	58.3	4.8
Vietnam	..	..	..	27.5	0.0

Note: (..) means that the country is not among the world's top-twenty importers of the respective commodity. For the European Union, data for 2003 are reported and specific duties are converted into *ad valorem* equivalents. For the Russian Federation, data for 2002 are reported.
Source: UNCTAD Trains database.

Figure 9.2 Tariff Escalation for Selected Products, 2004
(MFN tariffs in per cent)



Note: For the European Union, data for 2003 are reported. The categorization of products as unprocessed, semi-processed and processed goods follows the MTN (Multilateral Trade Negotiations) classification of the World Trade Organization. For tobacco, no semi-processed products exist in the MTN classification.
Source: UNCTAD Trains database.

In 2002, the total value to Uganda of preferential market access in the European Union, Japan, and the United States is estimated to amount to US$10.5m. (Table 9.2), equivalent to 2.2 percent of total exports or 0.015 per cent of GDP. Almost all of these benefits are due to preferences in the EU market. Most imports into the EU used ACP rather than EBA preferences due to the less strict ROO of the former. The average preference margin obtained on all exports to the three markets amounted to 8.5 percent. For individual products, the preference margin was even more important and commercially interesting. For example, for some Ugandan exports of seafood products to the EU, the preference margin amounted to 21 per cent of the import value.

Overall preference utilization, that is exports that used preferences as a share of the exports that were eligible for preferential treatment, amounted to more than 97 per cent. The utilization rate for agricultural products was significantly higher than that for manufactures, and exports to the EU benefited more consistently from preferential treatment than shipments to Japan and the United States. In fact, none of the exports to Japan that were eligible for preferences during 2002 used them, which could be due to uncertainty about the applicability of the schemes given the small-scale and infrequent shipments to the Japanese market.[212]

[212] Other explanations that have been put forward for generally low use of preference schemes by developing countries include constraints on complying with rules of origin (Brenton and Imagawa, 2004);

Box 9.1 Major Preferential Market Access Programs

The *Generalised System of Preferences* is based on the 1979 Enabling Clause that created a permanent waiver to the most-favoured-nation provision in the General Agreement on Tariffs and Trade. Under GSP, selected products originating in developing countries are granted non-reciprocal preferences in the form of reduced or zero tariff rates. Least developed countries (LDCs) receive preferential treatment for a wider coverage of products and deeper tariff cuts. GSP schemes represent unilateral preferences that differ in their design and duration across preference granting countries. The following countries currently operate GSP schemes: Australia, Belarus, Bulgaria, Canada, the European Community, Japan, New Zealand, Norway, the Russian Federation, Switzerland, Turkey and the United States of America.

The *Cotonou Agreement* of 2000 between the EU and 77 African, Caribbean and Pacific (ACP) countries provides preferential access to the EU market in addition to and beyond GSP. The Agreement grew out of the Lomé Convention that governed the relations between the EU and its former colonies in the ACP region from 1975 until 2000. It grants comprehensive market access preferences and allows partners to count the value-added in imports from other ACP countries as local input when determining the origin of a product ("full cumulation"). However, the EU has exempted bananas, beef, and sugar from the preferential access arrangements. The Agreement has been concluded for twenty years, with a clause allowing for revision every five years. In 2008, the present market access preferences are supposed to be replaced by arrangements to be agreed upon in Economic Partnership negotiations.

The EU's *Everything But Arms* initiative of 2001 grants duty-free access to imports of all products from LDCs, except to arms and munitions. Only imports of bananas, rice and sugar were not fully liberalised immediately. Duties on those products will be gradually reduced until duty free access will be granted for bananas in January 2006, for sugar in July 2009 and for rice in September 2009. In the meantime, there are duty free tariff quotas for rice and sugar. The EBA provisions have been incorporated into EU's GSP scheme. The rules of origin of the latter allow for "diagonal cumulation" in only four regions: in the Caribbean, East Asia, Latin America, and South Asia, intermediate inputs from regional partners are counted as local value-added if the degree of prior transformation of the inputs would have conferred origin in the regional partner country. Outside these regions, only imported inputs from the EU can be counted towards local value-added ("bilateral cumulation"). The regulation on EBA foresees that the special arrangements for LDC's are to be maintained for an unlimited period of time.

The *African Growth and Opportunities Act* of 2000 extends the GSP scheme of the United States to additional products, notably garments, from African countries that satisfy certain economic, social and political criteria. A special program for countries with a gross national product per capita of less than US$1500 relaxes the otherwise strict rules of origin for apparel and allows qualifying countries to count yarn and fabric from anywhere in the world as local content in apparel assembled in their countries. AGOA is a time-bound program that requires periodic renewal by the US Congress. The special textile benefits expire in September 2007, while the overall program is scheduled to run until 2015.

and costs of satisfying requirements related to certification, traceability and administrative documentation (Estevadeordal and Suominen, 2003).

Uganda's preference utilization in its main export market, the European Union, was very high in 2002, exceeding that of many other countries in Eastern and Southern Africa (Figure 9.3). Hence, Ugandan exporters seem to be able to meet the requirements for preferential treatment on a consistent basis. There might, of course, be cases in which the market access conditions are so demanding that exporters do not (or no longer) try to serve the European market, but direct their supplies elsewhere right away. *Given the relatively high preference utilization rates, lack of domestic supply capacities might well be more of a constraint to export growth than barriers in the European market.*

Since 2002, there has been one important shift in Uganda's preference utilization concerning apparel exports to the United States under AGOA. Uganda has qualified for AGOA preferences since October 2000 and became eligible for the special apparel benefits under the program in October 2001. Since then, apparel exports to the United States have been growing very dynamically, increasing from zero in 2002 to more than US$4m. (Table 9.3). The expansionary trend continued into 2005, despite a more competitive international apparel market environment following the phase-out of quantitative restrictions on textile and clothing exports under the Multi-fibre Arrangement.

