



UNCTAD'S Appraisal of the Implementation of the Brussels Programme of Action for LDCs for the Decade 2001–2010

Assessment of Progress and Lessons
for the Fourth United Nations Conference
on LDCs (LDC-IV) and Beyond



UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

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Abstract

The Brussels Programme of Action for the Least Developed Countries (LDCs)¹ contains multiple sets of actions and commitments, addressing social, economic, political and environmental challenges facing them. The Programme of Action (PoA) recognizes that factors influencing the growth and development prospects of the LDCs are varied and complex, reflecting not only their heterogeneity but also variations in their capacity to withstand external shocks, priorities and needs. Although there has been notable progress in some areas since the adoption of the PoA in 2001, the extent and magnitude of poverty in LDCs remains of considerable challenge for LDCs and their development partners alike. There is a growing concern that these countries are lagging behind other developing countries in attaining the Millennium Development Goals (MDGs) and the goals of the Programme of Action. In fact, while the other developing countries are now converging on the developed world, growth in the LDCs' group has been characterized by long-term divergence and inherent vulnerabilities to external shocks and crises. This situation has intensified their continued marginalization in the globalization processes and poses an order of magnitude more important than any other development problems.

The present study provides: (a) a brief account of the challenges faced in undertaking objective and results-oriented assessment of progress and impact evaluation of the Brussels Programme of Action, based on the implementation experience of UNCTAD and the annual review of progress by the regular session of the Trade and Development Board since the adoption of the PoA in 2001; (b) an assessment of progress and trends in the implementation of key commitments that are within the mandates and competence of UNCTAD; (c) an analysis of the role of commodities especially non-traditional exports (such as horticulture) in improving the growth and development prospects of LDCs; and (d) policy recommendations together with UNCTAD's perspectives and suggestions for the Fourth United Nations Conference on LDCs (LDC-IV) to be held in Istanbul, Turkey, in 2011.

Key Words

Brussels Programme of Action, assessment of progress, non-traditional exports, horticulture, United Nations Conference on LDCs.

¹ The 49 countries that currently belong to the group of LDCs are: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, the Democratic Republic of the Congo, Djibuti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, the Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, Vanuatu, Yemen and Zambia.

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The project was implemented by Mussie Delelegn and Jean-Claude Mporamazina under the overall supervision of, first, Mr. Habib Ouane, Director, Division for Africa, LDCs and Special Programmes (ALDC) of UNCTAD, and latter by Ms. Jo Elizabeth Butler, Officer-in-Charge, ALDC Division, UNCTAD. Massoumeh Sahami has provided support to the overall implementation of the project. Agnes Collardeau-Angleys provided statistical assistance to the project, while Madasamyraja Rajalingam did overall layout and desktop publishing. Messrs² Stephen Golub and Jeffery McManus provided consultancy services to the project and undertook several case studies in selected sub-Saharan African Countries. Mr. Tewodros Yilma (Ethiopia), Mr. Modibo Keita (Mali), Mr. Daniel Plunkett (Rwanda), Mr. Cheikh Diagne (Senegal) and Lindani Ndlovu (Uganda) provided independent consultancy services at the country level and prepared case studies³ on selected countries covered by the project.

The case studies were presented at the Expert Meeting of LDCs which was convened, as part of the project, in Kampala, Uganda, 8–30 October 2007. More than 60 experts from 36 LDCs, United Nations agencies, international organizations and from civil society as well as academia took part in the meeting. The expert meeting – the outcome of which forms annex I of this study – was officially opened with a keynote address by H.E. Maj. Gen. Kalinda Otafiire, Minister of Tourism, Trade and Industry of Uganda. The meeting was subsequently chaired by Mr. Silver Ojakol, Commissioner for External Trade, Ministry of Tourism, Trade and Industry of Uganda. Messrs Andreas Lebzien, Ministry of Foreign Affairs (Sweden) and Andrey Kuleshov, Senior Project Manager (Common Fund for Commodities) were involved in facilitating the implementation of the project.

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³ The case studies are available at: <http://www.unctad.org>

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Abbreviations

ACP	African, Caribbean and Pacific Group of States
AGOA	African Growth and Opportunity Act (United States)
APEP	Agriculture Productivity Enhancement Project (Uganda)
ATEP	Agriculture and Trade Expansion Program (Ethiopia)
BPoA	Brussels Programme of Action for LDCs for the Decade 2001-2010
BRC	British Retail Consortium
COMESA	Common Market for Eastern and Southern Africa
EBA	Everything But Arms trade agreement
ECOWAS	Economic Community of West African States
EHPEA	Ethiopian Horticultural Produce Exporters Association
EIF	Enhanced Integrated Framework for Trade-related Technical Assistance for LDCs
EPA	economic partnership agreement
EU	European Union
EurepGAP	Euro-Retailer Produce Working Group's Good Agricultural Practices
FAGE	Federation of Associations of Ghanaian Exporters
FDI	foreign direct investment
FFV	fresh fruit and vegetables
FHL	Fresh Handling Limited (Uganda)
FHFP	fresh horticultural and floricultural products
FLO International	Fairtrade Labeling Organizations International
FLO-Cert	Fairtrade Labeling Organizations Certification
FPEAK	Fresh Produce Exporters Association of Kenya
GAPs	Good Agricultural Practices
GAVEX	Ghana Association of Vegetable Producers
GDP	gross domestic product
GDS	Grandes Domaines du Sénégal
GHE	Gambia Horticultural Enterprises
GIG	Gambia is Good programme
GlobalGAP	Global Good Agricultural Practices
GSP	Generalized System of Preferences
GTZ	German Technical Cooperation
HACCP	Hazard Analysis and Critical Control Points
HAG	Horticulturalist Association of Ghana
HCDA	Horticultural Crops Development Authority (Kenya)
HPOU	Horticultural Promotion Organization of Uganda
IDEA	Investment in Developing Export Agriculture
ISO	International Organization for Standardization
ITFC	Integrated Tamale Fruit Company (Ghana)
KARI	Kenya Agricultural Research Institute
KFC	Kenya Flower Council
LACCU	Lubulima Agricultural Commercial Cooperatives Union
LDC-IV	Fourth United Nations Conference on LDCs
LDC	least developed country
LIA	Lusaka International Airport
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries (Uganda)
MCC	Millennium Challenge Corporation
MDGs	Millennium Development Goals
MNC	multinational corporation

MOFA	Ministry of Food and Agriculture (Ghana)
NGO	non-governmental organization
NHTF	National Horticulture Task Force (Ghana)
NRDC	Natural Resources Development College
NZTT	NRDC–ZEGA Training Trust
ODA	official development assistance
ONAPES	Organisation Nationale des Producteurs Exportateurs de Fruits et Légumes au Sénégal
PDMAS	Programme de Développement des Marchés Agricoles du Sénégal
PECP	Programme for Economic Cooperation in Projects (The Netherlands)
PMO	produce marketing organization
PoA	Programme of Action
PPEA	Projet de Promotion des Exportations Agricoles
PRSPs	Poverty Reduction Strategy Papers
PVS	private voluntary standard
QMS	quality management system
SCOPE	Strengthening the Competitiveness of Private Enterprises
SEPAM	Société d'Exploitation des Produits Agricoles et Maraîchers
SEPAS	Sénégalaise d'Exportation des Produits Agricoles et de Services
SHGs	Self-Help Groups (Kenya)
SME	small and medium-sized enterprise
SPEG	Sea-Freight and Pineapple Exporters of Ghana
SSA	sub-Saharan Africa
TIPCEE	Trade and Investment Program for a Competitive Export Economy (Ghana)
UFEA	Uganda Flower Exporters Association
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
USADF	United States–African Development Foundation
USAID	United States Agency for International Development
VEPEAG	Vegetable Producers and Exporters Association of Ghana
VREL	Volta River Estates Ltd.
WTO	World Trade Organization
ZATAC	Zambian Agribusiness Technical Assistance Center
ZEGA	Zambian Export Growers Association

Abbreviations used in citations

AA	AfricanAgriculture.blogspot.com
CIA WF	CIA World Factbook
DTIS	Diagnostic Trade Integration Study (World Bank)
F.I.	Fresh Insights working papers (agrifoodstandards.net)
FP	FreshPlaza.com
GFP	GhanaFreshProduce.org
MIR	Market Intelligence Reports (compiled by FAGE and TIPCEE)
OECD	Organization for Economic Cooperation and Development
WDI	World Development Indicators (World Bank)

Foreword

The Fourth United Nations Conference on LDCs (LDC-IV) will be held in Istanbul, Turkey, from 30 May to 3 June 2011, in accordance with the decision of the General Assembly A/RES/63/227 of 10 March 2009 and Economic and Social Council resolution E/2010/L.8 of 23 July 2010. The Conference, which is the continuation of major decennial events of the United Nations on Least Developed Countries,⁴ is expected to highlight, once again, the socio-economic plights of these countries. It is also meant to build political consensus on policies and actions required to address the most pressing and complex development challenges facing LDCs as well as to renew the commitment of the international community to design and implement concrete international support measures in their favour. At the Conference, Member States are also expected to reach consensus on desirable policies and strategies for action at the national, regional and international levels as well as adopt the Programme of Action for Least Developed Countries for the decade 2011–2020.

UNCTAD, which itself was created in 1964 to address the trade and development challenges and problems of developing countries, has been consistently advocating for special and differential treatment in favour of LDCs since its inception. It was an earlier work of UNCTAD on the “differing characteristics and stages of development of developing countries” that led to the establishment of the group of LDCs by the GA in 1971. Since then, UNCTAD has been in the forefront of advancing the trade and development interest of LDCs through its research and policy analysis, technical cooperation and consensus building functions. For instance, in addition to its extensive operational and analytical work in favour of LDCs and with the view to making substantive contributions to LDC-IV, UNCTAD undertook a number of important preparatory activities.⁵ The primary objective of these activities is to contribute to improved and informed participation of LDCs in the Conference, by assessing their priority needs for action at the national, regional and international levels.

With the above objective in mind, the UNCTAD secretariat has developed and implemented several projects since the adoption of the Programme of Action in 2001. The first project (IT/NT/OT/5BP) provided a qualitative assessment of progress in the implementation of the Brussels Programme of Action as part of its contribution to the Mid-term Review of the PoA (UNCTAD/LDC/2006/3). Chapters I and II of the present publication are based on the policy lessons drawn from this project. The second project dealt with export competitiveness of LDC and related policies and it resulted in a publication (UNCTAD/ALDC/2008/1).

⁴ The first two United Nations Conferences on LDCs took place in Paris in 1981 and 1991 and adopted, respectively, the New Substantial Programme of Action (NSPA) for LDCs for the 1980s and the Programme of Action for LDCs for the 1990s. The Third Conference took place in Brussels in May 2001 and adopted the Programme of Action for the Decade 2001-2010.

⁵ These include: (a) UNCTAD-LDC Expert Meeting, which took place in Kampala in October 2009 and adopted summary recommendations (see annex I), articulating the trade and development interests of LDCs that require action at LDC-IV; (b) the ad hoc expert meeting of the Secretary-General of UNCTAD, which was held in Geneva in February 2010, which shed light on the challenges facing LDCs, identified prospects for their growth and development, and discussed the international support measures needed to address underdevelopment in these countries; (c) pre-Conference event on “Building productive capacities in LDCs for sustainable and inclusive development” held in Geneva on 27–29 October 2010; (d) an international expert meeting on tourism development in the LDCs held in Caen, Basse-Normandy (France), from 12–14 October 2010; and (e) Executive Sessions of the Trade and Development Board devoted to discuss follow-up to LDC-III and preparations for LDC-IV.

The third project (TXB/2136/X77J/2411), which gave rise to this study, assisted in sectoral review and assessment of successful and less successful cases of non-traditional exports, notably horticulture. The work undertaken in the context of the project reveals that, despite the many and complex obstacles they face, there is considerable scope for many LDCs to join the group of successful exporters, not only in traditional exports but also in non-traditional exports such as horticulture, fishing and tourism, which have significant growth potential for LDCs. Policy research and case studies in selected countries through a project also indicate that horticulture is an extremely promising source of export diversification and poverty reduction for many LDCs, especially in Africa. Horticultural products, which include vegetables, fruit and cut flowers, have grown steadily since recently and become the single largest category in agricultural trade, accounting for more than 20 per cent of world agricultural exports. Horticultural exports from sub-Saharan Africa (SSA) have expanded and now exceed \$2 billion, but represent only 4 per cent of the world's total exports. The European Union (EU) is the main market for African produce, but regional markets are also promising.

Based on the findings and policy conclusions of the studies, UNCTAD also convened several LDC expert-level meetings with a view to sharing best practices and consolidating its findings. The expert meeting held in Kampala, Uganda 28–30 October 2009 explored how LDCs and their development partners should respond to the problems and challenges facing the poorest countries of the world. To that end, the meeting identified priority areas for intervention by LDCs and their development partners during and beyond LDC-IV. The summary recommendations of the expert meeting can be also found at www.unctad.org.



Supachai Panitchpakdi
Secretary-General of UNCTAD

I. INTRODUCTION

The Brussels Programme of Action for LDCs for the decade 2001–2010 (BPoA) contains multiple sets of actions and commitments – encompassing social, economic, political and environmental issues. Each of the economic, social, political and environmental pillars of the PoA are designed to be effectively managed and implemented in an integrated and interlinked manner in order to achieve the ultimate goal of accelerated and sustained poverty reduction, as economic growth alone is not sufficient to achieve sustainable development. Nor are social policies aimed specifically at poverty reduction sustainable in the long run. Environmental management and protection on their own are a necessary, but not a sufficient condition for achieving sustainable development. The Programme of Action was also conceived as a framework for partnership “based on mutual commitments by LDCs and their development partners to undertake concrete actions in a number of inter-linked areas” (para. 14). It articulates policies and measures by LDCs and their development partners to significantly improve the human conditions in these countries, to accelerate their sustained economic growth and sustainable development, to end their continued marginalization by eradicating poverty, inequality and deprivation and to enable them to beneficially into the global economy” (para. 4).

In addition to the guiding principles for its implementation, the Programme of Action contains a number of quantifiable and time- specific targets. This was to enable LDCs and their development partners to assess and monitor the implementation of the Programme of Action. Paragraph 94 provides that “the goals and targets set out in the Programme of Action will be used to review and evaluate the performance of LDCs and their development partners in implementing the various commitments”.

Several important policy lessons can be drawn from the implementation of the Programme of Action during the decade. These include:

- (a) Since the adoption of the PoA, national development policies and strategies of most LDCs have placed poverty reduction as central to their strategic development objectives and hence, Poverty Reduction Strategy Papers (PRSPs) became the defining feature of the trade and development agenda of LDCs;
- (b) Virtually, all LDCs have taken bold measures to remove anti-export bias and many have begun the arduous process of improving the institutional environment for private-sector development and addressing supply-side constraints. However, national policies and measures implemented in LDCs have not generated the form and quality of growth that reverses their continued marginalization. In fact, their persistent under-development and in many cases, long-term decline, illustrates the fragility of their economies and how national policies and strategies alone, although necessary, are not sufficient to ensure sustained growth, development and poverty reduction in LDCs;
- (c) Where socio-economic progress has been recorded, these were supplemented and sustained by predictable and well-coordinated aid flows linked to an effective national mechanism for monitoring implementation and demonstrating accountability. This confirms the critical role of development partnership in influencing the growth trajectory of LDCs;
- (d) The focus of national and international policies and support measures has been on social sectors. While this is important in itself, it should not be at the expense of productive sectors of the economies of LDCs. Hence, there is a need for a paradigm shift in development policies and strategies in LDCs. UNCTAD has for several years advocated the need for a shift in designing development policies and strategies in the LDCs. To this end, it is important to place the development of productive capacities – and the related expansion of productive employment – at the heart of national policies and strategies, including PRSPs.

The Fourth United Nations Conference on LDCs, which is being convened in 2011, will need to arrive at consensus on the ways and means of enhancing productive capacities of LDCs, taking into account the need for diversification and value addition, which remains more critical today than ever before, owing to the continued volatility of primary product prices and the uncertainties related to long-run price trends. UNCTAD's work on LDCs has underscored the fact that, in the short-to-medium term, growth prospects of LDCs can be enhanced by improving their export competitiveness, particularly in areas where they have comparative advantages such as production and export of non-traditional items.

This study has been prepared to assist the review and appraisal of the Programme of Action by the Trade and Development Board as input to the comprehensive appraisal of the PoA by the General Assembly pursuant to paragraph 114 of the PoA. The study particularly provides:

- (a) A brief account of the challenges faced in undertaking objective and results-oriented assessment of progress and impact evaluation of the Programme of Action. This is based on the implementation experience of UNCTAD and the annual review of progress by the regular session of the Trade and Development Board since the adoption of the PoA in 2001;
- (b) An assessment of trends in key areas that are within the mandates and competence of UNCTAD;
- (c) An analysis of the role of commodities, especially non-traditional exports, in LDCs in improving the growth and development prospects of these countries; and
- (d) Policy recommendations together with UNCTAD's perspectives and suggestions on possible issues needing attention by the Fourth United Nations Conference on LDCs (LDC-IV).

II. REVIEW, MONITORING AND EVALUATION OF IMPACT: CHALLENGES AND PROSPECTS

Section III of the PoA recognizes that effective mechanisms and arrangements for implementation, follow-up, review and monitoring of progress made are critical to the success of the Programme. This demonstrates the strong desire on the part of LDCs and their development partners for effective and result-oriented monitoring and evaluation of progress in implementing the actions commitments of the PoA and the results achieved of the PoA. Therefore, there is a growing support and interest for the use of monitoring and evaluation as an integral part of development activities at both the national and international levels. This is due to the fact that, by undertaking a systematic examination of the effects of a specific intervention, effective monitoring and evaluation of the PoA provides governments in LDCs, international development partners and civil society with the means for learning from past experience, improving future performance, and demonstrating results as part of accountability and transparency in partnership. Traditionally, monitoring and evaluation activities were confined mainly to projects, where the project cycle was designed to link *ex ante* project appraisal with *ex post* monitoring and evaluation. However, the shift “from projects to policies” in the 1980s and 1990s recognized that the policy environment plays a fundamental role in determining the pattern and pace of development, and focused the attention of decision-makers on issues relating to the design and delivery of “good” policies. During the mid-1990s the focus shifted again, from “first-generation” policy reforms to “second-generation” institutional reforms including legal, administrative and regulatory functions of governments in the delivery of “good governance”. This change in focus created the need for *ex post* monitoring and evaluation of strategic-level programme and policy interventions.

In reviewing the progress made in the implementation of the Brussels Programme of Action, UNCTAD undertook country-⁶ and sector-specific case studies⁷ in several LDCs. The recent research and policy analysis work of UNCTAD on LDCs⁸ also includes tracking their progress towards the goals and targets of the PoA and the Millennium Development Goals (MDGs). The country-by-country assessments and sectoral reviews as well as the research and policy analysis work of the secretariat shed further light on the development problems, challenges and opportunities in LDCs. The work of UNCTAD also reveals that assessing the impacts of interventions at the strategic level, particularly with regard to internationally adopted programmes of action such as the PoA for LDCs is complex. This is due to several reasons: first, determinants of growth are complex and varied, and the particular configuration of factors which is needed to achieve a higher growth trajectory, will vary from country to country. Also, sustainability of modest economic growth is fragile due to the excessive vulnerability of LDCs to various shocks – economic or otherwise, exogenous or internal – many of which are not covered (or anticipated) in the Programme of Action. For example, according to the latest estimates by the World Bank, as many as 53 million more people in developing countries – the majority of whom are in LDCs – could be trapped in poverty as economic growth slows around the world; and between 200,000 and 400,000 more babies could die each year between now and 2015 if the crisis persists. Out of some 40 per cent of developing countries identified by the World Bank as “highly vulnerable” to the effects of the global economic crisis, over 95 per cent belong to the LDCs’ group.

6 Case studies on: Bangladesh (UNCTAD/LDC MISC/ 2006/4), Burkina Faso (UNCTAD/LDC MISC/2006/7), Cape Verde (UNCTAD/LDC MISC/2006/6), Ethiopia (UNCTAD/LDC MISC/2006/5), Nepal (UNCTAD/LDC MISC/2006/3) are available at <http://www.unctad.org>.

7 Synthesis of sector-specific case studies is contained in publication titled “Export Competitiveness and Development in LDCs: Policies, Issues and Priorities for Least Developed Countries for Action” (UNCTAD/ALDC/2008/1).

8 For detailed analysis and comprehensive statistical information on where the LDCs and their development partners stand, over the years, in implementing the goals and actions of the Programme of Action for LDCs, see the UNCTAD Least Developed Countries Reports series: 2002, 2004, 2006, 2007, 2008 and 2009. See also UNCTAD’s contribution to the Mid-term Review of the PoA (UNCTAD/LDC/2006/3).

Secondly, the nature of the PoA including the scope and extent of commitments, which are often part of a “package” of development policies and strategies, as well as interventions made the task of monitoring and evaluation complex. This is particularly the case in recent years with the greater use of sector-wide approaches and general budget support, which makes it difficult to monitor and evaluate the effect of the separate components of a programme. Linked to this is the time period for the evaluation and the scope of the assessment. Generally, the effects of an intervention (e.g. through the PoA) take time to emerge, and the evaluation may need to extend well beyond the programme’s duration. Furthermore, the impact of some of the actions and commitments (e.g. on building productive capacities) are long-term in nature and may be invisible in the short run or during the timeframe agreed in the PoA. Building effective and durable capacity in countries that have structural and interrelated development problems such as the least developed countries is complex and daunting. Hence, capacity building especially the task of institutional and human resources development in LDCs should be seen from a long-term perspective. If the evaluation is carried out during or at the end of the programme, the magnitude and range of the effects that the intervention will have, may be understated. The issue of scale may also arise in terms of the spread of the effects of the programme. The intervention can have significant indirect effects, which extend well beyond the immediate targets or objectives of the intervention. If these effects are omitted from the evaluation, the full effect will again be underestimated. This also raises problems of causality. The PoA involves a set of “Actions” by LDCs and their development partners, at the national and international levels. These policy interventions are made as part of an integrated and comprehensive national strategy for pro-poor growth. It is therefore difficult to attribute the progress towards achieving the goal of poverty reduction and sustainable development to any single programme or set of interventions such as the PoA. For example, what proportion of the change in the performance indicator can be attributed to the intervention and what proportion is due to exogenous influences? What would have happened in the absence of the intervention?

Thirdly, the objectives and priorities of the various frameworks are often viewed as competing with rather than complementing each other. For instance, most LDCs had structural adjustment programmes in the 1980s and the 1990s, and several of these countries are now supported by Poverty Reduction Strategy Papers (PRSPs). There is a PRSP review process and mechanism in many LDCs (such as the World Bank Round Table discussions). There are also other frameworks and coordination mechanisms at the country level, such as the Common Country Assessment Framework, the United Nations Development Assistance Framework (UNDAF), the Enhanced Integrated Framework for Trade-related Technical Assistance to LDCs (EIF), the review of the MDGs, the recent Aid for Trade initiative, etc. Combined with national development policies and sectoral strategies, these have often resulted in institutional bottlenecks in which the PoA tends to receive relatively low-priority attention. In addition to the well-documented data limitations and statistical inadequacies in LDCs, the sheer absence of a systematic and coherent methodological framework at the national level renders the tasks of tracking, impact evaluation and monitoring progress more complex and cumbersome.

Finally, monitoring and evaluation of the impact of intervention at the national and/or sectoral level is costly, requiring significant amounts of financial, technical and human resources. But the benefits outweigh the costs. Without undertaking national or sectoral assessments of an intervention, it is extremely difficult to discern meaningful outcome of the substantive impacts of the Programme of Action on the ground. In the context of the PoA, there are no financial resources committed or pledged to undertake the progress review and assessment of the impact of the BPoA at the national (or sectoral), regional and international levels. This limits not only the scope and extent of impact evaluation but also undermines efforts to enhance the substantive (or developmental) impact of technical cooperation and capacity-building projects and programmes on institutions and economies of beneficiary countries.

Taking the above-mentioned shortcomings and limitations into account, LDC-IV needs to reach a consensus on the need for a systematic and coherent evaluation framework. Such a framework would need to be sufficiently flexible for implementation in a range of different contexts and with varying resource constraints. It would also need to have the capacity to provide clear and timely information to decision makers on the effects and effectiveness of the programme that is being evaluated. This is key in

making the findings of any assessment or monitoring and evaluation exercises of the successor PoA comprehensible to non-specialist decision makers, other stakeholders and interested parties. To encourage transparency and civil society participation in the process of policymaking, it is equally important for the findings from the assessments to be disseminated to all stakeholders.

If progress is to be made in addressing the challenges of monitoring and evaluation at the strategy and policy levels, there needs to be a shared understanding on what constitutes a satisfactory framework for carrying out programme evaluation and monitoring exercises. There is no single or ideal toolkit that can be applied to all evaluation assessments; rather, the methodological framework will need to be “tailor made” to the requirements of the particular assessment, and different methods will be needed to serve different objectives within the overall framework. It will be important to identify what the future programme of action or intervention is intended to achieve since this will determine the criteria to be used in monitoring and evaluating the impacts. In most cases, there will be a hierarchy of objectives, where intermediate targets are a stepping stone to achieving final goals. An initial policy or programme intervention would result in a number of activities or inputs, followed by outputs and outcomes which in turn would contribute to programme goals.

During and beyond LDC-IV, it will be important for LDCs to engage in constant dialogue with their development partners and international institutions in order to maximize the impact of programmes and projects implemented through a successor Programme of Action. Experience thus far has shown that the active involvement of beneficiary countries in the design and implementation of programmes and projects is of paramount importance in ensuring successful outcomes. Furthermore, requests from LDCs for direct programme and budgetary support should be based on a critical assessment of domestic gaps and needs whereby the relevance and impact of projects/programmes can be judged based not only on the effectiveness of their implementation, but their concrete contribution in addressing development problems and constraints. To this end, ongoing efforts aimed at enhancing ownership and absorptive capacities of LDCs should be continued.

III. KEY TRENDS IN ECONOMIC PERFORMANCE OF LDCS SINCE THE ADOPTION OF THE PROGRAMME OF ACTION

A. Real GDP and real per capita GDP growth

Despite the above-mentioned challenges, UNCTAD has been providing policy insights⁹ as to where the LDCs and their development partners stand, in a given time (or period), in implementing the goals and targets of the PoA. The work of the secretariat indicates that the socio-economic performance of LDCs, though it varies from region to region, country to country and across sectors, has shown significant improvement since May 2001. In fact, the performance of LDCs as a group remained vibrant and robust until the start of the financial and economic crises. The average annual growth rate¹⁰ of LDCs as a group during 2005–2007 was nearly 8 per cent. This was about 2 percentage points higher than the 5.9 per cent per annum achieved during 2000–2004, and almost double the average annual rate of 4 per cent achieved in the 1990s. Consequently, the growth rate of the LDCs as a group during 2005–2007 surpassed the 7 per cent growth target of the Brussels Programme of Action. In fact, these growth rates were higher than the average growth rate for other developing countries during the same period. Nevertheless, due to higher population growth in LDCs (2.5 per cent per annum, almost double the average rate in other developing countries), the gross domestic product (GDP) per capita growth in LDCs has continued to lag behind other developing countries. For instance, the average growth rate for real GDP per capita for LDCs as a group during 2005–2007 was about 5.5 per cent as compared to about 7 per cent for other developing countries during the same period.¹¹

In 2008–2009, key economic indicators showed contraction in the performance of LDCs, particularly when compared to the 2006–2007 period. In 2008, real GDP¹² grew by 5.8 per cent for LDCs as a group as compared to about 8 per cent in 2006–2007, with real GDP per capita declining from 5.6 per cent in 2007 to 4.6 per cent in 2008. This was the sharpest drop in real GDP per capita since 2003.

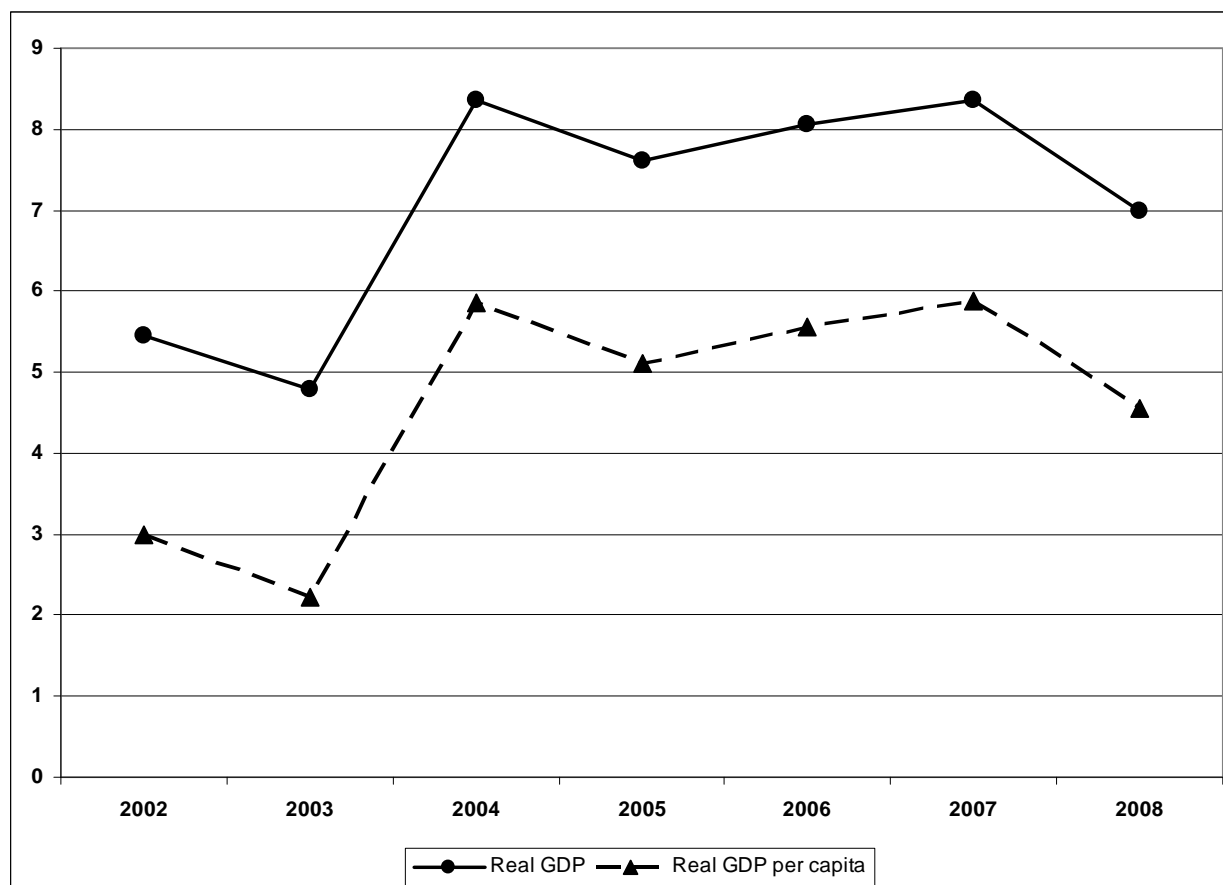
⁹ Ibid.

¹⁰ UNCTAD secretariat calculations based on UN/DESA Statistics and Population Divisions, January 2009.

¹¹ Data refers to real GDP and real GDP per capita (1990 dollars) and figures for other developing countries are from the 2008 World Global Economic Prospect (GEP) of the World Bank.

¹² Data on real GDP and real GDP per capita are UNCTAD secretariat's calculations based on UN/DESA Statistics and Population Divisions, August 2009 and refers to real GDP and real GDP per capita in (1990 dollars).

Figure 1. Real GDP and GDP per capita growth rate, 2002–2008
(Per cent)



The economic performance of LDCs as a group masks regional, sectoral and country variations (see Annex 2 for more details). In 2005–2007 at the regional level, the real GDP growth rate in African LDCs exceeded that of Asian LDCs for the same year. However, the real GDP growth for African LDCs (plus Haiti) shrunk from about 8.5 per cent in 2006–2007 to 6.2 per cent in 2008, whereas in the Asia and the Pacific region it decreased from 6.9 per cent to 5.2 per cent during the same period. Consequently, for LDCs as a group, real GDP per capita grew by a mere 4.6 per cent in 2008 against 5.9 per cent in 2007. Overall, in 2008 the number of LDCs that registered a real GDP growth rate of 6 per cent and above was 14¹³ – compared to 21 during 2005–2007 (5 of which are oil and mineral exporters). During the same year, 16 other LDCs¹⁴ – compared to 17 countries during 2005–2007 (of which 5 are mineral and/or oil exporters) registered real GDP growth rate of 4–6 per cent, while 9¹⁵ more countries from the group grew between 3 and 4 per cent. In fact, in 2008, real GDP per capita growth was less than or equal to 1 per cent in 16 LDCs, while it actually remained below zero in 9 LDCs. This trend compares negatively with that of the 2005–2007 period when only 2 LDCs registered negative per capita real GDP growth rate. However, these growth rates are still impressive when compared to the 2000–2004 period when only 6 out of the 46 LDCs (for which data are available) were able to meet or exceed an average annual growth

¹³ Angola, Bangladesh, Bhutan, Democratic Republic of Congo, Lao People’s Democratic Republic, Equatorial Guinea, Ethiopia, Liberia, Malawi, Rwanda, Solomon Islands, Timor-Leste, United Republic of Tanzania and Vanuatu.

¹⁴ Benin, Burkina Faso, Burundi, Cambodia, Djibouti, Gambia, Madagascar, Maldives, Mozambique, Myanmar, Nepal, Sao Tome and Principe, Sierra Leone, Sudan, Uganda and Zambia.

¹⁵ Afghanistan, Guinea, Guinea-Bissau, Lesotho, Mali, Mauritania, Niger, Senegal and Yemen.

rate of 7 per cent per annum. At the sectoral level, although oil-importing African LDCs have continued to improve their economic performance, oil-exporting LDCs continue to be the driving forces behind their region's improved economic performance. Out of the 12 African LDCs registering a high growth rate, 8 of them were oil or mineral exporters. Overall, during the period from 2000 to 2008, the highest growth rate in the LDCs as a group was evident in mining industries, the exploitation of crude oil and construction. Agriculture contributed a little over 30 per cent of the GDP in 2005–2008 as compared to above 35 per cent 10 years earlier. The share of manufacturing in total value added increased only marginally from 10 per cent to 11 per cent of total GDP (the average for other developing countries is 24 per cent) over the same period whilst the share of services declined marginally, from 42 to 40 per cent.

