



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# **MSU International Development Working Papers**

## **Trading out of Poverty: WTO Agreements and the West African Agriculture**

### **A Report of the Food Security II Cooperative Agreement**

**by**

**Kofi Nouve, John Staatz, David Schweikhardt, and  
Mbaye Yade**

**MSU International  
Development  
Working Paper No. 80  
2002**



**Department of Agricultural Economics  
Department of Economics  
MICHIGAN STATE UNIVERSITY  
East Lansing, Michigan 48824**

MSU Agricultural Economics Web Site: <http://www.aec.msu.edu/agecon/>  
MSU Food Security II Web Site: <http://www.aec.msu.edu/agecon/fs2/index.htm>

MSU is an affirmative-action/equal-opportunity institution.

# **MSU INTERNATIONAL DEVELOPMENT PAPERS**

Carl Liedholm and Michael T. Weber

Editors

The MSU International Development Paper series is designed to further the comparative analysis of international development activities in Africa, Latin America, Asia, and the Near East. The papers report research findings on historical, as well as contemporary, international development problems. The series includes papers on a wide range of topics, such as alternative rural development strategies; nonfarm employment and small scale industry; housing and construction; farming and marketing systems; food and nutrition policy analysis; economics of rice production in West Africa; technological change, employment, and income distribution; computer techniques for farm and marketing surveys; farming systems and food security research.

The papers are aimed at teachers, researchers, policy makers, donor agencies, and international development practitioners. Selected papers will be translated into French, Spanish, or other languages.

Individuals and institutions in Third World countries may receive single copies of papers published since 1993 free of charge. Requests for copies and for information on available papers may be sent to:

MSU Bulletin Office  
10-B Agriculture Hall  
Michigan State University  
East Lansing, Michigan 48824-1039  
U.S.A.

Information concerning how to purchase MSU International Development Papers is included in the back of this publication and requests should be sent to:

MSU Bulletin Office  
10-B Agriculture Hall  
Michigan State University  
East Lansing, Michigan 48824-1039  
U.S.A.

# **TRADING OUT OF POVERTY: WTO AGREEMENTS AND THE WEST AFRICAN AGRICULTURE**

## **A REPORT OF THE FOOD SECURITY II COOPERATIVE AGREEMENT**

**by**

**Kofi Nouve, John Staatz, David Schweikhardt, and Mbaye Yade**

**October 2002**

This paper is published by the Department of Agricultural Economics and the Department of Economics, Michigan State University (MSU). Funding for this research was provided by the Food Security II Cooperative Agreement (PCE-A-00-97-00044-00) between Michigan State University and the United States Agency for International Development, through the Bureau for Economic Growth, Agriculture and Trade's Office of Agriculture and Food Security (EGAT/AFS), with supplemental funding from Africa Bureau's West Africa Regional Program (AFR/WARP).

Staatz and Schweikhardt are Professors, Yade is Assistant Professor, International Development, and Nouve is a graduate student in the Department of Agricultural Economics, Michigan State University.

**ISSN 0731-3438**

© All rights reserved by Michigan State University, 2002.

Michigan State University agrees to and does hereby grant to the United States Government a royalty-free, non-exclusive and irrevocable license throughout the world to use, duplicate, disclose, or dispose of this publication in any manner and for any purposes and to permit others to do so.

Published by the Department of Agricultural Economics and the Department of Economics,  
Michigan State University, East Lansing, Michigan 48824-1039, U.S.A.

## **ACKNOWLEDGMENTS**

The USAID-MSU Food Security II Cooperative Agreement has provided financial support for this research, which was conducted in collaboration with the Institut du Sahel.

USAID/EGAT/Office of Agriculture and Food Security manages the Cooperative Agreement, with supplementary funding for this work provided by USAID's West African Regional Program (AFR/WARP). While gratefully acknowledging the intellectual and financial support of USAID and INSAH, the authors take sole responsibility for the statements in this report, which do not represent official positions of either USAID or INSAH.

For their helpful comments, we wish to thank participants at seminars organized on earlier versions of this report at the Department of Agricultural Economics, the African Studies Center, and Detroit College of Law at Michigan State University. This report has also benefitted from editorial assistance of Patricia Johannes, Josie Keel, and the Writing Center of Michigan State University to whom we extend our deepest gratitude.

## EXECUTIVE SUMMARY

The West African agricultural economy, like many economies in Sub-Sahara Africa, is part of a global, complex, and increasingly integrated agricultural system. The interdependence between domestic, regional and foreign agricultural production and trade policies now plays a central role in the development of the agricultural sector in West Africa, and elsewhere in Africa. Since January 1995, the World Trade Organization (WTO) has been the main international body that is trying to structure and manage various interdependencies in the world trading system. This report is a brief survey of WTO agreements and their implications for the West African economies (including Chad).

The study reviews the positions of West African countries on various WTO issues and compares these positions with positions expressed by major trade partners, particularly the Cairns Group, the European Union, Japan, Sub-Sahara Africa, and the United States. In total, 27 African countries, including 8 from West Africa, are covered in the study, which also reviews all official statements made by these countries at WTO fora between 1999 and 2002. The issues position matrices (in Tables 4 and 5), which are the first ones put together for the West African region, clearly reveal the similarity of concerns among the countries in the subregion.