However, Uganda's competitive advantage in apparel production is questionable, given the lack of locally produced yarn and fabric that is of appropriate quality and competitively priced. Current exports to the United States make use of the special, very liberal ROO requirements under AGOA, which allow Ugandan exporters to utilize low-cost fibre from Asian suppliers in their US-bound production. Even with such liberal ROO, Uganda still has to incur high transportation costs for importing such raw materials due to its landlocked status and other transport and trade facilitation issues it faces, which reduces its competitiveness and the viability of the industry (see Chapter 6 for a more detailed discussion). With the tightening of the ROO, as seems likely with the termination of the special rule for lesser developed countries in September 2007, the viability of the Ugandan apparel export industry would be further called to question.

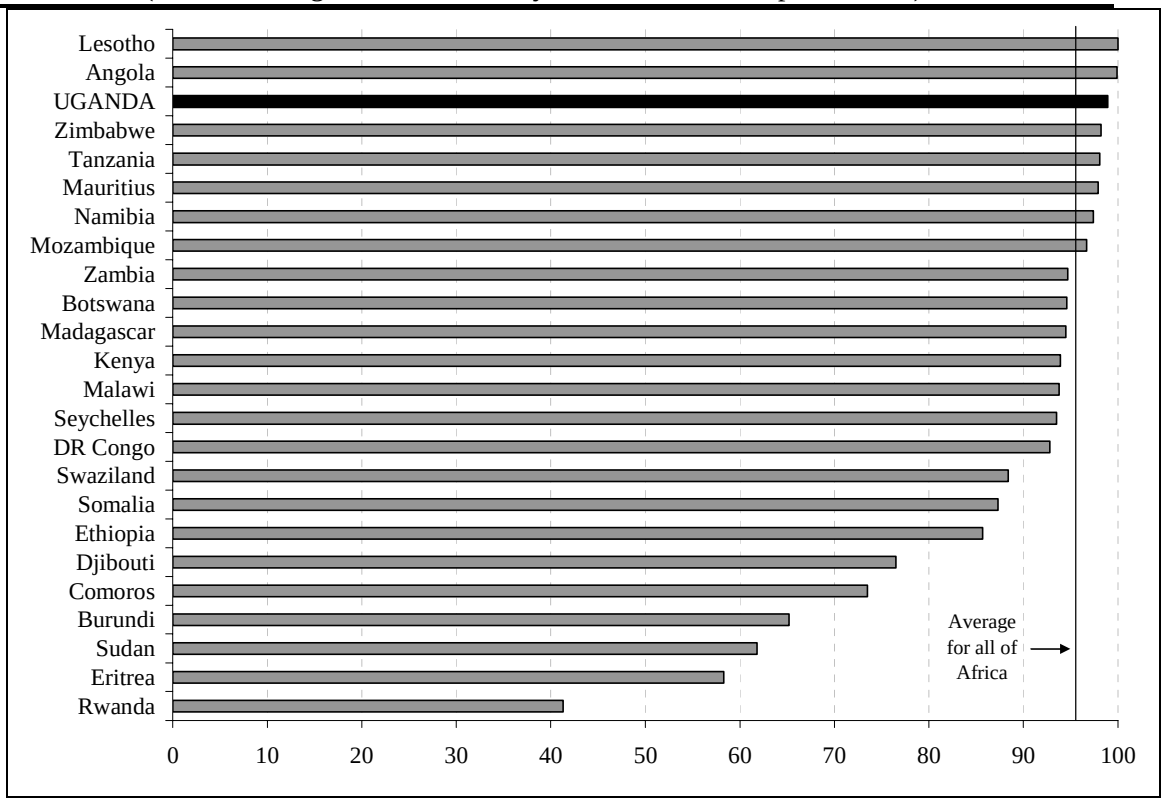
GOU has actively tried to encourage companies to exploit opportunities under AGOA and has extended considerable political and financial support to the apparel export industry in its efforts to serve the US market. There have been recent press reports ("Ugandan Company to Export Steel to US", The Monitor, Oct. 17th, 2005) that GOU is also supportive of attempts to launch stainless steel exports to the US in order to benefit from AGOA. A steel plant is reported to have invested US$10m. to upgrade and expand its facilities in order to satisfy US quality standards. Ugandan exports would benefit from a preference margin of about 30 per cent on their stainless steel shipments under AGOA, which is considerable. However, steel production is a very capital intensive activity; it is unclear whether Uganda has a long-term comparative advantage over other competitors in steel production and whether there would be any significant employment creation effect from the investments.

Table 9.2 Preference Utilization in Major Markets, 2002
(US Dollars and percent)