B. International trade

Regarding international trade, LDCs' export structure remains concentrated on a few primary commodities and low-skilled labour-intensive manufactures. However, recent high rates of export growth have been key in driving their strong GDP growth performance. As a result, international trade accounts for about 50 per cent of the GDP of LDCs as a group. In nominal terms, the value of LDCs' total merchandise exports has increased from \$83.3 billion in 2005 to \$128.5 billion in 2007¹⁶ and to about \$172 billion in 2008. During the same period, the total merchandise import of LDCs as a group has also significantly increased from \$87.9 billion in 2005 to \$101.4 billion in 2006, and to \$153 billion in 2008 (with a trade balance jumping in their favour, from a negative balance of \$4.5 billion in 2005 to \$19 billion in 2008. In fact, the trade balance in favour of LDCs was the highest in 2006, when it amounted to over \$27 billion. In comparison, the value of total merchandise exports achieved in 2008 was \$88.7 billion above the level in 2005 and \$131.8 billion above the value in 2002. This improved export performance was largely due to rising international commodity prices. With oil and mineral prices rising, exports from African LDCs (plus Haiti) increased from \$58.5 billion in 2005 to \$132.2 billion in 2008, while increasing from \$24.5 billion to \$38.9 billion in Asian LDCs during the same period. Overall, despite the high rate of growth of exports of LDCs and despite the fact that trade accounts for over 50 per cent of their GDP, the share of LDCs in international trade remains marginal (at less than 1 per cent in 2006–2008). As can be noted from the figure below and from Annex III, the 2005–2008 period was notable for LDCs as a group as their total merchandise exports grew from \$83.5 billion in 2005 to \$172 billion in 2008 (nearly 107 per cent increase), although, during the same period, merchandise imports also grew significantly.¹⁷ However, a major factor which affected the performance of LDCs in 2009 was the collapse of commodity prices. The commodity price boom which began in 2002 came to an end in early 2009¹⁸ and sharply declined during the second half of the year, reflecting the decline in global demand, largely due to global economic crises. Consequently, export earnings of LDCs as a group sharply declined (by up to 50 per cent) over the first half of 2009.¹⁹

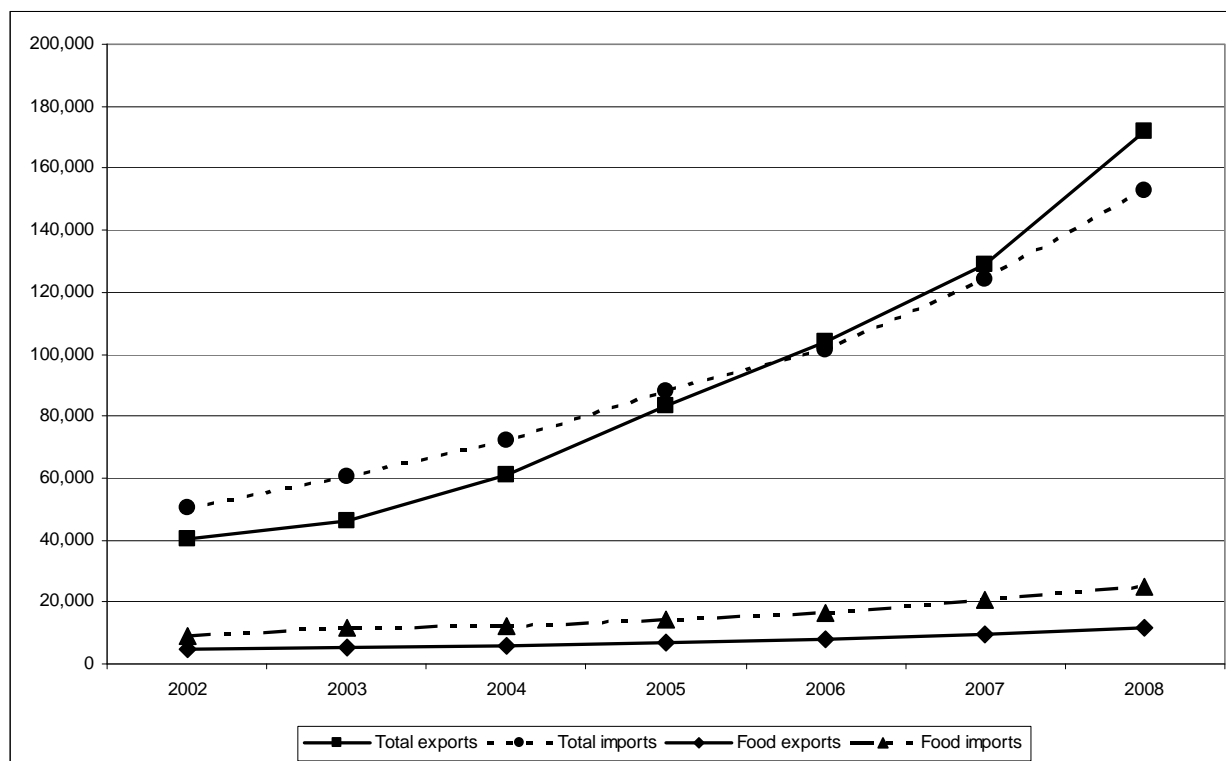
¹⁶ Total imports and exports: UNCTAD Secretariat estimates based on UN/DESA Statistics, COMTRADE data, January 2009.

¹⁷ Data on total imports and exports are UNCTAD Secretariat estimates based on UN/DESA Statistics, COMTRADE data, January 2009

¹⁸ For more details see the 2009 Trade and Development Report of UNCTAD: Responding to the global crisis, climate change mitigation and development

¹⁹ This is based on estimates as the data for 2009 was not available when this report was prepared.

Figure 2. International trade performance of LDCs, 2002–2008
 (\$ millions)



Another feature of international trade in LDCs is the increasing share of food imports, nearly triple from \$9.2 billion in 2002 to \$16.4 billion in 2006 and to \$24.8 billion in 2008. In comparison, food exports increased only marginally, from \$4.8 billion in 2002 to \$8.1 billion in 2006 and to \$11.5 billion in 2008.²⁰ The sharp rise in international food prices in 2006 and 2007 led to a substantial increase in food import bills for LDCs as a group. The unprecedented rise in global food prices has also resulted in social, political and economic burdens for LDCs – many of which are not only net food importers but are also food-insecure. The adverse impact of rising global food prices on LDCs can be seen as an emerging challenge but can reflect the deep-rooted structural problems with LDCs’ economies. Agricultural productivity in LDCs has been on a precipitous decline over the last several decades, while the demand for food has been on the rise, partly due to changing demographic trends in these countries. This sector was more productive 50 years ago than it is today and, in many LDCs, the annual growth of cereal production shrunk, from 3–6 per cent of agricultural produce in the 1980s to just 1–2 per cent today (UNCTAD policy brief, no. 2, June 2008). Rising food prices may complicate an already precarious food security situation in LDCs. For instance, according to the International Fund for Agricultural Development (IFAD), rising international food prices have been transmitted to domestic markets in several LDCs.²¹ This is despite the fact that many LDCs are also recipients of food aid year after year.

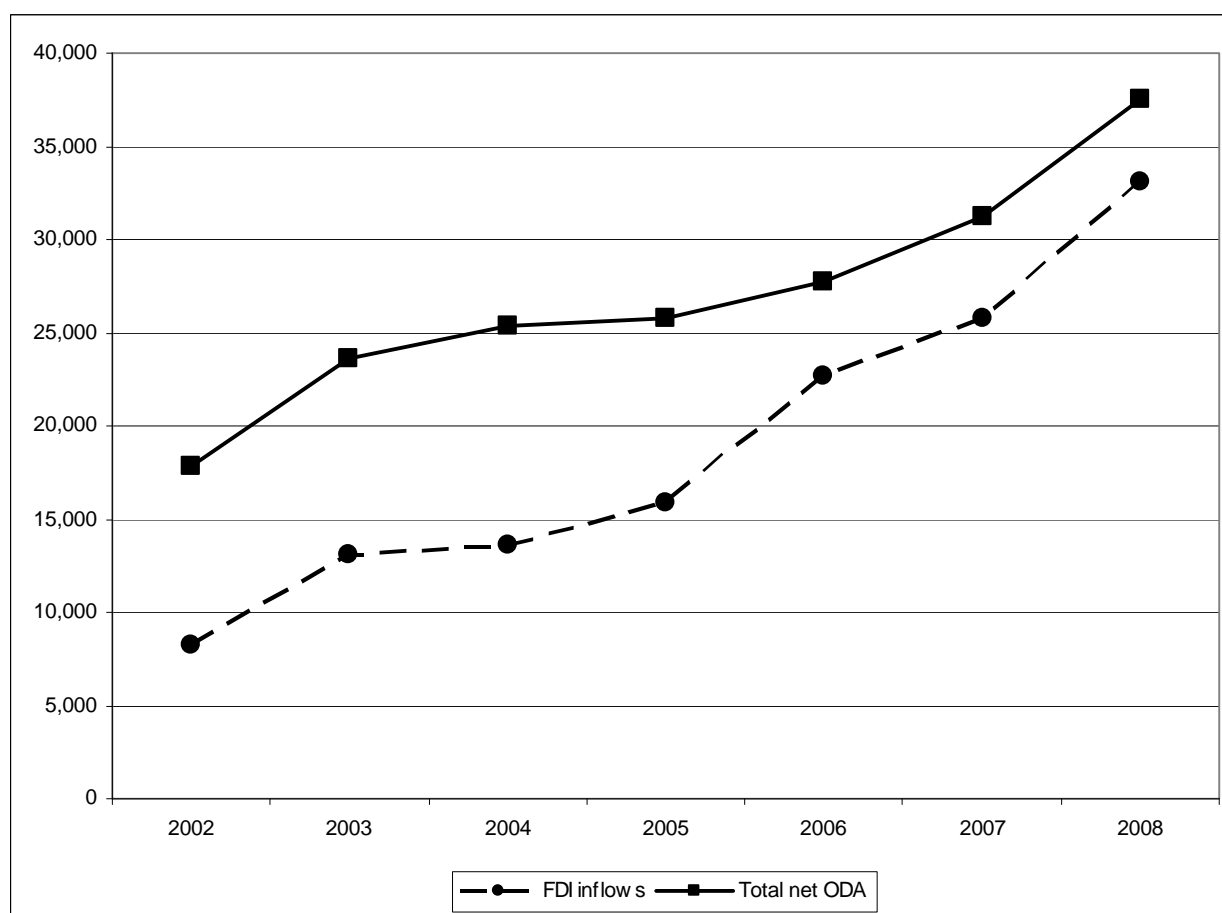
²⁰ Data on food import is and exports are based on UNCTAD secretariat estimates based on UN/DESA Statistics, COMTRADE data January 2009

²¹ For example, in Senegal wheat prices by February 2008 were twice the level of a year before; it increased by almost 90 per cent in Sudan and tripled in the northern part of Somalia. The price of maize in Uganda (Kampala) was 65 per cent higher in March 2008 than in September 2007, while it was 43 per cent higher in Mozambique (Maputo). According to the Food and Agriculture Organization of the United Nations (FAO), in Ethiopia (Addis Ababa), wheat and maize prices also increased by 33 per cent between March 2007 and March 2008.

C. External financial resources flows

As shown in figure 3 below, in 2008, total external financial flows, (including debt forgiveness and technical assistance) to LDCs reached \$44.3 billion (at current prices) up from \$33.4 billion over the previous year. When compared to 2002 (which was about \$17 billion, total official flows have actually more than doubled in 2008. Net official development assistance (ODA) flows to LDCs (excluding debt forgiveness grants and technical assistance) increased, in terms of volume, from \$32.2 billion in 2007 to \$37.6 billion in 2008,²² (although ODA distribution was uneven and there were instances where ODA actually declined for some LDCs). Similarly, FDI flows to LDCs also increased from about \$25.8 billion during the last quarter of 2008 to \$33.1 billion in 2009. FDI flows have almost quadrupled compared to 2002 (\$8.3 billion) and doubled in 2005 (\$13.6 billion). Much of this FDI was directed towards oil- and mineral-exporting LDCs, of which only 12 accounted for more than \$25.1 billion (or about 76 per cent) of total inward flows to LDCs in 2009²³.

Figure 3. FDI inflows and total net ODA to LDCs, 2002-2008
(\$ millions)



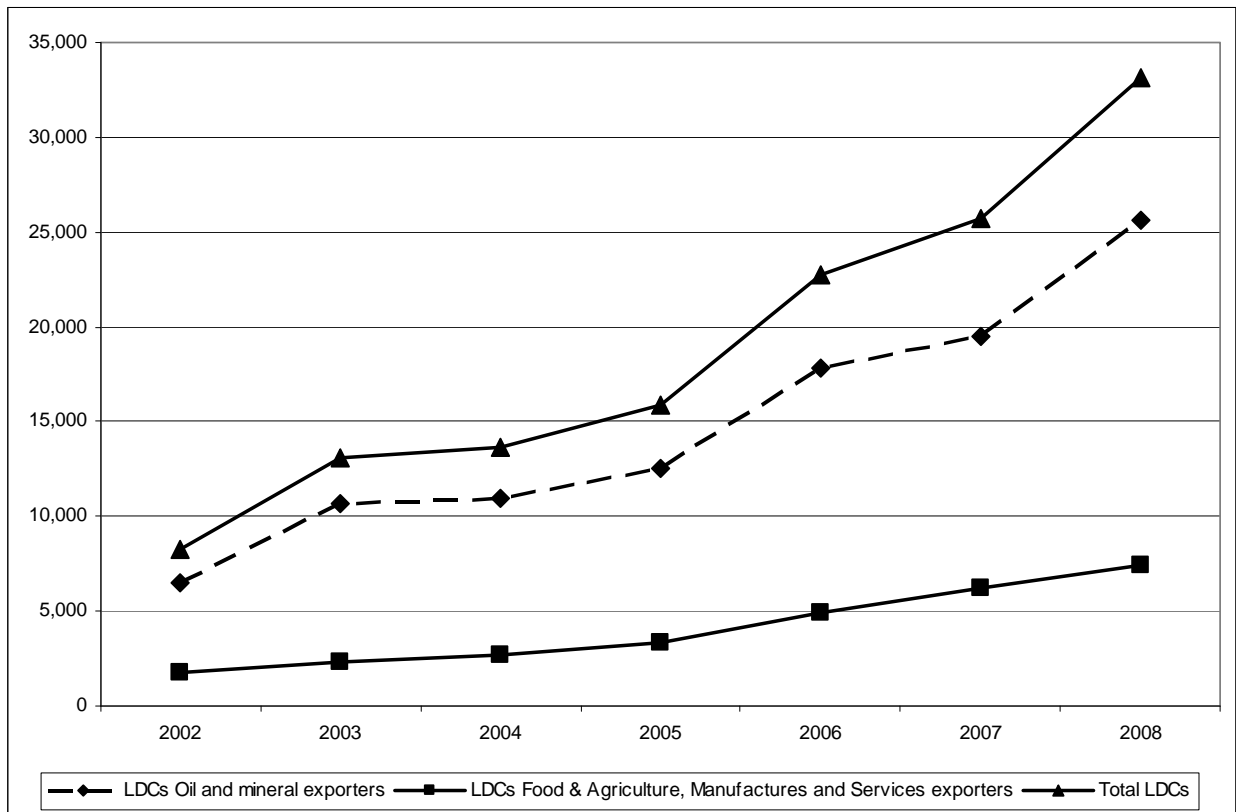
²² Data on external financial flows are from OECD/DAC, International Development Statistics, online data, 21 January 2010.

²³ FDI data are from UNCTAD, FDI/TNC database, *World Investment Report*, October 2009.

Improved economic performance observed over recent years in LDCs has been accompanied by improved international support measures and sound policies at the national level. Financial flows to LDCs, notably ODA and FDI have substantially increased and market access conditions for their exports significantly improved since the adoption of the PoA. Moreover, since the adoption of the PoA, there has also been significant progress in the untying of aid for these countries and in alleviating their external debt burden.

However, despite significant improvements in official and private capital flows to LDCs in recent years, in addition to their sectoral bias, ODA flows are also largely provided in the form of debt relief and humanitarian (emergency) assistance. Moreover, despite an increase in official and private capital flows to LDCs (notably ODA and FDI), both ODA and FDI flows continued to be concentrated geographically and/or sectorally. For instance, FDI inflows to oil and mineral exporting LDCs increased from \$6.5 billion in 2002 (against \$1.8 billion to food and agriculture, manufacture and services exporters) to \$25.6 billion in 2008 (only 7.4 billion went to the LDCs that are food and agriculture, manufacture and services exporters). In 2008 nearly 77.5 per cent of total FDI inflows to LDCs, went to 12 oil and mineral exporting countries (see the below figure).

Figure 4. Sectoral distribution of FDI in LDCs by export specialization, 2002-2008
(\$ millions)



D. Trends in savings and investments

As with the economic growth, trends in investment and savings also paint a mixed picture. While overall domestic savings increased from 13 per cent of the GDP to 21 per cent for LDCs as a group, it actually declined in half of the LDCs during 2000-2007. Over the same period, the highest domestic savings rates were found in the oil-and mineral exporting LDCs.²⁴ Trends in overall resource gaps reflect trends in domestic savings and paint a similar picture. For LDCs as a group, the resources gap, which indicates reliance on foreign resources, has fallen from 7 per cent of GDP in 2000-2002 to 1.6 per cent in 2006/2007. However, 15 LDCs had negative domestic savings rates in 2007 and thus were relying on foreign savings to finance their domestic investment and consumption. Overall, LDCs are far behind the target of 25 per cent investment to GDP ratio of the Brussels Programme of Action. This shows that the external financial resources remain critical as most LDCs depend on external sources of capital to finance their development needs and, in some cases, for domestic consumption.

Linked to the inability of LDCs to mobilize domestic resources for development is their weak and inadequate banking sector. Despite far-reaching reforms of their financial sectors, which were pursued mainly in the context of structural adjustment programmes, the banking sector in most LDCs remains woefully underdeveloped. According to surveys by the World Bank, more than 80 per cent of households and 80 per cent of small and medium-size enterprises (SMEs) in Africa have never had access to banking services. Furthermore, according to the most recent data, banks in African LDCs provided only 14 per cent of their loans to agriculture, even though agriculture in these countries accounted for more than 36 per cent of total value added and employed, on average, 86 per cent of the total labour force (UNCTAD, 2008). This institutional weakness combined with the high cost of lending, precluded, the access of enterprises especially SMEs to finance in these countries. This calls for urgent action to build institutional capacities of the banking sector of LDCs in parallel with efforts to make the cost of borrowings affordable through appropriate economic policies. The spread (variation) between the lead interest rate and applied rates is relatively higher in LDCs than other developing countries: consequently, banks in LDCs are twice as profitable as elsewhere, indicating a lack of effective competition in their banking sector.

E. Market access

At the end of the Paris Programme of Action for the 1990s and the beginning of the successor PoA for the present decade, several trading partners improved market access conditions for exports originating from LDCs. For instance, the Everything But Arms (EBA) initiative entered into effect on 5 March 2001, providing duty-free and quota-free market access to all products excluding arms. The scheme also excludes bananas, sugar and rice, for which customs duties are phased out over a transitional period and subject to tariff quotas. In May 2000, the United States promulgated the African Growth and Opportunity Act (AGOA), whereby the United States Generalized System of Preferences (GSP) scheme was amended in favour of designated sub-Saharan African countries to expand the range of products, including textiles and clothing. This was followed by the expansion of a Canadian GSP scheme to allow 570 products originating in LDCs to enter its market duty-free. In January 2003, the scheme was greatly improved by expanding product coverage to all products, including textiles and clothing, and new rules of origin with some minor exclusion of selected agricultural products. Similarly, following a review of Japan's GSP scheme, conducted in December 2000, it was revised to provide duty-free treatment for an additional list of industrial products originating in LDC beneficiaries. Following a second review in April 2003, an additional list of agricultural products was added for LDCs, and duty-free access was granted for all products covered by the scheme for LDCs. A latest significant change to the Japanese scheme was made in 2007²⁵. These and other bilateral preferential arrangements in favour of LDCs, have significantly

²⁴ Angola, Chad, Equatorial Guinea, Mauritania, Mozambique and Sudan plus the Lao People's Democratic Republic.

²⁵ For more details on these and other market access schemes, see UNCTAD/ALDC/2008/4.

improved market access conditions for many items of export interest to these countries. Overall, nearly 85 per cent of total developed country imports by value from LDCs were admitted preferential duty-free and quota-free during the period 2001–2007, although some LDCs’ exports still face punitive tariffs in some developed country markets. Recently, duty-free- quota- free coverage increased to 91 per cent of manufactured products and 93 per cent in the case of agriculture. Further efforts should be pursued to move towards the objective of duty-free and quota free market access for all LDC products and to remove market-entry barriers including non-tariff trade barriers.

As noted above, improved economic performance observed in LDCs since LDC-III in May 2001 has been accompanied by improved international support measures and sound policies at the national level. An important challenge for the coming decade is to make the progress achieved thus far through partnership more sustainable and long-lasting so as to improve the day-to-day lives of the ordinary people in the poorest countries, especially given the current global economic crisis.

IV. SECTORAL REVIEW AND ASSESSMENT OF SUCCESSFUL AND LESS SUCCESSFUL CASES OF NON-TRADITIONAL EXPORTS: THE CASE OF HORTICULTURE

The PoA identified a comprehensive set of measures (paragraph 68) which needed to be taken by LDCs and their development partners to help LDCs to increase their earnings from commodity exports in order to alleviate incomes poverty. The PoA called upon UNCTAD and other relevant organizations to intensify their efforts to assist LDCs to overcome commodity-related constraints to their development including in areas of non-traditional commodities exports where market niches offer fresh opportunities (para. 68t-u). Accordingly, UNCTAD designed and implemented a project with the objectives of (a) assessing the potential contribution of horticultural exports including tropical fruits from selected African LDCs to their socio-economic progress; (b) analysing poverty reducing impact of horticultural exports (tropical fruits) by creating employment opportunities for the rural poor, notably women; and (c) identifying policy recommendations for action at the national, regional and international levels. The project also assisted in closely examining the cases of successful exporters of horticulture such as Ghana, Kenya and Zimbabwe so as to draw policy lessons that can be replicated in LDCs, taking specific circumstances of each LDC and comparative advantages into accounts.

The work of the secretariat, including under this project, reveals that horticultural exports, which include vegetables, fruit and cut flowers, have grown steadily and become the single largest category in agricultural trade, accounting for more than 20 per cent of world agricultural exports. Horticultural exports from sub-Saharan Africa (SSA) have expanded and now exceed \$2 billion, but represent only 4 per cent of the world's total exports (English *et al.*, 2004).

The EU is the main market for African produce, but regional markets are also promising. Case studies²⁶ sponsored by UNCTAD in selected countries through Project INT/OT/5BP illustrate that horticulture is an extremely promising source of export diversification and poverty reduction for many LDCs, especially in Africa. Policy lessons and best practices drawn from the national case studies were deliberated at the Expert Meeting of LDCs which took place in Kampala, Uganda on 28–30 October 2009 as part of the preparatory process for LDC-IV. The summary recommendations from the expert meeting are available as Annex I to the present paper.

Country case studies and sector-specific studies covered in this paper confirm the findings of the recent study by the World Bank that growers in developing countries have a comparative advantage in horticultural products due to low labour costs and favourable natural resource endowments (World Bank, 2004). Promoting horticultural exports can greatly benefit the LDCs in the following ways. Firstly, horticulture can be an important source of more diversified and higher value non-traditional exports. In contrast to the declining prices of traditional agricultural commodities, prospects for horticultural products are very promising. International demand has been rapidly rising since the mid-1990s (English *et al.*, 2004). Secondly, horticultural production creates employment opportunities for the rural poor, notably women, and has significant impacts on poverty reduction. Studies also show that households who participate in horticultural production, in both rural and urban areas, earn higher incomes than households who do not (McCulloch and Ota, 2002). Thirdly, horticultural exports can enable LDCs to acquire new knowledge and technology in producing and marketing high-end products (UNCTAD, 2000). The perishable nature of the horticultural products and high sanitary and phytosanitary (SPS) standards require technical know-how and quality control.

²⁶ See UNCTAD/ALDC/2008/1. Further country case studies on horticulture in Ethiopia, Mali, Rwanda, Senegal and Uganda are also available at www.unctad.org.

The range of climate conditions suitable for various horticulture products is quite diverse, ranging from Burundi to Senegal and Uganda. An appropriate and flexible policy approach is required to encourage the private sector to respond to the opportunities and challenges of the rapidly-changing world market (Labaste, 2005). Moreover, international companies with technical expertise in production, packaging and marketing can serve as crucial intermediaries and transfer technology. For example, Blue Skies, a company based in the United Kingdom, exports tropical products from South Africa, Egypt, and Ghana to the EU market. In Ghana, Blue Skies prepares and packages ready-to-eat cut pineapple, papaya, and other tropical fruits in plastic containers for European supermarket shelves. It has rigorous quality control, Euro-Retailer Produce Working Group's Good Agricultural Practices (EurepGAP) certification and a good reputation amongst supermarkets. It provides capital at low EU rates, technical expertise, and marketing contacts, thus overcoming some of the key constraints in Ghana and elsewhere. In some countries (e.g. Burkina Faso) workers receive excellent social and health benefits and jobs in the company are highly sought-after.

EU and Middle Eastern markets are large and offer good growth potential, for least developed countries' exports, especially for high quality exotic/tropical fruits, quality products and certified organic produce. The EU enlargement to 25 member countries in May 2004 has created an even larger integrated market, and with rising incomes and continued changes in consumer preferences, the demand for such products is likely to continue expanding rapidly over the coming decade. African LDCs have tremendous potential to become a major horticulture producing and exporting region. Particularly, diversification into tropical fruits for both local consumption and exports in primary as well as in value-added form is among the growing sectors. However, this sector is hugely constrained by lack of capacity to meet market requirements including Sanitary and Phytosanitary Standards as well as other health and quality standard requirements.

A. Prospects, constraints and potential for export diversification through horticulture

Export growth and diversification is a catalyst for economic development (UNCTAD, 2008a). Exports promote development and poverty reduction through foreign exchange earnings, technological upgrading, and employment generation. In Asia and Latin America, export-led growth has been associated with the manufacturing sector. For Africa, however, exporting manufactures is difficult, given the lead in Asia and Latin America. UNCTAD (2008a) points out that dynamic efficiency gains and poverty reduction also accrue from other non-traditional exports such as horticulture, fishing, and tourism.

This study examines the situation and prospects of export horticulture (vegetables, fruits and cut flowers) in sub-Saharan Africa (SSA), particularly for African LDCs. As for manufacturing firms, horticulture exporters face intense competition and must satisfy the demanding quality and delivery schedules of developed country supermarkets. This requires efficiency in production, handling and distribution so that fresh produce reaches faraway supermarkets in an appealing and hygienic form. Horticulture therefore promotes technological upgrading. Also, like manufacturing, horticulture is labour-intensive and contributes to poverty reduction by raising employment and earnings. Horticulture exports can boost the demand for labour both through out-grower systems involving smallholders and production on large estates. Furthermore, horticulture raises the demand for labour in rural areas rather than exacerbating rural-urban migration and typically employs substantial numbers of women, thereby contributing to gender equity.

Africa has significant actual and potential comparative advantage in horticulture, particularly in European markets. Africa's varied but generally warm climate enables production in the European off-season. Also, Africa's proximity to Europe implies lower shipping costs and provides a natural advantage relative to South America and Asia. Africa also disposes of abundant and low-cost rural land and labour. African LDCs continue to benefit from preferential access to the European market, although preference margins are eroding. (For further reading on erosion of preferences, please see UNCTAD/LDC/2005/6.) SSA exports of horticultural products to Europe have expanded sharply but still account for a small share of total European consumption, leaving ample room for growth. Increasing supply to local retail chains

and to regional markets is also a potential source of growth, and can serve as a stepping-stone to the more lucrative European markets.

On the other hand, SSA exporters of flowers, fruits and vegetables face a multitude of obstacles on both supply and demand sides. On the supply side, producers are confronted with erratic weather patterns under the predominance of rain-fed production, poor infrastructure, lack of access to cheap credit, lack of knowledge about technology and marketing, and disorganization of producer organizations, government support agencies, and fragmented donor programmes (DTIS Senegal 2003; World Bank 2008). On the demand side, the most important impediments are the ever-rising quality and hygiene standards of the European market and the challenging of obtaining GlobalGAP certification, along with an intensifying competition from North Africa, Latin America and Asia.

The study also evaluates the opportunities and constraints facing export horticulture in Africa, drawing on case studies of several LDC and non-LDC countries, including Ethiopia, the Gambia, Ghana, Kenya, Senegal, Uganda and Zambia, as well as a recent UNCTAD study of Rwanda (UNCTAD, 2008c).

B. Trends in SSA Horticulture Exports

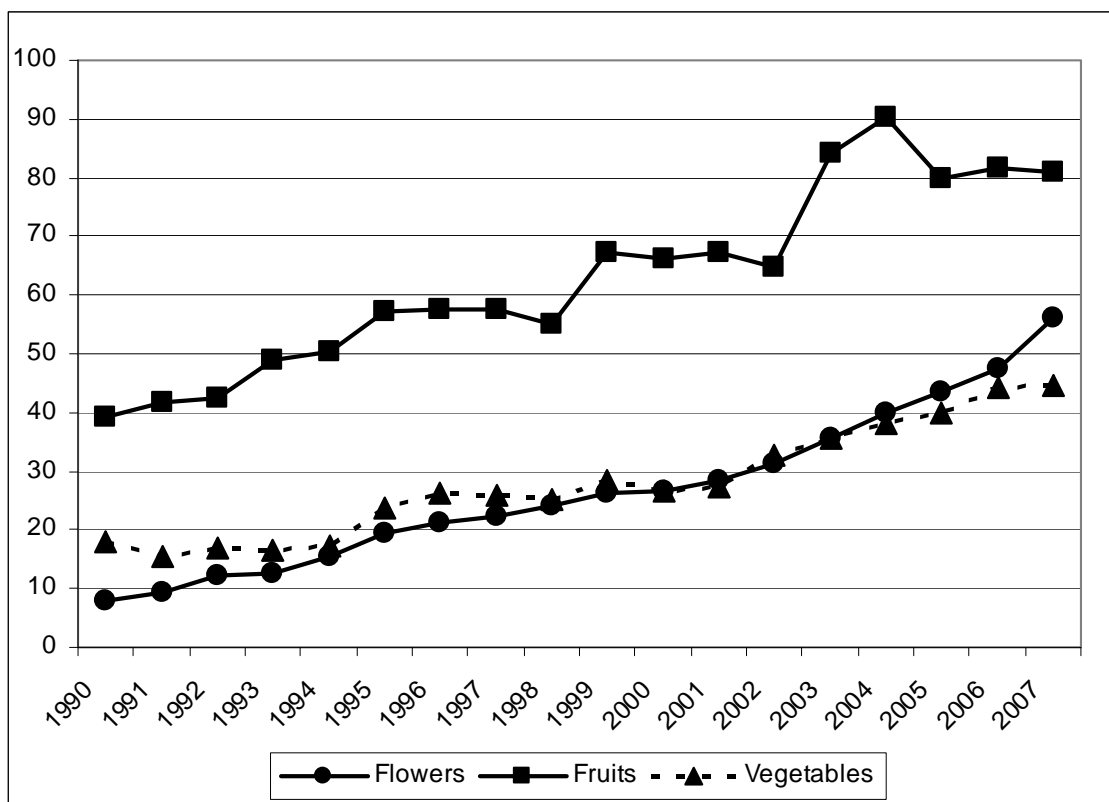
In 2007, SSA countries exported about \$4.6 billion of fruits, vegetables and flowers, up from \$530 million in 1990.²⁷ The most significant exports include pineapple, banana and mango from Western Africa and Southern Africa, roses and chrysanthemums from Eastern and Southern Africa, and green beans, peas, and “Asian” or “exotic” vegetables (e.g. okra, chili peppers, baby corn) from the entire continent. Flowers and vegetables are almost always shipped by air while less perishable fruit such as mangoes and pineapples are usually shipped by sea.

More than half of the total SSA export of horticulture in 2007 is accounted for by South Africa. Figure 5 shows the evolution in SSA fresh fruit and vegetables (FFV) exports in real terms over 1990–2007, excluding South Africa.²⁸ A clear upward trend is evident in all categories, with flowers showing the greatest growth rate, but fruit still dominating in absolute terms.

²⁷ Horticulture export figures are based on calculations using the COMTRADE database.

²⁸ South African exports consist overwhelmingly of fruit. In 2007, South African fruit exports amounted to \$2.3 billion. The overall situation for SSA is best presented by excluding South Africa from the SSA totals, given the atypical characteristics of the South African economy relative to other SSA economies and the fact that South African horticultural exports are recorded only after 1999 following the end of Apartheid. Consequently, all subsequent figures for SSA totals exclude South Africa.