This report puts a special emphasis on the market access issues facing agriculture in the arena of the international trade negotiations. It adopts a broad definition of the term "market access", which not only includes the reduction in tariff barriers, but also (i) reductions in trade-distorting domestic supports and export subsidies, (ii) a "fair" use of non-tariff barriers such as technical regulations, and (iii) an effective implementation of WTO agreements regarding special and differential treatments and technical assistance. The analysis reveals the following key points:

- African countries' interest in the global trade has increased since the initiation of the structural adjustment programs in early 1980s, which followed nearly two decades of inward-looking development policies after independence. However, the anticipated benefits from an open trade regime have been slow to materialize. It is with a general feeling of frustration and powerlessness that most countries in Africa, including those in West Africa, now perceive that the six-year implementation of WTO agreements has generally not delivered on their promises. In their various statements to WTO summits, West African countries have deplored the nonfulfillment of commitments to allow greater access to OECD and third-country markets by reducing tariffs, domestic supports, and export subsidies. The West African countries have also seriously condemned what they perceive as the insufficient provision of trade-related technical assistance and the neglect of the special and differential treatment provisions of the WTO agreements.
- WTO agreements call for a reduction in tariff rates and the conversion of non-tariff barriers, such as quotas, into tariffs. Developed countries have higher reduction commitments than the developing countries (36% versus 24%), while the least-developed countries (LDCs) are exempted from these commitments. All the West African countries except Côte d'Ivoire, Ghana, and Nigeria are considered as LDCs. The extent to which

these agreements were implemented is still not well understood, but many African countries have deplored the widespread use of tariff peaks (selectively high tariff rates) and tariff escalations (higher tariffs on processed products) by Northern countries over the past six years. The implementation of tariff reductions may also be done in conjunction with contingency measures, such as the agreements on anti-dumping, countervailing duties, and special safeguards. Countries may resort to these measures to temporarily increase their tariff levels in order to protect a domestic industry against injury caused by imports. However, West African countries have expressed fears about the potential abuse of these measures for protection purposes.

- The agreements also require reductions in domestic supports and export subsidies, with greater reductions required for high-income countries than for the developing and the least-developed countries. Export subsidies tend to be more transparent and easier to track than domestic support policies. Over the past six years, there has been a slight reduction in export subsidies, but not in domestic supports, which were rather increased through the mechanism of "reinstrumentation" -- the repackaging of the support measures from prohibited to authorized policy instruments. The elimination or reduction in the levels of domestic supports and export subsidy policies will probably increase agricultural prices, which may potentially drive up export earnings and food import bills in most African countries. The final impact on food security is ambiguous, depending on whether the price effect outweighs the income effect. The food security issue is, in fact, one of the numerous noncommodity issues that some countries, led by EU and Japan, are pushing the WTO to give greater weight to, under the concept of "multifunctionality."
- Other WTO agreements of interest to Africa include the agreements on Sanitary and Phytosanitary Standards (SPS) and on Technical Barriers to Trade (TBTs). Designed to facilitate global trade in agricultural products, these agreements may also be potentially used as disguised forms of protection, a situation severely condemned by most African countries. African countries have also pointed out that technical regulations in developed countries are increasingly demanding. There is, however, a demand-driven component of higher technical requirements in the North, which leaves little room for renegotiation at WTO. On their side, developed countries have expressed the desire to see a change in the often-difficult custom procedures that characterize most economies in the South.
- In order to meet technical requirements and other commitments made under the WTO agreements and to mitigate the negative impacts of the global trade reform on the developing and the least-developed economies, the WTO members agreed that these countries would benefit from technical assistance and special and differential treatments. Despite the involvement of many multilateral and bilateral bodies in the provision of WTO-related technical assistance to most African countries over the past years, the demand for assistance is still enormous. Without such assistance and increased market access opportunities for these countries, it is likely that most of them will increasingly find themselves on the periphery of the global commercial tide.



- However, liberalization of the world agricultural markets is not a short-term task. African countries should not count on any sizeable increase of their share in the global agricultural trade in a near future. This discouraging reality should not, however, prevent the region from intensifying its targeted trade liberalization efforts, especially in relation to intraregional trade. African economies will continue to be substantially dependent on international trade, and they will certainly be better off by closely watching and participating in the making of the WTO process.

## TABLE OF CONTENTS

ACKNOWLEDGMENTS .....	iii
EXECUTIVE SUMMARY .....	iv
LIST OF TABLES .....	vii
GLOSSARY AND ACRONYMS .....	ix
<u>Section</u>	<u>Page</u>
1. INTRODUCTION .....	1
2. HISTORICAL OVERVIEW ON GATT AND THE WTO MANDATE .....	4
3. TARIFF BARRIERS .....	7
3.1. Tariff Reductions .....	8
3.2. Tariffication and Tariff-rate Quotas .....	15
3.3. Contingency Measures .....	16
4. DOMESTIC SUPPORT .....	19
5. EXPORT COMPETITION .....	22
6. TECHNICAL REGULATIONS .....	24
7. TECHNICAL ASSISTANCE AND SPECIAL AND DIFFERENTIAL TREATMENTS ...	28
8. CONCLUDING REMARKS .....	30
ANNEX .....	32
REFERENCES .....	36

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. When Did West African Countries Become Gatt's Contracting Parties and WTO Members? .....	1
2. Countries Coverage and Base Documents for the WTO Position Matrices in Tables 4 and 5 .....	3
3. Overview of Commitments on Tariff Barriers from the Uruguay Round Agreement on Agriculture .....	7
4. Matrix of Policy Issues Positions of West African Countries .....	9
5. Matrix of Policy Issues Positions of WTO Negotiating Partners .....	12
6. Bound Tariff Levels for Agricultural Products in West Africa and Chad .....	17
7. Overview of Commitments on Domestic Support from the Uruguay Round Agreement on Agriculture .....	19
8. Overview of Commitments on Export Subsidy from the Uruguay Round Agreement on Agriculture .....	22
9. Number of Detentions Issued by the U.S. Food and Drug Administration (FDA) on Imports from West Africa: February 2000-January 2001 .....	26
10. Number of WTO Delegates from West Africa and Chad Resident in Geneva, Brussels, and New York in the First Half of 1999 .....	29

## **GLOSSARY<sup>1</sup> AND ACRONYMS**

### **ACP-EU (Africa, Caribbean and Pacific – European Union) Agreements**

See Lomé and Cotonou Agreements

### **Ad valorem tariff**

A fixed percentage charge levied on the value of imports.