	Agriculture	Manufacturing	All Goods
*Imports into the **EU, Japan and USA***			
Total shipments	233 410 554	39 827 861	273 238 415
Dutiable trade (MFN>0)	130 113 171	2 840 619	132 793 202
Trade eligible for trade preferences	121 175 465	2 839 894	124 015 360
Trade requesting trade preferences	120 026 100	362 475	120 388 575
Share of eligible trade requesting preferences	99.1%	12.8%	97.1%
Potential value of preferences	10 738 401	99 347	10 837 748
Value of preferences actually requested	10 519 493	18 272	10 537 765
Preference utilization rate	98.0%	18.4%	97.2%
Potential preferential margin	8.9%	3.5%	8.7%
Realized margin on trade eligible for preferences	8.7%	0.6%	8.5%
*Imports into the **EU***			
Total shipments	205 569 125	38 387 140	243 956 265
Dutiable trade (MFN>0)	121 144 403	2 677 008	123 821 411
Trade eligible for trade preferences	121 144 403	2 677 008	123 821 411
Trade requesting trade preferences	120 013 594	343 095	120 356 689
Share of eligible trade requesting preferences	99.1%	12.8%	97.2%
Potential value of preferences	10 736 861	81 041	10 817 902
Value of preferences actually requested	10 518 893	17 449	10 536 342
Preference utilization rate	98.0%	21.5%	97.4%
Potential preferential margin	8.9%	3.0%	8.7%
Realized margin on trade eligible for preferences	8.7%	0.7%	8.5%
*Imports into **Japan***			
Total shipments	14 103 806	440 385	14 544 191
Dutiable trade (MFN>0)	8 953 536	4 522	8 958 058
Trade eligible for trade preferences	15 831	4 522	20 353
Trade requesting trade preferences	0	0	0
Share of eligible trade requesting preferences	0.0%	0.0%	0.0%
Potential value of preferences	475	167	642
Value of preferences actually requested	0	0	0
Preference utilization rate	0.0%	0.0%	0.0%
Potential preferential margin	3.0%	3.7%	3.2%
Realized margin on trade eligible for preferences	0.0%	0.0%	0.0%
*Imports into the **USA***			
Total shipments	13 737 623	1 000 336	14 737 959
Dutiable trade (MFN>0)	15 232	159 089	13 733
Trade eligible for trade preferences	15 232	158 364	173 596
Trade requesting trade preferences	12 506	19 380	31 886
Share of eligible trade requesting preferences	82.1%	12.2%	18.4%
Potential value of preferences	1 066	18 138	19 204
Value of preferences actually requested	600	823	1 423
Preference utilization rate	56.3%	4.5%	7.4%
Potential preferential margin	7.0%	11.5%	11.1%
Realized margin on trade eligible for preferences	3.9%	0.5%	0.8%

Notes: The value of preferences is calculated by multiplying the value of imports by the margin between MFN and preferential tariff rates. For the USA, data averages for 2002 and 2003 are used.
Source: World Bank staff based on data from the European Commission, Japan and the United States.

Figure 9.3 Preference Utilization Rates in the EU Agriculture and Food Market, 2002
(Percent of eligible, non-zero duty trade that received preferences)



Source: OECD, 2005.

Table 9.3 US Imports from Uganda, 2002-2005
(thousand US dollars)

	2002	2003	2004	2004 (Jan-Jun)	2005 (Jan-Jun)
Total US Imports from Uganda	15 229	36 392	30 957	17 170	14 967
- Non-AGOA	15 165	33 374	20 663	11 914	10 579
- AGOA	32	1 509	5 147	2 628	2 194
-Agriculture	13	30	1 008	1 008	15
- Textiles	0	1 433	4 009	1 585	2 162
- Other	19	46	130	35	17

Source: United States Department of Commerce.

Negotiations of An Economic Partnership Agreement

Following the dispute at the WTO over the EU's banana import regime, the non-reciprocal trade preferences provided by the EU's Cotonou Agreement with former colonies in Africa, the Caribbean and the Pacific (ACP) will not be allowed after 2007. As an alternative, Economic Partnership Agreements (EPAs) involving reciprocal preferences are to be negotiated simultaneously between the EU and a large number of regional blocks of ACP countries.

The EPA negotiations started in 2004 and are supposed to conclude by the end of 2007. To facilitate the negotiation process and to enhance the development impact of the agreements through increased intra-regional trade, the EU intends the EPAs to be signed with free trade areas

or customs unions rather than individual countries. All countries in Eastern and Southern Africa are involved in the EPA process, except Egypt, Somalia and South Africa. Since early 2004, two country groupings for the negotiations have established themselves: the ESA-EPA group of 16 COMESA members and the SADC-EPA group of seven SADC members (Figure 3.2). However, neither of the two negotiating groups corresponds in its composition exactly to the existing RTAs. Of the seven countries that are members of both COMESA and SADC, five have opted to negotiate in the context of ESA-EPA and two as part of SADC-EPA. As a member of COMESA but not SADC, Uganda has naturally joined the ESA-EPA group.

While negotiations between the EU and the two groupings are already ongoing, the regional configuration remains an issue for discussion and concern. Tanzania is negotiating as part of SADC-EPA, while its EAC partners Kenya and Uganda are members of the ESA-EPA group. Unless the two negotiating tracks are closely coordinated, differences in commitments *vis-à-vis* the EU could emerge among the EAC partners that would make the implementation of the EPAs within the existing EAC customs union cumbersome and costly. Moreover, if SADC-EPA and ESA-EPA were to pursue deeper regional integration and form customs unions, this would certainly lead to contradictory requirements (see discussion on Overlapping RTAs in Chapter 3). Negotiating as an EAC group could sidestep these conflicts, although the window of opportunity for this seems already closed.

The prospective EPA agreement will not improve the preference margins that countries like Uganda currently enjoy in the EU market. As a least developed country, Uganda is eligible for duty and quota free access to the EU market under the EBA initiative, which is of unlimited duration. However, the EBA rules of origin are more restrictive than those under the Cotonou Agreement, notably by not allowing "full" regional cumulation. GOU, therefore, might aim in the EPA negotiations to obtain rules of origin provisions that are at least as favorable as those currently enjoyed under Cotonou, such as "cumulation". And if it were possible to negotiate more favorable specifications that confer origin based, for example, on a simple change of tariff heading or a low value-added rule, additional market access opportunities for Ugandan exporters would open up. On the imports side, reciprocity means that over a 12 year transition period from 2008 to 2020, Uganda would have to open its market to supplies from EU members.