Figure 5. Real SSA Exports of Horticultural Products, excluding South Africa
(2000 US\$ 100 millions)

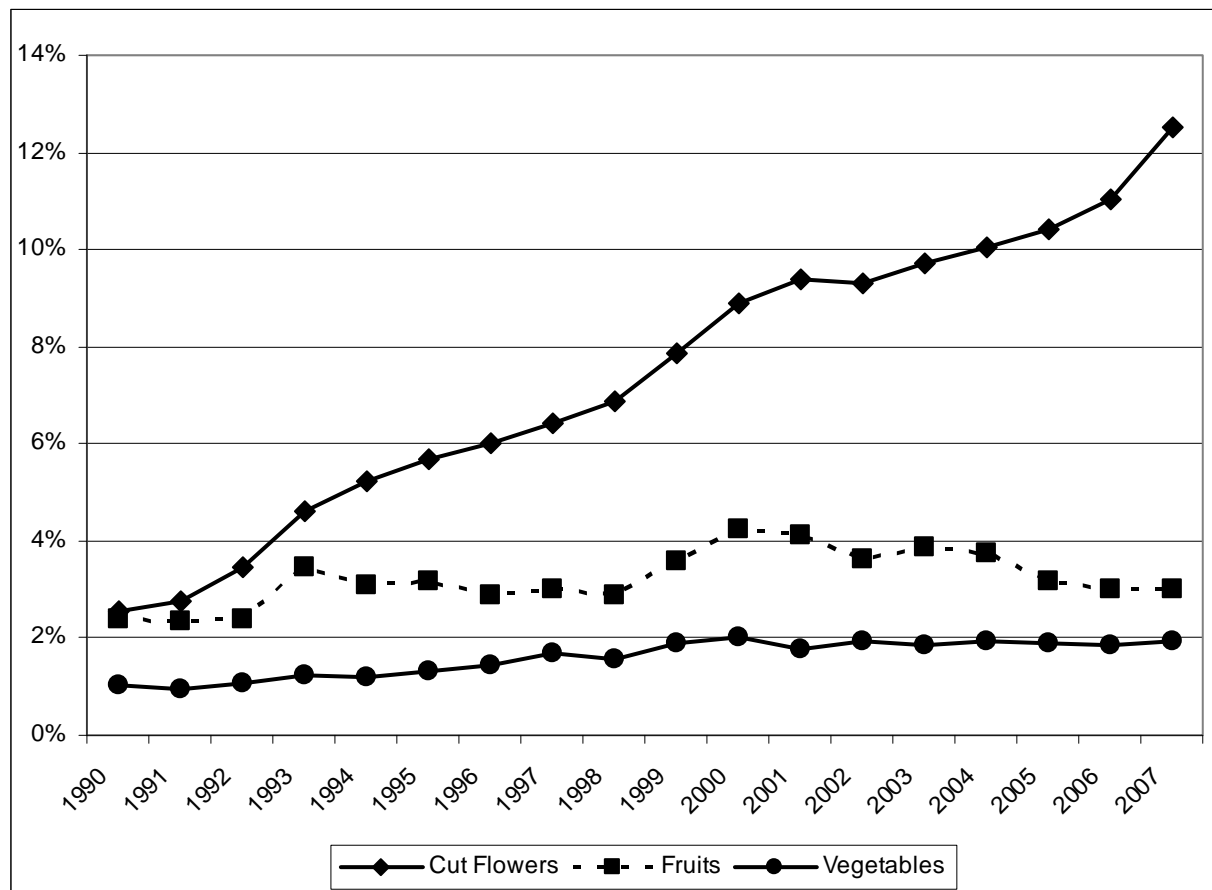


SSA exports are overwhelmingly destined for European markets. In recent years, more than 95 per cent of SSA exports of cut flowers and fresh fruit have been destined for Europe. For vegetables, the share of exports going to Europe is slightly lower, at about 85 per cent. Most of the remaining FFV exports are to other SSA countries²⁹. In short, the European market is of overwhelming importance to actual and potential SSA exporters, especially for fruit and flowers. For vegetables, other SSA countries are a significant market for some countries, but overall are much less important than Europe for the major SSA exporters.

Figure 6 shows SSA's share of total European imports of FFV. By this measure, SSA has been most successful in penetrating the European floriculture market, with SSA's share rising from under 3 per cent in 1990 to above 12 per cent in 2007. Fruits and vegetables, however, have shown much smaller increases in market shares, with fruits experiencing a decline after peaking at about 4 per cent in 2000.

²⁹ South Africa's exports are somewhat more diversified in terms of destination.

Figure 6. Sub-Saharan Africa's Share of European Imports, excluding South Africa



Aggregate SSA export trends conceal wide variations in individual SSA countries' success in penetrating the European market, as shown in Figure 7 and Tables 1–3.

1. Cut Flowers

Figure 7a and Table 1 depict selected countries shares of total SSA exports of cut flowers to Europe. In 1990, Kenya and Zimbabwe together accounted for around 90 per cent of SSA's share of the European market. Kenya has continued to dominate SSA exports to Europe (accounting for 60 to 70 per cent of all SSA flower exports), while Zimbabwe's share has plummeted in recent years. A number of other countries have made forays in the European floriculture market, with varying success. Uganda and especially Ethiopia have witnessed a large jump in export shares of flowers, while that of Côte d'Ivoire has dropped sharply. Zambia's share rose sharply until 2000 but has subsequently fallen back substantially.

2. Fruit

Aside from South Africa, the largest fruit exporters to Europe in SSA since 1990 have been Cote d'Ivoire and Cameroon, with the former's share falling and the latter's rising over time (Figure 7b and Table 2). Among other countries, Ghana has displayed remarkably strong growth of fruit exports, while Zimbabwe's share has declined in recent years. Senegal's small share has picked up in the last few years to reach about 2 per cent. Kenya's share has remained at about 3–4 per cent while Madagascar's share has fluctuated widely from as little as 2 per cent to as high as 10 per cent (not shown in the figure).

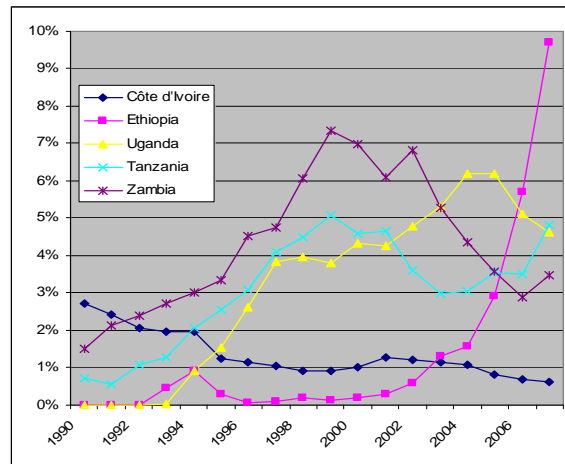
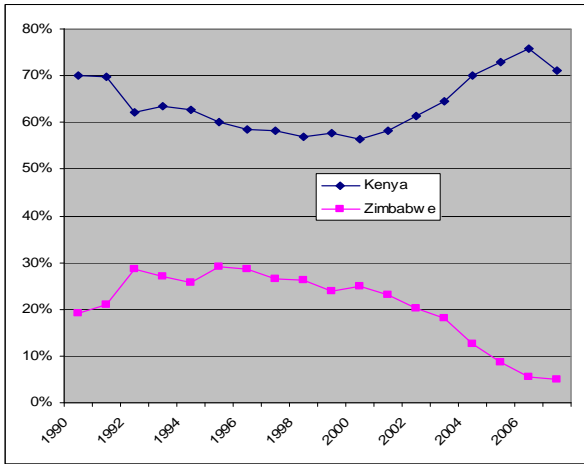
3. Vegetables

Kenya is by far the largest supplier of vegetables to Europe, with its share growing from about 40 per cent in 1990 to 60 per cent in 2007. Figure 7c and Table 3 display the shares for some other SSA countries, some of which are experiencing gains while others are losing ground. The countries who have gained market share since 1990 include Ethiopia, Ghana, Senegal and Zambia. Countries with declining shares include Burkina Faso, the Gambia, the United Republic of Tanzania and Zimbabwe.

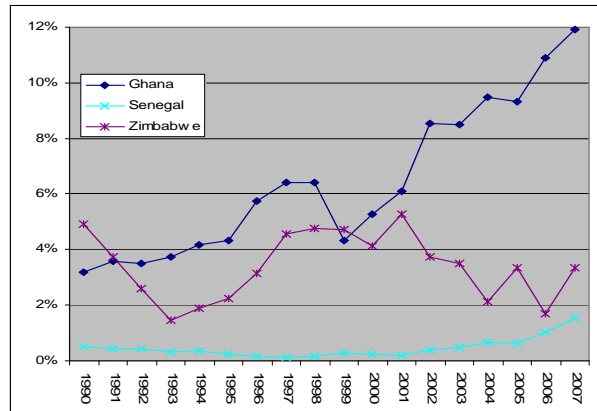
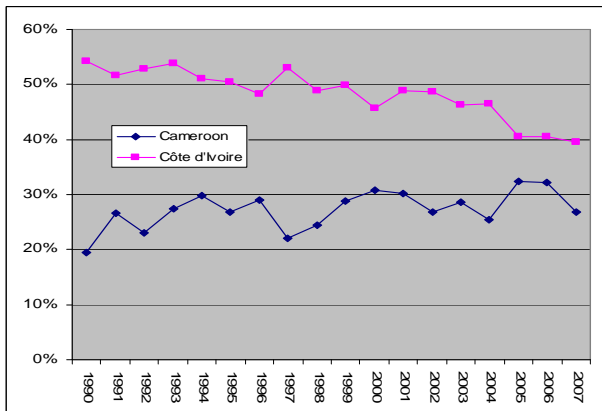
The factors explaining why some countries are gaining while others are losing are a central issue of this report and are analyzed through case studies and international comparisons.

Figure 7. Shares of total SSA exports to Europe, selected SSA countries

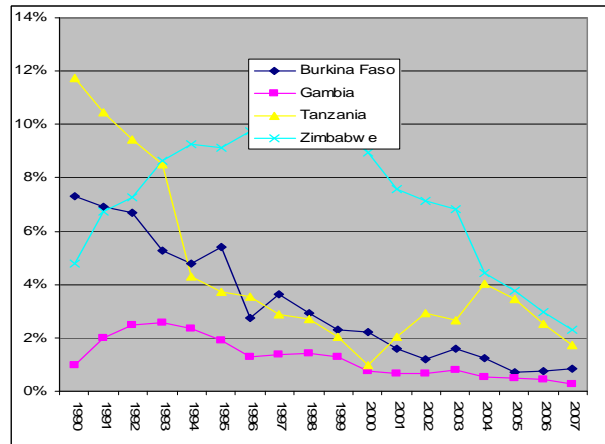
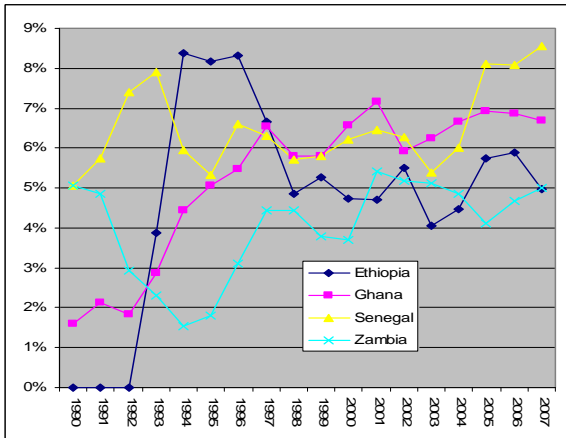
A. Flowers



B. Fruit



C. Vegetables



Source: UNCTAD Comtrade database³⁰.

³⁰ All statistical information on SSA exports is computed from the import data of the European Union as reported in Comtrade database.

Table 1

Sub-Saharan African Exports of Cut Flowers, Total and to Europe

(thousand dollars)

	Exports to World					Exports to Europe				
	1990	1995	2000	2005	2007	1990	1995	2000	2005	2007
Total All SSA	65,515	180,153	287,506	521,298	692,278	62,204	171,961	267,750	492,999	665,160
<i>of which</i>										
Burkina Faso	-	-	-	-	-	-	-	-	-	-
Burundi	4	-	2	315	346	4	-	2	315	346
Cameroon	103	278	791	1,998	1,629	103	278	791	1,997	1,629
Côte d'Ivoire	1,765	2,126	2,637	3,831	4,033	1,689	2,121	2,629	3,825	4,025
Ethiopia	-	490	561	13,986	64,840	-	488	530	13,708	62,680
Gambia	8	-	-	-	1	-	-	-	-	1
Ghana	-	-	134	13	25	-	-	134	13	25
Kenya	44,198	104,547	148,457	358,031	474,328	43,622	103,086	145,707	343,156	460,134
Madagascar	187	50	20	3	10	187	11	5	-	-
Mali	5	26	349	932	10	3	26	349	926	10
Mauritius	4,864	7,123	4,816	2,877	2,454	3,250	2,362	1,610	1,578	1,432
Niger	39	19	53	115	627	33	19	53	95	627
Nigeria	2	199	0	2	5	1	197	0	-	5
Rwanda	2	-	692	455	467	2	-	692	455	467
Senegal	88	7	7	3	1	-	7	6	2	1
South Africa	-	-	19,790	31,375	23,694	-	-	9,680	22,654	18,259
Togo	36	15	5	1	2	32	15	5	-	2
Uganda	3	2,677	11,145	29,295	30,158	3	2,676	11,141	29,215	29,826
United Rep. of Tanzania	459	4,372	11,864	17,036	33,070	459	4,370	11,853	16,721	31,209
Zambia	936	5,814	18,329	17,449	23,240	935	5,728	18,041	16,884	22,463
Zimbabwe	12,817	52,411	67,854	43,580	33,340	11,851	50,259	64,460	40,765	32,002

Source: UNCTAD Comtrade

Table 2

Sub-Saharan African Exports of Fruit, Total and to Europe
(thousand dollars)

	Exports to World					Exports to Europe				
	1990	1995	2000	2005	2007	1990	1995	2000	2005	2007
Total All SSA	318,865	525,778	1,737,817	2,946,445	3,290,547	315,539	516,403	1,428,384	2,456,281	2,802,615
<i>of which</i>										
Burkina Faso	1,997	1,274	755	5,313	10,753	1,997	1,179	569	4,671	10,720
Burundi	352	1,407	63 -		29	352	1,407	63 -		29
Cameroon	61,404	138,023	197,286	283,919	253,746	61,403	138,015	197,116	283,863	253,689
Côte d'Ivoire	171,402	261,169	296,776	363,798	384,332	171,399	260,654	293,391	355,064	374,384
Ethiopia	-	124	37	270	137	-	104	15	258	131
Gambia	697	971	675	1,275	1,797	697	971	675	1,271	1,797
Ghana	10,034	22,372	34,432	82,654	113,044	10,034	22,361	33,826	81,515	112,662
Kenya	10,924	21,026	22,280	38,388	31,613	10,920	19,627	16,986	29,191	29,470
Madagascar	14,121	49,014	54,925	31,751	53,977	14,061	48,916	54,682	31,432	53,879
Mali	2,201	1,464	1,793	4,510	10,652	2,200	1,365	1,730	4,486	10,651
Mauritius	1,378	1,107	995	2,493	3,623	1,326	1,017	948	2,451	3,593
Niger	6	34	151	21	15	6	30	145	8	0
Nigeria	956	435	667	1,339	47	930	239	46	1,242	44
Rwanda	38	4	172	111	123	38	4	149	111	121
Senegal	1,622	1,178	1,808	5,743	14,696	1,622	1,135	1,633	5,560	14,650
South Africa	-	-	1,075,817	2,044,413	2,322,032	-	-	787,712	1,581,533	1,857,006
Togo	566	181	496	1,849	2,427	566	178	468	1,773	2,427
Uganda	664	365	403	2,056	6,207	659	361	386	1,706	6,147
United Rep. of Tanzania	63	26	150	243	462	61	19	48	153	429
Zambia	914	228	343	280	372	913	160	223	271	287
Zimbabwe	16,179	13,250	29,448	33,357	37,188	15,545	11,662	26,566	29,294	31,498

Source: UNCTAD Comtrade

Table 3

Sub-Saharan African Exports of Vegetables, Total and to Europe
(thousand dollars)

	Exports to World					Exports to Europe				
	1990	1995	2000	2005	2007	1990	1995	2000	2005	2007
Total All SSA	145,909	217,477	335,762	559,852	627,565	113,277	177,744	243,428	402,479	514,461
<i>of which</i>										
Burkina Faso	8,285	9,638	5,346	3,192	4,171	8,285	9,603	5,065	2,701	3,924
Burundi	340	618	73	5	31	340	618	17	-	31
Cameroon	1,388	5,518	2,177	4,610	3,756	1,387	5,509	1,510	3,476	3,699
Côte d'Ivoire	968	3,254	1,444	2,212	2,032	937	3,054	1,306	1,612	1,681
Ethiopia	-	16,102	14,445	35,958	45,451	-	14,506	10,828	21,238	22,917
Gambia	1,120	3,364	1,695	1,859	1,143	1,120	3,364	1,695	1,858	1,143
Ghana	2,010	9,969	17,062	30,456	36,561	1,802	8,992	15,059	25,668	30,909
Kenya	60,071	74,112	126,821	210,645	283,084	48,318	70,582	124,562	205,130	279,282
Madagascar	16,484	13,032	5,570	7,115	9,611	11,298	7,456	3,980	5,871	6,290
Mali	1,028	3,794	3,256	553	317	1,027	2,790	2,519	533	317
Mauritius	1,832	3,100	368	258	695	304	183	241	199	416
Niger	389	582	1,637	3,760	1,334	313	341	1,386	1,985	7
Nigeria	656	1,831	1,262	7,111	7,503	581	1,458	960	6,434	7,075
Rwanda	196	27	126	11	8	196	1	0	5	5
Senegal	5,770	9,842	14,501	30,214	39,694	5,746	9,488	14,219	30,021	39,551
South Africa	-	-	68,166	109,978	94,361	-	-	14,641	32,344	52,374
Togo	1,311	923	1,972	3,065	3,084	1,311	895	1,924	2,244	2,562
Uganda	658	1,711	6,470	8,238	20,395	221	1,060	2,843	6,857	5,098
United Rep. of Tanzania	25,030	21,863	5,234	40,547	13,874	13,311	6,649	2,264	12,824	8,033
Zambia	5,735	3,342	8,673	18,891	25,939	5,735	3,225	8,444	15,238	23,108
Zimbabwe	5,744	19,880	24,479	15,073	12,481	5,433	16,236	20,510	13,942	10,606

Source: UNCTAD Comtrade

C. Constraints to Horticulture Production and Export

1. Supply-Side Constraints

Climate and natural resources

A warm climate that enables cultivation in the European off-season and contributes to high yields is an important factor in SSA's comparative advantage in horticulture production. Climate variations across the continent, however, require adaptation of established techniques to local conditions, calling for research and extension services. This is evident in the failed attempts to apply Kenyan techniques to Uganda's tropical climate that led to low-yield, poor quality flowers until the identification of more viable varieties by the United States Agency for International Development's (USAID's) Investment in Developing Export Agriculture (IDEA) project. In recent years, moreover, African climates have been subject to substantial variability, with alternating periods of drought and flood that have devastated harvests and undermined the predictability of output. Persistent dryness in Senegal, for example, has contributed to fires and desertification that have reduced soil fertility by 25 per cent over the last three decades (allAfrica.com, 1 March 2007). Widespread flooding in Ghana in mid-2007 and in Zambia later that year destroyed harvests. The dependency of most farmers on rainfall rather than irrigation makes SSA farmers particularly vulnerable to climatic uncertainty.

The lack of use of environmentally sustainable techniques is exacerbating the strain on natural resources. This is not due to the high cost of eco-friendly practices, but rather a lack of awareness. Drip irrigation, for example, is a low-cost method of efficiently watering crops that can conserve 20–30 per cent more water than traditional techniques, but is unknown to most farmers. Similarly, Integrated Pest Management, which is about 15 per cent more expensive than pesticides, replaces harmful chemicals with beneficial insects, but its application has been limited. The rapid depletion or pollution of water sources is restricting horticulture expansion in many SSA countries. Kenya's Lake Naivasha has received particular attention in recent years, as floricultural farms that are clustered around the shoreline have been blamed for a 10-foot fall in the water level from overuse and the loss of wildlife from careless management of pesticide runoff (Food & Water Watch, 2008). Horticulturalists around Mount Kenya are similarly being blamed for the disappearance of nearby rivers that have been diverted for irrigation (AA, 7 September 2008). This has led to dangerous water shortages as well as aggravated tensions between the local population and the foreign owners. Salinity problems from pesticide runoff have also been an issue in the Niayes region of Senegal.

At the same time, damage from pests has been rising, requiring greater use of pesticides. The locust invasions of the last few years throughout Africa have been especially severe. Earlier this year, for instance, the Ethiopian Government sprayed over 200,000 hectares of land in response to a massive infestation of locusts and army worms (AA, 14 Aug 2008). Diseases have also been acute, particularly on vegetable farms in Eastern and Southern Africa that have been invaded by a strain of bacterial wilt disease that is resistant to available pesticides (*F.I.* 10, 2007). The Pesticides Initiative Programme was created in 2001 to help SSA farmers address pest management issues without violating EU limits on pesticide usage, but pests and pesticides remain significant constraints on SSA horticulture.

Deficient physical infrastructure

The most visible constraint to horticulture exports in SSA is an undeveloped physical infrastructure. The "golden rules" of fresh horticultural and floricultural products (FHFP) development, consistency in supply and recorded traceability of products (Labaste, 2005), depend principally on the quality and technological sophistication of domestic production and

transport. The negative impact of undeveloped infrastructure on output is clear: poorly maintained roads in Senegal increase costs as much as 31.9 per cent, and Uganda's inadequate roads, rail, and airports impose the equivalent of an 80 per cent tax on exports (OECD 2006, *ibid.*). Inconsistent and delayed shipments are cited as the most common reason for failed transactions and lost customers (OECD, 2007).

Infrastructural needs can be categorized as basic production factors – access to water, good roads, electricity, airports, and sea ports – and as advanced production factors – irrigation, refrigerated transport, cold storage, and communications technology (Labaste, 2005). Basic infrastructure is essential for horticulture as for all modern economic activities. The industrial shift in European food markets toward multinational retailers augments the importance of an advanced infrastructure. The “cold chain” is particularly crucial: refrigerated storage on farms, on trucks, and at airports and seaports. These elements are necessary to maintain the quality of highly-perishable products (which includes most FHFP) and to minimize waste. The discontinuity of the Ghanaian cold chain, for example, causes losses of 40 per cent of output yearly (USITC, 2008). While foreign investors like Compagnie Fruitiere or Sher Karuturi have constructed some aspects of the cold chain, the majority is characterized by public or near-public goods, requiring governmental or donor provision. This is especially true of more remote rural areas with abundant and cheap land and labour that remain unexploited due to the lack of physical infrastructure.

Insufficient and costly cargo availability

All shipments from SSA must be sent by air or sea. West African producers have the option of shipping some products by sea but greater distances rule out this option for East Africa. For LDCs, lack of air cargo space in particular is often a major constraint on expansion of horticulture. For example, in the Gambia, exporters cite this factor as one of the most important impediments. There are significant economies of scale in international shipping, so countries with small export volumes incur higher transport costs. This situation may justify temporary air freight subsidies, as in Ethiopia and Rwanda (UNCTAD, 2008c). Boosting tourism also helps by increasing the number of flights, as in Kenya, which also benefits from scale economies due to its high volume of exports of vegetables and flowers. Zambia faces very high air freight rates which have led many vegetable producers to truck their produce to South Africa and fly out of Johannesburg. On the other hand, the efficiency of domestic airports and ports determines in part the availability of international air and maritime service, as carriers are more likely to stop in well-functioning locations. High world oil prices are also a factor in raising shipping costs, although this can work to SSA's advantage relative to Latin America and Asia, given the lesser distance to Europe.

Lack of access to finance

Financing is increasingly necessary in export horticulture markets due to the transition from low-end to high-end buyers that require higher quality inputs (seed, fertilizer, pesticide), greater farm infrastructure (field toilets, hand washing facilities, storage), and certification by international standards organizations (which involves significant costs and fees). Additionally, trade credit is necessary. Exporters typically have to wait 45-60 days for payment after shipment, and producers have to wait even longer, making it difficult to meet short-term obligations in the absence of credit (UNCTAD, 2003). Domestic producers are constrained by the lack of available credit, which is the result of the absence of available financial institutions and the unwillingness of existing institutions to lend to small and medium enterprises in Africa. Even when credit is available, interest rates are often prohibitively high. The interest rate on domestic loans to rural enterprise in SSA is typically above 30 per cent per annum (UNCTAD, 2008b). High interest rates have been blamed for the lack of investment in small horticultural players such as Zambia (AA, 4 December 2007). The Ethiopian Government has addressed this constraint by offering subsidized loans through

the Ethiopian Development Bank to horticultural producers and exporters. The interest rates on these loans are about half of the regional average: 6.5 per cent versus 12+ per cent (UNCTAD, 2008b). This practice has not been implemented elsewhere. An advantage of FDI is that it can alleviate this problem through foreign firms' access to international financial markets. Donors can also provide financing for technological upgrading, but the short horizons of donors make this a more precarious option.

Lack of information and know-how

Export of horticulture in Ethiopia and Uganda has existed for less than 20 years, and floriculture is even more recent. Dearth of skilled labour and know-how, especially of middle-tier management, relative to more-established competitors such as Kenya is a serious handicap for new entrants such as Rwanda (UNCTAD, 2008c). In spite of the provision of extension services by donors such as USAID, the Program for Economic Cooperation in Projects (PECP), and the German Technical Cooperation (GTZ), many producers remain unaware of modern practices and requirements. For example, lack of knowledge explains the lack of use of efficient and relatively inexpensive techniques such as drip irrigation in some countries. There is also limited dissemination and updating of current market information, and the websites of most exporter associations and government agencies have not been revised in 5–10 years. Again, multinationals with experience in many countries and with global marketing networks, can provide a critical vehicle for transfer of technology and market connections. Foreign investment was crucial to the establishment and growth of horticulture in Kenya and Ghana. It is therefore vital to maintain an attractive environment for foreign direct investment.

Fragmentation in the institutional environment

The respective case studies reveal that the absence of coordination between public and private organizations is a significant constraint to the development of horticulture in West Africa, especially in Ghana and Senegal (see pages 36-42 and 48-53). In many countries, exporters associations are fragmented and ineffective. In Ghana, for example, there are several competing exporters associations (FAGE, SPEG, HAG, VEPEAG, GAVEX, etc). This is less of an issue where governments or multinational corporations (MNCs) actively directed the creation and development of an export horticulture sector, as in Ethiopia and Kenya, or where the sector is characterized by a small group of large-scale producers, as in Ugandan floriculture.

Fragmentation within and between support institutions, in turn, has undermined the ability of producers and exporters to respond quickly and effectively to changes in market demand. SSA pineapple producers have been sluggish in their adoption of the MD2 variety, favoured in Europe for its extra sweetness, low acidity, and uniformity, leading to a significant loss of market share to more organized operations in Central America. Similar circumstances have plagued the papaya market with the introduction of the Golden Papaya variety. Moreover, the lack of a coherent, collective strategy among donors has undermined the effectiveness of aid (see case study of Ghana, page 36-42). While Ghanaian and Senegalese horticulture has expanded over the past decade, lack of coordination has inhibited more rapid growth. On the other hand, Ethiopian horticulture, which has received comparatively little external assistance, is booming under the focused direction and support of the government.

Socio-political context and business climate

Political stability and sound overall economic policies are essential backdrops for any sophisticated industry, whether manufacturing or horticulture. Civil war in Côte d'Ivoire and poor economic policies in Zimbabwe have driven potential investors away from those countries and led to the decline of horticulture over the last five years.³¹ Horticulture in the Gambia has yet to recover from the instability following the 1994 coup d'état. More recently, election turmoil in Kenya has had a damaging effect on horticulture exports. Although the instability in Kenya and Côte d'Ivoire has been a positive short-term development for competitors such as Ethiopia, Uganda, Zambia and Ghana, who have concurrently witnessed an influx of FDI, it threatens the long-term reputation of the whole continent and threatens neighbouring countries with cross-border violence.

Given the importance of FDI in horticultural development, a favourable overall business climate is important to attract investors. This means providing adequate physical infrastructure as described above but also refraining from excessive interference in business. The success of Kenyan horticulture is largely attributable to the Government's lack of intervention. Likewise, in Senegal, horticulture has grown while traditional crops have stagnated, in part because the private sector has been given a free hand. On the other hand, the Government has intervened aggressively in Ethiopia, with targeted subsidies, so far to good effect. It appears, therefore, that activist government policies can be helpful if they are well designed and implemented, and the viability of the private sector is the overriding objective.

Competitive exchange rates are important for horticulture as for all non-traditional exports. In addition to high transport costs, Zambia's competitiveness has suffered from strong real appreciation in recent years. The devaluation of the CFA franc in 1994 provided an important boost to Senegal's fledgling horticulture sector.

2. Demand-Side Constraints

Quality standards

SSA producers have mainly supplied European wholesale and auction markets rather than supermarkets with higher quality standards. In recent years, however, low-end markets have been shrinking as the industry is increasingly consolidated and dominated by high-end retailers that demand strict compliance to food and flower safety requirements. This demand is a result of the recent branding of supermarket chains, and the fact that produce quality is one of the ways the various chains compete (World Bank, 2003). A "standards drift" is even beginning in wholesale and auction markets: British and French wholesalers and Dutch auctions have recently rejected non-certified shipments of African produce and flowers (*F.I.* 10, 2007). These standards primarily include Good Agricultural Practices (GAPs, which encompass product safety, worker safety and environmental sustainability), pesticide residue limits and careful documentation of the origin of the product (traceability) (OECD, 2007). While standards awareness programmes and compliance initiatives have been present in all SSA horticulture exporting countries for years, widespread certification remains elusive, contributing to inferior FFV, pest-ridden flowers and a reputation for poor quality in European markets.

Horticulture standards have long been enforced by public agencies, and the International Organization for Standardization's ISO 22000 (which incorporates Hazard Analysis and Critical Control Points (HACCP)) and the World Trade Organization's (WTO) Sanitary and Phytosanitary Measures continue to play important roles in determining international food safety standards. Yet the most significant challenge is the rise of private

³¹ The Zimbabwe Independent (TZI), Business weekly, 30 September 2004.

voluntary standards (PVSs) that go beyond legal requirements and have become mandatory for exporters interested in selling to EU retailers. This trend is principally represented in the creation of the Euro-Retailer Produce working group's Good Agricultural Practices (EurepGAP) in 1997 by British and Dutch retailers, an industry-wide effort to consolidate individual PVS under one code, which was renamed Global Good Agricultural Practices (GlobalGAP) in 2007 to reflect the increasing international significance of that code. Some retailers impose additional standards in an effort to differentiate their produce (e.g. Tesco's Nature's Choice), but for the most part these standards are similar to GlobalGAP.

GlobalGAP certification is available to growers under two options – individual certification (Option 1) and group certification (Option 2) – and can either be obtained directly from the GlobalGAP Board or from approved national GAPs benchmarked against GlobalGAP (GlobalGAP.org). GlobalGAP certification requires significant initial investment in farm infrastructure (such as cold storage and field toilets), high-quality inputs, and worker training, and recurrent compliance fees can represent anywhere from 1–21 per cent of annual sales (UNCTAD, 2008b). These costs erode already thin profit margins and compromise the cost-competitiveness of African suppliers.

Since GlobalGAP standards apply to crops before they leave the farm, retailers are demanding compliance with other transport-specific criteria and procedures as well. The British Retail Consortium's Global Food Standard incorporates the most recognized post-farm gate standards, including packaging and transportation measures. Additionally, supermarkets require traceability in order to provide information to consumers and address quality issues as quickly and efficiently as possible. Although traceability requirements have existed in the EU General Food Law for years (Article 18 – *F.I.* 1, 2006), supermarkets are demanding more stringent and electronic documentation. Compliance with these measures, which necessitates detailed, organized record keeping, is especially difficult for small, "traditional" exporters that have little or no training in business management and limited access to computer-based systems (OECD, 2007).

GlobalGAP certification is the most important hurdle for SSA horticultural farms. However, recent consumer-driven demand for eco-friendly produce, and specifically the slow food movement, has also had a significant effect on purchases of African-grown produce in European supermarkets. This movement is stimulated by the erroneous belief that buying African produce supports a highly-polluting air-freight industry, and many supermarkets now label air-freighted produce with a plane icon that deters customers from buying African products. Development agencies have responded with studies from the International Trade Center and other sources that indicate buying from local, highly-mechanized farms is actually less environmentally friendly than importing food and flowers from low-energy-using SSA producers; a Cranfield University analysis shows that African floriculture generates 17 per cent of the carbon emissions that equivalent-sized Dutch production generate, and that 85 per cent of energy usage occurs once African produce is already in the United Kingdom (GFP, 27 July 2007). Moreover, 60 per cent of air-freighted horticulture is not transported in cargo planes, but in the holds of passenger aircraft, and there is no evidence that utilization of this excess capacity encourages additional flights (GFP, 27 May 2008). Although West African exporters have increasingly transitioned to sea-freight, this remains an unviable form of transport for most East African exporters. Thus, the success of counter-slow movements like the Kenya Flower Council's "Grown Under the Sun" is vital in preventing further decline in consumer demand.

International competition from non-LDCs

European importers continue to source the majority of African produce from non-LDC countries, especially South Africa, Kenya, Ghana, Morocco and Egypt. In 2007, importers sourced only 22 per cent of cut flowers, 4 per cent of fruits, and 22 per cent of vegetables grown in SSA from LDCs (23 per cent, 10 per cent and 24 per cent respectively, excluding

South Africa) (COMTRADE data, 2008). While this represents an improvement over levels of vegetable exports a decade ago, when SSA vegetables were almost exclusively supplied by Kenya, Zimbabwe and Ghana, it is a fall in the LDC share of flower exports by 30 per cent and fruit exports by 50 per cent since 1997. The largest LDC exporters are Ethiopia, Uganda, the United Republic of Tanzania and Zambia (see Tables 1–3 above). Most LDCs, however, find it difficult to compete against established non-LDCs, and are thus falling further behind.

More recently, non-African competition from Latin America and East Asia has increased. This is in part due to the erosion of the African, Caribbean and Pacific Group of States (ACP) and LDC trade preferences that enable countries such as Costa Rica and China easier access to the European market. ACP has had preferential and non-reciprocal access to the EU under the Lomé Convention (1976) and Cotonou Agreement (2001). Economic partnership agreements (EPAs) are being negotiated as a replacement of the Cotonou Agreement and would create a free trade area between the EU and ACP countries, including non-LDC horticulture producers such as Kenya, Ghana, South Africa and Côte d'Ivoire, thereby retaining duty-free access for all African exporters. All LDCs are also eligible for preferential access to the EU and to other non-EU countries under WTO's enabling clauses, including GSP. The EU's Everything But Arms (EBA) initiative grants tariff and duty-free access to all non-military imports from LDCs, which is a significant advantage given the 6.9 per cent tariff on green beans and 2.3 per cent tariff on pineapple (the two most important SSA FFV exports) for all other countries (UNCTAD, 2008b). However, bilateral agreements and changes in the GSP structure have undermined this advantage. For example, the world leader of banana exports, Ecuador, is currently petitioning for the elimination of EU tariffs on their exports, a move that could force African banana exporters out of business (GFP, 1 September 2008). The GSP+ initiative, created in 2006, has also reduced tariffs for non-LDC countries that implement sustainable development and human rights policies, and it includes 11 Latin American countries that represent the majority of non-African horticultural exports competition (European Commission – Trade Issues, 21 December 2005).

Recent trade agreements have also improved conditions for regional competitors. As of 2007, Morocco and Egypt have obtained preferential market access. Increased competition in European horticultural imports is already evident as prices in supermarkets stagnate in spite of rising fuel costs and shrinking profit margins.