### **African Growth Opportunity Act (AGOA)**

### **Agreement on Agriculture (AoA)**

Part of the Uruguay Round agreement covering agriculture-related issues, such as market access, export subsidies, and domestic support.

### **Aggregate Measurement of Support (AMS)**

An index that measures the monetary value of the extent of government support to a sector. The AMS, as defined in the Agreement on Agriculture, includes both budgetary outlays as well as revenue transfers from consumers to producers as a result of policies that distort market prices.

### **Amber box**

See Domestic supports

### **Anti-dumping (AD)**

Additional duties imposed on exporters that sell at unfairly low prices, if proof of actual or potential material injury to the importing country is established.

### **Autarky**

A policy regime where there is no trade. A country in autarky does not export to, nor does it import from, other countries.

### **Blue box**

See Domestic Supports.

### **Bound tariff rates**

Maximum tariff rates that a given WTO member country agrees to charge on imports. Bound tariff rates are enforceable under WTO agreements and may be subject to retaliatory actions if a given WTO member raises a tariff above the bound rate.

### **Cairns Group**

A group formed by eighteen agricultural exporting countries in 1986 in Cairns, Australia, that seeks the removal of trade barriers and substantial reductions in subsidies affecting agricultural trade. The eighteen member countries are: Argentina, Australia, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Fiji, Guatemala, Indonesian, Malaysia, New Zealand, Paraguay, Philippines, South Africa, Thailand, and Uruguay.

### **Comité Permanent Inter-Etats de Lutte contre Sécheresse dans le Sahel (CILSS)**

A permanent committee of nine Sahelian States endeavoring to control drought, ensure food security, and promote efficient management of natural resources in the region. Member countries are Burkina Faso, Cape

---

<sup>1</sup> A comprehensive glossary of key terms used in this report may be found at the following address: [www.agtrade.org/glossary.htm](http://www.agtrade.org/glossary.htm). The present glossary is a shortened version that is primarily, and sometimes directly, based on the Agtrade source.

Verde, Gambia, Guinea Bissau, Mali, Mauritania, Niger, Senegal, and Chad. The English name for CILSS is Permanent Interstate Committee for Drought Control in the Sahel.

**Common External Tariff (CET)**

Common tariff charged by a regional group on extra-regional imports. The group may apply lower tariffs or no tariff on intra-regional exchange.

**Conformity assessment procedures**

The part of the Agreements on Technical Barriers to Trade (TBTs). The aim of these procedures is to assess whether a traded good complies with technical standards. These procedures must not discriminate between domestic and foreign firms.

**Cotonou Agreement**

See Lomé and Cotonou Agreements

**Countervailing Duty (CD)**

A supplementary levy imposed on imported goods to counteract subsidies provided to producers or exporters by the government of the exporting country.

**De minimis rule**

The total AMS (defined above) does not include any specific commodity support that is less than 5% of its production value, neither does it include any noncommodity-specific support level lower than 5% of the value of total agricultural output.

**Developed Countries (DCs)**

All developed countries in Western European, Northern American, and Asian Pacific regions.

**Developing Countries**

Usually middle-income countries in Africa, Latin America, and Asia.

**Dispute Settlement**

The WTO's procedure for resolving trade disputes between member countries. A dispute arises when a member government believes another member government is violating an agreement or a commitment that it has made in the WTO ([www.wto.org](http://www.wto.org)).

**Domestic Supports**

Policies that provide price support or other forms of subsidies to agricultural productions. The Agreement on Agriculture defines three different types of domestic supports: *green box*, *blue box* and *amber box* policies. The *amber box* contains all domestic support measures that are subject to reduction commitments under the Agreement on Agriculture. The *blue box* refers to policies that are considered to have a minimum effect on trade and the *green box* regroups policies that are considered to have no or little impacts on trade. Both the *green box* and *blue box* support policies are not subject to reduction commitment.

**European Community (EC)**

**European Union (EU)**

A common market of fifteen European countries: Belgium, the Netherlands, Luxembourg, Germany, Italy, France, the UK, Ireland, Denmark, Greece, Spain, Portugal, Austria, Sweden, and Finland.

**Export credits or guarantee (or insurance)**

A government-guaranteed credit for commercial financing of agricultural exports; often to protect its exporters against loss due to nonpayment by foreign buyers.

**Export subsidy**

A government payment made to an exporter for facilitating exports.

**Food and Agriculture Organization of the United Nations (FAO)****Food and Drug Administration (FDA)****Free trade**

A state of drastic reduction or elimination of tariffs and quotas on some or all goods between countries. Free trade does not preclude each country to pursue independent policies with respect to the rest of the world.

**General Agreement on Tariffs and Trade (GATT)**

An agreement dating from 1947 to increase international trade by reducing tariffs and other trade barriers. The agreement is now fully integrated to WTO.

**Green box**

See Domestic Supports.

**Least Developed Countries (LDCs)**

Generally poor countries in Sub-Sahara Africa, Latin America, and Asia.