The coverage of the EPA negotiations is *a priori* not limited to the goods sector, but might also embrace services. This part of the negotiations could provide opportunities for GOU to request EU support for transport and trade facilitation measures identified in Chapter 6 that would help reduce Uganda's disadvantages as a landlocked country. GOU might also use the EPA negotiations to lock in and advance reforms of its domestic services sector. Policies that restrict international trade in services are typically domestic regulations, some of which serve important policy objectives (for example prudential regulations in the banking sector). Technical assistance could be sought for identifying services sectors that may be liberalized through such negotiations.

According to statistical analysis undertaken by the Bank,[213] the impact of an EPA on Uganda is expected to be very small (there are several caveats to the analytical work which are discussed in the paper; an additional one is that 2001 rather than CET tariffs are used as the basis for simulations, so the results presented here should be taken as illustrative of directional and relative magnitudes of changes). The small impact is due to the already relatively low level of tariffs in Uganda, and the pre-existing relatively unrestricted access to EU markets as discussed earlier in

[213] In a paper by Anderson and van der Mensbrugghe (2006), commissioned for the DTIS. They undertook simulations using a global computable general equilibrium model, LINKAGE, which is used by the World Bank to project the world's economies to 2015 under various scenarios.

this chapter. The impact would be small regardless of whether ACP countries free trade or not amongst themselves at the same time—it would be -0.1 percent of GDP in the former case and -0.2 percent of GDP in the latter (Table 9.4). The outcome is expected to be somewhere in between, as some freeing of trade is expected among ACP countries as regions within Africa will be forming regional arrangements first before each of those arrangements negotiate with the EU, as mentioned earlier.

Table 9.4 Estimated Changes in Real Value-Added by Sector with an EPA (change in 2015 relative to baseline)

	EPA without free trade across ACP		**EPA with free trade across ACP**	
	$million	Percent	$ million	Percent
Agriculture	***5.0***	***0.1***	***12.3***	***0.3***
Grains	4.4	0.7	8.8	1.4
Sugar	0.3	0.2	0.7	0.5
Plant based fibres	1.4	1.6	-1.9	-2.2
Vegetables and fruits	-3.2	-0.1	-4.2	-0.2
Other crops	7.0	1.1	20.5	3.3
Livestock	-4.7	-0.5	-11.7	-1.2
Processed foods	***-9.0***	***-1.9***	***-4.7***	***-1.0***
Processed meats	-0.2	-1.1	-0.5	-2.3
Dairy products	0.4	3.8	0.4	3.8
Other foods	-9.2	-2.1	-4.7	-1.1
Fossil fuels	***-0.4***	***-0.5***	***-3.7***	***-4.9***
Other natural resources	***-1.6***	***-0.8***	***-3.2***	***-1.7***
Manufacturing excl proc. foods	***-9.4***	***-3.5***	***-6.8***	***-2.6***
Textile and leather	-1.9	-3.9	-1.6	-4.6
Wearing apparel	-1.6	-4.7	-0.3	-2.2
Chemicals rubber & plastics	-0.3	-15.3	1.3	60.9
Other manufacturing	-7.2	-3.3	-6.2	-2.9
Construction and Services	***0.1***	***0.0***	***-1.6***	***0.0***
Total	***-15.3***	***-0.2***	***-7.8***	***-0.1***

Source: Anderson and van der Mensbrugghe (2006).

The small overall effect masks differences between sectors with respect to changes in value-added: agriculture would grow at the expense of manufacturing and construction and services, and even more so if intra-ACP trade were also liberalized at the same time. (Note that the simulations do not include services trade reform, such that the estimated contraction in the value-added of the construction and services sector is due to resources—capital and labor—moving to the expanding sector, that is, agriculture). Most agricultural subsectors would gain, with the exception of fruits and vegetables, and livestock, which would suffer small losses of 0.1, and 0.5 percent, respectively. All the processed food subsectors would lose by around 1 to 2 percent, with the exception of dairy which would gain by nearly 4 percent. Natural resource sectors would lose, as would manufacturing subsectors, with losses ranging from around 2 percent for apparel to around 5 percent for textiles and leather. The chemicals, rubber and plastics sub-sector would face a loss of 15 percent if ACP countries do not liberalize (as resources move into other subsectors that face a more favorable trading regime and as the subsector itself faces additional competitive pressures from imports), and a large gain of over 60 percent if other ACP countries liberalize (due to the elimination of protection in the latter). It should be noted that the reported

simulation results do not take into account dynamic benefits, such as those derived from increased competition, expanded investments, and enhanced technology transfer, which are difficult to quantify.

Multilateral Trade Negotiations

While preferential trade liberalization can be advantageous, some objectives can be better achieved at the multilateral level. In particular, adverse effects from trade diversion are avoided, the complexity of trade regulations is reduced, and better market access can be achieved in countries that are unwilling to extend preferential agreements. Moreover, highly sensitive issues, such as agricultural subsidy reductions in industrialized countries, can only be effectively addressed in a multilateral forum. The multilateral trading system also provides a legal framework that treats all members equally, irrespective of their economic status. Uganda has recognized these advantages and has been participating in multilateral negotiations as a founding member of the WTO.

Research undertaken by the Bank[214] has shown that Sub-Saharan Africa (SSA) as a whole could more than proportionally gain from multilateral reform, but countries will need to take a proactive stance in the negotiations to secure a positive outcome. Opening agricultural markets in industrialized countries is projected to result in large benefits for poor African countries, but the reductions in tariffs, domestic support and export subsidies need to be ambitious. Exempting even just a few "sensitive" or "special" products could reduce hugely the gains from reform, since these products are likely to be the tariff peak items. Expanding non-agricultural market access at the same time as reforming agriculture is equally important for SSA. In Uganda's case, expanding market access to middle-income developing countries is equally important, in light of the high tariffs Uganda faces in some of these countries for some of its key exports and the absence of preferential trade access to these markets as discussed earlier.