D. Horticulture Organization and Poverty Alleviation

1. Declining Smallholder Participation

Floriculture requires higher levels of investment than FFV and is consequently grown almost exclusively on large-scale commercial farms (UNCTAD, 2008c). These farms are financed by FDI, including investors from India (Sher Karaturi), Great Britain (Finlays Ltd., PGI Group Plc., Homegrown), and the Netherlands (Oserian), by donors, including USAID (in Uganda) and the European Development Bank (in Ethiopia), and/or by the government (as in Ethiopia). Smallholders are prevented from entering the sector due to the high initial costs and capital-intensity of production, especially in the construction and maintenance of greenhouses, and to the high perishability of the product, which requires a more technically advanced cold chain than most horticulture crops. Smallholder participation in horticultural markets is thus confined to FFV.

Until recently, smallholders dominated FFV production in SSA due to a number of advantages. Most crops do not necessitate high initial investment and there is no evidence that marginal costs decrease as production expands; thus, FFV is not characterized by economies of scale (UNCTAD, 2008b). Moreover, FFV cultivation is labour-intensive since it requires little machinery but great attention to land-specific and crop-specific needs, and harvesting is often based on the ripeness of individual fruit pieces rather than farm-wide conditions (Takane, 2004). This characteristic works in favour of smallholders, who have access to

cheap family labour. Smallholders also avoid principal-agent problems (since labourers and owners tend to be the same) and supervisory costs, which many plantations report to be substantial (*ibid*). As a result of these advantages, production costs per hectare have been estimated to be 22 per cent lower for smallholders than for large farms (Obeng, 1994). Exporters have historically preferred sourcing from smallholders, as the price offered by smallholders is more competitive than the price offered by larger farms, and because it allows exporters to spread risk over many suppliers (Mithöfer et al, 2007).

Nonetheless, African smallholders are increasingly dropping out of the FFV supply chain. In East Africa and Ghana, where small-scale horticulture farmers were most established in supplying for export, smallholder participation fell 50 per cent in 2005–2006 (UNCTAD, 2008b). Between 2003 and 2006, the first three years of EurepGAP, 60 per cent of smallholders were dropped by export companies in Kenya (*F.I.* 6, 2007). Over a similar period in Senegal, 72 per cent of smallholders were dropped by export companies, while the proportion of rural households involved in wage labour on FFV estates rose from 10 per cent to 34 per cent (Maertens and Swinnen, 2007). In 2006 alone, the number of smallholders involved in FFV export fell 40 per cent in Uganda (*F.I.* 10, 2007). And since 2000, 97 per cent of smallholders have stopped exporting FFV in Zambia (*F.I.* 13, 2007). This trend has shown no signs of reversing in spite of donor efforts to encourage smallholder participation through farmer cooperatives and out-grower systems.

Trends within the European, and especially the British, food industry are the source of demand pressures that have squeezed out smallholders. As the EU food industry consolidates and supermarkets and hypermarkets vie for additional market power through branding, horticultural supply chains are increasingly buyer-driven (UNCTAD 2000, 2008b). Danielou and Ravry (2005) observe that “supermarket brands are now so valuable that retailers are extremely risk-averse”, and produce sections are one of the few places where chains can differentiate themselves from competitors and establish this brand image (World Bank, 2003). Although some food processors and retailers such as Tropical Wholefoods in the United Kingdom have a policy of specifically purchasing from smallholders (*DTIS: Uganda*, 2006), risk-aversion and brand-consciousness have pushed the dominant trend in the reverse direction. Consequently, European supermarkets are increasingly purchasing from large farms, where standards compliance is more easily monitored, product origins are more easily traced, output is more consistent, and quality is more uniform. In particular, large farms can obtain GlobalGAP certification, the minimum requirement for retail supply since 2003, and related PVS with fewer costs and difficulties than smallholders. These difficulties occur at several levels.

At the level of production, smallholders are unable to meet the costs of GlobalGAP compliance. These costs are more significant for smallholders due to scale economies of compliance: as a share of total revenue, compliance costs are two to three times greater for smallholders than for large farms (*F.I.* 5, 2007). Major initial costs include employee training and the construction of pesticide/fertilizer storage facilities, field toilets and hand-washing stations, and major recurrent costs include certification and auditing fees (UNCTAD, 2008b). In Kenya, farmers pay 36 per cent of initial costs and 14 per cent of annual recurrent costs, with exporters, and to a lesser extent donors, sharing the remainder; elsewhere, the proportion paid by farmers is even smaller (*F. I.* 6, 2007). Yet these costs are an enormous burden on smallholders. In Zambia, for example, recurrent costs are 227 per cent of annual revenue, and initial costs require a financial outlay equivalent to 10 years of smallholder income (*F.I.* 13, 2008). Even in Ghana, where initial costs are only 6–11 per cent of annual revenue and recurrent costs are less than 1 per cent of annual sales, extremely slim profit margins undermine the feasibility of GlobalGAP compliance (UNCTAD, 2008b). Similarly, in Kenya, recurrent costs are a small fraction of turnover but can erode profit margins by 50 per cent or more. *Fresh Insights* 6 (2007) provides a breakdown of compliance costs that demonstrates the impracticality of smallholders achieving GlobalGAP certification: initial costs are £433 and recurrent costs are £104, but average profit margins are only £182. Financial pressures

are compounded by the fact that compliance has not resulted in price premiums on FFV from existing buyers, although it does lead to improved farm hygiene and safety, stable demand, and access to credit and information about markets (*F.I.* 16, 2008).

Even GlobalGAP Option 2, which was specifically formulated to permit smallholder participation in horticulture chains through group membership, has been criticized for imposing unreasonable financial and technical constraints on smallholders. In particular, certification does not account for differences in farm-specific levels of risk and thus applies the same measures to all farms, although smallholders do not have the complex machinery or chemicals that the standard was designed to regulate (*F. I.* 13, 2008). For example, Option 2 still requires all farms to purchase a spray suit for £40, or 10 per cent of the annual income of East African vegetable smallholders, even though these suits are designed to protect from tractor boom spray, which is not a hazard on non-mechanized small-scale farms (*F.I.* 16, 2008). The standard also requires irrigation, which can be a huge expense, and nearly impossible to obtain in regions like the Niayes in Senegal or around Lake Navaisha in Kenya, where farms are already under heavy international criticism for abusing water resources. These problems are exacerbated by complex and sometimes incomprehensible Quality Management System (QMS) manuals and record-keeping requirements. In Zambia, smallholders have failed to obtain certification despite compliance because of their inability to refer to specific QMS procedures and regulations during audits (*F.I.* 15, 2008).

At the level of domestic transport, smallholders are unable to deliver produce consistently and with minimal damage. This is not only a consequence of inadequate infrastructure, which affects the whole sector, but of the inability to finance refrigerated trucking. In 2005, the Zambian Agribusiness Technical Assistance Center (ZATAC), a project funded by USAID to link smallholders to exporters in Zambia, attempted to resolve this issue for a horticultural cooperative by purchasing an ex-United States Army truck and encouraging members to share use and expenses. However, lack of coordination among the farmers resulted in user costs that were still too high for any individual grower, and the opportunity remained unexploited (*F.I.* 5, 2007).

The high costs of compliance with GlobalGAP and other standards are exacerbated by the lack of access to credit described above. Smallholders trying to obtain GlobalGAP certification are caught in a vicious cycle, in which bankers are unwilling to provide credit because they are not linked to a major exporter or retail chain, although this is a consequence of not being GlobalGAP certified (*F.I.* 13, 2008).

Smallholders have difficulty in marketing their product as they are increasingly bypassed in favour of larger farms, despite the price competitiveness of smallholders. Retailers, and in turn exporters, demand a continuity of supply that smallholders are incapable of providing due to a lack of advanced farming technology (*F.I.* 12, 2008). Moreover, the burden of verifying GlobalGAP compliance and recording crop origins falls on the exporter, and the costs of these measures rise as the number of suppliers increases since the exporter must in turn perform more audits and track produce from more farms (supermarkets require standards compliance and traceability back to individual farms, *F.I.* 16, 2008). In Kenya, the costs of pesticide residue tests for individual farms are cited as the main reason that exporters have reduced sourcing from smallholders (*ibid.*). Some exporter associations, in an effort to limit these costs without compromising the integrity of their exports, have rules designed to discourage smallholder membership. In Senegal, for example, the *Organisation Nationale des Producteurs Exportateurs de Fruits et Légumes au Sénégal* (ONAPES) requires that members meet a certain level of export volume (200 tons) and a certain share of own production (50 per cent), thereby preventing smallholders or large companies with out-grower systems from becoming members (Maertens and Swinnen, 2007). Since ONAPES is the predominant middleman for linkages between producers and retailers in Senegal, these rules have had “a profound impact on the structure of the export supply chain” (Maertens et al, 2007).

Graffham et al (2008) found that 83 per cent of Kenyan smallholders who were unable to obtain GlobalGAP certification continued to export FFV but were limited to wholesalers and other low-end markets (*F.I.* 15, 2008). Not only do these buyers offer lower prices and more erratic demand, but this option is becoming less viable as the remaining wholesalers also increasingly require higher standards (*F.I.* 10, 2007). Additionally, LDCs such as Zambia that are relatively less cost-competitive can only enter the supply chain on the basis of quality and through high-end markets. In short, African LDCs cannot rely on demand from low-end markets, and must be able to supply high-end retailers. This cannot be done in the context of a smallholder-dominated supply base.

2. Three Viable Models for FFV Production and Export

(a) The vertically-integrated corporation

The vertically-integrated corporation that has links with major European retailers and supplies those retailers primarily from own-production is the fastest-growing model in SSA horticulture markets. This growth is stimulated by a positive feedback mechanism: the decision of a multinational corporation (MNC) to establish operations in horticulture acts as a strategic complement to other companies in the sector (especially through the sector's greater size and clout enabling cheaper purchase of and/or easier access to inputs and freight) and sends a positive signal to other foreign investors. African FFV sectors are projected to expand significantly in the next few years as MNCs launch major investments, including Sher Karuturi's massive 340,000-hectare vegetable diversification project in Ethiopia and Compagnie Fruitiere's increased growth of MD2 pineapple in Ghana. These corporations often control the entire domestic supply chain, including cultivation, processing and packaging FFV, and in some instances they also develop local infrastructure and privately-owned freight companies in order to fill in discontinuities in the cold chain. They borrow from local banks, which are willing to lend to them at lower rates than those offered to smallholders, or from international capital markets, and GlobalGAP certification is usually not an overwhelming constraint. Domestically-owned companies have commonly received financial assistance from donors, as in the International Finance Corporation's £2 million A loan to the *Société d'Exploitation des Produits Agricoles et Maraîchers* (SEPAM) or the United States African Development Foundation's (USADF) grants to Agriconcept (IFC.org 2007, USADF 2005).

(b) Out-grower systems

Smallholders have remained in the horticultural supply chain through two models: out-grower systems and cooperatives. Out-grower systems are based on closely-monitored contract farming, in which large corporations will provide smallholders with training, inputs, finance and stable demand for their produce. The level of the corporation's involvement in smallholder cultivation differs between systems, but typically a corporation will assist smallholders in a number of ways: (a) facilitate Option 2 GlobalGAP compliance by providing financial assistance, extension services, and monitoring of compliance; (b) purchase seeds and fertilizers in bulk to sell to out-growers at a reduced price; (c) provide domestic transport so that growers can truck their produce to exporters or to the company farm; and (d) provide credit at a lower rate than domestic financial institutions. These direct, contractual links between smallholders and buyers are also important to ensure steady demand and favourable prices paid to producers. The Horticultural Crops Development Authority (HCDA) in Kenya found that, in the absence of such linkages, middlemen pay lower prices to small-scale growers desperate to sell their crop before it rots (*Business Day Africa*, 9 July 2008).

Out-grower systems operate as supplements to own-production on large estates, as with Tongu Fruits in Ghana and Vegpro in Kenya, or as suppliers for food processors, as with

Amfri Farms in Uganda and Freshmot Zambia Ltd. in Zambia. Out-growers are often financed by international donors who aim to integrate smallholders into the horticulture supply chain. The Dutch non-governmental organization (NGO) Cordaid, for example, provided financial and technical assistance to Tongu Fruits to create an out-grower system in 2004 that would supplement the company's own output. Smallholders in this programme receive extensive training and experience, including a mandatory three years of wage labour on the company farm and several Cordaid-administered exams before they are permitted to purchase their own farm plots and grow for the company (KIT, 2006). Tongu Fruits supplies out-growers with MD2 plantlets; elsewhere in Ghana, the inability of smallholders to transition from Smooth Cayenne to MD2 pineapple was a major cause of small-scale farms being squeezed out of the supply chain. USAID is also involved in out-grower systems in SSA horticulture, including one organized by Fruits of the Nile, an exporter of dehydrated fruit in Uganda that sources raw and dried fruit from smallholders for processing in the company factory. The Fruits of the Nile system is less vertically-integrated than Tongu Fruits, and there have been complaints by exporters that inferior quality and productivity at the small-scale farmer and dryer levels result from lack of centralized management (Ribbink, 2005).

(c) Cooperatives

Smallholders have also remained in the horticulture supply chain through the cooperative model, which is comprised of a group of farmers centered about and managed by a produce marketing organization (PMO). Notable examples include Agriflora and its successor the Lubulima Agricultural Commercial Cooperatives Union (LACCU) in Zambia, Farmapine in Ghana, and Self-Help Groups in Kenya. As with out-grower systems, cooperatives enable smallholders to meet the critical mass of exporters by aggregating output, obtain cheaper inputs through bulk purchases of seed and fertilizer, obtain credit from local banks, develop agronomic techniques from agricultural extension services (sponsored by the PMO), and register for GlobalGAP under Option 2.

The horticultural cooperative model in SSA has not performed well. Few cooperatives have successfully functioned independently of financial and technical assistance from donors, and critics question the long-term sustainability of the model (e.g. *F.I.* 5, 2007). The sudden, devastating collapse of Agriflora in Zambia (2004) and of Farmapine in Ghana (2006), the largest horticultural cooperative in each country, highlighted the inherent instability of the model, even in the presence of significant external support. This instability is the result of weaknesses in the design of the model at several levels. At the level of the farm, moral hazard in GlobalGAP compliance can undermine the quality of the cooperative's output. Members are GlobalGAP-certified as a consequence of the group's certification, not their own demonstrated compliance. Annual audits choose a relatively small number of farms at random (usually the square root of the total number of farms in the cooperative) to determine the compliance of the whole group. Farmers recognize that the likelihood of being audited is slim (less than 5 per cent in large cooperatives like Agriflora with over 500 members), which encourages less costly, non-complying behaviour. Moreover, if a non-complying farm is identified, then the whole cooperative is deemed to have failed certification (*F.I.* 6, 2007). This problem can be exacerbated by contractual protections of growers within the group and by legal protections of the group as a whole. In Kenya, for example, Self-Help Groups (SHGs) cannot exclude individual farmers that do not comply with standards, and SHGs themselves are not legally designated as corporate bodies that can be sued (and thus held responsible) for problems in output (UNCTAD, 2008b). As a result, the quality of crops from cooperatives is widely perceived as dubious, and many European retailers are unwilling to source produce from them.

Additionally, mismanagement has plagued cooperative executive teams. Agriflora failed in 2004 after the discovery of huge accounting irregularities as a result of poor corporate governance, leading to millions of dollars lost by shareholders and banks, the

inability of its smallholders to complete GlobalGAP certification, and a widespread and lasting mistrust of horticultural cooperatives in Zambia (allAfrica.com, 30 September 2004, 16 August 2005). Cooperatives have furthermore often not responded quickly and effectively to market shifts, as evident in Farmapine's slow reaction to the introduction of the MD2 pineapple. Expectations of failure in a cooperative can also be self-fulfilling. In Ghana, for example, growers became increasingly distrustful of Farmapine's executive team, which encouraged them to breach contracts and sell to other exporters. Subsequently, Farmapine was unable to obtain sufficient volumes for export, leading to its collapse (*The Statesman Online*, 8 March 2007).

3. Effects on Poverty Reduction

The growth of horticultural markets in African LDCs yields significant economic gains including foreign exchange earnings, export diversification, technological upgrading, employment growth and poverty reduction. Studies have found that these gains occur both in sectors dominated by smallholders and in those dominated by large farms (McCulloch and Ota, 2002). Yet the extent of economic gains and the channels through which they are realized are affected by the structure of production.

Maertens and Swinnen (2007) find that export horticulture has the greatest absolute effect on rural incomes through smallholder-based systems, with the effect of contract farming on income twice as high as that of wage labour. Also, the majority of FFV cultivation (for both domestic consumption and for export) continues to be dominated by small-scale farms. In spite of the dramatic reduction of smallholder participation in global horticultural supply chains, UNCTAD (2008b) found that 98 per cent of FFV in Uganda is still grown by smallholders. Models that seek to manage this production under a PMO or a lead firm, rather than replacing it with large-scale operations, would minimize transaction costs. Opposition to land ownership by foreign investors, especially within the sensitive context of postcolonial Africa, may be another concern. In Ethiopia, for example, foreign investors are unable to purchase land, but must lease it from the government, and thus smallholders have a distinct advantage over MNCs. However, fragmented smallholders are unable to increase yield per unit of land due to lack of economies of scale in using improved farming techniques and high-yield variety seeds so as to increase their horticulture produce.

Maertens and Swinnen (2007) and Maertens et al. (2007) consider the impact of the declining prominence of cooperatives and out-grower systems in Senegalese horticulture and the subsequent vertical consolidation under large corporations on poverty reduction. They determine that, although the total gains of export horticulture to the local population decline, these gains are more equitably distributed (Maertens *et al.*, 2007). This is because wage labour and small-scale farming attract different segments of the population. In order to participate in a cooperative or an out-grower system, horticulture smallholders have to produce a minimum level of output, and therefore own and cultivate a certain amount of land, although this level is much lower than if they marketed to exporters independently. Smallholders thus tend not to be the poorest group in rural societies. Wage labour on large farms, however, comes from households with minimal land holdings (and thus a low opportunity cost for not cultivating their own farms) and the under-employed. The large farm model thereby targets groups (subsistence farmers, the landless, large rural families) with a higher incidence of poverty than among smallholders.

Large farms also provide more stable employment by virtue of their size and through better access than smallholder-based systems to high-end retail markets. Employees at these farms, especially for very large foreign-owned operations, often receive additional benefits, including healthcare and paid leave. There are also spillover effects for nearby communities; Golden Exotics Ltd, for example, improved the nearby community's infrastructure (including providing electricity, irrigation and a waste management system) and supplied easy access to clean water (fruitiere.fr). However, there remains room for improvement. Job insecurity is

high on Zambian horticulture estates (Tallontire *et al.*, 2004) in a context of high levels of rural unemployment (15 per cent officially, 50 per cent unofficially). The crowds waiting at farm gates each morning for any available jobs highlights the ease with which workers can be replaced as well as the desirability of these jobs. This lack of job security is especially true of “casuals”, or impermanent seasonal workers, who are hired without a written contract and typically have little understanding of their legal rights. Managers are reported to manipulate to require workers to put in overtime without additional pay and by firing workers for committing minor mistakes. The Fair Trade movement among European consumers has had some success in encouraging large-scale farms to implement improved labour standards.

In addition to targeting the poorest of the poor, wage labour on large farms promotes gender equity through female employment. Although women are actively involved on small-scale horticultural farms (56 per cent of workers on small-scale farms in Zambia and 66 per cent on small-scale farms in Kenya are female (English *et al.* 2003, Tallontire *et al.* 2004)), they dominate employment on large farms and in processing facilities. Major MNCs, such as Blue Skies Ghana, have a policy of promoting female employment (bsholdings.com). In Kenya, 80 per cent of employees in horticulture packhouses are female (English *et al.*, 2003). However, discrimination against female workers and sexual harassment at large-scale farms and in processing facilities remains pervasive. Women are far less likely to receive higher-paying traditional “male” tasks, permanent jobs, promotions, and compensation for sick and maternity leave (Tallontire *et al.*, 2004).

While there is considerable debate over the preferred structural model, large welfare gains accrue under all forms of horticulture production, and donors must be prepared to take advantage of all opportunities to promote export horticulture in SSA, as emphasized by McCulloch and Ota (2002).

E. Opportunities for Expansion

1. Market Access

European buyers, especially major retail chains, continue to provide the greatest prospect for the expansion of African export horticulture. SSA’s share of the European market remains small, at 12 per cent for cut flowers, 3 per cent for fruit, and 2 per cent for vegetables in 2007. The most significant challenge is to improve competitiveness vis-à-vis Latin America and other competitors in the ways discussed elsewhere in this report. In addition, however, several new markets are being opened to African horticulture.

Domestic supermarkets offer an important opportunity for growers unable to comply with GlobalGAP but seeking more lucrative buyers than “wetmarkets” (domestic wholesalers). These supermarkets require some compliance with standards, primarily based on the physical condition and uniform appearance of the product (UNCTAD, 2008b); thus, suppliers gain experience in compliance short of the complex and costly measures associated with GlobalGAP. Three regional supermarket chains, Shoprite (based in South Africa), Uchumi and Nakumatt (based in Kenya) dominate high-end food retail in SSA LDCs and source almost all produce from local smallholders directly or through middlemen. Nakumatt, for instance, contracts directly with farmers for the majority of its FFV (60 per cent), and obtains the rest from brokers (32 per cent) and imports (8 per cent) (Nyoro *et al.*, 2007). Uchumi, on the other hand, sources the majority of its FFV from brokers (70 per cent) (UNCTAD, 2008b). These supermarkets have branches throughout Eastern and Southern Africa: Shoprite operates in South Africa, Zambia, Uganda, the United Republic of Tanzania and 12 other African countries; Uchumi in Kenya and Uganda; and Nakumatt in Kenya and Rwanda. Shoprite is also in the process of expanding to West Africa with chains in Ghana (allafrica.com, 20 March 2007).

Regional trade, especially sales to South Africa and Kenya, is another possibility and, like domestic supermarkets, can serve as a stepping-stone to more demanding but more lucrative European markets. Lack of and poor condition of roads throughout the continent is the foremost impediment to regional trade. Moreover, frequent checkpoints and burdensome regulations discourage trade even within regional trading groups where official trade barriers have been dismantled. For example, Benin's trade with its neighbors in the West African Economic and Monetary Union is minimal due to high costs of transport, associated both to poor roads and numerous checkpoints (Benin DTIS, 2005). In areas where roads are decent, however, some countries are beginning to take advantage of regional trade blocs, in particular the Common Market for Eastern and Southern Africa (COMESA) and the Economic Community of West African States. Zambian vegetable exporters, for instance, sell half of their produce to the South African retail chain Woolworths (AA, 14 September 2007). The Kenya Flower Council has launched an advertising campaign to promote the development of an intra-COMESA floricultural market in order to present an alternative to producers that do not meet European standards; currently, 97 per cent of flowers produced in Kenya are sold in the EU, and flowers of inferior quality are often thrown away (kenyaflowers.co.ke). The campaign, targeted at a young demographic, encourages African consumers to adopt the American and European practice of purchasing flowers for special occasions (AA, 3 September 2007). In the Gambia, a new foreign investment by M.A. Kharafi targets the regional market in onions and potatoes. Overall, however, intra-African trade in horticulture remains embryonic.

The United States has been investigated as a potential destination for African horticulture for several years, but strict Sanitary and Phytosanitary (SPS) requirements not covered by GlobalGAP certification, competition from Latin America, and the lack of passenger flights between the United States and Africa (the traditional vehicle for produce destined to Europe) have prevented any serious penetration of the FFV market. The only exception is a deal recently concluded between the Kenya Plant Health Inspectorate Service and the United States Government that would allow imports of Kenyan beans by late 2008 (ghp.org, 27 July 2007). On the other hand, African floriculture has exhibited considerable potential in the United States market, and Kenyan and Ugandan flowers have been successfully imported. The USAID project Strengthening the Competitiveness of Private Enterprises (SCOPE, 2006-2010) is researching additional demand opportunities for African floriculture producers in the US (DTIS: *Uganda*, 2006).

2. Supply Chain Diversification

(a) Low-end to high-end products: national GAP standards

African horticulturalists must upgrade from low-end to high-end produce, not only to expand market access, but even to maintain current levels of demand. Producers are already cost-competitive; they must now focus on being quality-competitive. This is accomplished through GlobalGAP certification. Yet the difficulty of GlobalGAP compliance, especially for smallholders, and the drastic effects of non-compliance on participation within the supply chain have already been noted. Recognizing these difficulties, the GlobalGAP secretariat provides for countries to create national standards benchmarked against GlobalGAP that are viewed as equivalent to GlobalGAP by exporters and retailers (GlobalGAP.org). These national GAPs, implemented by National Technical Working Groups in cooperation with GlobalGAP officials, are customized to local farming techniques, thereby eliminating irrelevant control points, lowering compliance costs, and streamlining the certification process for producers and especially for smallholders. National GAPs also ensure that requirements are easy to understand for local farmers and do not contradict country-specific legislation or common business practices (Garbutt, 2007). Once a national GAP has been benchmarked against GlobalGAP and approved by the secretariat, producers are certified under Option 3 (individual certification) or Option 4 (group certification).

In 2005, the Fresh Produce Exporter Association of Kenya (FPEAK) initiated a national GAP benchmarking process for produce in an effort to reduce the high drop-out rate of smallholders in Option 2 systems (UNCTAD, 2008b). KenyaGAP, approved by GlobalGAP in 2007, represents the first successful development of a national GAP in Africa. The National Horticulture Task Force (NHTF) in Ghana is pursuing a similar goal, and LDCs are beginning to follow suit. The Horticulture Promotion Organization of Uganda (HPOU), the Zambia Export Grower's Association's (ZEGA) Code of Practice, and the *Origine Sénégal* campaign are all attempting to establish national GAPs or the equivalent that cater to regional-specific needs. The benchmarking process in each country is at an early stage or temporarily suspended, however, and a renewed commitment to national GAPs is necessary to reduce withdrawal from the supply chain and maintain competitiveness in European produce markets. (While efforts are underway in many parts of Africa to create certification processes and/or certifying institutions, the problem of recognition by consumers in developed markets remains an impediment. As a result consumer confidence rests with more acclaimed or recognized certification agencies of their own. Therefore, it is important that widely known and recognized certifying agencies in the developed countries could work in collaboration with national or regional certifying bodies in African and the LDCs when it comes to quality assurance and compliance).

(b) Downstream upgrading: processing and packaging

Another opportunity for SSA horticultural market expansion is through downstream processing of raw FFV, including preparation and packaging into ready-to-eat units, canning, juicing, and dehydrating. In addition to contributing to technology upgrading, creating stable employment, and providing a consistent market for local producers (often smallholders) with fewer restrictions than European retailers, processed FFV earns a very large price premium over raw FFV from importers and supermarkets. In Senegal, for example, the introduction of processed green beans in 2006 raised the value of exports from €1752/ton to €2104/ton, almost double the unit value of equivalent Moroccan bean exports (€1094/ton) (UNCTAD, 2008b). One supermarket in the United Kingdom found that by peeling and slicing carrots and presenting them as a snack rather than as a raw vegetable, it could sell them for 15 times the price per pound of loose, full-sized carrots at little additional cost (UNCTAD, 2000). Although supermarkets keep a large portion of these rents, they also trickle down to processors in SSA. The profit margin for Kenyan exporters of packaged vegetables is 14 per cent, compared with a 2 per cent margin on exports of bulk vegetables (FP, 17 October 2008).

Several MNCs have already constructed processing facilities on their farms or at regional airports and are exporting processed FFV to the EU. In 2006, for example, Golden Exotics Ltd. in Ghana established a subsidiary, Heart of the Fruit, to cut and prepare fresh pineapple (fruitiere.fr). Vegpro Ltd. recently built a processing facility at Jomo Kenyatta International Airport for beans and baby corn exports. In order to meet demand, the company sources 20 per cent of its vegetables from out-growers, including 4000 smallholders, and it is currently the third-largest buyer of African vegetables (allAfrica.com, 12 September 2007). Companies in LDCs are following suit. Amfri Farms and Fruits of the Nile in Uganda process dehydrated fruit supplied by local smallholders for sale in the United Kingdom, and Sher Karuturi in Ethiopia is expanding production to include processed vegetables. UNNAT Fruits Processing Ltd. recently opened in the United Republic of Tanzania, with an ambitious goal to source oranges and pineapple from 75,000 smallholders that have historically sold their crop to middlemen for throw-away prices. In addition to providing a source of steady demand, particularly when seasonal demand in Europe for imported produce is low, UNNAT has generated spillovers for farms, including fermented waste from concentrates that has proven to be an excellent fertilizer (AA, 17 March 2008). Donors have also supported local processing. The Common Fund for Commodities, for instance, is involved in a \$6.5 million project in Uganda and the United Republic of Tanzania to link smallholders to a banana-processing facility (*East Africa Business Week*, 18 June 2007).

3. Product Diversification

(a) New products and varieties

Several countries are expanding horticultural sectors by commercializing and exporting crops traditionally grown for local consumption and by introducing new crops. Golden Exotics and Volta River Estates Ltd. (VREL) in Ghana, for example, recently began producing bananas for export; their efforts have met with so much success (144 per cent annual growth in exports since 2003) that banana exports currently rival pineapples in value (*MIR: Bananas*, 2008). Uganda, the world's second-largest banana producer but 73rd largest exporter due to inconsistent quality and bacterial diseases, is also investing in lab-cultivated higher-quality bananas for export (GFP, 25 March 2008). In Ethiopia, a GTZ initiative in apple production and an Ilan Tot Plc (Israeli FDI) initiative in strawberry production are attempting to exploit the high-altitude, cool climate sites around Addis Ababa. Production of previously-imported FFV is rising. In Senegal, for example, farmers are growing onions and potatoes, with the long-term objective of exporting to the European market (*DTIS: Senegal*, 2003).

New crop varieties offer another opportunity for expansion in SSA. New varieties may have higher yields, show resistance to pests and diseases, or permit cultivation in regions traditionally unsuitable to that crop due to climatic constraints. Donor projects and government agencies have met with considerable success in spearheading initiatives for new varieties, as evident in several recent developments in Uganda. USAID's Agriculture Productivity Enhancement Project (APEP), for example, is experimenting with intermediate rose varieties at high-altitude sites that would allow Uganda to export the same high-end roses to Europe currently sourced from Kenya and Ethiopia; APEP's predecessor, IDEA, had a similarly critical role a decade earlier in the identification of sweetheart roses as a viable export for Uganda. The Agricultural Research Institute, a Government parastatal, has adapted a new orange plant from Thailand, the Tondodee, that has higher yields and higher-quality fruit than local varieties (*allAfrica.com*, 3 March 2004). The Alliance for a Green Revolution in Africa, an NGO chaired by Kofi Annan, has successfully bred new bean varieties resistant to root rot and anthracnose, two diseases that have devastated up to 70 per cent of harvests on some farms (*Tradingmarkets.com*, 26 March 2008). The adoption of new varieties can also be necessary to maintain market share. This was recognized by Ghana in 2004, when the failure of producers to transition from Smooth Cayenne to MD2 pineapple resulted in the loss of a substantial portion of the EU market to Costa Rica, Ecuador, and Panama. Ghanaian pineapple exports remain 30.6 per cent below 2004 levels (*MIR: Pineapple*, 2008).

(b) Niche Markets

Niche markets offer lucrative possibilities in the EU. The successful exploitation of demand for Asian vegetables in the 1990s through marketing links between Indian smallholders and Indians in the United Kingdom, for example, jumpstarted the commercialization of vegetable exporting in Kenya. The small but unexploited market for herbs is currently being investigated by several companies. Melissa Flowers Ltd. in Uganda and Jordan River Herbs Plc in Ethiopia have already established operations for herb exports to Europe.

In particular, the Fairtrade movement in developed countries has provided significant opportunities for African horticulture. Fairtrade branding is managed by Fairtrade Labelling Organizations (FLO) International, which develops standards, and FLO-Cert, which certifies producers and verifies compliance with those standards (*fairtrade.net*). FLO International sets a Fairtrade Minimum Price for commodities that enables commercial farms to pay above-average wages and provide social services to workers, and smallholders to earn above-average prices for crops. The Fairtrade market has expanded rapidly in recent years (40 per cent in 2006 and 47 per cent in 2007), especially in the United Kingdom (72 per cent in

2007), which is the primary destination for African horticulture (*ibid.*, 25 July 2007 and 22 May 2008). Specifically, Fairtrade-certified FFV has charted impressive growth (92 per cent in 2007), with bananas posting the greatest increase in sales (130 per cent in 2007) (GFP, 30 June 2008, and fairtrade.net). In recognition of this profitable opportunity, several SSA producers have entered the Fairtrade market through the Max Havelaar Foundation, a labeling initiative adopted by European countries in 1988 and a member of FLO International. HPW Fairtrade Ltd, a Swiss-owned conglomerate of pineapple producers in Ghana, for instance, requires members to comply with Fairtrade standards. The company sets aside 1 per cent of all revenue to fund regional social projects (hpwag.ch). Companies in LDCs are also beginning to exploit the Fairtrade movement. With the assistance of USAID, for example, Amfri Farms in Uganda has achieved Fairtrade certification.

The organic market is another important niche opportunity in Europe. Organic products sell for 40–150 per cent more than comparable conventional products in supermarkets (ajc.com, 4 September 2008). They are also an important venue for promoting agricultural sustainability, and studies have shown that organic farmers achieve higher yields than non-organic farmers in the medium-to-long term (*Business Daily Africa*, 2 June 2008). In the EU, and especially in the United Kingdom, the organic market is expanding rapidly due to encouragement from government health campaigns, food scares, and the commercial success of Whole Foods Market. According to retail surveys, the organic movement has been partly eclipsed recently by the local food movement, but is nonetheless posting impressive growth (GFP, 10 April 2008). Organic sales have increased 12–15 per cent annually for the last 15 years, in contrast to the 2–4 per cent annual growth of conventional food market sales, and they are projected to expand an additional 50 per cent in the next five years (UNCTAD, 2008b, GFP, 4 September 2007). Frequent supply shortages highlight the potential for African expansion into this niche (GFP, 16 June 2008). NGO and government health campaigns in SSA have encouraged local consumption of organics as well, thereby expanding the domestic retail possibilities for organic FFV.