**Lomé and Cotonou Agreements**

Preferential trade agreements between the European Union (EU) and the African, Caribbean and Pacific (ACP) countries. The Cotonou Agreement, signed on 23 June 2000, replaced the defunct Lomé IV agreement signed in December 1989. Before Lomé IV, were Lomé I (February 1975) and Lomé III (December 1984). There are currently 77 member countries in ACP groups. These are: Angola, Antigua and Barbuda, Bahamas, Barbados, Belize, Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Cameroon, Comoros, Congo, Congo Democratic Republic, Cook Islands, Côte d'Ivoire, Djibouti, Dominica, Eritrea, Ethiopia, Fiji, Gabon, The Gambia, Ghana, Grenada, Guinea, Guinea Equatorial, Guinea-Bissau, Guyana, Haiti, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Mali, Marshall Islands, Mauritania, Mauritius, Micronesia (Federated States Of), Mozambique, Namibia, Nauru, Niger, Nigeria, Niue, Palau, Papua New Guinea, Dominican Republic, Central African Republic, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, South Africa, St Kitts And Nevis, St Lucia, St Vincent And The Grenadines, Sudan, Suriname, Swaziland, Tanzania, Chad, Togo, Tonga, Trinidad and Tobago, Tuvalu, Uganda, Vanuatu, Western Samoa, Zambia, and Zimbabwe.

**Marrakech Decision**

The final act of the Uruguay Agreement concluded in Marrakech, Morocco, in April 1994.

**Market access**

The extent to which foreign products can enter a domestic market. Importing countries may resort to a variety of tariff and nontariff trade barriers to limit market access to foreign products.

**Multi functionality**

Often refers to the different roles agriculture plays in a given country's economy. These roles include, but not limited to, ensuring food security, protecting the environment, managing structural adjustment programs, supporting rural development, and alleviating poverty.

**Non Governmental Organization (NGO)****Non Tariff Barrier (NTB)**

Governmental restrictions on imports from, and exports to, other countries. These restrictions include embargoes, import quotas, and technical barriers to trade.

**Notifications (Notify)**

The process by which member countries report annually to the WTO information on commitments, changes in policies, and other related matters as required by the various agreements.

**Open trade regime**

Policies that encourage *free trade* (see above).

**Organization of Economic Cooperation and Development (OECD)****Protectionism (Protectionist Policies)**

The practice of shielding domestic industry production by using tariffs and quotas to discourage imports.

**Regionalism**

The creation of a common economic or commercial space between countries, which adopt a mutually advantageous trade rules among themselves, as compared with the rest of the world.

**Rules of origin**

The criteria used to determine where a product is made. The rules of origin are necessary to implement a wide range of trade policies such as quotas, antidumping, countervailing duties, preferential tariffs, and so on.

**Sanitary and Phytosanitary Measures (SPS)**

An agreement on food safety and animal and plant health standards for agricultural products that are traded globally.

**Special and Differential Treatment (SDT)**

The provision that allows exports from developing countries to receive preferential access to markets in developed countries on a nonreciprocal basis.

**Special Safeguards (SS)**

Are similar countervailing duties (see above). Their application is restricted to situations where imported products cause "serious injury" to a domestic industry producing like or directly competitive products.

**State Trading Enterprises (STE)**

An enterprise authorized to engage in trade that is owned, sanctioned, or otherwise supported by the government. Many STEs enjoy monopoly control over imports or exports.

**Structural Adjustment Programs (SAPs)**

Macroeconomic policies reforms initiated since the early 1980s by the Breton Woods institutions in conjunction with developing countries, particularly in Africa, with in the aim to correct severe imbalances in these economies.

**Tariff**

A tax imposed by a nation on an imported good or service.

**Tariff escalation**

Increases in the tariffs in response to the level of processing: the more a product is processed, the higher the rate of tariff applied.

**Tariff peak**

Very high tariffs usually applied on out-of-quota imports. See Tariff-rate quota (TRQ).

**Tariff Rate Quota (TRQ)**

A rate restriction involving a lower (in quota) tariff rate for a specified volume of imports and a higher (out-of-quota) tariff rate for imports above the conceded access level.

**Technical Barriers to Trade (TBT)**

Technical requirements, such as products or process standards, set at levels excessively limiting or even prohibiting trade.

**Trade facilitation**

The simplification and harmonization of international trade procedures.

**Trade procedures**

Activities, practices, and formalities involved in collecting, presenting, communicating, and processing data required for the movement of goods in international trade.

**Trade-Related Investment Measures (TRIMs)**

A WTO agreement that regulates trade-related foreign investment. For example, the TRIMs Agreement prohibits measures such as local content requirements, which are inconsistent with basic principles of WTO.

**Trade-Related Aspects of Intellectual Property Rights (TRIPs)**

A WTO agreement designed to narrow the gap between countries regarding the way property rights are protected and enforced. TRIPs cover different aspects of property rights, including copyright and related rights, as well as trademarks such as service marks, geographical indications, industrial designs, patents, and layout-designs of integrated circuits. They also regulate undisclosed information, such as trade secrets.

**United Nation Conference on Trade, Agriculture, and Development (UNCTAD)****Uruguay Round (UR) Agreement**

A trade agreement designed to open world markets. The Agreement on Agriculture is one of the 29 individual legal texts included in the final act under an umbrella agreement establishing the WTO. The negotiation began at Punta del Este, Uruguay, in September 1986 and concluded in Marrakech, Morocco in April 1994.

**Value Added**

The difference between the cost of materials purchased by a firm and the price for which it sells goods produced using those materials. This difference represents the value added by the productive activities of the firm.

**Value Added Tax (VAT)**

Tax on the value added. See *value added* above.

**West Africa Economic and Monetary Union (WAEMU)**

An economic and monetary union formed by eight West African countries, namely Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo. The Union implements a common monetary policy and applies a common external tariff on extra-regional imports. The ultimate goal of the Union is the perfect integration between the economies of the region, and several criteria are routinely used to measure the degree of convergence between these economies.

**World Trade Organization (WTO)**

A multilateral organization established on January 1, 1995, with the aim to promote a rule-based liberalization and functioning of the multilateral trading system. WTO replaced GATT following eight years of Uruguay Round of negotiations. There are currently 143 countries that are members of WTO.