On their part, developing countries need to pursue further reforms in manufacturing and services to improve the prospects of concessions by industrialized countries concerning agriculture, as well as to obtain greater efficiency gains in SSA. Uganda currently has tariff bindings in 815 out of 5028 tariff lines (Table 9.5). Its bound rates, as well as those of its EAC partners, are generally well above the applied tariffs, so that significant binding overhang exists. Hence, Uganda could offer in the Doha negotiations to significantly expand its binding coverage and reduce bound rates, without necessarily facing major adjustments in its trade regime and domestic economy. As discussed in Chapter 3, further reductions in EAC external trade barriers might be desirable for reaping benefits from a more open trade regime, but such a liberalization would likely not be forced on Uganda and its EAC partners by Doha, but remain in its extent and timing subject to unilateral policy decisions.

The issue of preference erosion has emerged as a potentially important one for LDCs in the context of the current Doha round of WTO trade negotiations. Specifically, the concern is that liberalization of MFN tariffs by developed and developing countries for both agricultural and non-agricultural goods proposed under the Doha round of trade negotiations would expand exports from competing countries (as these would face lower tariff barriers in developed country markets) to the detriment of the poorer developing countries which currently benefit from trade preferences.

[214] Anderson, Martin, and van der Mensbrugghe (2005).

Table 9.5 WTO Tariff Bindings of EAC Members

Country	Number of bound tariff lines	Minimum binding (%)	Maximum binding (%)
Kenya	748	18	100
Tanzania	755	120	120
Uganda	815	40	80

Source: WTO Consolidated Tariff Schedules database.

Analysis undertaken by the World Bank[215] indicates that the overall effect of the Doha Round on GDP in Uganda would be small, amounting to around -0.2 percent (Table 9.6) (the same caveats apply as for the simulations for the EPA scenarios).[216] The overall small effect masks some differences between sectors—value-added of services would grow somewhat (0.1 percent) while agriculture and manufacturing would decline. The decline of agriculture as a whole would be small, of only around 0.3 percent. The impact on the individual agricultural sub-sectors is also expected to be rather small, with other crops (which include coffee, tea, tobacco, spices, and cocoa) expected to lose by about 2 percent. The exception is plant-base fibres (mostly cotton), which is expected to have a large gain, by around 19 percent. This 19 percent gain is based on an assumption of complete removal of EU and US subsidies on cotton, which is not likely to happen. A more realistic scenario would be the reduction of such subsidies by 30 percent, which means a gain of 6 percent for Uganda. The overall impact on processed foods is also expected to be small, with a decline of about 0.9 percent; within processed foods, however, dairy products are expected to enjoy a sizeable gain of 7 percent. The changes in value-added for other manufacturing sub-sectors are also small, ranging between -1 and 1.5 percent. Interestingly, the analysis indicates that Uganda would fare a little worse under the Doha scenario[217] than under the EPA Agreements.

9.2 ACCESS TO REGIONAL MARKETS

As discussed in Chapter 1, the regional markets have an important place in Uganda's external trade. Kenya, DRC, Rwanda, and Sudan are amongst the top ten export markets for Uganda in 2004. They are also members of RTAs (EAC and COMESA) in which Uganda is a member: Kenya is a member of EAC and COMESA, whereas both Rwanda and Sudan are COMESA members. Uganda's trade with these regional markets is expected to become even more significant in the future after Rwanda joins the EAC (expected in 2006), and in light of the recent peace agreement in Sudan which is expected to lead to larger trade flows with that country (see Chapter 1). Uganda can further enhance its trade links with regional markets by addressing the conflicts arising from being members of overlapping RTAs, in particular those pertaining to ROO requirements; and advancing its accession to the COMESA Free Trade Area.

Conflicting Rules of Origin

Preferential trading agreements use ROO to ensure that third countries do not unduly benefit from the preferential treatment that members of a RTA grant to one another. They specify the amount

[215] Anderson and van der Mensbrugghe (2006).

[216] Separately, the World Bank is currently undertaking a study to estimate the impact of the Doha Round scenarios on poverty using household level data.

[217] The Doha scenario that was simulated was the Doha Development Agenda Framework Agreement of July 2004, which turned out to cover the range of proposals tabled in the lead-up to the WTO's Trade Ministerial meeting in Hong Kong in December 2005.

of processing that a product must undergo in partner countries in order to quality for market access under the preferential agreement. These rules can add considerable complexity to the trading process and add to the costs of international trade, in particular if ROO vary across different overlapping agreements, [218] as is the case for Uganda.

Table 9.6 Estimated Changes in Real Value-Added by Sector with Doha Round (change in 2015 relative to baseline)

	$ million	percent
Agriculture	***-15.3***	***-0.3***
Grains	-3.6	-0.6
Sugar	1.0	0.7
Plant based fibres	16.9	19.4
Vegetables and fruits	-9.1	-0.4
Other crops	-14.8	-2.4
Livestock	-5.7	-0.6
Processed foods	***-4.2***	***-0.9***
Processed meats	0.2	0..9
Dairy products	0.8	7.1
Other foods	-5.2	-1.2
Fossil fuels	***0.7***	***0.9***
Other natural resources	***-1.4***	***-0.7***
Manufacturing excl proc. foods	***-0.7***	***-0.3***
Textile and leather	-0.2	-0.7
Wearing apparel	0.1	0.6
Chemicals rubber & plastics	0.0	1.5
Other manufacturing	-0.6	-0.3
Construction and Services	***2.9***	***0.1***
Total	***-18.0***	***-0.2***

Source: Anderson and van der Mensbrugghe (2006).