MNCs in Kenya have exported organic FFV for almost three decades. In many cases, however, organic farming does not require the impetus of foreign investors since smallholders are already organic by default due to the prohibitive prices of fertilizers and pesticides, which can amount to 50 per cent of total costs (GFP, 9 June 2008). In Uganda, for example, smallholders have dominated the niche since its inception, and approximately 39,000 households currently rely on the sale of organic products for their primary source of income. These smallholders have the potential to join export supply chains if they modify traditional techniques to comply with international standards. International donors and Government agencies, such as the Kenya Institute of Organic Farming and the Kenya Organic Agriculture Network, have stepped into this gap by providing smallholders with extension services that raise awareness about exporting to international organic markets. These services are important since quality, not organic or Fairtrade certification, remains the foremost concern of retailers. Earlier this year, a shipment of Ugandan dried fruit to the EU was rejected because organic methods of preservation had led to an inferior product (*The New Vision*, 22 June 2008).

F. Case-Studies: Successful SSA Predecessors

1. Kenya

Current situation

After South Africa, Kenya is the largest and most experienced producer and exporter of horticulture in SSA. The country's historical involvement in horticulture can be traced back to British agronomic experiments in the 1890s, but the sector did not begin commercial expansion until WWII. The key phases were marked by the entry of Del Monte and the

production of pineapple in the 1970s, the rapid expansion of floriculture in the 1980s, the commercialization of Asian vegetables and green beans in the 1990s, and increasing downstream processing in recent years. The sector benefited from long-term political stability, especially in contrast to neighboring countries, until the strife in 2008 following the presidential election. Kenya offers important lessons in the role of horticulture in spurring private-sector led growth and poverty reduction.

Kenyan horticulture has recorded impressive growth. While only 4 per cent of horticultural output is exported, these exports recently became the largest earner of foreign exchange reserves, overtaking tourism (allAfrica.com, 26 March 2008). Fruit and vegetable farms directly employ 100,000 Kenyans, and floricultural firms employ approximately the same number. Moreover, several million people, through forward and backward linkages, depend on the industry for their economic livelihoods. Between 70 and 80 per cent of workers employed by horticulture estates or packhouses are female, many of them unmarried. Horticulture exports have consequently had a substantial impact on poverty reduction.

FFV production and, very recently, the cultivation of certain flower varieties, have also contributed to poverty reduction through smallholder involvement. Smallholders engaged in horticultural cultivation own twice as much land, have higher returns per unit of land, and have poverty rates that are far below those of other smallholders (McCulloch and Ota, 2002, Minot and Ngigi, 2004). However, the inability to comply with GlobalGAP standards has caused major export companies to drop 65 per cent of smallholders in the last five years. In response, donor initiatives have focused on integrating smallholders into the supply chain.

(a) Floriculture

Flower production in Kenya originated in foreign ventures. First Danish and then Dutch investors were attracted to the sector in the 1970s and 1980s, and today the largest operations are still owned by Europeans (Homegrown – British and Oserian – Dutch). Many of these firms were initially involved in vegetable production, and switched to floriculture due to higher returns. Exports grew from \$43.6 million in 1990 to \$460.1 million in 2007.

The Kenya Flower Council (KFC) was formed to consolidate air freight at Jomo Kenyatta International Airport. KFC currently represents 50 large-scale floriculture companies, or about 80 per cent of the sector. The association has also led efforts to establish quality standards and awards exporters with a Gold, Silver or Regular status, depending on level of compliance. Individual firms like Homegrown and Oserian have financed additional advertising campaigns to assure customers that their products are not only sanitary, but also fair-trade certified, environmentally sustainable, and organic.

Recently, the Government has had a small but significant role through the semi-autonomous Kenya Agricultural Research Institute (KARI). Floriculture production has traditionally occurred within climate-controlled greenhouses, limiting entry to large firms with access to finance. In 2007, however, KARI developed a rose variety that could be cultivated in open fields and was particularly suitable to the country's equatorial climate, thereby enabling smallholders to participate in production (GFP, 10 August 2007). These varieties are not only labour-intensive but also high-yielding, and some experiments have suggested that they are twice as productive as comparable greenhouse varieties. Nevertheless, smallholders continue to face other barriers such as the lack of scale economies in input and air-freight purchases and difficulties in meeting GlobalGAP compliance and cold chain transport and traceability requirements.

(b) Fruits and vegetables

Export horticulture was similarly stimulated by foreign investors. Del Monte, through its subsidiary Kenya Cannery, began growing pineapples in 1965 and has never been threatened by domestic competitors. The company currently employs 6,000 people in its

vertically-integrated operations, and as such contributes to poverty reduction in spite of accusations of human rights and labour abuses in the late 1990s.

Vegetable exports expanded from \$48 million in 1990 to \$279 million in 2007. Exports were initiated by Kenyan Asians who exploited commercial links with niche markets in the United Kingdom, but in the last 25 years production has been dominated by several large-scale firms that market green beans, runner beans, snow peas, okra, and chilies. Between 75 and 80 per cent of exports are from large commercial farms, 10–15 per cent are from out-growers, and 5–10 per cent are from cooperatives (Minot and Ngigi, 2004).

These large-scale firms have fostered upgrading and diversification into downstream processing. Sunripe, Vegpro, and Njoro Cannery, three industry leaders, export packaged, frozen, and dehydrated vegetables to United Kingdom markets that earn a premium over unprocessed vegetables. They have also exploited niche markets such as fair trade, environmental sustainability and herbs. Commercial success has encouraged these firms to expand, and Vegpro is currently one of the largest private employers in Kenya, with 6,500 workers (Bell, 2007). Vegpro has constructed a company-owned cold chain, with refrigerated storage sites on farms, insulated trucks, and processing facilities at the airport.

Smallholders continue to participate but at a much-reduced scale. 83 per cent of those farmers who failed to obtain GlobalGAP certification remain in the supply chain, though with substantially reduced output (*F.I.* 15, 2008). Large-scale operations increasingly source a portion of their fresh vegetables for processing from out-growers; Sunripe, for example, contracts with 1,000 small-scale farmers, and Vegpro with over 4,000. Smallholders can also participate through cooperatives called Self-Help Groups (SHGs) that have been enthusiastically supported by donors and imitated throughout SSA. SHGs facilitate linkages between smallholders, input suppliers (including creditors) and exporters. Additionally, members can register collectively for GlobalGAP certification under Option 2. This prospect has attracted specific donor projects, including USAID's Kenya Horticulture Development Program (2003–2008) and the EU's Horticultural Produce Phytosanitary Certification and Quality Assurance Project (2008–2011). The sector's producer and exporter association, FPEAK, has customized KenyaGAP for smallholder compliance (USAID, 2008). KenyaGAP was recently approved by GlobalGAP officials as an acceptable code of practice for horticultural exporters selling to EU markets, thereby increasing the potential for smallholders to sell to high-end European retailers through Option 4 certification.

Success factors

Kenya's geography and climate permit year-round production of a variety of temperate-zone horticultural crops. The relatively early development of the sector is an important source of competitive advantage, for example in generating an experienced workforce lacking in other countries.

Effective producer and exporter associations such as FPEAK and KFC represent nearly all of the major players and interests in horticulture, and they have filled critical roles in the dissemination of reliable market data, the promotion of industry standards, training and technical assistance to producers, and political and legal representation of members. While FPEAK and KFC previously received financial support from USAID, funding is now derived from small levies on exports (Minot and Ngigi, 2004). Although governmental and donor support is necessary for export horticulture in most of SSA, the Kenyan experience demonstrates the significance of avoiding aid dependency.

Private-sector-led growth and the creation of a competitive environment encouraged experimentation and adaptability. Horticulture producers have consistently diversified and upgraded their product line in response to market opportunities, as seen in the shift from pineapple to vegetables to floriculture, then from the transition from fresh FFV to downstream processing and packaging, and finally to the development of niche markets. Most

recently, smallholders have pursued the niche market of organic certification. Not only is organic farming increasingly desired by European consumers, it also reduces smallholder costs by as much as 50 per cent due to the skyrocketing price of fertilizers (GFP, 9 June 2008). The Kenya Institute of Organic Farming offers extension services to smallholders and assists them in the three-year process of decontaminating their land in order to support organic crops. As a result, smallholders are regaining a presence, and Kenyan produce is receiving a new, upgraded image on European supermarket shelves.

A relatively favourable business climate has been crucial in encouraging FDI. Government involvement has been minimal and lack of interference has been a major strength (English *et al.*, 2003). The market-driven reforms of the early 1990s, including liberalization of the exchange rate, decentralization of air freight, and removal of trade barriers on imported inputs, played a major role in creating a supportive climate for investment.

A stable sociopolitical environment until this past year has contributed positively to this business climate and given Kenyan horticulture a distinct advantage. In the 1970s, Idi Amin's "economic war" led many Indians to seek refuge in Kenya. These refugees had experience in vegetable cultivation and strong commercial links with ethnic communities in the United Kingdom. The largest Kenyan horticulture operation today, Vegpro, was founded by an Indian exile and continues to be directed by his family.

Synergies with tourism, which has also benefited from political stability, have also boosted horticulture expansion, by providing additional demand from domestic hotels, restaurants and supermarkets, and more importantly by increasing the number of flights and thus available cargo space. As a result of scale economies, Kenyan exporters enjoy the cheapest air-freight rates in Eastern Africa (allAfrica.com, 23 June 2008).

Constraints

Two major constraints have emerged in recent years. First, political violence in January and February 2008 following a contentious presidential election has undermined the stability that gave Kenyan horticulture an edge over competitors for decades. The effects of this violence are already evident in below-average projections for total annual output, especially in floriculture, although horticulture was not hit as hard as other industries (GFP, 28 January 2008). Many flower companies reduced production drastically during their busiest season (Valentine's Day) or watched millions of shillings worth of flowers that could not be transported rot on farms (AA, 5 February 2008). Only 20–30 per cent of employees showed up for work, transport to and from the farms was often disrupted by road blockades, and most shipments had to be airlifted or delivered under the cover of darkness.

Second, consumer awareness of and demand for environmentally sustainable products have led many supermarkets to reduce retailing of air-freighted produce. Supermarkets such as Marks and Spencer and Tesco now label products that have been air-freighted with a small airplane logo or even with a number indicating the total carbon footprint, thereby discouraging consumers from purchasing African produce (allAfrica.com, 1 May 2007). FPEAK and KFC have countered, citing many studies (such as one newly published by the UK's Cranfield University) that demonstrate that African horticulture actually has a smaller carbon footprint than European horticulture since the latter is more energy-intensive in production. FPEAK and KFC have launched an advertising campaign, "Grown under the Sun", in which they assert that "emissions produced by growing flowers in Kenya and flying them to the United Kingdom can be less than a fifth of those grown in the heated and lighted greenhouses of Holland" (grownunderthesun.com). Exporters have also begun to explore other market opportunities, including the Middle East and the United States, as the food miles debate remains unresolved in the United Kingdom (GFP, 10 December 2007). It is this resilience and adaptability that has been the source of dynamism in Kenyan horticulture.

2. Ghana

Current situation

Overall, the development of a Ghanaian FFV sector is a success story in SSA. The country secured a foothold in export horticulture in 1994 by way of a low-end, cost-competitive strategy that captured a significant EU market share in tropical fruit, mainly pineapples. Since then, the production base has diversified horizontally into more exotic products than traditional pineapple and banana (including mango, papaya and chilies), and vertically into downstream preparation, processing and packaging of raw FFV. In recent years, however, Ghana's horticulture exporters have had to adjust to important demand and technology shocks, notably the switch to new pineapple varieties and the increasing importance of GlobalGAP certification. Ghana has begun to supply high-end EU supermarket chains but, as in many countries, through multinational corporations and at the expense of smallholders.

Pineapple

Fourteen years ago, pineapple production cost was estimated to be 22 per cent lower for smallholders than for large farms (Obeng, 1994). Consequently, the rapid commercialization of pineapple production in Ghana was initiated and dominated by smallholders for a decade. Three factors have undermined this structure in the last five years: (a) international pressure for the adoption of strict quality standards and traceability measures; (b) dysfunctions within smallholder cooperatives, leading notably to the collapse of Farmapine; and (c) the decline in demand for the Smooth Cayenne variety. Large-scale production has become a necessary prerequisite for GlobalGAP certification and for cultivation of the MD2 variety. As the industry struggles with this transition, exports have dropped 30.6 per cent since 2004 to 37,960 tons per year, and Ghana has fallen from the third-largest supplier of pineapple to the EU to the fifth-largest supplier (overtaken by Ecuador and Panama) (*MIR: Pineapple*, 2008).

There are currently three major Ghanaian exporters of pineapples, with each firm catering to a slightly different market. Golden Exotics Ltd., a subsidiary of the French horticultural giant Compagnie Fruitiere, is the largest operation and is responsible for about 40 per cent of total pineapple exports. Golden Exotics has generated significant spillovers for the industry and for local communities, including: providing finance for the refurbishment of storage depot Shed 9 at the Port of Tema, manufacturing and distributing MD2 planting material to nearby companies, establishing a waste management programme for the region, and increasing access to irrigation for company farms and adjoining plots of land (www.fruitiere.fr). Golden Exotics employs approximately 1,500 permanent workers and 500 seasonal workers, who benefit from the company's compliance with GlobalGAP labour standards. HPW AG, a new Swiss corporation that consolidates the output of five domestic producers (including former industry leader Jei River), concentrates on niche markets, namely Fairtrade and organic certification. Finally, the British company Blue Skies exports fresh-cut and packaged pineapples and juice. Blue Skies must export fresh-cut fruit via air, but costs are held down since preparation of the fruit removes much of the weight. Blue Skies employs 1,500 workers, a majority of whom are female, and the company is noted for its attention to environmentally-sustainable production processes (bsholdings.com).

In this manner, FDI has not only created significant employment opportunities, but it has also provided important physical and knowledge infrastructure to a fragile sector and encouraged the adherence of producers to good environmental and labour practices. Consequently, the social impact of the switch from smallholders to large estates has not necessarily been negative.

The most significant smallholder cooperative in Ghana was Farmapine Ghana Ltd., a project developed and funded by the government, IDA, Technoserve, and the World Bank. From 178 smallholders at its formation in 1998, Farmapine membership peaked at 300 in early 2004 and the cooperative became one of the largest pineapple exporters in Ghana. Membership enabled smallholders to overcome many traditional barriers to horticulture export, including access to credit (the company had connections with a rural bank that offered loans to Farmapine members), access to knowledge (the company ran training and agricultural extension programmes), and most importantly, access to EU supermarkets (Farmapine, and consequently its members, were GlobalGAP certified). Moreover, members regularly achieved profit margins that were twice as high as comparable non-member smallholders (Yeboah, 2005). However, the cooperative increasingly suffered from mismanagement, and proved unable to assist its members in transitioning to MD2 production. Farmers recognized the cooperative's impending failure, leading them to breach contracts and sell to other exporters, thereby speeding the collapse (*The Statesman Online*, 8 March 2007). Farmapine's bankruptcy in 2006 represented a major setback to cooperative models throughout SSA.

On the other hand, some out-grower systems have integrated smallholders into the supply chain somewhat more effectively. In particular, large-scale processors such as Tongu Fruits and Blue Skies have successfully sourced from smallholders. To ensure quality standards, these processors have invested heavily in the human capital of workers; Tongu Fruits, for example, through a programme funded by the Dutch NGO Cordaid, has rigorously trained out-growers on everything from literacy to advanced agrochemical techniques. Importantly, these systems have succeeded in part because processors continue to purchase traditional varieties rather than the more capital-intensive MD2.

Other FFV

Banana exports have boomed in the last five years and currently rival pineapple exports in value (*MIR: Banana*, 2008). Production is dominated by two firms that together employ over 2,500 workers: Golden Exotics and VREL, a Dutch-Ghanaian joint venture that targets the niche market in fair-trade organic produce. In particular, the fair-trade agreement stipulates that workers hold at least a 25 per cent stake in the company, thus providing an alternative to smallholding while maintaining an ownership stake. In a significant setback for Ghana, however, Chiquita had planned to invest in Ghana but withdrew due to its inability to find a local partner (Peter Jaeger, private communication).

Mango exports have also expanded enormously, from 119 tons in 2003 to 1,071 tons in 2007 (*MIR: Mango*, 2008). This expansion is in large part due to the efforts of the Integrated Tamale Fruit Company (ITFC) and donors (USADF, Cordaid, United Nations Development Programme (UNDP)). ITFC has constructed a tenancy system with 1,300 smallholders, in which members pay 30 per cent of annual income in return for inputs and technical assistance. The company has furthermore advanced social welfare through such initiatives as the Children to Schools Project and programmes to combat HIV/AIDS (ITFCorganic.com).

Vegetable exports, especially chilies, Asian vegetables, yams and cassava, remain small but significant for some growers. The cultivation of exotic vegetables is more labour-intensive than fruit production, and is more amenable for smallholders. Ghana is also able to supply to the EU during the off-season of its top competitors (such as Morocco, Israel, and Egypt).

Success factors

Ghana benefits from some natural geographic and climate advantages. These include an equatorial climate that enables off-season production, abundant water and fertile land, geographic proximity to the EU and, a coastal location with access to sea-freight lines.

Recently, active hurricane seasons that have severely disrupted production in the Caribbean and Central America have relieved Ghana of some international competitive pressures (Costa Rica, the Dominican Republic, Honduras, and Panama are also major suppliers to EU supermarkets).

Some of Ghana's success also reflects institutional and policy considerations, which enabled a relatively rapid transition from high-cost air-freight to low-cost sea-freight, the substitution of traditional varieties with modern varieties (including MD2 pineapple and Golden papaya), and entry into niche markets (such as Fairtrade and organics) that have high returns.

Political stability and ethnic harmony have been a decisive competitive advantage in recent years. Strife in Côte d'Ivoire and, to a lesser extent, Togo, has meant that FDI earmarked for West Africa is increasingly directed to Ghana. In the last five years, MNCs like Compagnie Fruitière (2003), VIAD (2004), Pinora (2005), HPW AG (2006), and others have set up operations in Ghana, whereas previously Ghana attracted very little horticulture FDI. Political stability and good governance have similarly motivated donors to increase aid to Ghana in the distribution of SSA aid (e.g. the Millennium Challenge Corporation [MCC] has launched a huge project in Ghana while bypassing unstable African countries like Cote d'Ivoire and Togo).

Constraints

Infrastructure

Despite donor programmes, a discontinuous cold chain from farm gate to reefer ship or cargo plane remains a major impediment to Ghana's transition from a low-end to a high-end export horticulture strategy. Poor roads, inadequate cooling facilities and the lack of a universal working power grid plague Ghanaian producers and thus undermine the ability of sellers to ensure high-quality products. While MNCs like Golden Exotics have constructed some aspects of the cold chain (such as on-site storage containers), the majority of the cold chain is characterized by public or near-public goods, requiring public provision. Lack of a continuous cold chain handicaps EurepGAP certification, and profit margins are eroded by waste (one box of rotted fruit can negate the profit on five boxes of fruit sold, Voisard and Jaeger, 2003). The MCC is targeting the rehabilitation of feeder roads, upgrading the National Highway, and rural electrification, but all of these projects remain in a preparation phase, and none address important storage issues at Kotoka International Airport and at the Port of Tema (MCC, 2008).

Fragmented support

The greatest constraint to the expansion of FFV exports in Ghana is fragmentation of support institutions. The country does not want for aid or the involvement of donor agencies; with an MCC grant of \$547 million (much of it earmarked for FFV development) and a veritable alphabet soup of organizations, Ghana has one of the highest levels of aid per capita among African countries. Instead, FFV requires greater collaboration between private associations, government agencies and international donors.

One expert characterizes Ghanaian producer-exporter groups in the following manner: "(Ghana) has producers' associations, but they're not relevant to their members" and another states that "individual associations tend to 'pursue their own thing'" (Sakyi-Addor, 2007; and OECD, 2007). A number of these groups, including FAGE, SPEG, HAG, VEPEAG, GAVEX, and NHTF have attempted to assume leadership, but none have met with lasting success. NHTF currently commands the most authority, lists the most members, and keeps its affiliated website most up-to-date (ghanafreshproduce.org), although the association by no means represents the interests of all FFV producer-exporters.

Historically, the Sea-Freight and Pineapple Exporters of Ghana (SPEG) has played a leading role in encouraging the transition from air-freight to sea-freight, coordinating members in order to ensure that there is enough product to call ships to port, and supporting the refurbishment of Shed 9 depot at Tema. The outcome of the last project, however, typifies the crippling effect of fragmented external involvement. In 2003, HEIL, in cooperation with the Ministry of Food and Agriculture (MOFA), SPEG, and Golden Exotics, endeavoured to upgrade these facilities in order to offer refrigerated, easy-access storage. The completion of this project in 2007 was regarded as an important step towards a continuous cold chain. Yet disputes over repayment and maintenance between the various donors have prevented operations, thereby depriving exporters not only of a refrigerated terminal but of any storage at all.

Public agencies, when supported by external assistance, have sometimes been more effective; Bioplantlets Ghana Ltd. (a MOFA-directed project), for example, has played a decisive role in the propagation of MD2 planting material (such that by 2007 90 per cent of pineapple exports were MD2). Most public projects have failed, however, due mainly to lack of cooperation with private associations. International donor efforts have similarly generated frustratingly limited results. Many of these donors have organized projects that specifically target smallholder production, including the United States Government (USAID – Trade and Investment Program for a Competitive Export Economy, TIPCEE), the EU (9th and 10th EDF), and the African Development Bank. Besides being ill-coordinated, this aid may be misguided as well.

The decline of smallholder systems, in spite of significant donor support, and the simultaneous success of MNC subsidiaries suggest that aid could be more effective if refocused. In particular, improved infrastructure and research would contribute to a more attractive investment climate and spur further growth of FDI.

G. Case-Studies: LDC Experiences and Potential

1. Uganda

Current situation

Horticulture is growing rapidly in Uganda, but the specific trajectories of and opportunities for flower, fruit and vegetables are very different. Whereas floriculture exports have consistently expanded, fruit and vegetable exports have fluctuated as domestic companies experiment with production for various EU wholesalers and niche markets. Horticulture directly employs 9,500 workers, 60 per cent of them female, and the potential for doubling that number within the next five years appears feasible. Growth is contingent on the ability of producers to innovate and diversify exporters to reduce freight costs, the Government to offer incentives to investors, and donors to continue to provide financial and technical assistance.

(a) Floriculture

Uganda cut flower exports have emerged since the mid-1990s under the impetus of a USAID project, Investment in Developing Export Agriculture (IDEA). Floriculture production is currently clustered around the only viable sources of level land, accessible water and freight, around Lake Victoria and Entebbe Airport. Diversification into the production of intermediate rose varieties at high altitudes is being explored. Exporters are also attempting to sell directly to EU supermarkets; all flowers are presently destined for Dutch auctions, which require fewer quality standards but pay lower prices. GlobalGAP certification is a prerequisite for selling to high-end markets, as well as an important step for the overall expansion of the sector.

IDEA, which was in effect from 1995 to 2003, did not imitate Kenyan crop selection and growing techniques in Uganda's tropical environment, and instead encouraged the propagation of the now highly successful sweetheart rose varieties and chrysanthemums. The project was also responsible for improving coordination between firms and consolidating their activities into the Ugandan Flowers Exporters Association (UFEA) and for reducing air-freight costs through the establishment of Fresh Handling Ltd. (FHL). IDEA's successor, the Agriculture Productivity Enhancement Program (APEP) covering 2003–2008, focused more specifically on research on product diversification and production at high-altitudes, and on training personnel to fill middle management positions. USAID and other donor organizations, most notably the Dutch Program for Economic Cooperation in Projects (PECP), have played a key role in the creation and development of floriculture. These donors' success derives from working directly with the private sector rather than through ineffective government support programmes (IDEA, 2004).

The private sector is dominated by 17 domestically-based companies and 3 Dutch-Ugandan joint ventures (UFEA.com). The high capital-intensity and entry barriers preclude smallholders from floriculture, but wage labour is significant with about 6,000 workers currently employed on large farms. Furthermore, working conditions on the large farms are good. Rosebud Ltd., the largest rose exporter in Uganda (commanding 35 per cent of the market), provides housing allowances, healthcare, training sessions, and HIV/AIDS awareness programmes to staff. It has also recently become the second floricultural firm to allow workers to join the National Union of Plantation and Agricultural Workers in Uganda. Another major exporter, and one of the few foreign-owned firms, Wagagai Ltd., has won several awards from the Government for socially-conscious investment. In particular, Wagagai has maintained nearby roads, constructed a public clinic, funded a bicycle-loan system, and built neighborhood soccer facilities.

Ninety-five per cent of cut flower exports and 50 per cent of vegetable exports are handled by FHL. The company was initially funded by IDEA, but now is largely financed by the major domestic horticulture firms. FHL, in cooperation with UFEA, has established and enforced uniform standards for members, as well as helping to ensure that firms can meet quality requirements by refurbishing much-needed cold storage at Entebbe and (as of last year) divesting that storage to members. The effects of FHL's efforts, which include coordinating freight and negotiating rates, are a clear example of successful collaboration between the private sector and international donors: FHL is credited with directly reducing freight costs by 30–40 per cent. Nevertheless, persistently high rates relative to regional competitors and elusive GlobalGAP certification underline the need for continued progress.

(b) Fruits and vegetables

Produce exports from Uganda are much smaller than floriculture exports, but the labour-intensity of production entails high levels of employment (about 2,500 people) and smallholder involvement. Yet rising fuel costs and increasing pressures for GlobalGAP certification even from wholesalers (the predominant buyers of Ugandan FFV) have significantly reduced the number of exporting smallholders, which fell 40 per cent from 2,145 to 1,260 farms in 2006 alone (*F.I. 10*, 2007).

Some large-scale firms were attracted to export horticulture in the late 1990s by the relatively high prices offered by EU wholesalers for exotic FFV: European buyers were willing to pay on average \$1/kg for FFV that only fetched \$.17/kg in cross-border trade (*ibid.*). Nonetheless, many of these firms failed or left the sector in pursuit of higher profit margins being offered by floriculture production-for-export (\$20/square meter versus \$5/square meter, IDEA, 2004). Mairye Estates is one firm that made this transition successfully. In 2006, Mairye abruptly stopped purchasing vegetables from out-growers to focus solely on sweetheart rose production on company farms, resulting in a 30 per cent

decline in total FFV exports and a 75 per cent decline in FFV exports supplied by smallholders.

Currently, vegetable exports are dominated by a few commercialized farms that produce exotic varieties (hot peppers, green chilies, and okra) for niche markets in the United Kingdom. Icemark and Sulma Foods, two of the largest vegetable exporters, continue to contract some FFV from out-grower networks, but quality and traceability standards limit out-grower participation. Improved standards are being developed and disseminated by the Horticulture Promotion Organization of Uganda (HPOU – the FFV equivalent of UFEA), which was given a mandate last year, in cooperation with the Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF), to develop and implement a UgaGAP benchmarked against GlobalGAP.

Fruit exports – primarily banana, pineapple, orange, and mango – have benefited in the last five years from the innovative strategies of industry leaders Amfri Farms and Fruits of the Nile. These companies identified dehydrated fruit as a viable market option that bypasses the constraints imposed on fresh FFV by a discontinuous cold chain and enables smallholders to remain active in production. They have also exploited niche markets and captured price premiums by adjusting to changes in consumer preferences and encouraging socially-conscious production techniques. Fruits of the Nile, for example, markets its product as environmentally-sustainable by requiring out-growers to use solar dehydration, and as a result its wholesaler (Tropical Wholefoods) has increased demand from supermarkets in the United Kingdom. Amfri Farms has focused on organic farming, taking advantage of the fact that most smallholders are “organic by default” due to the lack of access to agrochemicals. Amfri Farms also has Fairtrade branding, thanks to the favourable prices paid to out-growers and aid in establishing safe and hygienic work spaces. Both companies have received substantial assistance from IDEA and other donors.

Opportunities

Ugandan horticulture has two avenues for growth: product diversification and market expansion. The most obvious and well-documented example of the former is the production of intermediate rose varieties at higher altitudes to the west and north of Entebbe and Lake Victoria. Besides bringing jobs to areas characterized by high levels of rural unemployment, this would enable Ugandan companies to adopt some of the high-end varieties and techniques exploited on Kenyan farms (inaccessible to farmers in the tropical lowlands) and to repair a tarnished international reputation for inferior quality flowers. Three companies, in partnership with APEP, have already begun experimenting with these varieties near Fort Portal.

In addition to other rose varieties, the practicality of chrysanthemum cultivation is being researched, and a Dutch-Ugandan joint venture recently announced intentions to establish the nation’s first all-chrysanthemum farm within the year. Organics, Fairtrade, environmentally-sustainable, and dehydrated fruit markets have already provided lucrative business opportunities to Ugandan companies and there is significant room for expansion in these and other niche markets. Amfri Farms is considering entering the prepared fruit market, though this would require substantial improvements in the cold chain and in the supply of electricity. Finally, Melissa Flowers Ltd., in conjunction with Dutch investors, is exploring the relatively small and unexploited market of herb production.

Ugandan exporters also have clear opportunities for expanding existing product lines. Most notably, UFEA and HPOU are attempting to advance GlobalGAP certification so as to expand from Dutch auctions and United Kingdom wholesalers to direct sales to major European retail chains. Regional trade and local supermarkets can offer important stepping stones in the gradual maturation of the industry. Uganda already exports the majority of its fruit to Kenya, and an increase in this trade and the inclusion of vegetables in regional horticulture exports would provide much-needed stimulation to a struggling sector. Domestic supermarkets such as Shoprite and Uchumi, which currently source FFV from South Africa

and Kenya, have less demanding quality standards than those in Europe, and satisfying them can serve as step towards GlobalGAP implementation (Aliguma, 2007).

Exports of cut flowers to North America may be viable, and the idea is under investigation by the USAID project Strengthening the Competitiveness of Private Enterprises (SCOPE, 2006-2010). Duty-free access to the United States under the African Growth and Opportunity Act (AGOA), provides a significant competitive advantage. Rosebud Ltd., assisted by SCOPE, made the first shipment of 500,000 hydroponics to Miami in mid-2006, and UFEA has outlined a strategy to extend this success to the entire sector.

Uganda could benefit from political instability in its competitors Zimbabwe and, more recently, Kenya. Uganda itself, however, has experienced political tensions in recent years.

Constraints

The conclusion of APEP and USAID's hesitation in implementing a successor project has come at a critical time for Ugandan horticulture exports. The tropical climate and landlocked geography remain the most prohibitive constraints. Uganda has the highest air-freight rates to Northern Europe in East Africa and rates are at least twice as high as those in West Africa (allAfrica.com, 9 August 2008). Exporters are squeezed by the combination of higher input and freight costs and stagnant prices in the EU. UFEA predicts a collapse of floricultural production in Uganda if circumstances do not improve, and industry leader Rosebud has threatened to turn flower farms into a housing project by next year (allAfrica.com, 13 May 2008). Transport costs are further exacerbated by the scattered location of farms and poor roads.

Uganda is suffering from competition from new entrants, notably Ethiopia, where floriculture exports began only in 2001, but are now twice the value of Uganda's (COMTRADE data, 2008). Ethiopia provides generous investment incentives, including tax holidays, EPZs, and subsidized air-freight (Ethiopian exporters pay \$1.50/kg relative to Uganda's \$2.40/kg). In fact, two flower companies, Xpressions and Sai Farms, recently terminated operations in Uganda in order to relocate to Ethiopia. Ethiopia's rapid growth is a challenge to the Uganda Plan for the Modernization of Agriculture, and the private sector has assigned responsibility for horticulture's unimpressive and fragile market position to the government's inability to offer an appealing investment incentive package (allAfrica.com, 19 July 2007).

To attain increased GlobalGAP compliance, plans for UgaGAP have been formulated, but are far from implementation. The absence of trained middle management that can implement these standards, in spite of APEP and PECP training programmes, is a major impediment. Earlier this year, dehydrated fruit exports were temporarily suspended from European markets due to poor preservation methods, and Ugandan roses have also been rejected due to the presence of pests and diseases. The negative reputation of Ugandan floriculture in the EU has caused Dutch auctions to label Ugandan roses C and D grade regardless of the quality of individual shipments. As a result, UFEA has launched a branding campaign to rehabilitate Uganda's image in the international market. The success of this campaign is dependent on the revived interest of investors in Ugandan export horticulture and floriculture, the active involvement of government organizations in cultivating a supportive and attractive environment, and the recommitment of donors to provide financial and technical assistance.

2. Senegal

Current situation

The devaluation of the CFA franc and the liberalization of agricultural markets in 1994 set Senegalese horticulture on a path of steady growth. Although FFV production is only a

small fraction of total agricultural output (the three major FFV crops green beans, cherry tomatoes, and mangoes together amount to only 1.8 per cent of the volume of groundnuts produced). The comparatively high yields on horticulture are encouraging farmers to substitute away from land-intensive, low-yield traditional products like groundnuts and cotton.

The increasing necessity of GlobalGAP certification and the entry of multinational firms into Senegalese horticulture have led to consolidation. Between 2000 and 2007, for example, the number of green bean export companies fell from 27 to 20 and the market share of the three largest companies rose from 1/2 to 2/3. This was paralleled by a drop in the proportion of rural households involved in contract farming from 23 per cent to 10 per cent, and a rise in the number of rural households involved in wage labour on horticultural estates from 10 per cent to 34 per cent (Maertens, 2007). This shift towards large farms has had little effect on overall poverty rates but has sharply reduced the most acute poverty, as the employees of large estates consist of small-scale farmers and the landless poor who are worse off than contract farmers.

FDI has played a key role in the growth of FFV through the establishment of large farms, helping to reduce the cost of inputs and freight. Most of the major horticulture firms are now foreign owned, including Soleil Vert, Baniang, Safina, and Grandes Domaines du Sénégal (GDS, a subsidiary of Compagnie Fruitière). The only major domestic export firms, SEPAM and Agriconcept, have been supported by the International Finance Corporation and the United States African Development Fund, respectively. All of these companies have obtained GlobalGAP certification.

The sector is represented by two separate and competing export associations. The *Sénégalaise d'Exportation des Produits Agricoles et de Services* (SEPAS) was established in 1994 to coordinate transportation and marketing, and for five years it was the principal voice for the private sector. In 1999, ONAPES was created by the seven largest FFV exporters to ensure compliance with traceability and EurepGAP, and is limited to large producers. ONAPES membership covers 80 per cent of FFV exports.

Government agencies have given little support to these associations and to the development of horticulture in recent years due to lack of capacity and to a food crisis precipitated by the increasing prices of staple food imports. This crisis has encouraged officials to prioritize self-sufficiency in traditional crops like rice over diversification into non-traditional exports. The only two horticulture-specific government initiatives, the Project d'Appui aux Opérateurs de l'Agro-alimentaire au Sénégal and Mise à Niveau, were small-scale and recently concluded with mixed results.