## 1. INTRODUCTION

The 21<sup>st</sup> century is characterized by the process of increased integration between economies. The markets for goods, services, and capital in a country depend not only on domestic conditions but also on market and political forces originating in other countries. In West Africa, where agriculture remains the backbone of the economy, the interdependence between domestic and foreign trade and production policies plays a central role in the development of this key sector. Paddy production in Senegal, for example, may be influenced by rice imports from Vietnam; dairy production in Côte d'Ivoire may be hampered by cheap milk imports from the European Union (EU); exports of fruits and vegetables from Mali or Burkina Faso may be increased by preferential market access to EU markets; domestic cotton policies in the United States (U.S.) may affect cotton production in West African countries, and so forth. The impact of each of these trade relationships on different parties involved is often ambiguous, hence the need for an international body aimed at structuring the various interdependencies in the world trading system. The World Trade Organization (WTO) has played this role since January 1995.

This report is a brief overview on the implications of the WTO agreements for the agricultural sector in West Africa and Chad. Fifteen out of the seventeen countries that constitute the group are members of WTO. Most of these countries were also contracting parties in the General Agreements on Trade and Tariffs (GATT) in the early years following their independence in the 1960s (Table 1).

**Table 1. When Did West African Countries Become Gatt's Contracting Parties and WTO Members?**

Countries	GATT	WTO
Benin*	12 September 1963	22 February 1996
Burkina Faso*	3 May 1963	3 June 1995
Cape Verde*	Was not a contracting party	Observer—in process of admission
Chad*	12 July 1963	19 October 1996
Côte d'Ivoire	31 December 1963	1 January 1995
Gambia, The*	22 February 1965	23 October 1996
Ghana	17 October 1957	1 January 1995
Guinea *	8 December 1994	25 October 1995
Guinea Bissau*	17 March 1994	31 May 1995
Liberia	Was not a contracting party	Nonmember and not observer
Mali*	11 January 1993	31 May 1995
Mauritania*	30 September 1963	31 May 1995
Niger*	31 December 1963	13 December 1996
Nigeria	18 November 1960	1 January 1995
Senegal*	27 September 1963	1 January 1995
Sierra Leone*	19 May 1961	23 July 1995
Togo*	20 March 1964	1 May 1995

\* The least-developed countries

Anticipating the benefits of an open trade regime (as opposed to autarky), West African countries and other developing countries have generally been eager to share the GATT and WTO freer-trade philosophy, especially after the inception of the structural adjustment programs, which dismantled some of the protectionist trade policies in place in these countries before the early 1980s. The enthusiasm, however, is being increasingly eroded and displaced by a feeling of frustration and powerlessness, as these countries realize that the letter and spirit of the agreements are not fully implemented. In their various statements to WTO summits, West African countries have deplored the nonfulfillment of commitments on market access in terms of reductions in tariffs, domestic supports and export subsidies. The non- or insufficient provision of trade-related technical assistance and the neglect of the special and differential treatments have also been seriously condemned. In short, the least developed countries, including those of West Africa, feel that they have been marginalized in the six-year implementation of WTO agreements.

The critique of marginalization is often relayed and amplified by many nongovernmental organizations (NGOs), which are leading a massive campaign against the WTO attempts to achieve a greater rule-based liberalization of the world trade. NGOs efforts culminated in the vast Seattle 1999 protest against what is perceived as corporate domination of the global trade.<sup>2</sup> This domination, some NGOs charge, has had negative impacts on the environment and the living standards of rural communities in the South. The present report does not delve into the WTO-NGOs controversial views on the contribution of the multilateral trading system to the agriculture-based global welfare. It rather surveys the agreements on agriculture from the perspectives of countries and groups of countries. The report is mainly based on statements made by various countries at the Third WTO Ministerial Conference in Seattle in 1999. Additional materials covered in the report include several negotiating proposals submitted by countries and groups of countries following the Seattle meeting, as well as more recent statements at the Fourth WTO Ministerial Conference held in Doha, Qatar, in November 2001.

This report emphasizes the market access issues facing agriculture in the arena of the international trade negotiations. The study covers 27 African countries (including 8 from West Africa), the United States, the European Union, Japan, and the Cairns Group (Table 2). This initial analysis excludes countries from Asia, Latin and Central America, as well as the economies in transition from Eastern Europe. Subsequent investigations will pay more attention to these three regions, which present increasingly strategic exchange interest for West Africa. The Cairns Group is included in this initial phase of the study because of its weight in multilateral negotiations on agriculture, where African countries have their most vital interests.

---

<sup>2</sup> The protest was held in Seattle, United States, in November 1999 during the Third WTO Ministerial Conference. Many WTO members described the Conference as a failure, thus giving more importance to NGOs' arguments.

**Table 2. Countries Coverage and Base Documents for the WTO Position Matrices in Tables 4 and 5**

Countries and Groups of Countries	WTO Documents
West Africa and Chad	3 <sup>rd</sup> WTO Ministerial Conference: Statements made by Ministers from Burkina Faso, Côte-d'Ivoire, Mali, Nigeria, Mauritania, Senegal, Sierra Leone, The Gambia
Rest of Africa	3 <sup>rd</sup> WTO Ministerial Conference: Statements by Ministers Morocco, Tanzania, South Africa, Mozambique, Madagascar, Botswana, Lesotho, Angola, Uganda, Algeria, Gabon, Zimbabwe, Egypt, Kenya, Zambia, Burundi, Sudan, Malawi, Cameroon
United States	Docs WT/MIN(99)/ST/12; G/AG/NG/W/15, 23 June 2000; G/AG/NG/W/16, 23 June 2000; G/AG/NG/W/32, 12 July 2000
European Union	Docs WT/MIN(99)/ST/3; WT/MIN(99)/ST/4; G/AG/NG/W/34, 18 September 2000; G/AG/NG/W/18, 28 June 2000; G/AG/NG/W/17, 28 June 2000
Japan	Docs WT/MIN(99)/ST/26; WT/MIN(99)/ST/44; G/AG/NG/W/46, 5 October 2000
The Cairn Group	Docs G/AG/NG/W/11, 16 June 2000; G/AG/NG/W/21, 11 July 2000; G/AG/NG/W/40, 5 October 2000

This report adopts a definition of the term “market access” that is broader than is typically used in the literature. Traditionally “market access” refers to a reduction in tariff barriers. Market access is understood here to include all types of measures aimed at strengthening the opportunities of entry of a commodity into a foreign market. From the perspective of West African economies, besides tariff cuts, these measures involve:

- reductions in trade-distorting domestic supports and export subsidies in developed countries;
- a fair use of nontariff barriers such as technical regulations; and
- an effective implementation of WTO agreements regarding special and differential treatments and technical assistance, etc.