The EAC partner countries agreed on ROO that represent a negotiating compromise between the prevailing arrangements in COMESA and SADC, and do not correspond to either of these pre-existing arrangements. The EAC-ROO are to a large extent based on ROO used in COMESA, which specify a local value addition requirement of 35 per cent or a change in tariff heading. But, for a number of tariff lines, more complex sector and product-specific SADC rules of origin—which are more restrictive and more difficult to handle—were adopted. This situation with different rules of origin in EAC, SADC, and COMESA may force firms in EAC members to focus on only certain export destinations, given that they might need to produce differently to receive preferential access in different foreign markets.

Further, companies not only have to comply with the rules on sufficient domestic processing, but also need documentation to prove compliance. In North America, the costs of providing appropriate documentation to prove origin have been estimated to amount to as much as 3 per cent of import value.[219] These costs might well be even higher for small firms in developing countries such as Uganda that do not have sophisticated accounting procedures in place to keep

[218] Brenton and Imagawa (2004).
[219] Anson et al (2005).

track of the geographical origin of their production inputs. It can become prohibitively expensive for such firms to show compliance with ROO that vary across different agreements.

Multiple origin schemes also place a burden on the administrative capacity of the customs services. In a recent world-wide survey of customs agencies in member countries of the World Customs Organization, almost half of all respondents and two-thirds of African respondents stated that overlapping agreements with differing ROO created problems.[220] In addition, there are issues of integrity. The existence of different rates of import duty from different countries provides incentives for false invoicing, so as to show origin in the country subject to lower duties. Also, situations at the border may arise that are open to abuse or subject to excessive bureaucracy, thereby inflicting costs on traders in addition and beyond those related to compliance with the applicable ROO regulations.

In sum, it is recommended that Uganda push for simple, non-restrictive ROO specifications in the RTAs it is party to, to reduce and/or avoid conflicts arising from differing ROO, to lessen the costs of compliance including the administrative costs, and to reduce instances of abuse.

COMESA Free Trade Area

Uganda can enhance its regional trade linkages within the existing COMESA framework. Uganda is taking part in COMESA's tariff reduction program and currently grants an 80 per cent reduction to imports from other members that are at the same stage of intra-regional trade liberalization. In other words, the tariffs it charges on imports from these COMESA countries are only one fifth of MFN-rates. Conversely, these other members charge one fifth of their MFN-duties on Ugandan exports.

However, since not all countries are equally advanced in their intra-regional tariff reduction efforts (Table 9.7), different tariff regimes apply to Uganda's trade with its COMESA partners. Tariff reductions under the COMESA program are applied in a reciprocal manner, such that countries that have been more progressive in their tariff liberalization and are already participating in the COMESA-FTA, such as Rwanda and Sudan, are granting the 80 per cent reductions on their MFN-tariffs (22 and 23 percent, respectively)[221] to imports from Uganda that the latter is offering them (while allowing free trade with fellow COMESA-FTA members). COMESA members that have moved slower in their intra-regional tariff reduction programs charge higher tariffs (and conversely receive a smaller tariff reduction on their exports to Uganda). For example, Ethiopia applies a 10 per cent reduction in tariffs to its COMESA trading partners, so that Ugandan exporters that want to enter the Ethiopian market pay 90 per cent of the MFN-rates on their shipments. Angola, DRC, and Seychelles apply their full MFN duties to Ugandan exports.

Uganda aims to join the COMESA free trade area and consultations on FTA-accession are already under way. FTA membership would simplify trade procedures and lower tariffs with countries like Rwanda and Sudan and make it easier for Ugandan exporters to reach these regional markets. Although Uganda already enjoys 80 percent tariff reduction with respect to these two countries such that it only faces tariffs of 4.4 and 4.5 percent, respectively, in Rwanda and Sudan, Uganda is somewhat at a disadvantage vis-à-vis its competitors in other COMESA-FTA countries such as Kenya in the case of Sudan and Burundi in the case of Rwanda. Perhaps

[220] Brenton and Imagawa (2004). The survey requested the views of customs officials on their experiences in administering ROOs.
[221] These are simple average tariffs, including para-tariffs and customs surcharges.

more importantly, the low but non-zero tariffs are a nuisance at the border and a potential trigger for corruption.

Table 9.7 Trade Relationships among COMESA Members

Rate of Duty Reduction	COMESA country
100% (COMESA-FTA)	Burundi, Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Rwanda, Sudan, Zambia, Zimbabwe
80%	Comoros, Eritrea, Uganda
10%	Ethiopia
Nil	Angola, DR Congo, Seychelles
Under derogation	Swaziland

Source: COMESA Secretariat.

GOU has indicated that it needed more time to study the effects of a complete elimination of tariffs, and has requested that a compensatory mechanism for losses of tariff revenue be established and safeguard measures be implemented to soften the impact of potential import surges. However, in light of the fact that official imports from COMESA-FTA members other than Kenya, with which Uganda is already in the process of practicing free trade under EAC provisions, account for less than 1 per cent of Uganda's total imports and that these imports already occur at reduced tariff rates, the prospective impacts of joining the COMESA-FTA on tariff revenues and the economy at large seem rather limited. Moreover, two COMESA-FTA members, notably Burundi and Rwanda, are expected to accede to the EAC during 2006, even though the exact timetable and procedures, including possible transitional arrangements, remain to be determined.[222] The rationale for Uganda to stay outside the COMESA-FTA is further weakened under these circumstances and GOU should consider advancing its integration with COMESA and join the FTA in order to maximize the benefits from regional trade.