In contrast, there has been substantial donor support for horticulture in Senegal, so much so that the multitude of external actors and the lack of coordination have severely undermined the effectiveness of aid. Canada, the United States, Japan, the EU, African agencies, Arab agencies, and multilateral agencies such as the United Nations and the World Bank are all actively involved. The World Bank's *Project de Promotion des Exportations Agricoles* (PPEA) has been particularly important, contributing to the tripling of exports during its operation from 1999–2004 (OECD, 2008). PPEA raised awareness about quality standards, financed the construction of cold storage at Yoff Airport, and assisted firms in obtaining GlobalGAP certification. In 2006, the *Programme de Développement des Marchés Agricoles du Sénégal* (PDMAS) was established as a follow-up to PPEA, targeting irrigation and downstream diversification into packaging, and is expected to generate 9,000 jobs before its completion in 2016. Simultaneously, the World Bank has funded complementary projects (PSAOP 1&2) that focus on improving the business climate by reducing barriers to entrepreneurship and trade and by encouraging collaboration between firms, export associations, and external actors.

Opportunities

Senegal has several opportunities for diversification into new markets. Some of these markets are local or regional and offer stepping-stones to EU retailers. Onions and potatoes cultivated in the Senegal River Valley may yield a viable non-traditional export to regional markets (*DTIS: Senegal*, 2003). A federation of smallholders has successfully marketed bananas to buyers in the Gambia. One market niche being explored by the Food and Agriculture Organization of the United Nations (FAO) is organic mango sourced from 3,700 small-scale out-growers in Saint-Louis, far north of the Niayes region (FP, 8 May 2007). These farmers have been producing mango for decades without pesticides, and thus the transition to organics is relatively straightforward. However, a fruit fly has recently devastated mango crops throughout Senegal. The Ministry of Agriculture, in cooperation with several NGOs, is investigating removal of the fly using inexpensive and simple non-pesticide based traps (*allAfrica.com*, 27 November 2007).

Most importantly, Senegal must exploit its reputation for high-end produce. In recent years, an advertising campaign funded by PPEA and several large foreign firms successfully established a positive image (*Origine Sénégal*) for Senegalese exports among EU retailers. This image has induced other investors such as *Compagnie Fruitière* to choose Senegal over alternative locations such as Morocco and Egypt. The legitimacy of *Origine Sénégal* depends on the rapid extension of GlobalGAP certification to the whole sector, namely to smallholders, which in turn requires donor assistance.

A few small-scale pilot projects have presented innovative approaches to donor provision of infrastructure that are cost-effective, environmentally-sustainable, and do not require long-term dependency on aid. One such project in 2002, funded by the Global Environment Facility, constructed a giant wind turbine in the small rural village of Mboro to power a cold storage room that was subsequently made accessible to local farmers (*allAfrica.com*, 26 August 2002). This approach has considerable potential to boost horticulture in areas along the coast that lack electricity but have high potential for harnessing wind energy. The introduction of drip irrigation is another new low-tech improvement, using less water than conventional irrigation (*THP.org*, 2003).

Constraints

Horticulture is concentrated in the Niayes region, due to its favourable location and climate, but land and clean water are increasingly scarce due to encroaching urban sprawl from Dakar. Ample supplies of fertile land are available in the Senegal River Valley, Casamance, and other Dakar regions, but the absence of adequate infrastructure in these regions has prevented horticulture firms from expanding beyond the Niayes.

The use of environmentally-damaging techniques, reflecting in part a shortage of skills, is leading to soil degradation and putting a further strain on land availability. The availability of skilled workers in Senegalese horticulture is substantially below that of the country's main competitors, including Ghana, Kenya and Uganda, pushing up costs of managerial and technical staff (*Snapshot*, 2007).

Despite substantial donor funding, the quantity and quality of infrastructure in Senegal is substandard. The road network is particularly debilitated and remains among the worst on the continent: total road length increased only 5 per cent from 1978 to 2004, road per inhabitant is far below the SSA average, and the majority of the network is in a bad or a very bad state (OECD, 2006). It is estimated that the poor roads increase producer costs by as much as 31.9 per cent (*ibid.*). The absence of refrigerated trucking and cold storage at farms and departure depots leads to inferior quality and waste. Additionally, farmers suffer from lack of irrigation, which subjects them to erratic rains, with alternating flooding and drought (*allAfrica.com*, 13 December 2007).

Smallholders are unable to obtain bank credit in spite of substantial donor assistance and the high liquidity of Senegalese banks, limiting their ability to finance investment in irrigation, greenhouse cultivation, fertilizer and pesticides. They also suffer from limited access to transport networks.

The fragmentation of public and private support agencies is especially acute in Senegal, due to the proliferation of institutions and organizations, and the lack of a clear Government policy towards horticulture. The new *Stratégie de Croissance Accélérée* (SCA) encompassing clear Government policies and strategies targets agriculture, including horticulture as one of the poles of growth, but its effectiveness remains to be seen.

3. Ethiopia

Current situation

(a) Floriculture

The fast growth of floriculture in Ethiopia stands in stark contrast to the stagnation of traditional agriculture. While irregular weather patterns have devastated the maize crops of smallholders and subsistence farmers and required the Government and donors to rush emergency food to 4.6 million people, irrigation-fed floriculture exports rose from under \$1 million in 2001 to over \$100 million in 2007 with a further jump expected in 2008 (COMTRADE data, floricultureinternational.com). Floriculture is expected to overtake coffee within five years as Ethiopia's primary export, with Ethiopia overtaking Kenya as the leading African exporter (AA, 2 July 2008). The sector directly employs 16,626 workers and indirectly supports another 66,504 on 1,000 hectares of farms and greenhouses, with the expectation that these figures will double by 2009 (nazret.com, 12 February 2008). Production is centered around Addis Ababa.

Investment from traditional floricultural exporters – especially the Netherlands, Germany, India and Israel – is the source of this rapid growth, attracted by the generous incentive package offered by the Ethiopian Government. African companies have also shifted production to Ethiopia. Two major floricultural companies from Uganda, Xpressions and Sai Farms, relocated to Ethiopia last year. Violence in Zimbabwe and Kenya has also contributed to the influx of FDI into comparatively stable Ethiopia. Currently, 60 per cent of flower farms are foreign-owned, and this share is expected to increase (AA, 2 July 2008).

The largest floriculture operation is Ethiopian Meadows Plc, a subsidiary of the Indian-owned corporation Sher Karuturi, which also has farms in Kenya and India. After acquiring Ethiopia's Sher Agencies in 2007, Sher Karuturi became the largest rose producer in the world. The next largest floricultural company is Shadi Plc, a Dutch-Indian venture that employs 6,000 workers. Since 2002, these firms and over 50 others have been represented by the Ethiopian Horticultural Produce Exporters Association (EHPEA). EHPEA is also involved in coordinating freight at Addis Ababa's Bole International Airport through the company Ethio-Horti, and in organizing the biennial trade fair Hortiflora Ethiopia that draws investors from around the world and signals the country's important role in international floriculture.

Ethiopia has natural advantages, including a climate for European off-season production that rivals that of Kenya (*DTIS: Uganda*, 2006), geographic proximity to Europe (flights from Bole International to Western Europe are two hours shorter than flights from Nairobi's Jomo Kenyatta International Airport) and the lowest labour costs in SSA at \$.80 per day (UNCTAD, 2008b). Ethiopia's primary competitive advantage, however, are investment incentives. A five-year tax holiday, exemptions from export taxes and tariffs on imported

inputs, are afforded to all floricultural investors (Ethiopian Embassy). Although investors are not permitted to own land, they may lease large tracts for an indefinite period at competitive rates. EHPEA's coordinating role and subsidization of air cargo ensures that Ethiopia offers the cheapest freight in the region – \$1.85/kg compared with Kenya's \$1.95/kg and Uganda's \$2.22/kg (Sergeant, 2006). Subsidization of credit ensures that Ethiopia offers the cheapest borrowing in the region as well: 6.5 per cent compared with Zambia's 12–15 per cent (UNCTAD, 2008b). Finally, the Government, in cooperation with EHPEA and donors, has waged a large-scale advertising campaign calling attention to these advantages and promoting the image of the country.

(b) Fruits and vegetables

Although growth in vegetable exports has been slower than for floriculture, exports quadrupled from \$5 million in 1993 to \$23 million in 2007. Ninety-nine per cent of FFV exports from Ethiopia are green beans, with small quantities of cherry tomatoes, and recently strawberries and herbs (EHPEA.org.et). FFV exports are expected to boom in the next few years as Sher Karuturi diversifies into vegetables, in addition to other agricultural products such as sugar, cereals, and palm. The company has obtained a massive 340,000 hectares from the government on a 50-year lease, and with the assistance of United States commercial agronomists it plans to begin production on 10,000 hectares by February 2009 and increase operations by 10,000 hectares in each additional month (Karuturi Annual Report 2007-2008, allAfrica.com, 14 July 2008).

While aid has played a much lesser role than FDI in Ethiopia, USAID has been involved in FFV production through the Agriculture and Trade Expansion Program (ATEP). ATEP has assisted farmers with Integrated Pest Management, most recently strawberry producers who were being devastated in 2007 by spider mites (USAID, June 2008). The programme has also helped medium-sized vegetable growers produce for export, such as Chanco Flowers (*ibid*), and it has organized cooperatives of green bean smallholders, such as Dodicha Cooperative (USAID, 31 March 2006). These projects are small relative to USAID initiatives in Uganda and Ghana.

Opportunities

Diversification into other horticultural products, especially fruits and niche-market FFV, is currently being explored. A GTZ-sponsored initiative into apple production, which involves 7,550 smallholders on 3,775 small-scale farms, is set to conclude in 2009 (nazret.com, 26 March 2007). Although the majority of these farmers sell their produce locally or regionally, high-level GTZ training on disease and pest control and orchard management may enable smallholders to establish linkages with European buyers. Expansion into the niche market for herbs is also being investigated by large companies like Jericho Flowers, which has established a subsidiary called Jordan River Herbs Plc to export to Europe (AA, 19 July 2007). Premium strawberries were exported to the Netherlands for the first time last year from the Israeli-owned company Ilan Tot Plc (FP, 26 November 2007). The firm, which is GlobalGAP certified and sells to the Dutch retailer Fruit World Breda, discovered that the Ethiopian climate yields exceptionally sweet strawberries which have proved popular with European consumers. Ilan Tot has also provided important welfare benefits for the village near Addis Ababa where the farm is located: 85 per cent of the 450 employees are women who have never held a job before, the company funds local schools and encourages children to attend classes, and it provides basic infrastructure to the community including fresh water and electricity.

Exporting by sea via the port at Djibouti is under consideration, as it could reduce transport costs by as much as 50 per cent (AA, 20 November 2007). However, trial shipments have taken 15–17 days to reach the Middle East from Djibouti, not including the time for

exporters to transport produce to Djibouti or for ships to continue on to southern Europe. Exporters are searching for alternative shipping routes to Europe.

Constraints

Ethiopia faces constraints to expansion typical of a newcomer to export horticulture: (a) poor infrastructure including insufficient or poor roads, lack of cold storage, and electricity outages, especially beyond the Addis Ababa metropolitan area; a reputation for low product quality; (b) a lack of skilled workers and management; and (c) and the inability of smallholders to participate in the supply chain. These constraints can be overcome to some extent by private initiatives; for example, Ethiopian Meadows Plc invested in its own refrigerated trucks and depots, acquired GlobalGAP certification and the patronage of large retailers such as Tesco, brought in trained professionals from Bangalore to manage farms, and are considering the viability of out-grower systems to source additional output.

The sustainability of Ethiopia's competitive advantages is open to question. Labour costs are likely to rise to comply with fair trade certification, as in neighboring Kenya. Government-subsidies and tax holidays to investors are an increasing burden on the budget. Are these subsidies the most effective use of the Government's scarce funds, particularly given the continuing famine in parts of the country? It also remains to be seen if Ethiopian horticulture can remain competitive in the absence of subsidies. Moreover, recent stagflation (inflation is running as high as 60 per cent – the highest in the world after Zimbabwe) has made input prices skyrocket, which may undermine the long-term sustainability of the competitive advantage that Ethiopia holds over its rivals in horticulture business.

4. Zambia

Current situation

Unlike in its East African competitors Kenya and Uganda, Zambian horticulture has been largely stagnant for the last five years. It is a relatively young sector; vegetable production began in the 1980s but did not grow significantly for at least a decade, and floriculture production followed a similar trajectory. Horticulture exports currently total about \$53.7 million and 11,228 tons per year, of which 65 per cent are vegetables and 35 per cent are flowers (Sergeant, 2006). The sector employs 10,000 workers (vegetables – 7,500, flowers – 2,500), of which half are women (UNCTAD, 2008b). It is important to note, however that many of these workers, especially females, are “casual” workers with little, if any, job security. The sustained poor performance of horticulture production in fact threatens the job security of all 10,000 labourers.

Export vegetables consist primarily of green beans, baby corn, peas and carrots. The sector grew rapidly in its early stages, with export volumes increasing 13-fold between 1990 and 2002. In contrast to Ghana, however, the stimulus of this growth did not originate in smallholder production, but in the entrepreneurial initiative of large commercial farms. It continues to be dominated by these large farms, including Chalimbana Fresh Produce, York Farms, and Borassus Estates. The participation of smallholders did not occur until the late 1990s, when external donors (namely ZATAC and USAID) formed a partnership with Agriflora with the explicit objective of linking smallholders to export markets. Initially the out-grower system was a success, whereby the incomes of the 121 farmers involved in the system in 2004 were on average 10–15 times greater than Zambian GDP per capita (*F.I.* 13, WDI, CIA WF). However, due to financial issues, Agriflora collapsed in 2004, which not only undermined the competitiveness of smallholder members (by eliminating the possibility of EurepGAP certification), but also led to a sudden, sector-wide decline. Horticulture production has yet to fully recover.

On the other hand, the development of floriculture has been less dramatic. Floriculture production in Zambia is dominated by a few large commercial farms, namely Khal Amazi and EnviroFlor, which together produce about 50–60 per cent of the country's rose output, reflecting the usual economies of scale in floriculture production. Export volumes have been static since the mid-1990s, when the sector received an injection of aid from the European Investment Bank to create cold storage and provide subsidized loans to farmers (Sergeant, 2006). Output consists almost entirely of roses, which has been an important factor in the sector's unimpressive growth trajectory; recently, several regional competitors (especially Kenya, Uganda, and Ethiopia) expanded production of sweetheart roses and captured significant portions of the EU market. The future of Zambian floriculture depends wholly upon the sector's ability to reduce freight costs, expand product diversification, and effectively adapt to the dynamic, competitive environment of floriculture production in SSA.

Intervention and external support

Donor support, although not particularly large, has been critical and, in contrast to Ghana and Senegal, effectively coordinated. In fact, there is some concern that aid has promoted out-grower systems and cooperatives in an unsustainable way.

Aid is mostly funneled through the Zambia Export Growers Association (ZEGA), which is recognized as the dominant horticulture producer association and an authoritative voice for the sector. ZEGA was established in 1984 with the purpose of coordinating input purchases, air-freight, and relations between private horticulture companies and external actors. This purpose has adapted in response to extenuating circumstances, and currently ZEGA is involved in facilitating GlobalGAP certification and guaranteeing that members adhere to a ZEGA Code of Practice (created in 2000) that is benchmarked against the PVS of major EU supermarket chains. The association also provides training courses for horticultural staff (Tallontire, 2004).

Except for its involvement in the NRDC-ZEGA Training Trust (NZTT) through the National Resources Development College (a branch of the Ministry of Agriculture), the Government of Zambia has not promoted horticulture production (*Business for Development*, 2008). The Government has, however, encouraged a generally supportive investment climate by liberalizing agricultural markets, assuring political stability (especially in contrast to neighboring countries), exempting imports of capital and inputs from tariffs and other measures. Policies to counter the appreciation of the kwacha and rising oil prices, which undermine the attractiveness of Zambian horticulture to foreign investors, as well as more specific, targeted public projects, are important for horticulture growth.

Donors involved in Zambian horticulture include United States, Dutch and, notably, United Kingdom governmental organizations; the last is especially interested in horticulture development because almost all Zambian vegetable exports are purchased by United Kingdom supermarkets. Perhaps the dominant aid organization has been the Zambian Agribusiness Technical Assistance Center (ZATAC). Financed and directed by USAID, JICA, and the African Development Fund, ZATAC was formed in 1994 specifically to link smallholders to exporters. ZATAC was first partnered with Agriflora, but following the company's sudden collapse ZATAC began to support LACCU.

A recent attempt at overcoming transportation barriers highlights the characteristic well-meaning but sometimes unproductive nature of aid provided by external donors. In 2005 ZATAC obtained an ex-United States Army truck for LACCU members to use for freighting vegetables; however, the donors failed to recognize the lack of coordination among smallholders, a consequence of the disorder caused by Agriflora's bankruptcy a few months before. Since the costs of using the truck were too high for any farmers acting unilaterally, and since cooperation among smallholders proved elusive, the truck sat idle and the potential for transporting crops more effectively was not exploited.

Welfare implications

One study provides some information on the financial and non-financial benefits accruing to individual workers on large commercial horticultural farms in Zambia (Tallontire, 2004). The average income of a non-management level worker in 2002 was \$417 per year, higher than in other agriculture, but only one fifth of the income of smallholders in export horticulture (Tallontire, 2004, WDI). This income differential between wage labourers and smallholders is substantially offset by greater certainty of pay, fewer costs borne by the farmer (inputs, interest on capital, freight costs, training costs, GlobalGAP compliance costs, ZEGA membership fees, etc.), and numerous employee benefits, including paid leave, healthcare, subsidized meals, bonus systems, use of sports facilities, and others. At the same time, however, this study also found evidence of workplace abuses in large commercial farms involving sexual harassment, requiring overtime work without adequate compensation, etc.

To foster small-scale production, ZATAC, in partnership with an established export horticulture company, created Agriflora Small Scale in 1999. The out-grower system, similar to models found in Kenya (Homegrown) and Zimbabwe (Hortico Agrisystems), included 500 smallholders from 7 cooperatives. However, as previously noted, the system collapsed in 2004 due to financial issues, the company farms were dismantled by opportunists and thieves, and the whole experience fostered a bitter mistrust of export horticulture among the local populace. Nonetheless, the Lubulima Agricultural Commercial Cooperatives Union (LACCU), founded in 2004 by six of the Agriflora cooperatives (severely reduced in number) and similarly assisted financially and technically by ZATAC, encouraged the continued presence of smallholders in export horticulture. Although the smallholders remaining in the system reduced output so as to rely less on the experiential uncertainty of vegetable production, some farmers began to obtain EurepGAP certification by 2006 and successfully market their vegetables to York Farms, the largest horticulture exporter in Zambia. LACCU, which provides members with cheaper seed and fertilizer (purchased in bulk), subsidized credit, training (via NZTT), and legal representation, remains dependent on donor aid; the long-term viability and self-sufficiency of the system, especially in contrast to the commercial farm model, has yet to be determined.

FDI has been limited, mostly confined to rose production. Khal Amazi, a vertically-integrated floriculture company, is a subsidiary of the British firm PGI, and EnviroFlor, another large floriculture company, was created in 1995 as a Dutch-Zambian joint venture. Otherwise, export horticulture has been the initiative of domestic firms and, later, smallholders. Foreign investors may be discouraged by the relatively unfavourable business climate (e.g. UNCTAD, 2008b)

Opportunities

Zambia has a distinct advantage in horticultural export due to regional complementarities: Zambia can produce vegetables when Kenya is prevented from doing so during the rainy season. Zambia also benefits from its proximity to South Africa. Several commercial vegetable exporters have greatly reduced air freight costs by freighting produce down to Johannesburg in refrigerated trucks and utilizing the excess cargo capacity on passenger planes departing South Africa to transport vegetables to Europe. In fact, excess cargo capacity is so great and, consequently, South African air-freight charges are so cheap that total costs from Lusaka to the United Kingdom are between \$1.45 and 1.65 per kilogram; this is less expensive than comparable Kenyan exports and competitive with subsidized Ethiopian exports (Sergeant, 2006). Greater coordination between farmers in out-grower or cooperative systems, such that initiatives similar to the ZATAC–LACCU United States Army truck project would succeed, is necessary to enable smallholders to take advantage of this opportunity for lower air-freight costs as well.

Zambia has made considerable strides in attaining GlobalGAP certification. As of 2008, 13 of ZEGA's 32 members were GlobalGAP-compliant and all members adhered to the Code of Practice (UNCTAD, 2008b). Consequently, Zambia has earned a reputation for supplying quality produce, which will provide producers an advantage as competitive pressures continue to increase and help offset Zambia's lack of scale economies and relatively high cost structure.

For larger vegetable exporters, other opportunities exist in niche markets and downstream processing. Chalimbana Fresh Produce has experimented with organic peas, which earn a premium in United Kingdom supermarkets. York Farms has similarly diversified production by way of organics, and it has acquired capital in order to process and package vegetables. This sort of diversification is important not only to increase revenues and thereby raise incomes and expand the sector, but also to cultivate the image of Zambia as a high-end supplier of horticultural exports.

Constraints

Zambian farmers face many of the constraints typical of horticulture producers in SSA, including lack of access to credit, irrigation, seed, electricity and other inputs. These obstacles are augmented by the relative youth and small size of the sectors and the inexperience of producers, compared to Kenya, despite significant efforts to upgrade management skills and training. The small size of the sector limits the economies of scale enjoyed by other East African farmer-exporters, including cheaper inputs (from bulk purchases), cheaper freight (from expanding capacity at LIA), and contracts with the largest retailers in the EU.

Zambia's distinct seasonality of production, while advantageous for vegetable production, entails a competitive disadvantage in floriculture relative to firms in regional equatorial countries like Kenya and Uganda that can harvest roses year-round.

Freight costs, and in particular air-freight costs, are one of the greatest constraints on the horticulture industry in Zambia. These costs are the result of relatively high fuel prices and the lack of scale economies of export at Lusaka International Airport (LIA). The innovative approach by vegetable producers to bypass LIA via export through Johannesburg is not viable for floricultural firms, due to the higher perishability of their product and to contractual obligations with the local airlines. Moreover, the departure of large vegetable exporters from LIA further reduces scale economies in air freight. Consequently, floriculture and smallholder exporters must pay rates of \$2.32 per kilogram, or 18.9 per cent greater than exporters in Kenya (who enjoy the lower rates of scale economies) and 25.4 per cent greater than exporters in Ethiopia (who enjoy Government subsidies to transport) (Sergeant, 2006). Furthermore, ZEGA reports that jet fuel costs 40-50 per cent more in Lusaka than in Johannesburg (*ibid*).

Zambia's horticulture exports also suffer from currency overvaluation due to the "Dutch disease" effects of a booming copper sector and large aid inflows. One study found that a net profit of 3 per cent on turnover (typical of vegetable exporters in 2006) was instantly transformed into a loss of 5 per cent (*ibid*). The Government has responded by offering tax exemptions on horticultural exports, but profitability remains low (oanda.com, CIA WF)

In spite of the recently successful attempts to promote a Zambian image of high-quality horticulture exports, the prices obtained by Zambian exporters remain far below those obtained by competitors, due to limited progress in GlobalGAP certification, whereby only 1/3 of ZEGA members are certified. The farmers that have acquired GlobalGAP certification report greater access to high-value markets and significantly higher yields (*F.I.* 5, 2007).

5. The Gambia³²

Current situation

The Gambia is the smallest country in continental Africa, enclosed within Senegal except for a 60-km coastline. As such, the climate and geography are nearly identical to Senegal's. Yet, while Senegalese horticulture has grown strongly in recent years, in the Gambia horticulture exports have fallen well below the peak attained in the early 1990s, despite the presence of the multinational firm Radville Farms, which has been in operation in the Gambia for over 20 years. Small size, lack of economic cooperation with Senegal, and a deteriorating political and investment climate since the 1994 coup d'état account for the sector's downturn in the Gambia.

In 1991, there were about 30 fruit and vegetable exporters in the Gambia, with two dominant producers, Sifoe and Radville. Radville is still in operation, along with two other producers, Gambia Horticultural Entreprises (GHE) and M.A. Karafi. Radville and GHE both produce fruits (mainly mangoes) and vegetables (green beans, chilies, eggplant, Asian vegetables) for the United Kingdom market. Radville, which is GlobalGAP certified, sells to United Kingdom supermarkets, whereas the smaller GHE is not certified and is limited to the less lucrative London wholesale market. Mangoes are shipped by sea and vegetables by air. The recently established Kharafi enterprise had also initially targeted vegetables but has switched to supplying potatoes and onions to regional markets.

Floriculture investments were initiated in the early 1990s, but failed to recover from the instability following the 1994 political turmoil.

Opportunities

As for Senegal, the Gambia has the advantage of a coastal location and relative proximity to Europe. The seasonality of rainfall and dry seasons also allows both countries to fill a brief gap in off-season European production between the Kenyan and North African seasons. One of the Gambia's main industries is tourism, with significant beneficial spillovers on horticulture in the form of air freight capacity and demand for produce by tourists. The NGO Concern Universal initiated the Gambia is Good (GIG) programme to increase local sourcing of produce by hotels and restaurants. GIG is working with farmers to improve production capabilities and distribution.

The Gambia has also benefited from early FDI in horticulture, providing expertise and market connections. Radville Farms was established in the Gambia in 1985 as a joint venture with local partners by Mr. Rati Dhamani, a Kenyan of Asian descent, who had created Wealmoor, a major United Kingdom distributor of Kenyan produce in 1973. Mr. Dhamani set up operations in the Gambia to supply Wealmoor in the Kenyan off-season. Radville's connection with Wealmoor's expertise and marketing network provided an ideal starting point for the fledgling Gambian horticulture industry. Wealmoor has become one of the largest importers of tropical produce in the United Kingdom. It is certified for GlobalGAP, as well as for several other United Kingdom private labels such as Nature's Choice and the British Retail Consortium. About half of its operation is certified organic. Radville has 130 full-time employees and 2,000 seasonal staff. Over time, Radville has expanded its acreage and has built a state-of-the-art packhouse. It uses modern growing methods, including drip irrigation. It has its own farms and sources from smallholders; it has invested in local schools and clinics. It assists the smallholders in upgrading methods so as to obtain certification (InfoPip, 2004). Wealmoor markets Radville's produce to top-of-the-line supermarkets in the United Kingdom such as Tesco, Sainsbury's and Waitrose, with stringent and varying certification

³² Unless indicated otherwise, all information is from the Gambia DTIS (World Bank 2007).

requirements to which Wealmoor has successfully adapted. In the past, Radville organized its own air freight shipments by chartering cargo planes, but no longer does so due to the high costs. It accounts for the bulk of Gambian horticulture exports.

M.A. Karafi, a Kuwait-based firm, is the largest foreign investor in the Gambia, mainly in construction. Karafi's decision to diversify into horticulture, in a joint venture with the Dutch firm Farmfrites, could provide an important capital infusion into the sector, and the focus on supplying potatoes and onions to local markets is a sensible beginning.

Constraints

Despite its geographic advantages and Radville's longstanding presence, horticulture exports have fallen by half in nominal terms since the 1993 peak. The decline of the horticulture industry coincides with the 1994 military coup in which Yahya Jammeh took power. Tourist arrivals from Europe declined dramatically in the mid-1990s due to ostracism of the Gambia, and have yet to fully recover to pre-1994 levels. The consequent decline in flights into the Gambia has adversely affected the availability of air freight for outgoing horticulture exports. Exporters view the lack of cargo space as the most important impediment to increasing exports. Moreover, the erratic economic policies followed by the Jammeh administration have adversely affected the investment climate. Imprudent macroeconomic policies led to a surge in inflation and a financial crisis in 2001. The Jammeh administration's adversarial relations with Senegal have hindered cooperation in a wide range of areas of potential mutual interest, including transport, tourism, and energy, thereby raising costs in the Gambia, due to its very small size.

Radville reports that costs of production in the Gambia are double those in Kenya. High costs reflect the poor state of primary infrastructure in the Gambia, especially electricity. Radville must rely on its own generators to supply power given the unreliability and high cost of power. Despite some improvements, roads remain poor, and telecommunications expensive. Radville managers cite lack of support from Government and the difficulties in receiving duty rebates on imported inputs to which they are entitled. All of these factors have curtailed Radville's plans for expansion in the Gambia.

V. CONCLUSIONS

Vulnerability of LDCs increases especially during global crises and shocks. As mentioned, in early 2009, exports earnings for these countries as a group sharply declined owing to the global financial and economic crises that struck major economies of the world. Similarly, external resource flows including ODA and remittances to LDCs are expected to contract in the coming years as revival and recovery in the global economy remain slow and are projected to take a longer period of time. Consequently, poverty in these countries has worsened dramatically. The confluence of global economic crisis and deep-rooted structural weakness inherent in these economies has seriously undermined their growth and development prospects. For example, the volcanic ash that has intermittently disrupted air travel, particularly to Europe, has cost small producers and suppliers in LDCs millions of dollars. Uganda reported that it lost \$4 million (U Sh 8 billion) in exports only in one week of flight disruption. The hardest hit export items include: floriculture, fresh vegetables, fruits and fishery, as well as the tourism sector. Ethiopia's loss from flower exports during the same week amounted to about \$2.6 million. Its airline suffered huge losses as its daily flights to major destinations in Europe were grounded. Kenya, which serves as a regional hub for exports from nearby landlocked LDCs, also reported a daily loss of \$3 million. These examples clearly illustrate the vulnerability and fragility of LDC economies to various external shocks-economic, financial, natural or political. Hence, special and sustained support from the global community in general from developed countries in particular is needed.

In general, factors influencing the growth and development prospects of LDCs are varied and complex, reflecting not only their heterogeneity but also variations in their capacity to withstand external shocks, priorities and needs. There is a growing consensus that, although the process of globalization has presented both opportunities and challenges to all peoples, countries and regions of the world, available evidence so far suggests that least developed countries in particular have yet to reap the benefits of globalization. In fact, conventional development indicators point to the fact that the LDCs are lagging behind other developing countries. While other developing countries are now converging upon the developed world, growth in the LDCs' group has been characterized by long-term divergence. This situation has intensified their continued marginalization in the globalization processes poses development challenges of the highest magnitude more important than any other development challenges (Collier and Gunning, 2003).

Despite growing challenges, the progress observed in the implementation of the BPoA is encouraging, especially when compared with the previous programmes of action for the 1980s and the 1990s. However, progress towards the goals and targets of the Brussels Programme of Action are also varied, inconsistent and susceptible to various economic, political and environmental shocks-external or internal. For instance, in some cases, growth has been favourable (although below the ambitious target of 7 per cent), and this has contributed to a reduction in extreme poverty particularly in urban areas, while rural areas tend to suffer more poverty. Where progress has been observed, it has generally been based on sound economic policies which have improved the business environment and enhanced investor confidence. In other LDCs, however, the record has been much less positive, with disappointing economic growth and little improvement in poverty reduction.

With regard to international trade, as shown above, the export structure of LDCs remains concentrated on a few primary commodities and low-skill labour-intensive manufactures. Nevertheless, international trade accounts for about 50 per cent of the GDP of LDCs as a group. The case studies reveal considerable potential for LDCs to join the group of successful exporters from developing countries, especially in the areas of non-traditional exports such as horticulture.

Horticulture exports, consisting of fresh fruit and vegetables and cut flowers, are an important potential source of growth and poverty reduction for African LDCs. Horticulture is highly labour-intensive and promotes technological upgrading. Its exports contribute to poverty reduction through increased incomes and employment opportunities, especially for women. LDC exporters of horticulture have established a significant presence in the European market, thanks to a strong comparative advantage arising from geographical proximity and favourable climate. African producers have considerable scope for gaining market share in Europe, through expansion of existing products as well as product diversification. Product diversification includes niche areas such as organic and fair-trade products and processing of fruits and vegetables. Furthermore, horticulture development has significant synergies with tourism, another promising industry in Africa, via increasing the number of airline flights and thereby raising cargo availability, and demand from hotels and restaurants.

While non-LDCs – mainly South Africa, Kenya and Ghana – are by far the largest exporters in SSA, some LDCs, including Senegal, Uganda and Ethiopia have experienced rapid growth. Further gains and, indeed, maintaining existing market shares, is contingent upon overcoming a number of obstacles. Competition from Latin America is becoming more intense and tariff preference margins are diminishing. Rapid technological and institutional change requires upgrading by producers. African exporters have mostly sold to lower-end wholesale and ethnic markets, where standards are lower. With lower-end markets declining in importance in favour of supermarket chains with strict quality and traceability requirements, adherence to increasingly stringent government and private standards, particularly GlobalGAP, is becoming essential. Even in wholesale markets, quality and sanitary standards are rising.

The high costs of meeting quality standards pose a particular challenge to smallholders, traditionally the dominant mode of production in Africa. Thus, production is increasingly shifting towards larger farms. In some respects, Africa in general and smallholders in particular are well-positioned to take advantage of increasingly discriminating consumer preferences in Europe. Smallholders are often predisposed to organic techniques because of the unavailability or high cost of fertilizer and pesticides. Moreover, production costs are lower for smallholders. GlobalGAP Option 2 group certification has been established to ease the burden on smallholders, although quality control and logistics remain daunting challenges. Smallholder participation continues in two main forms: out-grower systems and cooperatives. Out-grower systems, whereby smallholders engage in contract farming with large buyers are feasible when the buyers work closely with the farmers and provide technical and financial assistance. Out-growers have also been extensively supported by donors. Cooperatives, where groups of farmers are organized, have not functioned well recently in Africa, even with substantial donor assistance.

The national and sector specific case-studies reported on this note has led to the identification of a number of key problems that are typical of LDC economies. These include: massive poverty and under-development, lack of infrastructure, weak supply capacities, lack of institutional and technological capabilities, low labour productivity, and lack of resources for development. These problems are further entrenched by civil strife and conflict; political instability; desertification, drought and land degradation; and high population growth and ill-health, all hindering the growth and development prospects for LDCs. Many LDCs are also landlocked, while others are Small Island Developing States. This physical handicap and the high transit–transport cost associated with it have further compounded the ability of LDCs to produce and trade on the regional and international markets, thus undermining their international competitiveness. One could safely conclude that, owing to the above constraints, the current form of growth is not leading to structural transformation in these countries and sustainability of growth remains a challenge. It is therefore of urgent necessity to

effectively address the following sectoral and economy-wide challenges confronting the least developed countries.