The remaining part of the report presents a brief historical overview of GATT and WTO, and then discusses each of the components of market access as perceived by the major countries and groups of countries. The study also identifies some key areas of further investigation regarding the implications of the WTO agreements on West African agriculture.

## **2. HISTORICAL OVERVIEW ON GATT AND THE WTO MANDATE<sup>3</sup>**

GATT was both a provisional agreement and an organization that oversaw the multilateral trading system for almost half a century (1947-1994). There were 128 countries—including the 14 West African countries and Chad—that had signed GATT by the end of 1994. The organization helped to reduce tariffs at an earlier stage of world trade liberalization, resulting in high rates of world trade growth (8% on the average) in the 1950s and 1960s. However, following economic recession in the 1970s and early 1980s, developed countries in Europe and North America reinforced their protectionist policies (e.g., increase in agricultural subsidies), which seriously damaged the credibility and effectiveness of the organization. Also, GATT agreements, which were developed to structure the multilateral trading system in the late 1940s, became inadequate to address more complex and diversified trade issues of the 1980s. Thus, it became necessary to strengthen and broaden the system. This was done over nearly 8 years of negotiations at the Uruguay Rounds, resulting in the creation of WTO in January 1995. GATT-organization was dissolved, and GATT-agreement was amended, extended and integrated to WTO.

The WTO Secretariat in Geneva has highlighted five key differences between WTO and GATT:

- GATT was ad hoc and provisional. It was never ratified in members' parliaments, and it contained no provisions for the creation of an organization;
- The WTO and its agreements are permanent. The WTO is an international organization with a sound legal basis. Members have ratified the WTO agreements and the agreements themselves describe how the WTO is to function;
- The WTO has “members” while GATT had “contracting parties,” underscoring the fact that officially GATT was a legal text;
- GATT dealt with trade in goods, whereas WTO covers services and intellectual property as well; and
- The WTO dispute settlement system is faster and more automatic than the old GATT system. The WTO's rulings cannot be blocked.

The WTO counted 143 members by the end of the year 2001, with China being the 143<sup>rd</sup> member. The organization is the only one that deals with international trade rules between countries. The WTO activities are based on rules, which are the outcome of negotiations among members. It is not currently possible to indicate whether the organizational differences between GATT and WTO have resulted in noticeable changes or not in the functioning of the world trade, especially vis-à-vis of West African countries. Neither is it possible to tell how these differences will affect the performance in the future. WTO, obviously, has a much broader scope than

---

<sup>3</sup> This section heavily draws on information available on the WTO web site, [www.wto.org](http://www.wto.org).

GATT, but the current and future performance as well as the credibility of the organization will be undermined if current agreements remain poorly implemented.

The organization indeed has multiple objectives, as outlined in the Preamble of the Marrakech Decision establishing WTO. Some of these objectives include: raising the living standards of people around the world; ensuring full employment as well as steady growth in real income and effective demand; and expanding the production and trade of goods and services in an efficient and sustainable way through the respect of specific development needs of each member country. The Preamble of the agreements also recognizes the need for countries to devote special efforts in order to ensure that developing countries, and particularly the least developed countries, have a fair share in the growth in global trade. It emphasizes the importance of reciprocal and mutually advantageous arrangements aimed at reducing tariffs and other barriers to trade while eliminating discriminatory practices in international trade relations.

The WTO's main function is to administer the agreements by:

- organizing forums for trade negotiations;
- handling trade disputes;
- monitoring national trade policies;
- providing technical assistance and training for developing countries; and
- cooperating with other international organizations.

The administration of WTO follows some key principles while exercising these functions. These include the need to:

- treat all trading partners equally without discriminating between them;
- work for freer trade between nations;
- make the multilateral trading system predictable and prevent the use of arbitrary tariffs or nontariffs protection measures;
- encourage competitive trade policies that do not rely, for example, on dumping as means of increasing market share; and
- make the system advantageous to the least-developed countries.

Some of these principles, nondiscrimination in particular, are violated by the existence of regionalism (WAEMU, ECOWAS) or preferential trade arrangements (Lomé and Cotonou Agreements). There are, however, other special provisions in the WTO Agreements, which allow the West African countries to form regional commercial blocks and benefit from trading

preferences extended to them by the European Union. For example, the Doha 2001 WTO ministerial conference exempted the ACP-EU Agreement from the nondiscriminatory requirements. Future publications will treat in more detail the issues of intra and extra-regional preferential trade arrangements in West Africa. As mentioned earlier, this report focuses primarily on the issues of tariff barriers, export subsidies, and domestic supports.

### 3. TARIFF BARRIERS

The aim of WTO negotiations on tariff barriers is twofold: eliminate or reduce tariff rates and convert nontariff barriers, such as trade quotas, into tariffs. The conversion of quotas into tariffs is referred to as *tariffication*. Tariff instruments may also be used in connection to other agreements, such as the agreements on antidumping (AD), countervailing duties (CDs), and special safeguards (SS). These three agreements may be viewed as contingency measures allowing beneficiary countries to increase temporarily their tariff levels in order to protect a domestic industry against injury caused by imports. (See section 3.3 for more details on these three measures.)