Joining the COMESA-FTA would mean that Uganda would grant its COMESA-FTA partners 100 percent tariff preference, up from the current 80 percent. This step does not further complicate Uganda's already complicated membership in multiple RTAs. However, were COMESA subsequently to agree on and implement a CET, Uganda (and similarly Kenya) would have to decide whether it would want to go with COMESA or EAC, since it is impossible to implement two different CETs at the same time. Anyway, to date it is unclear whether and when COMESA would adopt a CET, and discussions in the context of the EPA negotiations might meanwhile lead to a consolidation of RTAs in Eastern and Southern Africa which would spare the countries from having to make politically difficult decisions on alternative membership in different customs unions.

[222] "Rwanda, Burundi join EAC in March," The New Times, 10 February 2006.

APPENDICES

Appendix 1, Table A.1: Microeconomic Determinants of Household Welfare (OLS linear regression)

	Model 1	Model 2
Age	-0.011***	-0.010***
	(0.003)	(0.003)
Age squared	0.000***	0.000***
	(0.000)	(0.000)
Number of children under age 15 living in the household	-0.034***	-0.033***
	(0.006)	(0.005)
Loan Indicator/Access to credit	0.008	0.001
	(0.018)	(0.017)
No. of Livestock	0.000	0.000
	(0.000)	(0.000)
Homeowner	0.032	-0.016
	(0.026)	(0.025)
Literate	0.163***	0.110***
	(0.017)	(0.015)
Vocational sch.	0.167***	0.157***
	(0.041)	(0.042)
Secondary sch.	0.275***	0.215***
	(0.026)	(0.025)
Post primary specialized sch.	0.274***	0.172***
	(0.043)	(0.041)
Post secondary specialized sch.	0.455***	0.333***
	(0.041)	(0.045)
University	1.116***	1.171***
	(0.116)	(0.233)
Male	0.020	-0.028
	(0.026)	(0.021)
Married	-0.050*	-0.045**
	(0.027)	(0.022)
Rural	-0.420***	-0.250***
	(0.039)	(0.031)
Eastern	-0.224***	-0.152***
	(0.020)	(0.020)
Northern	-0.590***	-0.439***
	(0.022)	(0.023)
Western	-0.100***	0.009
	(0.018)	(0.019)
Industry: Crop agriculture	0.085**	
	(0.036)	
Industry: Fishing	0.243***	0.147**
	(0.072)	(0.074)
Industry: Hunting	-0.033	-0.218***
	(0.073)	(0.037)
Industry: Mining and Quarrying	-0.010	-0.017
	(0.124)	(0.089)

Industry: Manufacturing	0.139***	0.050
	(0.049)	(0.041)
Industry: Electricity, gas, water	0.410***	0.308***
	(0.071)	(0.099)
Industry: Construction	0.104	0.076
	(0.072)	(0.062)
Industry: Services	0.263***	0.197***
	(0.042)	(0.025)
Industry: Hotel and lodging, bars, restaurants	0.288***	0.074
	(0.079)	(0.116)
Maize Producer		0.077***
		(0.023)
Cotton Producer		-0.064**
		(0.029)
Coffee Producer		0.050***
		(0.018)
Tobacco Producer		-0.054
		(0.035)
Other Crop Producer		0.001
		(0.029)
Time to nearest market		-0.000
		(0.000)
Total owned land_acres		0.003**
		(0.001)
Fertilizer use		0.159***
		(0.029)
Pesticide use		0.130***
		(0.026)
Improved seed use		0.128***
		(0.022)
Hybrid seed use		0.105***
		(0.034)
Constant	10.838***	10.672***
	(0.068)	(0.066)
Observations	10558	7701
R-squared	0.39	0.28

Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%
Source: Author's calculations based on the 1999/2000 UNHS.
Notes: Welfare is measured as the logarithm of real per adult-equivalent consumption expenditures (LRPC). Model 1 captures the differences in broader industrial groups such as crop-agriculture vs. manufacturing; Model 2 disaggregates crop-agriculture into coffee, cotton, tobacco, maize, and other crops. In both models, the comparison group are those households in livestock. All individual characteristics, such as industry or education, refer to that of the household head. Industry categorization is based on the "main activity of the household head." Individual crop producer is a dummy variable that indicates whether the household produces that particular crop, though not necessarily as their main activity. This definition means that there are some households which produce both coffee and maize, for example.

Appendix 1, Table A.2: Microeconomic Determinants of Household Welfare (Probit regression)

	Model 1	Model 3
Age	0.009***	0.012***
	(0.003)	(0.002)
Age squared	-0.000***	-0.000***
	(0.000)	(0.000)
Number of children under age 15 living in the household	0.021***	0.031***
	(0.004)	(0.004)
Loan Indicator/Access to credit	0.012	0.021
	(0.018)	(0.017)
No. of Livestock	0.000	0.000
	(0.000)	(0.000)
Homeowner	0.011	0.016
	(0.023)	(0.025)
Literate	-0.106***	-0.062***
	(0.016)	(0.015)
Vocational sch.	-0.140***	-0.098***
	(0.034)	(0.038)
Secondary sch.	-0.174***	-0.144***
	(0.017)	(0.019)
Post primary specialized sch.	-0.125***	-0.079*
	(0.031)	(0.042)
Post secondary specialized sch.	-0.252***	-0.213***
	(0.027)	(0.039)
University		
Male	-0.003	0.031
	(0.019)	(0.020)
Married	0.028	0.026
	(0.021)	(0.022)
Rural	0.136***	0.056**
	(0.022)	(0.025)
Eastern	0.133***	0.085***
	(0.020)	(0.021)
Northern	0.408***	0.314***
	(0.021)	(0.025)
Western	0.025	-0.050***
	(0.018)	(0.019)
Industry: Crop agriculture	-0.046*	
	(0.027)	
Industry: Fishing	-0.115*	-0.075
	(0.060)	(0.072)
Industry: Hunting	0.319	
	(0.231)	
Industry: Mining and Quarrying	-0.049	0.049
	(0.079)	(0.096)
Industry: Manufacturing	-0.082**	-0.077**