Inadequate physical infrastructure

Both basic infrastructure (transportation systems, including roads, seaports, airports; telecommunications; and energy) and well-functioning horticulture-specific infrastructure (the cold chain, including refrigerated storage depots and trucks, and irrigation systems) are lacking in LDCs. Basic infrastructure is a public good usually requiring some public involvement in organization and financing. The sheer lack of essential infrastructure is undermining local productivity and international competitiveness of LDCs as well as poverty reduction efforts in these countries. For instance, lack of air cargo space in particular is often a major constraint on expansion of horticulture, which may, in part reflect poor domestic infrastructure.

Lack of access to finance

Throughout LDCs, small and even large local enterprises face credit constraints and high interest rates, inhibiting market entry, upgrading and expansion. Partnering with foreign investors can obviate malfunctioning local financial markets through access to global capital markets. Donors can also be a source of capital, particularly for smallholders.

Lack of knowledge

Domestic producers, especially smallholders, are often unaware of State technology and lack information on market opportunities. Foreign investors and donors can play a catalytic role in the transfer of technology and in establishing market connections in importing countries.

Political instability

Socio-economic progress can not be achieved in the absence of peace and political stability. The case studies clearly articulate that, even at the sectoral level, political stability is a prerequisite for economic growth and development. For instance, horticulture investment takes root in countries with a reasonable degree of political stability. In a number of previously stable countries, the horticulture industry has been undermined by recent political conflict, including Zimbabwe, Côte d'Ivoire and, most recently, Kenya.

Less conducive macroeconomic environment

Stable and sound macroeconomic policies are essential for economic growth and development. Country- and sector-specific case studies clearly demonstrate that pro-growth and development, less interventionist and more activist government policies have helped many poor countries to become successful exporters. One of the main factors underpinning Kenya's horticulture sector has been the avoidance of excessive Government intervention and unstable policy regimes. In many African countries, however, erratic macroeconomic, trade and tax policies contribute to an unfavourable business climate. A promising start in the Gambia has been harmed by a deteriorating investment climate since a 1994 coup d'état, including erratic macroeconomic policies and dysfunctional duty rebate systems.

Ineffective support organizations and lack of public action

Lack of strategy for mobilizing public action against underdevelopment and poverty, combined with weak institutions and support organizations, remains among important impediments undermining the growth and development prospects of LDCs, including poverty

reduction efforts. Government and private sector support organizations are often fragmented, underfunded, and disorganized. Smallholders in particular depend on these organizations for assistance and representation. Donor efforts are also often uncoordinated and driven by their own political exigencies.

VI. IMPLICATIONS FOR LDC-IV AND RECOMMENDATIONS

A. Policy implications and the way forward

The key constraints identified through the national case studies and sector specific analysis require policy actions at the national, regional and global levels. The implications of these findings for LDC-IV are that:

- (a) There are sectors where national and international efforts, if properly targeted, could contribute to poverty reduction in LDCs. For instance, while cash incomes of horticultural employees on large estates are below those of smallholder exporters, wage labourers tend to be poorer to begin with, as they were previously subsistence farmers or landless labourers. Moreover, local communities and workers on large foreign-owned enterprises benefit from the fringe benefits, services, and local infrastructure that these firms tend to provide, including health, education, electricity, water and waste management systems;
- (b) Well-designed and targeted diversification strategies with focus on areas where LDCs have comparative advantage could generate export revenue comparable to traditional export sectors of many poor countries. For instance, the horticulture sector offers employment opportunities improving household incomes with direct positive impact on poverty reduction in many of the countries covered by the case studies;
- (c) While diversification into value addition and manufacture is important for the long-term sustainability of economic growth and development in LDCs, horizontal diversification is essential for the growth and development prospects of many of the poorest countries of the world. Several LDCs could join successful exporters, provided that they put in place effective development policies and strategies coupled with targeted and well structured incentive schemes;
- (d) Targeting investment – including resources from ODA, FDI and private sources – to sectors of strategic interest to LDCs can have direct impact on socio-economic development of LDCs. The case studies confirm the fact that, given the high technological and information requirements for participation in increasingly sophisticated global horticulture chains, foreign involvement is essential for LDC success in exporting. Transfer of technology, financing and market connections can be provided through foreign direct investment (FDI), donor assistance, or both, thereby overcoming local market failures in finance and information. In the successful African exporters, notably Kenya, Ghana, and recently Ethiopia, foreign investment has played a pivotal role in establishing and developing a domestic horticulture industry. Multinational companies such as Dole and Compagnie Fruitière have the experience and capacities, as well as the incentive, to develop domestic African supply capabilities, including training and assistance in satisfying GlobalGAP requirements. Moreover, large investors find that it is their interest to promote development through investment in local communities in the form of infrastructure and social services. The most important conclusion, therefore, is that countries must create conditions that are favourable to attracting FDI from the leading global horticulture multinationals;
- (e) For LDCs, particularly those countries emerging from severe political and social conflicts such as Uganda and Rwanda, attracting FDI is difficult. Donors, including international financial institutions such as the World Bank, can provide an initial injection of capital and know-how, and have played a crucial role in jump-starting export horticulture in some countries, for example through research on adapting crops to local climate conditions and in constructing refrigerated storage depots. Donor assistance is less dependable than foreign investment, however, given the short-term

focus of donors and their limited resources, and the sustainability of industries created with donor support is uncertain. Donors should deemphasize their support for smallholder systems, as smallholders are increasingly vulnerable to various shocks and unviable economically in the long run. For instance, the ever-rising standards of global horticulture chains have adverse impacts on the production and export of horticulture by small land holders. Instead, donors can focus their support on public goods such as investments in transportation systems and storage depots that will assist all producers, regardless of size. Supportive government policies that foster a favourable investment climate are a necessary condition for FDI and donor involvement. This includes provision of basic services, avoidance of excessive intervention, and transparent and well-functioning investment incentives. In addition, recent developments in countries such as Kenya, Côte d'Ivoire and Zimbabwe have reinforced the fundamental importance of effective governance so as to avoid social conflicts. Beyond these basics, the precise role of government can vary, depending on local circumstances and capabilities. In Senegal, the horticulture industry has developed thanks in part to the absence of the kind of intrusive government intervention that has adversely affected Senegalese industries in the past. Ethiopia's experience in boosting floriculture, however, suggests that active government promotion efforts, including subsidies to foreign investors, can be successful, if well designed and implemented. As in the case of donor-supported industries in countries such as Uganda, the sustainability of Ethiopia's subsidized floriculture industry remains to be seen. Ethiopia's experience should be closely monitored to draw lessons for other countries. LDC governments and donors must also work together to foster effective support organizations for producers that promote the interests of the horticulture sector and act as a coordinating group in matters of mutual interest, particularly in the area of upgrading standards. GlobalGAP allows for the creation of national GAP systems adapted to local conditions as a way of obtaining certification, but progress has been slow in establishing local GAP systems.

Further policy lessons that successor programme of action should take into account relate to overdependence of LDC economies on primary commodities. The recent expansion of exports and economic growth in LDCs has not been accompanied by an increase in value addition. In other words, there is a lack of economy-wide improvement in terms of productivity, value added by domestic producers and long-term structural change in LDCs. The increase in export earnings of these countries is simply the result of improvements in world commodity prices and growth in traditional and non-traditional commodity exports. While such an improvement is cause for optimism, there is concern that this has not been accompanied by structural transformation, thereby implying a high degree of vulnerability to shocks and crises. Therefore, in order for LDCs to take advantage of globalization, while minimizing its risks, they should diversify their economic base through developing their productive capacities into production of higher value added goods and services, leading to a fundamental socio-economic transformation. Overall, gains from decades of liberalization policies and strategies have fallen short of expectations. For the last several decades, most LDCs have been pursuing wide-ranging economic reform and adjustment programmes aimed at trade liberalization. These policies and measures were unable to generate the form and quality of growth that reverses their continued marginalization. However, this does not mean that protectionism is the best option for these countries. In fact, they should avoid any attempt or temptation to resort to protectionist policies. They should, instead, design their home-grown and endogenous development policies and strategies based on their specific socio-economic circumstances, resources base, institutional capability and overall local conditions.

Moreover, environmental degradation, climate change and disruptive weather patterns cause drought, famine, desertification, cyclones, floods, etc. The confluence of these natural disasters undermines socio-economic progress in LDCs, which inherently lack the institutional and financial capacities to adapt to and mitigate the effects of adverse natural consequences. Experience shows that natural crises hurt poor countries and poor people the most and diminish their chances of escaping the poverty trap. The adverse impact of climate

change may also result in millions of environmental refugees from LDCs. The destruction of Haiti by the 12 January earthquake is a further illustration of inherent vulnerability of LDCs to natural shocks and disasters as well as their inability to mitigate the devastating consequences of such shocks. The case of Haiti is also a wake-up call for LDCs and their development partners to build economic and institutional resilience. The international community should be further mobilized to assist the rehabilitation, recovery and reconstruction efforts in Haiti.

B. Recommendations for action during and beyond LDC-IV

1. Policies and institutions

From the above, one can safely conclude that, despite improved economic performance, many LDCs could not achieve poverty reduction goals of the PoA and those contained in MDGs. In fact, poverty and the vulnerability associated with it continued to plague their population. There is strong evidence today, more than ever before, suggesting that, for economic growth to have substantial impact on poverty reduction, it must be robust, sound, inclusive and broad-based. It should also be accompanied by growth of productive and supply capacities, diversification and an increase in value addition. These require sound development policies and capable institutions to implement them. This calls for new approaches to development policies and strategies in LDCs as well as concrete measures at the national, regional and international levels. At the national level, the importance of rebuilding developmental States aimed at effectively addressing the challenges and concerns of LDCs should be given adequate emphasis. The recent global economic crisis is already undermining the modest gains seen during the last several years and is likely to impose very serious damage to LDCs economies, implying that “business as usual” is no longer possible and that an urgent re-examination of current approaches to development policies is required. The 2009 *Least Developed Countries Report* offers new and viable policy orientations and argues that the role of the state is crucially important in promoting development in LDCs. The report further argues that it is now necessary to adopt more active State policies to promote structural transformation and the development of productive capacities. This will require the development of both industrial and agricultural policies embedded within a framework of growth-oriented macroeconomic policies. The case studies of Kenya, Rwanda and Ethiopia provide fresh evidence on the need for more activist, less interventionist, pro-growth and developmental states.

2. Building productive and supply capacities of LDCs

Inadequate physical infrastructure and low level of productive capacities are among the key problems constraining the growth and development prospects of LDCs. Efforts to improve productivity, diversification and economy-wide value addition should also be high on the agenda of the Fourth United Nations Conference on LDCs (LDC-IV). The Conference should assist in forging a new form of partnership between LDCs and the international community. Such an approach should also take into account the initial conditions, diversity and heterogeneity of LDCs. In this regard, on the basis of the findings of its research and policy analysis work, UNCTAD has been advocating a rethinking of the development model that the LDCs have been pursuing for several decades now. It has been proposing a paradigm shift in development policies and strategies as well as in the nature of development partnerships. This entails, in particular, the reorientation of national and international policies towards building productive capacities. For instance, there has been a consistent and dramatic decline in investment in productive sectors, notably agriculture, since the 1980s. The consequence of such a gap is that there is a lack of economy-wide improvement in terms of productivity, value added by domestic producers and long-term structural change in LDC economies. This in turn led to a form of economic growth that does not stimulate productive investment nor create sufficient jobs. LDC-IV and the successor Programme of Action should attempt to identify policies and measures that can remedy such inconsistencies. One of the apparent

limitations inherent in past national and international policies pertaining to LDCs was also their excessive preoccupation in averting growth collapse, social exclusion and vulnerability without addressing key issues of building resilience against shocks. While preventing economic, social and environmental crises or disasters is essential, building resilience and capacities to weather the crises should be given adequate attention in the outcome document of LDC-IV.

3. Access to finance, including loans at affordable rates

In most LDCs, domestic enterprises (especially SMEs) and producers (particularly those in agriculture and agro-processing business) have little or no access to finance. This is despite the fact that agriculture remains the mainstay of the economy of LDCs in terms of employment, contribution to GDP and exports. Besides, most of these countries are not only net food importers but they are also chronically food-insecure. The recurrent food price rises and related crises are the causes and effects of low productivity of the agriculture sector of LDCs. Furthermore, the share of public and private investment in productive sectors, notably agriculture in total investment, remains low and has declined over the years. Banks in LDCs are also reluctant to provide loans to agriculture-based investment projects. For instance, banks in African LDCs provided only 14 per cent of their loans to agriculture, even though agriculture in these countries accounted for more than 36 per cent of total value added and employed, on average, 86 per cent of the total labour force (UNCTAD, 2008). The Conference should agree on a set of national and international policy measures to enhance the socio-economic benefit of the sector for LDCs.

4. Scaling-up ODA and improving its quality, including its effectiveness

Resources mobilization for development remains among the key challenges, undermining the full and effective implementation of the outcomes of previous United Nations Conferences on LDCs. Given the current global economic meltdown, this aspect needs to be given a central place and immediate attention in the process leading up to the Conference. Linked to this is the future of ODA, which requires new approaches. While the success of the PoA will depend on the scaling-up of development resource flows to LDCs, ensuring that these resources are used effectively towards reaching the MDGs and the goals of the PoA is vital. There is growing concern that the recent multiple crises will affect the magnitude of development aid and the way it should be channeled to the poorest countries. As a result, the global economic situation has dramatically changed since the third United Nations Conference in 2001. A new approach to development aid policies is highly desirable if LDCs are to achieve greater ownership of public expenditures. This should be closely examined and consensus should be reached during the Conference on creating more innovative operational modalities specifically tailored to the needs of LDCs. For instance, in spite of some progress on the quantity of development aid, improving its quality as well as aid effectiveness remains a challenge. The real economy, especially the productive sectors such as agriculture, should be given utmost emphasis during the preparatory processes and at the Conference. The sectoral composition of ODA has also changed markedly since the 1990s with significant increase in the proportion devoted to social sectors and an equivalent reduction for economic and productive sectors, especially agriculture. This calls for a re-balancing of development aid with a focus on productive sectors of LDCs.

5. Remittances

Remittances from migrant workers account for a sizable portion of external resource flows to several LDCs. In 2007, the top five remittances-receiving LDCs were Bangladesh (\$6.4 billion), Nepal (\$1.6 billion), Yemen (\$1.3 billion), Haiti and Sudan (\$1.2 billion)

each)³³. When compared with the relative weight of remittances in GDP, Lesotho (24 per cent), Nepal (18 per cent), the Gambia (12.5 per cent), Kiribati (9.9 per cent), Bangladesh (8.8 per cent), Uganda and Togo (8.7 per cent each) top the LDCs' group. The World Bank also revised its forecast for 2008 and 2009, owing to global economic crisis. LDC-IV should provide policy guidance on how to sustain the flow of remittances to poor countries and as to how such resources could be best used to advance the trade and development interests of LDCs.

6. New generation of international support measures

Building entrepreneurship and enhancing the role of the private sectors is key to strengthening the competitiveness of LDC economies, including through the transfer of technology and know-how as well as by building technological capabilities and innovation in these countries. This calls for targeted and sustained assistance, for example, by establishing funds for infrastructure development ("Infrastructure Fund" and for technological upgrading and innovation ("Technology Fund") for LDCs. The concept of infrastructure and technology funds could be further developed by UNCTAD and the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) as preparations for the Conference advance. A new generation of international support measures should also include ways and means of making the Aid for Trade initiative operational in LDCs. The Aid for Trade Initiative addresses constraints, which impede supply capacities, including weak trade-related infrastructure. It should also include trade-related technical assistance to build capacities to formulate a locally-owned trade policy, participate in trade negotiations, and implement trade agreements.

7. Strategy for public awareness and information campaign

Appropriate strategy for public awareness and information campaign needs to be developed in consultation with LDCs, their development partners and United Nations system agencies at the national, regional and global levels. Such a strategy should focus primarily on the Conference, its objectives as well as ways and means of attaining them. Developing a well-thought-out strategy for a public awareness and information campaign should also ensure the involvement of national and regional institutions, government agencies, and civil society and private sector stakeholders in the preparatory processes of the Conference and during the implementation phase of the outcome document. This not only will enhance awareness of the complex development problems and challenges of LDCs, but will also help to mobilize stakeholders and secure necessary resources for the cause of development.

8. Monitoring progress

Continued efforts should also be made to establish a mechanism for systematic and results-oriented monitoring and evaluation and to track progress of the implementation of actions and commitments. Monitoring and evaluation of impact at the national level is critical for drawing practical lessons and best practices relating to the implementation of the outcome of the Conference. This encourages the participation of national institutions and actors in the development process while ensuring ownership of the development process. This requires building statistical and research capacities in LDCs. UNCTAD's work in this area shows that inadequate statistical data has seriously undermined efforts to carry out results-oriented monitoring of progress with the current PoA.

³³ World Bank, Remittances Factbook, 2008.

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ANNEX I

Summary Recommendations from the Expert Meeting of Least Developed Countries (LDCs) in preparation for the Fourth United Nations Conference on LDCs (LDC-IV)

Kampala, 28–30 October 2009

The following assessment of progress made in the implementation of the Brussels Programme of Action (PoA) and recommended policy measures for the successor PoA are far from being complete, nor are they comprehensive. However, they should be seen as a starting point to kick-start the process of preparation for the Fourth United Nations Conference on LDCs (LDC-IV). Policies and measures proposed are only indicative, with no particular hierarchy of importance attached to them.

I. Brief assessment of socio-economic progress in LDCs since the Third United Nations Conference in May 2001

1. Since the Third United Nations Conference on LDCs, the overall socio-economic performance of LDCs has improved, although it varied from region to region, from country to country and across sectors. In some cases, growth has been favourable, reaching (or in a few cases surpassing) the 7 per cent target agreed in the Brussels PoA. Such improved performance has contributed to a reduction in extreme poverty in some LDCs particularly in urban areas, although rural areas tend to suffer more poverty. Progress made towards achieving the human development targets of the PoA and internationally agreed development goals, including the Millennium Development Goals (MDGs), is also mixed. Some LDCs have made concrete progress, notably in reducing child mortality, improving access to safe water, expanding universal primary education and promoting adult literacy as well as in reducing gender disparities at schools, while others are lagging behind. If the current poverty trend continues, LDCs could remain off the target to meet the MDGs and the goals of the PoA.
2. As regards national policies, LDCs have continued to implement wide-ranging economic reform programmes. They made tangible progress, particularly in eliminating the most severe distortions arising from fiscal deficits, exchange rate overvaluation and high and variable import barriers. It is increasingly recognized, however, that much more is required in creating a favourable business climate, with the government having a crucial role in providing public goods and overcoming market failures.
3. Regarding international trade, LDCs' export structure remains concentrated on a few primary commodities and low-skill labour-intensive manufactures. The commodity price boom that began in 2002 came to an end in 2008 and turned into a sharp decline during the second half of the year, reflecting the decline in global demand, largely due to global economic crises. Consequently, export earnings of LDCs as a group sharply declined (by up to 50 per cent) over the first half of 2009 and their combined share in world trade, though marginally improved, remained negligible at 0.85 per cent during the same period.
4. International support measures have shown measurable improvements since 2001, with increased financial flows to LDCs, notably official development assistance (ODA) and foreign direct investment (FDI). For instance, ODA flows to LDCs (excluding debt forgiveness grants and technical assistance) increased, in terms of volume, from \$12.09 billion in 2001 to \$25.8 billion in 2005 and \$32.5 billion in 2007, although distribution was uneven and there were instances where ODA actually declined for some LDCs. There has also been significant progress in untying aid for these countries and alleviating their external debt burden. FDI flows to LDCs also increased from about \$5 billion in

2001 to \$7.1 billion in 2005 and to \$13.2 billion in 2007. However, much of this FDI was directed towards oil- and mineral-exporting LDCs. Similarly, on market access (on average), nearly 85 per cent of total developed country imports by value from LDCs were admitted preferential duty-free and quota-free during the period 2001–2007, although some LDCs’ exports still face punitive tariffs in some developed country markets.

II. Important trade and development challenges facing LDCs

5. At the domestic level, challenges constraining socio-economic progress and the growth and development prospects of LDCs include massive poverty and underdevelopment, lack of infrastructure, weak productive and supply capacities, lack of institutional and technological capabilities to design and implement policies, low level of human development, low labour productivity, overdependence on a few commodity exports, a weak statistical base, brain drain and a lack of domestic resources for development.
6. The focus of current national policies and international support measures is, generally, addressing short-term humanitarian emergencies and financing needs in the social sectors. However, the long-term challenges such as underdevelopment, geography, weak productive and supply capacities, insufficient institutional and market structures, and overdependence on few commodity exports continue to pose formidable challenges to LDCs and their development partners.
7. A major challenge that the LDCs will face in the coming decade is that increasing numbers of people will be entering the labour force. If properly managed, this could be a demographic dividend. In the past, most people entering the labour force were absorbed by the agricultural sector. However, due to declining farm sizes, very low productivity, shifting to marginal land and environmental degradation, more and more people are now seeking work outside agriculture. This employment transition requires policies and strategies that focus both on improving agricultural productivity growth and on the generation of productive income opportunities outside agriculture.
8. The state and quality of human development remains poor in most LDCs. A high rate of population growth is also undermining efforts to improve the quality and access to education, health care and skill development, especially in rural areas. LDCs are also lagging behind other developing countries in bridging the digital divide, including in information and communication technologies (ICTs), mostly due to lack of education and necessary infrastructure. ICTs can play an important role in the overall development of LDCs.
9. Overall, the marginalization of LDCs in the global economy has continued unabated. There is now a consensus that this group of countries has yet to reap the full benefits of globalization and is lagging behind other developing countries. International and national policies and strategies pursued in LDCs over the years have produced mixed results and failed to deliver intended outcomes, leading to further economic vulnerability, growth collapse and widespread poverty.
10. The current global economic meltdown poses new and emerging challenges for LDCs. This is mainly due to the inability of LDCs’ economies to withstand and insulate themselves from major economic crises, such as the current one. Out of some 40 per cent of developing countries identified by the World Bank as “highly vulnerable” to the effects of the global economic crisis, over 95 per cent are LDCs. In the first half of 2009 – the peak of the global economic crisis – LDCs’ export earnings collapsed by about 50 per cent, accounting for a \$26.8 billion loss.
11. Ensuring food security remains one of the major challenges for many LDCs. The recent unprecedented rise in global food prices has also resulted in social, political and economic burdens for LDCs – many of which are not only net food importers but are also food insecure. Agricultural productivity in most LDCs has been on a precipitous decline over

the last several decades while the demand for food has been on the rise, partly due to changing demographic trends in these countries.

12. Furthermore, LDCs suffer from a paucity of domestic financial resources and weak institutional limitations to mobilize such resources. Although overall domestic savings have improved in recent years for LDCs as a group, they actually declined in more than half of the LDCs, with 15 LDCs registering negative domestic saving rates. Overall, LDCs are far behind the target of a 25 per cent investment-to-gross domestic product ratio of the Brussels PoA. This shows that external financial resources remain critical as most LDCs depend on external sources of capital to finance their development needs and, in some cases, for domestic consumption.
13. Linked to the inability of LDCs to mobilize domestic resources for development is their weak and inadequate banking sector, which remains woefully underdeveloped. Consequently, the majority of households and small and medium-sized enterprises (SMEs) in several LDCs had no access to banking services. Furthermore, during 2006–2007, only 14 per cent of the loans (with a very high interest rate) from domestic financial sector went to agriculture, even though agriculture in most LDCs accounted for more than 36 per cent of total value added and employed, on average, 86 per cent of the total labour force.
14. Lack of economic diversification, especially overdependence on a single or a few commodity exports, coupled with the excessive volatility of prices in international markets continues to aggravate the economic vulnerability of LDCs. For instance, the recent improvements in economic growth and expansion of exports of these countries (which has been reversed since 2008) have not been accompanied by an increase in value addition. In other words, there was a lack of economy-wide improvement in terms of productivity, value added by domestic producers and long-term structural change in their economies.
15. The increase in export earnings of these countries is simply the result of short-lived improvements in world commodity prices and modest growth in traditional exports such as oil, copper, coffee, cocoa and groundnuts. Tourism and travel-related services have also contributed to the recent upsurge in export earnings of LDCs. Such an optimistic outlook has been clouded and reversed by the end of the commodity price boom in 2008, reflecting a lack of structural transformation in the LDCs' economies and their inherent vulnerability to international price volatility and external shocks. In this context, commodity issues should be given adequate attention during LDC-IV.
16. Furthermore, environmental degradation, climate change and disruptive weather patterns cause drought, famine, desertification, cyclones, floods, etc. The confluence of these natural disasters undermines socio-economic progress in LDCs that inherently lack the institutional and financial capacities to adapt to and mitigate the effects of adverse natural consequences. Experience shows that natural crises hurt poor countries and poor people the most and diminish their chances of escaping the poverty trap. The adverse impact of climate change may result in millions of environmental refugees from LDCs.
17. Climate change is also seriously threatening grain production in some LDCs in low-lying coastal areas, where a significant proportion of their arable land is under saline water or affected by sea-level rise. This grim scenario is further aggravated by prohibitive measures adopted by many food surplus-producing countries with respect to the export of food grains. In order to address LDCs' concerns, the export of food grains to LDCs should not be subject to any restriction. Furthermore, LDCs and their development partners should make further efforts to establish "regional food banks" to address the recurring problem of food insecurity.
18. At the international level, the current multiple crises and the resulting economic recession as well as the massive bailout packages undertaken by developed countries have

increased concerns and uncertainty over the future of development assistance. Even without the crises, aid disbursements are far short of the aid targets agreed in the Brussels PoA and a large share of ODA is provided in the form of debt relief or humanitarian assistance.

19. In addition to the volume and composition of ODA, the multiplicity of transfer mechanisms (channels) for development aid, uncoordinated efforts of donors (with different accounting and reporting standards), selectivity and increasingly complex aid conditionality remain serious bottlenecks to improved aid effectiveness and to effective country ownership of development policies and strategies.
20. LDCs are not homogeneous; some are landlocked while some others are Small Island Developing States. Also, some LDCs are oil and mineral exporters while some others are emerging from conflict or are in a conflict situation. National and international policies should therefore be tailored to address specific national development challenges, needs and priorities, while maintaining LDCs' policy space.
21. For landlocked LDCs and Small Island Developing States, the challenge is remoteness from the international market. Their geographical handicaps have further compounded their ability to produce and trade on the regional and international markets, thus undermining their international competitiveness.
22. For oil- and mineral-exporting LDCs, these sectors have become a leading source of FDI and growth. This impetus has been heightened by recent sharp increases in world oil prices, which can be highly beneficial to exporters. However, the challenge for this group of countries is to manage the revenues carefully with improved budgetary processes that are technically capable and reasonably business friendly.
23. For LDCs that are in a special situation, key policy challenges include restoring peace and stability, rebuilding economic infrastructure and social institutions, fostering a political climate favourable to growth and development, creating synergies between governments and communities affected by conflicts, and mobilizing and widening the scope for public participation in the development process.
24. A few LDCs are nearing the graduation threshold, which is a step in the right direction. However, post-graduation uncertainty regarding international support measures and eventual or premature loss of such support measures in the areas of ODA, market access, special and differential treatment with regard to World Trade Organization (WTO) obligations, trade-related capacity-building, reduction in assistance for adaptation and mitigation of adverse impacts of climate change, and falls in ODA remain among their major concerns. Concrete ways and means should be put in place for the effective and smooth transition of graduating countries.
25. The next Conference (LDC-IV) will take place in 2011 against mixed or limited progress and in the face of continuing challenges. LDC-IV should therefore provide a renewed momentum and opportunity for LDCs and their development partners to engage in new commitments to significantly improve the living conditions of the people in LDCs and to help them achieve their overall development objectives. It should also provide a new framework for global partnership and articulate and mobilize new and additional international support measures in favour of LDCs, as well as devise a strategy for effective support mechanisms to LDCs to help them towards graduation and to sustain development thereafter.

III. Policies, strategies and specific actions at the sectoral, national, regional and international levels

26. National, regional and international policies and strategies to be agreed in the successor PoA should be designed to effectively address social, economic and environmental

challenges undermining the growth and development prospects of LDCs. The actions and policy measures at the various levels should be complementary and supportive of each other, while national priorities should be set by taking into account individual countries' economic, socio-political, structural and cultural contexts as well as their institutional capacity and resources base.

27. It should also be noted that there is no simple, uniform and universal blueprint that enables LDCs to arrest and reverse their continued marginalization. LDCs should design their home-grown and endogenous development policies and strategies and assume primary responsibility for their implementation.

A. At the sectoral level

28. In order for LDCs to take advantage of global trade opportunities, they need to diversify their economic base by developing their productive capacities into the production of higher value added goods and services, thereby leading to fundamental socio-economic transformation. This requires, in particular, efforts to develop, upgrade and improve energy efficiency, storage and port facilities, road networks at the national (and also regional) level, functional railway systems and air freight capacity to speedily move goods and reach markets in acceptable conditions.
29. The global tourism industry is also highly competitive and a successful country must pass the market test of attracting tourists by providing a quality product that encompasses transport services, accommodations, attractions and security. Office services such as call centres and data processing are another promising but so far largely untapped area of potential comparative advantage for some LDCs. In view of the growing importance and potential of service exports from LDCs, the modalities for special treatment for LDCs in the WTO negotiations on trade in services should be fully implemented. In this regard, priority needs to be granted to methods and mode of supply of export interest to LDCs, in particular on the movement of natural persons under mode 4.
30. The overall lack of structural change and very slow rate of productivity growth in the LDCs as a group is the result of slow technological learning and a lack of innovation in their economies. There should be an enabling environment for private sector-led growth with particular attention to the nature of the domestic firms, domestic financial systems and domestic knowledge systems. Success in the development of productive capacities depends on the creation of a knowledge-based society and the existence of firms that are capable of investing, learning and innovating.
31. The key trade policy effort in commodity-dependent LDCs should be to upgrade their primary commodity sector coupled with a vigorous export promotion strategy to exploit dynamically changing comparative advantages, which can be part of a strategy of diversification into exports of labour-intensive manufactures. Diversification not only broadens the scope for employment creation and poverty reduction, but it also increases a country's economic resilience to external shocks, thereby making income more stable and predictable. It can also promote technological advance and efficiency and boost labour productivity and incomes.
32. For LDCs, dynamic gains and poverty reduction can also accrue, particularly from other non-traditional exports such as horticulture, fishing and tourism. There is also considerable scope for many LDCs to join the group of successful agricultural commodity exporters in speciality and niche markets. However, most LDC exports face intense competition and must satisfy the demanding quality and delivery schedules of developed country markets. Development and trading partners of LDCs should provide technical and financial assistance to LDCs to help them meet the safety requirements of consumers and industries. They should also make efforts to harmonize their national standards with those agreed at the international level. Other necessary facilities such as quality assurance

schemes and conformity with international standards are important to become competitive in world markets.

33. LDCs and their development partners should make every effort to invest in agricultural research, innovation and technological upgrading as well as the development, multiplication and dissemination of high yield variety seeds. Costs of research and technology adoption are high and often smallholder farmers are unable to adopt these, and yet they are key to improving production and ensuring that quality products reach the markets. Efforts should also include better management of key natural resources, particularly land and water, and allocating adequate resources for programmes on family planning in order to promote a more rapid demographic transition in LDCs. In view of the likely negative effects of LDCs' growing exposure to volatile commodity markets, attention needs to be paid to continued support for commodity sectors of LDCs, enabling their greater participation in the global value chains on an equitable basis as a way to promote sustainable market-driven growth, and strengthening the efforts to assist LDCs and their commodity producers in adopting effective strategies for reducing their exposure and increasing their capacity to cope with their increasing vulnerability to volatility in the global commodity markets.
34. Establishing or institutionalizing farmers' associations and organizations is a very effective way of improving access to finance. Such associations can also contribute to improving production and marketing systems, diffusing technology and disseminating information as well as assisting in establishing acceptable practices in agriculture. Business and other social linkages (i.e. linking farmers with established companies, hotel chains and other catering service providers such as buyers and the diaspora) are also effective ways of increasing both farm production and productivity. The availability of reliable weather data and forecasts are also important for farmers in planning and protecting their crops.
35. The complex and costly accession processes of the WTO are beyond the financial, technical and human resources capacities of LDCs. LDCs in the WTO accession process should be provided with adequate financial and technical assistance to adjust and build their institutional, regulatory and administrative capacities. The accession processes, procedures and requirements should therefore be simplified and tailored to LDCs' developmental needs and objectives. In this context, the 2002 WTO General Council Decision on the accession of LDCs should be implemented in an urgent and effective manner. Acceding LDCs should not assume commitments and obligations that go beyond what the current developing country members of the WTO have undertaken.

B. At the national level

36. LDCs should continue to improve governance by implementing their reform agenda and by creating an enabling environment for economic growth and development through stable fiscal and monetary policy, investment regimes and sound financial systems. LDCs should also endeavour to create a public administration and institutions that implement policies and strategies efficiently and effectively as well as improve public services delivery. LDCs should also make efforts to introduce a system of customer service measurement in the public sector to improve the quality of services delivery and maximize customer satisfaction.
37. Further, LDCs' domestic policy agenda for the coming decade should also include efforts to build a developmental State for good development governance, strengthen domestic institutions to mobilize private savings, encourage private sector development and improve the tax collection system to augment government revenue and rationalize government spending with a view to eliminating areas of over-expenditure and ensuring the efficient use of resources. LDCs should also address prohibitive policies especially in

selected services, such as the telecommunications services, that have undermined private investments in this area in several LDCs.

38. In LDCs' national financial sector including capital markets, other banking and insurance services are underdeveloped. Such a handicap, combined with the high costs of lending, has hampered the access of enterprises, especially SMEs, to finance in these countries. This calls for urgent action to build the institutional capacities of LDCs' banking sector in parallel with further efforts to make the cost of borrowing affordable through appropriate economic and financial incentives and policies. Efforts to expand microcredit and microfinance schemes, which could improve access to credit by the poor in LDCs, should be strengthened.
39. Governments of LDCs should also ensure the provision of rural extension services, increase credit guarantee schemes and improve access to finance, especially to smallholder farmers. This would lead to a business approach to agriculture and build the confidence of national banks to increase their lending to the agriculture sector, which now stands at less than 15 per cent of loans from domestic sources. The State should regain a significant role in these endeavours.
40. LDCs should put in place effective social policies so as to ensure that improved growth performance is translated into pro-poor growth and that the benefits from growth are equally redistributed to the poor and vulnerable sections of society. Too often in the past, economic growth has failed to "trickle down" to the poor in the LDCs. Pro-poor growth also needs to be underpinned by improvements in the quality of governance, through greater transparency and accountability in public policy. Similarly, improving access of the poor to key services should be seen as an integral part of development policies and poverty reduction strategies in LDCs.