The Uruguay Round agreements on agriculture spell out several rules for a progressive reduction in tariff rates, conversion of nontariff barriers into tariffs (tariffication), and the use of contingency measures. In accordance with the WTO principle of favorable treatment of the least developed countries, the agreements generally require higher commitments and shorter implementation periods in developed countries compared to developing countries (Table 3). The least-developed countries are exempted from most tariff reductions. Besides Côte d'Ivoire, Ghana, and Nigeria, which are considered as developing countries, all the remaining West African countries have the status of least-developed countries at WTO.

**Table 3. Overview of Commitments on Tariff Barriers from the Uruguay Round Agreement on Agriculture**

Category/Item	Developed Countries (DCs)	Developing Countries (excluding LDCs)	Least Developed Countries (LDCs)
<b>Tariffication</b>	Convert all nontariff barriers to tariffs	Same as DCs	Same as DCs
<b>Tariff rate reduction</b>	Reduce tariffs by 36% Overall within 6 years Minimum 15% per tariff line	Reduce tariffs by 24% Overall within 10 years; Minimum 10% per tariff line	Exempt from reductions, but must at least bind tariffs
<b>Tariff-rate quotas</b>	"Tariffy" all quotas; Increase the in-quota volume by at least 3% (to be increased to 5%) of the consumption needs	Same as DCs	Same as DCs
<b>Special safeguards</b>	Importers may use additional tariffs on tariff-rate quota commodities, if subsidized imports constitute serious threats to the domestic industry; the WTO Agreement defines the modalities of use of special safeguards	Same as DCs	Same as DCs

Adapted from Regmi, Trueblood, and Shapouri 2000

### 3.1. Tariff Reductions

Reductions in tariff rates are evaluated with respect to a base level. The base tariff level is determined in two ways: either by the bound tariff levels<sup>4</sup> (if tariffs are bound before January 1, 1995) or by the actual rates charged at the beginning of Uruguay Round in September 1986. As indicated in Table 3, developed countries agree to schedule reductions in their out-of-quota tariffs by an average of 36%, equally distributed over six years, beginning January 1, 1995. Developing countries were expected to implement a 24% reduction over a period of 10 years. Minimum cuts per product were 15% and 10% for developed and developing countries, respectively. The least developed countries were exempted from such reduction schedules, as mentioned earlier. It is extremely difficult to know the extent to which developed countries complied with these commitments at the end of the six-year implementation period. WTO (2001) argues that bound tariffs fairly approximate the tariff rates that developed countries apply to agricultural imports. The approximation is not straightforward for the developing and the least-developed countries, as there is usually a huge discrepancy between bound and applied rates. For example, Mali applied on the average 28.7% on agricultural imports in 1997 and bounded the tariff rate at an average of 60%. This rate jumped to an average of 110% in 2000 (Table 6). Australia, Japan, and U.S. charged an average tariff of 1.2%, 26.3%, and 10.7%, respectively on agricultural imports in 1998-1999; their average bound tariff rates are 3.3%, 25.3%, and 8.2%, respectively (WTO 2001).

Though most West African countries are classified as least developed countries and, thereby, exempted from reduction commitments, there have been unilateral efforts to cut tariffs under the structural adjustment programs in many countries. Besides, member countries of the West African Economic and Monetary Union (WAEMU) also engaged in extensive structural reforms, resulting in the harmonization and simplification of import taxation policy within the Union (see Box 1 in the Appendices for details on fiscal and commercial policies in WAEMU).

Country comparative analyses in Tables 4 and 5 show that there is a general consensus among countries to reduce substantially or even eliminate tariffs on products originating in the least developed countries. This consensus clearly emerged since Seattle 1999 and was restated with Doha 2001. Sub-Sahara African countries are unanimous about the need to reduce tariff peaks and eliminate tariff escalation.<sup>5</sup> This position is also strongly supported by the United States and the Cairns Group. Japan proposed a more comprehensive market access system that would cover agriculture, services, and industrial tariffs. The European Union, while inviting the developed countries to offer duty-free access to exports originating in the least developed countries, remains the least favorable to the idea of an unconditional elimination of tariff peaks, tariff escalation, and other contingent protection measures such as antidumping, countervailing duties, and special safeguards.

---

<sup>4</sup> Bound tariff levels are the maximum rates countries agree to charge on a given commodity.

<sup>5</sup> Tariff peaks are the excessively high tariff rates charged on exports once the allocated quota is filled. Tariff escalation is the practice that consists of charging higher tariff rates as the level of processing of a commodity increases.



**Table 4. Matrix of Policy Issues Positions of West African Countries**

Countries	Tariff Barriers	Domestic Support	Export Competition	Nontariff Barriers to Trade (NTBs)	Special and Differential Treatments (SDTs)	Contingency Measures	Technical Assistance
<b>Burkina Faso</b>	Totally free market access to products from the least developed countries	Abolish subsidies to agriculture in developed countries (DCs)		The rule of origin must be transparent; avoid using environment and labor standards as NTBs	Partners in DCs should give due importance to SDTs; apply SPS and TBTs as part of SDTs		
<b>Cote d'Ivoire</b>	No use of arbitrary measures, such as tariff peak and countervailing duties, that reduce market access			Stop using SPS as disguised trade barriers	Maintain asymmetric Agreements and fully implement SDTs	No arbitrary use of antidumping measures	Address supply constraints, strengthen national capacities
<b>Gambia</b>	Give unfettered duty-free market access to products from the least developed countries (LDCs)			Strengthen standard setting discipline and procedures	Avoid using SPS to hamper trade opportunities offered by DCs		
<b>Mali</b>	Duty-free access to fruits and vegetables, livestock products (red meat, cattle, hides and leather), cotton from LDCs	Substantial reduction of domestic support in DCs; Maintain the right of cotton State Trading Enterprises (STEs) in LDCs to operate in the international markets	Eliminate ag. exports subsidies in DCs over time, particularly on rice, and immediately on fruits and vegetables	Clarify rules and simplify conformity assessment procedures; distinguish between mandatory and optional rules			Assist LDCs to build their capacity and expertise in trade policy and help them meet their commitments
<b>Mauritania</b>			Address fully and decisively the issue of export financing		Implement the SDTs; pay special attention difficulties faced by LDCs		Help build human and institutional capacity and improve trade infrastructure