	(0.038)	(0.039)
Industry: Electricity, gas, water		
Industry: Construction	-0.086*	-0.069
	(0.048)	(0.054)
Industry: Services	-0.158***	-0.143***
	(0.027)	(0.020)
Industry: Hotel and lodging, bars, restaurants	-0.185***	-0.033
	(0.048)	(0.103)
Maize Producer		-0.020
		(0.022)
Cotton Producer		0.054*
		(0.031)
Coffee Producer		-0.049***
		(0.017)
Tobacco Producer		0.059
		(0.048)
Other Crop Producer		0.052*
		(0.028)
Time to nearest market		0.000
		(0.000)
Total owned land_acres		-0.010***
		(0.002)
Fertilizer use		-0.117***
		(0.026)
Pesticide use		-0.111***
		(0.025)
Improved seed use		-0.091***
		(0.020)
Hybrid seed use		-0.093***
		(0.032)
Constant		
Observations	10460	7676

Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%
Source: Author's calculations based on the 1999/2000 UNHS.
Notes: Poverty is a dummy variable which takes the value 1 if the household lives below the poverty line, and 0 otherwise. Results shown in the table are estimated marginal effects based on probit coefficient estimates. Model 1 captures the differences in broader industrial groups such as crop-agriculture vs. manufacturing; Model 2 disaggregates crop-agriculture into coffee, cotton, tobacco, maize, and other crops. In both models, the comparison group are those households in livestock. All individual characteristics, such as industry or education, refer to that of the household head. Industry categorization is based on the "main activity of the household head." Individual crop producer is a dummy variable that indicates whether the household produces that particular crop, though not necessarily as their main activity. This definition means that there are some households which produce both coffee and maize, for example.

Appendix 2: Methodological Framework for estimating the impact of changes in tariffs and the impact of changes in main sources of cash income or main activity on poverty

Calculating Average Tariffs

Average tariffs are computed to determine whether the existing tariff structure and the newly adopted EAC CET taxes protects the poor.

The average tariff—consumption weighted—that applies to the consumption bundle of each household is calculated as follows:

$$\overline{T_C} = \sum_{c=1}^{n} s_c t_c$$

where $\overline{T_C}$ denotes average tariff on consumption, c the consumption good ($c=1,...,n$), such as cereals, fruits, s_c the share of consumption good c in the total expenditures, and t_c the tariff rate that applies to the consumption good c.

The weighted average tariff that applies to the income bundle of each household is calculated similarly as:

$$\overline{T_I} = \sum_{i=1}^{k} s_i t_i$$

where $\overline{T_I}$ denotes average tariff on income, i the income source ($i=1,...,k$), such as income from fishing, income from wages, s_i the share of income source i in total income, and t_i the tariff rate that applies to the income source i.

Average tariff on net household income is then calculated as the average tariff on income minus the average tariff on consumption at the household level. Given the detail available in the 1999/2000 UNHS, tariff calculations are used based on HS2-HS8 level tariff data.

Calculating Impact of Changes in Tariff Rates

To compute the impact of tariff rate changes on household income, the following set of equations is used:

$$\frac{dNI_h}{Y_h} = \sum_{i=1}^{k} (t_i^{'} - t_i) s_i - \sum_{c=1}^{n} (t_c^{'} - t_c) s_c$$

Perfect price transmission is assumed here between border and household prices, that is, a change in tariff rate is assumed to be transmitted fully into changes in prices paid and received by households. Ideally, imperfect price transmission should be allowed for, especially across regions due to varying transportation costs and other intermediary charges. However, there is lack of data on regional prices for a series of commodities to take this into account. Also, this simple exercise does not take into account supply responses and general equilibrium effects and provides a bound for the initial short-term impact. Finally, all these exercises have been severely limited by the lack of data on detailed income sources. Hence, the analyses are based on very crude income groups: share of income from crops (grain and cash), share of income from non-farm wages (without sector-level detail), share of income from livestock related activities, share of income from own-enterprise etc.

Calculating Impact of Changes in Main Sources of Cash Income or Main Activity

An exercise is carried out to estimate the effects of increases in production of various sub-sectors on income and poverty. Such increases could come about either by households shifting into a particular activity (from livestock or non-cash crops) or by households increasing the production of a particular sub-sector as a result of removal of constraints discussed in the report.

First, the relationship between household income and the main source of cash income and main activity is determined by an OLS regressions, as follows.

$$\ln c_i = \beta X_i + \varepsilon_i$$

where c_i is the per-capita adult-equivalent adjusted total household expenditures (proxy for income), and X_i is a vector of household and household head characteristics, including education, land size, source of main cash income, and main activity. The latter two variables, given the nature of data in 1999/2000 HBS, are dummy variables indicating: whether or not the household is a coffee producer or a cotton producer, or whether the main activity of the household head is tourism or fishing.[223]

Second, estimates of changes in household income are derived, based on coefficients obtained from the OLS regression above, for the simulations discussed in the report.

[223] Excluded dummy variable for the main source of cash income is sales of food crops.

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