C. At the regional level

41. The Economic Partnership Arrangements (EPAs) with the European Union (EU) can be important for LDCs. In negotiating EPAs, LDCs should seek to ensure that these agreements are coherent and consistent with their development policies and strategies as well as with multilateral trade agreements. In particular, EPAs should: (a) promote their development objectives, by strengthening their productive and supply capacities, including transfer of technology, knowledge and technological know-how; (b) contribute to consolidating regional integration processes; and (c) enhance inward FDI flows including in key sectors such as manufacturing and services. Flexible provisions and long transition periods may also be required to minimize the costs and potentially adverse impacts of adjustment and reform in LDCs.
42. EPAs could involve significant costs to ACP (African, Caribbean and Pacific Group of States) countries from forgone tariff revenue, reduced intraregional trade and increased pressure on local agriculture, industry and services sectors. These possible negative impacts of EPAs are likely to outweigh the potential benefits of greater access to the EU market, particularly given the generally low EU most favoured nation tariff levels. EPAs should not impose on LDCs trade rules and obligations that go beyond the current multilateral trade agreements in areas such as trade-related aspects of intellectual property rights, investment and services.
43. Regional economic and trading groups are also proliferating in the developing world. A drawback of regional trade blocs is that they create complex rules of origin and discriminatory trade taxes, leading to possible trade loss or diversion. Efforts to deepen regional integration should be pursued, particularly to simplify the rules of origin and trade taxes as well as to harmonize trade with other development policies and strategies. South-South cooperation, especially the Global System of Trade Preferences among

developing countries, should also be strengthened taking into account LDCs' special trade and economic needs and prospects.

44. LDCs should enhance economic cooperation between and among themselves, including by exploring the possibility of establishing a free trade arrangement with simplified and harmonized rules of origin, taking into account their trade and development interests.

D. At the international level

45. Efforts and policies by LDCs alone are not sufficient to effectively address the complex development problems facing them. Global action is crucial both to ensure that opportunities from globalization benefit poor people in poor countries and to manage the risks of insecurity and exclusion that the LDCs face today. This should include, in particular, bridging the digital and knowledge divide, opening the markets of rich countries to the goods and services of LDCs, providing financial resources including through ODA and debt relief, targeted financial and technical support to help LDCs adapt and mitigate the adverse impacts of climate change, and realigning international support measures to the new and emerging needs and priorities of LDCs.
46. LDCs' development partners should address urgently the quantity and quality of ODA by meeting agreed aid targets, improving aid coordination and harmonizing accounting and reporting standards. Efforts should also include linking development aid with national priorities of recipient countries through direct budgetary support and establishing monitoring mechanisms for donors' performances at the national level in recipient countries.
47. To ensure progress towards internationally agreed development goals, including the MDGs, as well as the development goals agreed in the Third Programme of Action for LDCs, it is necessary that ODA be significantly increased and made more effective, and it must be additional to debt relief or emergency assistance. In this regard, development partners (donor countries) that have not done so should endeavour to make additional efforts to meet the special ODA targets of 0.15 per cent to 0.2 per cent of their respective gross national income to LDCs by 2010. Aid conditionalities must not restrict policy choices in recipient countries. If all the donors had fulfilled the agreed aid target, the volume of ODA, in absolute terms, could have surpassed \$50 billion annually.
48. In the framework of international support measures to LDCs, there should also be a rebalancing of priorities between the social sector and productive capacity-related issues, with greater emphasis on the latter. Furthermore, in order to reduce the risk of recurrent debt crisis, it is desirable that future development assistance to LDCs be provided in the form of grants rather than loans and as direct budgetary support.
49. A new approach to FDI and forms of technology transfer will be crucial in order to ensure a better impact on productive capacities in host countries. LDCs have been actively pursuing policies aimed at attracting and benefiting from FDI as a means of acquiring capital and technology and providing employment and export opportunities. Similar efforts should be made to enhance the role and contribution of domestic investment so that the "crowding out" effect on domestic producers of goods and services can be avoided.
50. Investment home countries should also play a facilitating role to encourage long-term private capital flows to LDCs. This should include specific actions to write off some of the perceived risks deterring the flow of FDI to LDCs by putting in place appropriate incentives such as investment insurance or guarantee schemes. Furthermore, investment home countries can make a measurable difference if they exempt companies and individuals that are willing to invest in LDCs from profit taxes (e.g. taxes on repatriation of profits) or give such investors special treatment.

51. In the light of the growing economic importance to a number of LDCs of remittances from nationals living and working abroad, there is a need for greater and coordinated efforts by the international community to promote channels, mechanisms and international policies to reduce the transaction costs that hamper the use of remittances as a source of development financing in relevant countries. Intensifying or redirecting remittances towards productive investment schemes should be seen as a desirable policy objective and development partners of LDCs should provide adequate technical and financial support in this area. LDCs should also endeavour to provide incentives and create related structures to attract remittances from their nationals working abroad.
52. The importance of market access in expanding trade and jump-starting the manufacturing sector in LDCs is crucial, especially in textiles and apparel where preference margins remain substantial and where several LDCs have a potential comparative advantage. Developed countries and developing countries that are in a position to do so should immediately and fully implement the commitments to grant duty-free and quota-free access for all products of all LDCs and to remove market entry barriers including non-tariff measures and other trade barriers. Efforts by trading and development partners should also include secured simplified, harmonized, flexible and liberal rules of origin for LDCs and make market access more predictable and sustainable.
53. Future international support measures in the area of trade should include ways and means of progressively taking advantage of the Enhanced Integrated Framework for Trade-related Technical Assistance to LDCs (EIF) to leverage the Aid for Trade initiative in LDCs to alleviate constraints impeding supply capacities, including weak trade-related infrastructure. Trade support measures should also incorporate the development dimensions of the Doha Round, particularly those meant to benefit LDCs.
54. The EIF, which continues to be an important mechanism to strengthen the delivery of trade-related technical assistance to LDCs and to mainstream trade in their national development policies and strategies, should be further reinforced including through the Aid for Trade initiative. Donors are encouraged to provide adequate financial support on a basis as sustained and predictable as possible for the effective implementation of projects identified through the Diagnostic Trade Integration Studies.
55. With a view to building entrepreneurship and enhancing the role of the private sector in LDCs' economies, development partners could undertake further measures. Such measures could include the transfer of technology and know-how as well as building technological capabilities and innovation in these countries. This calls for innovative financing on a sustained basis and targeted assistance, including by establishing special facilities or funds for infrastructure development ("Infrastructure Fund") and for technological upgrading and innovation ("Technology Fund") in favour of these countries. Special and renewed efforts to improve productivity and innovation in LDCs should also include addressing problems related to power (electricity) and transportation, as well as enhancing investments in technical and vocational training at the secondary and college levels with a view to improving labour productivity and efficiency.
56. Future international support measures for LDCs must comprehensively address the climate change-related concerns of these countries. These should include adequate and appropriate technical and financial assistance for the adaptation to and mitigation of climate change impacts, establishing early warning systems, transfer of eco-friendly (green) technologies to LDCs and making available scientifically credible and adequate information on the state of climate and weather patterns.

Annex 2

Real GDP, total and per capita: Annual average growth rates

(Per cent)

	Real GDP							Real GDP per Capita						
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008
Countries with real GDP growth > 6% in 2008														
Equatorial Guinea	20.4	14.4	32.6	8.9	5.3	23.2	15.2	17.0	11.2	29.0	6.0	2.5	20.0	12.2
Angola	14.5	3.3	11.2	20.6	18.6	20.3	14.8	11.1	0.1	7.8	17.1	15.3	17.1	11.8
Ethiopia	1.5	-2.2	13.6	11.8	10.8	11.1	11.3	-1.1	-4.7	10.7	9.0	8.0	8.3	8.5
Rwanda	9.3	0.2	5.3	7.2	7.3	7.9	11.2	6.4	-1.5	3.7	5.2	4.8	5.1	8.2
Uganda	4.7	6.2	5.8	10.0	7.0	8.6	9.5	1.4	2.8	2.4	6.5	3.6	5.1	6.0
Sudan	6.7	6.1	17.8	8.7	9.4	10.5	7.6	4.5	4.0	15.5	6.4	7.1	8.1	5.2
Lao People's Democratic Republic	5.9	5.8	6.9	7.3	8.3	7.9	7.5	4.1	4.1	5.2	5.5	6.4	6.0	5.5
United Republic of Tanzania	7.2	6.9	7.8	7.3	6.7	7.1	7.5	4.4	4.1	4.9	4.4	3.8	4.1	4.4
Malawi	2.7	5.7	9.5	3.3	8.3	7.9	7.4	-0.3	2.8	6.5	0.4	5.3	5.0	4.5
Liberia	3.7	-31.3	2.6	5.3	7.8	9.5	7.1	0.3	-33.1	-0.2	1.8	3.5	4.8	2.4
Mozambique	9.2	6.5	7.9	8.4	8.7	7.4	7.0	6.3	3.7	5.1	5.7	6.0	4.9	4.5
Timor-Leste	18.8	2.0	0.4	2.3	-3.4	16.2	6.8	12.4	1.1	-4.2	-1.9	-6.9	12.4	3.5
Bhutan	10.9	7.2	6.8	7.1	5.8	21.4	6.6	7.5	3.9	3.7	4.4	3.5	19.2	4.9
Kiribati	4.9	7.4	1.6	1.8	-3.8	-1.8	6.3	3.0	5.4	-0.2	0.1	-5.4	-3.3	4.7
Zambia	3.3	4.3	6.2	5.2	6.2	5.8	6.3	1.0	2.0	3.8	2.8	3.7	3.3	3.7
Bangladesh	4.4	5.3	6.3	6.0	6.6	6.4	6.2	2.6	3.5	4.5	4.3	5.0	4.9	4.7
Democratic Republic of the Congo	3.5	5.8	6.6	7.9	5.6	6.3	6.2	0.4	2.5	3.4	4.7	2.6	3.3	3.3
Cambodia	6.6	8.5	10.3	13.3	10.8	10.2	6.0	4.8	6.8	8.6	11.5	9.0	8.4	4.3
Solomon Islands	-2.8	6.5	4.9	5.4	6.9	10.0	6.0	-5.3	3.7	2.2	2.8	4.3	7.3	3.4
Countries with real GDP growth between 3% and 6% in 2008														
Niger	5.3	7.7	-0.8	8.4	5.8	3.3	5.9	1.9	4.1	-4.2	4.6	1.9	-0.6	1.8
Maldives	6.1	9.2	11.3	-5.0	22.5	6.0	5.8	4.6	7.7	9.8	-6.3	20.8	4.5	4.3
Sao Tome and Principe	11.6	5.4	6.6	5.7	6.7	6.0	5.8	9.7	3.6	4.8	3.9	5.0	4.3	4.1
Djibouti	2.6	3.2	3.0	3.2	4.8	4.8	5.8	0.5	1.3	1.2	1.4	2.9	2.9	3.9
Vanuatu	-7.4	3.2	5.5	6.5	7.4	6.8	5.7	-9.8	0.4	2.6	3.7	4.6	4.1	3.1
Nepal	3.9	4.7	3.1	3.7	3.2	4.7	5.6	1.7	2.4	1.0	1.6	1.2	2.7	3.7
Sierra Leone	18.2	10.9	9.6	7.5	7.3	6.4	5.5	13.7	6.4	5.3	3.7	3.9	3.4	2.9
Madagascar	-12.7	9.8	5.3	4.6	5.0	6.3	5.0	-15.1	6.7	2.3	1.7	2.2	3.5	2.3
Benin	4.4	3.9	3.1	2.9	3.8	4.6	5.0	1.0	0.4	-0.3	-0.5	0.4	1.3	1.8

Annex 2

Real GDP, total and per capita: Annual average growth rates

(Per cent)

	Real GDP							Real GDP per Capita						
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008
Gambia	0.5	2.3	-0.6	2.1	6.7	6.3	4.9	-2.8	-0.9	-3.6	-0.9	3.6	3.3	2.1
Mali	4.3	7.6	2.3	6.1	5.3	4.3	4.7	1.9	5.1	-0.2	3.6	2.8	1.9	2.3
Burundi	4.5	-1.2	4.4	0.9	5.1	3.6	4.5	2.0	-3.9	1.4	-2.1	2.0	0.5	1.5
Burkina Faso	4.7	8.0	4.6	7.1	5.5	3.6	4.5	1.4	4.5	1.2	3.5	2.0	0.1	1.0
Guinea	4.2	1.2	2.3	3.0	2.5	1.8	4.0	2.2	-0.7	0.4	1.0	0.4	-0.4	1.7
Yemen	3.2	3.3	3.1	5.8	4.5	4.7	3.9	0.2	0.4	0.2	2.8	1.5	1.7	1.0
Lesotho	1.6	3.9	4.6	0.7	8.1	5.1	3.5	0.4	2.9	3.5	-0.3	7.1	4.1	2.6
Afghanistan	81.1	14.3	9.4	14.5	11.2	16.2	3.4	74.9	10.1	5.4	10.4	7.3	12.2	-0.1
Guinea-Bissau	-7.1	-0.6	2.2	3.5	1.8	3.7	3.1	-9.4	-3.0	-0.3	1.1	-0.5	1.4	0.8
Countries with real GDP growth <3% in 2008														
Somalia	3.5	2.1	2.8	2.4	2.6	2.6	2.6	0.9	-0.3	0.4	0.1	0.3	0.4	0.4
Senegal	0.7	6.7	5.9	5.6	2.4	4.7	2.5	-1.9	3.9	3.2	2.9	-0.2	2.0	-0.2
Mauritania	1.8	5.6	6.7	5.4	29.4	1.0	2.2	-1.0	2.7	3.9	2.7	26.2	-1.4	-0.2
Central African Republic	-0.6	-7.6	1.3	2.2	4.1	3.7	2.2	-2.4	-9.2	-0.5	0.4	2.2	1.8	0.3
Myanmar	0.0	0.0	0.0	0.0	12.7	5.5	2.0	-0.7	-0.7	-0.7	-0.7	11.8	4.6	1.1
Tuvalu	5.5	4.0	4.0	2.0	1.0	2.0	2.0	5.0	3.5	3.6	1.6	0.6	1.6	1.6
Haiti	-0.3	0.4	-3.5	1.8	2.3	3.2	1.3	-1.9	-1.3	-5.1	0.1	0.7	1.6	-0.3
Togo	-0.3	5.8	2.3	1.2	2.0	3.5	1.1	-2.9	3.1	-0.2	-1.3	-0.5	0.9	-1.4
Eritrea	3.0	-2.7	1.5	2.6	-1.0	1.3	1.0	-1.2	-6.7	-2.6	-1.2	-4.3	-1.9	-2.0
Comoros	4.1	2.5	-0.2	4.2	1.2	-1.0	1.0	1.9	0.3	-2.4	1.9	-1.1	-3.3	-1.3
Chad	8.5	14.3	33.7	7.9	0.2	0.1	0.3	4.6	10.2	29.1	4.5	-2.8	-2.7	-2.3
Samoa	3.2	4.8	4.8	5.4	1.0	6.4	-3.4	2.8	4.5	4.6	5.3	1.0	6.5	-3.4
Least developed countries	5.5	4.8	8.4	7.6	8.0	8.4	7.0	3.0	2.2	5.9	5.1	5.6	5.9	4.6
<i>LDCs: Africa and Haiti</i>	<i>5.1</i>	<i>4.6</i>	<i>10.1</i>	<i>8.6</i>	<i>8.3</i>	<i>9.1</i>	<i>7.9</i>	<i>2.3</i>	<i>1.8</i>	<i>7.2</i>	<i>5.7</i>	<i>5.4</i>	<i>6.2</i>	<i>5.0</i>
<i>LDCs: Asia</i>	<i>6.1</i>	<i>4.9</i>	<i>5.2</i>	<i>5.8</i>	<i>7.5</i>	<i>7.0</i>	<i>5.2</i>	<i>4.2</i>	<i>3.0</i>	<i>3.3</i>	<i>4.0</i>	<i>5.7</i>	<i>5.2</i>	<i>3.5</i>
<i>LDCs: Islands</i>	<i>4.3</i>	<i>5.4</i>	<i>5.4</i>	<i>2.0</i>	<i>8.2</i>	<i>6.4</i>	<i>4.4</i>	<i>1.0</i>	<i>3.7</i>	<i>2.4</i>	<i>-0.7</i>	<i>5.5</i>	<i>3.8</i>	<i>2.0</i>

Source: UNCTAD *Globstat Database*, based on UN/DESA Statistics and Population Divisions, January 2010.

Note: Data refers to real GDP And real GDP per capita (1990 dollars).

Annex 3
International Trade
(\$ millions)

Total Merchandise Exports

Total Merchandise Imports

	2005	2006	2007	2008		2005	2006	2007	2008
LDCs Oil and mineral exporters					LDCs Oil and mineral exporters				
Angola	24,109.4	31,862.2	44,828.0	67,242.0	Angola	8,353.0	8,777.6	13,662.0	17,077.0
Central African Republic	129.0	158.0	195.0	224.2	Central African Republic	174.7	202.5	224.9	300.0
Chad	3,141.2	3,407.3	3,509.0	4,974.0	Chad	949.6	1,349.0	1,551.0	1,810.0
Dem. Rep. of the Congo	2,190.0	2,320.0	2,600.0	3,950.0	Dem. Rep. of the Congo	2,270.0	2,740.0	2,950.0	4,100.0
Equatorial Guinea	7,058.3	8,206.2	9,781.8	13,936.6	Equatorial Guinea	2,109.0	2,621.0	3,100.0	3,241.5
Guinea	890.0	900.0	1,100.0	1,300.0	Guinea	820.0	900.0	1,190.0	1,600.0
Mali	1,100.9	1,544.3	1,556.3	1,980.1	Mali	1,543.6	1,819.8	2,184.8	3,338.9
Mauritania	625.1	1,366.6	1,352.9	1,630.4	Mauritania	1,343.5	1,088.6	1,430.0	1,622.3
Mozambique	1,783.0	2,381.1	2,650.0	2,653.3	Mozambique	2,408.2	2,869.3	3,210.0	3,803.6
Myanmar	3,813.5	4,585.4	6,317.4	6,950.1	Myanmar	1,926.9	2,564.1	3,280.1	4,299.1
Niger	477.6	507.9	663.3	889.0	Niger	943.0	949.0	1,056.6	1,540.3
Sierra Leone	158.5	231.0	245.2	221.3	Sierra Leone	344.7	389.4	444.7	590.0
Sudan	4,824.3	5,656.6	8,879.3	11,670.5	Sudan	6,756.8	8,073.5	8,775.5	9,351.5
Yemen	6,413.2	7,316.4	7,049.5	8,976.9	Yemen	5,377.7	6,073.6	8,514.0	10,035.6
Zambia	1,809.8	3,770.4	4,567.7	4,965.6	Zambia	2,558.0	3,074.3	3,974.7	4,932.7
<i>Burundi *</i>	56.9	58.4	50.6	57.3	<i>Burundi *</i>	267.2	430.6	319.1	402.3
<i>Lao People's democratic Republic *</i>	553.1	882.0	922.7	1,080.0	<i>Lao People's democratic Republic *</i>	882.0	1,059.5	1,066.9	1,390.0
LDCs Food & Agriculture, Manufactures and Services exporters					LDCs Food & Agriculture, Manufactures and Services exporters				
Afghanistan	384.0	408.0	497.0	580.3	Afghanistan	2,470.0	2,582.0	2,819.0	2,513.8
Bangladesh	9,297.0	11,802.0	12,453.0	15,369.4	Bangladesh	13,889.0	16,034.0	18,595.0	23,860.6
Benin	578.2	735.5	1,046.9	1,159.0	Benin	1,018.5	1,228.5	1,602.0	1,795.0
Bhutan	258.2	414.0	673.8	521.4	Bhutan	386.3	419.6	526.5	543.3
Burkina Faso	467.9	588.3	620.0	620.6	Burkina Faso	1,260.0	1,318.4	1,620.0	1,899.0
Cambodia	2,910.3	3,693.7	4,089.2	4,346.0	Cambodia	3,927.8	4,749.2	5,423.6	6,430.0
Comoros	12.0	9.9	8.5	9.8	Comoros	98.7	115.2	120.0	162.8
Djibouti	39.5	56.0	60.0	68.8	Djibouti	277.3	335.7	410.0	580.4
Eritrea	11.3	12.3	13.2	20.0	Eritrea	495.0	495.0	510.0	530.0
Ethiopia	903.1	1,036.2	1,287.6	1,601.8	Ethiopia	4,126.9	4,805.0	5,808.6	8,680.3
Gambia	8.0	11.5	13.0	13.9	Gambia	237.0	259.3	305.0	329.4
Guinea-Bissau	89.5	74.1	107.0	125.1	Guinea-Bissau	105.6	127.1	167.9	196.3

Annex 3
International Trade
(\$ millions)

Total Merchandise Exports					Total Merchandise Imports				
	2005	2006	2007	2008		2005	2006	2007	2008
Haiti	470.2	495.3	521.8	472.4	Haiti	1,453.7	1,642.0	1,851.7	2,148.2
Kiribati	4.3	6.3	9.8	15.0	Kiribati	76.4	63.3	70.2	55.0
Lesotho	650.6	694.9	810.6	878.3	Lesotho	1,410.1	1,466.1	1,731.3	2,030.1
Liberia	131.3	157.8	200.2	233.0	Liberia	309.9	466.7	501.5	864.5
Madagascar	854.6	985.3	1,237.3	1,666.5	Madagascar	1,706.3	1,803.7	2,635.6	3,845.9
Malawi	501.5	666.2	868.6	879.0	Malawi	1,163.9	1,209.2	1,380.0	2,203.7
Maldives	161.6	225.2	228.0	327.6	Maldives	744.9	926.5	1,096.3	1,387.7
Nepal	863.2	837.9	887.7	1,100.0	Nepal	2,283.3	2,491.8	2,904.4	1,100.0
Rwanda	124.9	147.4	176.8	245.0	Rwanda	430.4	548.1	737.2	1,145.6
Samoa	11.9	10.7	15.5	11.2	Samoa	238.9	275.0	265.3	288.3
Sao Tome and Principe	3.4	3.8	3.9	5.6	Sao Tome and Principe	49.7	70.9	79.1	114.1
Senegal	1,578.1	1,556.0	1,650.0	1,996.0	Senegal	3,197.0	3,434.0	4,430.9	5,659.1
Solomon Islands	103.4	121.5	159.6	213.8	Solomon Islands	185.1	216.8	287.2	329.0
Somalia	300.0	290.0	360.0	..	Somalia	610.0	660.0	680.0	..
Timor-Leste	9.0	9.0	8.0	11.0	Timor-Leste	125.0	123.0	200.0	309.0
Tuvalu	0.1	0.1	0.1	0.1	Tuvalu	12.9	12.7	15.3	26.5
Togo	658.8	612.0	690.0	771.9	Togo	1,193.4	1,330.0	1,450.0	1,641.4
Uganda	1,017.0	1,187.6	1,685.9	2,807.8	Uganda	2,054.1	2,557.0	3,465.8	4,966.9
United Republic of Tanzania	1,679.1	1,917.6	2,024.2	2,608.5	United Republic of Tanzania	3,246.8	4,526.7	5,337.1	6,953.7
Vanuatu	37.8	36.9	29.7	41.7	Vanuatu	149.3	160.4	200.9	286.4
Least developed countries	83,253.5	103,956.6	128,705.3	171,781.8	Least developed countries	87,961.1	101,434.4	124,161.6	152,990.9
<i>LDCs: Africa and Haiti</i>	<i>58,417.5</i>	<i>73,593.9</i>	<i>95,352.0</i>	<i>132,221.9</i>	<i>LDCs: Africa and Haiti</i>	<i>55,137.3</i>	<i>63,496.7</i>	<i>78,697.9</i>	<i>99,859.7</i>
<i>LDCs: Asia</i>	<i>24,492.5</i>	<i>29,939.4</i>	<i>32,890.2</i>	<i>38,924.0</i>	<i>LDCs: Asia</i>	<i>31,142.9</i>	<i>35,973.8</i>	<i>43,129.5</i>	<i>50,172.4</i>
<i>LDCs: Islands</i>	<i>343.5</i>	<i>423.3</i>	<i>463.0</i>	<i>635.9</i>	<i>LDCs: Islands</i>	<i>1,680.8</i>	<i>1,963.8</i>	<i>2,334.2</i>	<i>2,958.8</i>

Source: UNCTAD Secretariat estimates based on UN/DESA Statistics, COMTRADE database, 2009

Notes: Classification based on the share of oil, food & agricultural, minerals & metals, manufactures and services exports in total exports of goods and services in 2007-2008 and based on whether or not oil, food & agricultural, minerals & metals, manufactures or services accounted for 45 per cent of total exports of goods and services.

* Burundi and Lao People's Dem.Rep. are mixed exporters.

Burundi is Mineral and Food & Agricultural exporter with respectively 33.5% and 31.7% of total exports.

Lao People's Democratic Republic is Mineral and Services exporter with respectively 33.9% and 22.2% of total exports.

Annex 4
Foreign direct investment

	Inward flows (\$ millions)							Inward flows (\$ per capita)						
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008
LDCs Oil and mineral exporters														
Angola	3133.5	5685.0	5606.4	6794.2	9063.7	9795.8	15547.7	206.6	363.3	347.5	408.9	530.4	558.0	862.8
Central African Republic	5.6	22.2	28.6	32.4	34.6	56.8	121.1	1.4	5.6	7.1	7.9	8.3	13.3	27.9
Chad	924.1	712.7	466.8	-99.3	656.0	717.6	833.6	102.3	76.1	48.1	-9.9	63.5	67.5	76.4
Dem. Rep. of the Congo	117.0	158.0	9.9	-76.0	-107.7	720.0	1000.0	2.2	2.8	0.2	-1.3	-1.8	11.5	15.6
Equatorial Guinea	323.4	1443.6	1650.6	1873.1	1655.8	1726.5	1289.6	577.1	2504.7	2786.0	3076.7	2647.6	2688.4	1956.4
Guinea	30.0	82.8	97.9	105.0	125.0	385.9	1349.6	3.4	9.3	10.8	11.4	13.3	40.1	137.2
Mali	243.8	132.3	101.0	223.8	83.4	72.8	126.7	22.1	11.7	8.7	18.9	6.9	5.9	10.0
Mauritania	67.4	101.9	391.6	814.1	154.6	152.9	103.2	24.5	36.0	134.7	272.7	50.5	48.7	32.1
Mozambique	347.3	336.7	244.7	107.9	153.7	427.4	587.0	18.0	17.0	12.0	5.2	7.2	19.5	26.2
Myanmar	191.4	291.2	251.0	235.8	427.8	257.7	283.5	4.0	6.1	5.2	4.9	8.8	5.2	5.7
Niger	2.4	11.5	19.7	30.3	50.5	129.0	146.9	0.2	0.9	1.6	2.3	3.7	9.1	10.0
Sierra Leone	10.4	8.6	61.2	83.2	58.6	94.5	29.6	2.3	1.8	12.4	16.3	11.1	17.4	5.3
Sudan	713.2	1349.2	1511.1	2304.6	3541.4	2436.3	2600.5	19.6	36.3	39.9	59.6	89.6	60.3	62.9
Yemen	101.7	5.5	143.6	-302.1	1121.0	917.3	463.0	5.3	0.3	7.0	-14.4	51.8	41.2	20.2
Zambia	303.4	347.0	364.0	356.9	615.8	1323.9	938.6	27.7	30.9	31.7	30.4	51.2	107.5	74.4
<i>Burundi*</i>	0.0	0.0	0.0	0.6	0.0	0.5	0.5	0.0	0.0	0.0	0.1	0.0	0.1	0.1
<i>Lao People's dem. Republic*</i>	25.0	19.5	17.0	27.7	187.4	323.5	227.7	4.5	3.4	2.9	4.7	31.3	53.1	36.7
LDCs Food & Agriculture, Manufactures and Services exporters														
Afghanistan	50.0	57.8	186.9	271.0	238.0	243.0	300.0	2.3	2.5	7.9	11.1	9.4	9.2	11.0
Bangladesh	328.3	350.2	460.4	845.3	792.5	666.4	1086.3	2.3	2.4	3.1	5.5	5.1	4.2	6.8
Benin	13.5	44.7	63.8	53.0	53.2	255.2	120.5	1.9	6.1	8.4	6.7	6.5	30.4	13.9
Bhutan	2.1	2.5	3.5	9.0	6.1	73.3	29.7	3.5	4.1	5.5	13.8	9.2	108.4	43.2
Burkina Faso	15.0	29.1	14.3	34.2	33.6	343.5	137.1	1.2	2.3	1.1	2.5	2.4	23.3	9.0
Cambodia	145.1	84.0	131.4	381.2	483.2	867.3	815.2	11.0	6.3	9.6	27.5	34.3	60.5	56.0
Comoros	0.4	0.8	0.7	0.6	0.6	7.5	8.1	0.7	1.3	1.1	0.9	0.9	11.7	12.2
Djibouti	3.5	14.2	38.5	59.0	163.6	195.4	234.0	4.6	18.3	48.7	73.3	199.6	234.2	275.5
Eritrea	20.0	22.0	-7.9	-1.0	0.5	-0.1	-0.2	5.0	5.3	-1.8	-0.2	0.1	0.0	0.0
Ethiopia	255.0	465.0	545.1	265.1	545.3	222.0	92.7	3.7	6.6	7.5	3.6	7.1	2.8	1.1
Gambia	42.8	14.9	49.1	44.7	71.2	76.5	62.5	30.8	10.4	33.2	29.3	45.3	47.3	37.7
Guinea-Bissau	3.5	4.0	1.7	8.7	17.7	18.5	15.0	2.6	2.9	1.2	5.9	11.8	12.0	9.5
Haiti	5.7	13.8	5.9	26.0	160.0	74.5	29.8	0.6	1.5	0.6	2.8	16.7	7.7	3.0
Kiribati	14.5	16.4	18.8	0.8	12.9	-8.3	1.9	166.4	184.7	207.9	8.3	138.2	-87.1	20.1

Annex 4
Foreign direct investment

	Inward flows (\$ millions)							Inward flows (\$ per capita)						
	2002	2003	2004	2005	2006	2007	2008	2002	2003	2004	2005	2006	2007	2008
Lesotho	26.9	41.9	53.3	57.3	92.0	105.7	198.9	13.9	21.4	27.0	28.7	45.7	52.0	97.0
Liberia	2.8	372.2	75.4	82.8	107.9	131.8	143.8	0.9	118.6	23.4	24.8	31.1	36.3	37.9
Madagascar	61.1	95.5	95.2	86.0	294.2	777.5	1476.8	3.8	5.7	5.6	4.9	16.3	41.8	77.3
Malawi	16.7	65.8	107.7	26.5	29.7	54.6	36.9	1.3	5.1	8.1	1.9	2.1	3.8	2.5
Maldives	12.4	13.5	14.7	9.5	13.9	15.0	15.4	44.2	47.5	51.0	32.5	46.8	49.9	50.5
Nepal	-6.0	14.8	-0.4	2.4	-6.6	5.9	1.0	-0.2	0.6	0.0	0.1	-0.2	0.2	0.0
Rwanda	1.5	2.6	10.9	14.3	15.5	67.2	103.4	0.2	0.3	1.2	1.6	1.7	7.1	10.6
Samoa	-0.1	0.5	2.2	-3.6	12.0	2.6	5.6	-0.4	2.9	12.5	-20.3	67.0	14.6	31.1
Sao Tome and Principe	3.6	3.4	3.5	15.7	37.5	35.3	32.5	24.8	23.0	23.3	102.7	241.8	224.0	202.9
Senegal	78.1	52.5	77.0	44.6	220.3	297.4	705.7	7.5	4.9	7.0	4.0	19.0	25.0	57.8
Solomon Islands	-4.0	-1.8	5.7	18.6	34.1	66.7	75.5	-9.1	-4.0	12.3	39.2	70.2	133.9	147.9
Somalia	0.1	-0.9	-4.8	24.0	96.0	141.0	87.0	0.0	-0.1	-0.6	2.9	11.2	16.1	9.7
Timor-Leste	-	4.7	2.9	0.1	0.5	0.3	0.3	-	5.2	3.1	0.1	0.5	0.3	0.3
Tuvalu	25.0	0.0	0.0	0.0	4.7	0.1	1.7	2594.2	1.0	4.1	-2.0	478.4	14.2	167.3
Togo	53.4	33.7	59.4	77.0	77.3	49.2	67.8	9.6	5.9	10.2	12.8	12.6	7.8	10.5
Uganda	184.6	202.2	295.4	379.8	644.3	733.0	787.4	7.1	7.5	10.6	13.2	21.7	23.9	24.9
United Republic of Tanzania	387.6	308.2	330.6	494.1	597.0	647.0	744.0	10.8	8.3	8.7	12.7	14.9	15.7	17.5
Vanuatu	12.6	17.9	19.8	13.3	43.6	34.0	33.5	63.1	87.5	94.2	61.5	196.1	149.2	143.3
Least developed countries	8295.5	13053.9	13626.0	15851.9	22713.7	25737.3	33098.5	11.7	18.0	18.3	20.8	29.1	32.3	40.5
<i>LDCs: Africa and Haiti</i>	<i>7393.4</i>	<i>12172.9</i>	<i>12364.2</i>	<i>14326.8</i>	<i>19304.6</i>	<i>22229.7</i>	<i>29717.6</i>	<i>17.3</i>	<i>27.7</i>	<i>27.4</i>	<i>30.9</i>	<i>40.5</i>	<i>45.4</i>	<i>59.0</i>
<i>LDCs: Asia</i>	<i>837.6</i>	<i>825.5</i>	<i>1193.4</i>	<i>1470.3</i>	<i>3249.4</i>	<i>3354.4</i>	<i>3206.3</i>	<i>3.0</i>	<i>2.9</i>	<i>4.1</i>	<i>5.0</i>	<i>10.8</i>	<i>11.0</i>	<i>10.3</i>
<i>LDCs: Islands</i>	<i>64.4</i>	<i>55.5</i>	<i>68.4</i>	<i>54.8</i>	<i>159.7</i>	<i>153.3</i>	<i>174.5</i>	<i>33.7</i>	<i>19.4</i>	<i>23.2</i>	<i>18.1</i>	<i>51.5</i>	<i>48.2</i>	<i>53.6</i>

Source: UNCTAD , FDI/TNC database, World Investment Report, October 2009

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