AMS = Aggregate Measurement of Support—DC's = Developed Countries—LDCs = Least-Developed Countries—NTB/TBT = Non Tariff Barriers/Technical Barriers to Trade—SDT = Special and Differential Treatment—SPS = Sanitary and Phytosanitary Standards—STE = State Trading Enterprises—SS = Special Safeguards—TRIMs = Trade-Related Investment Measures—TRIPs = Trade-Related Intellectual Property Rights—TRQ = Tariff-Rate Quota

Countries	Tariff Barriers	Domestic Support	Export Competition	Nontariff Barriers to Trade (NTBs)	Special and Differential Treatments (SDTs)	Contingency Measures	Technical Assistance
<b>Nigeria</b>	Remove tariff escalation and put a ceiling to tariff peaks in DCs; expand tariff quotas and lower in-quota tariffs; Recognize that LDCs need flexibility while reducing their tariffs, especially on sensitive agricultural products	Reduce domestic supports; Allow LDCs to take new support measures up to levels substantially higher than the “de minimis” levels; remove limitations imposed on countries that have not scheduled reductions in their domestic support; increase flexibility of LDCs to use domestic supports to improve food security and income for poor farmers	Reduce export subsidies in DCs; more discipline regarding competition policies within the international agricultural marketing systems; need to understand and regulate the role of multinationals in the food systems.	There still exists NTBs, including SPS, that inhibit access to markets in DCs; members must apply unified set of international measures that reflect specific constraints in LDCs	Implement the provisions on SDTs for LDCs; commitments, obligations and concessions in all areas must take into account their developmental needs		Assist LDCs to build local capacity and help implement their commitments, e.g in regards to custom valuation, TRIPs and TRIMs
<b>Senegal</b>	LDCs’ exports have encountered tariff barriers, such as tariff peak and tariff escalation in DCs and these need to be removed; grant total exemption from duties and quotas to LDCs	Allow LDCs the flexibility to give internal support to the agricultural sector in order to ensure food security, preserve rural jobs and reduce poverty	Progressive cuts in export subsidies and discipline in other forms of export supports in DCs while ensuring food security in LDCs	Remove nontariff barriers and inappropriate conditionalities which are limiting access to markets in DCs	Maintain duty-free and preferential market access for agric. products in DCs; gradually replace arbitrary deadlines with economic targets	Allow LDCs to use special and appropriate safeguards to protect their market if needed	Help build local capacity; make provision for technical assistance in regular WTO budget
<b>Sierra Leone</b>	Tariff peaks and tariff escalation negatively affects products in which LDCs have a comparative advantage			DCs set stringent norms and standards in areas where they want to maintain their lead and prevent participation of LDCs.	Need for SDTs with regard to TRIPs; maintain preferential market access agreements		Assist LDCs to address supply-side constraints and build capacity

AMS = Aggregate Measurement of Support—DCs = Developed Countries—LDCs = Least-Developed Countries—NTB/TBT = Non Tariff Barriers/Technical Barriers to Trade—SDT = Special and Differential Treatment—SPS = Sanitary and Phytosanitary Standards—STE = State Trading Enterprises—SS = Special Safeguards—TRIMs = Trade-Related Investment Measures—TRIPs = Trade-Related Intellectual Property Rights—TRQ = Tariff-Rate Quota

Countries	Tariff Barriers	Domestic Support	Export Competition	Nontariff Barriers to Trade (NTBs)	Special and Differential Treatments (SDTs)	Contingency Measures	Technical Assistance
<b>African Group*</b>	Give credit to Africa for its autonomous agricultural liberalization; further domestic tariff reductions must be linked to substantial cuts in domestic supports and export subsidies in DCs, which must also reduce tariff peak and escalation and offer tariff-free and quota-free access to exports from LDCs; make tariff rate quotas (TRQs) available to small farmers and traders; maintain current tariff bounds.	Reduce substantially and progressively all trade- and production-distorting domestic support measures in DCs; tighten the range of use of the “green box” policies so as to make them minimally distorting; make the “de minimis” provision more flexible for LDCs, allow LDCs to provide AMS supports under development programs; input and investment subsidies to poor farmers must not be actionable	Reduce and eventually eliminate export subsidies in DCs; Continue and strengthen Article 9.4 which exempts LDCs from making commitments on export subsidy; discipline the use of export credits, guarantees and insurances, as provided in Article 10.2.; no abuse of food aid.		Request increased, stable and predictable conditions for preferential market access; expand SDTs to allow LDCs to use domestic policies to reduce poverty, achieve food security, product differentiation and to improve competitiveness among small producers	Review Article 5 pertaining to the Special Safeguards (SS) mechanisms; develop appropriate agricultural safeguards for LDCs	Provide additional financial and technical assistance and make it binding under the Agreement
<b>Consensus position of West African Nations</b>	Duty-free market access to products originating in LDCs; eliminate tariff peak, tariff escalation, and countervailing duties or avoid their arbitrary use; condition further reduction to substantial reductions in all distorting policies in DCs	Abolish subsidies to agriculture in DCs; reform support policies in order to make them minimally distorting; reforms must account for special development needs of LDCs and help address poverty issues in poor households	Eliminate export subsidies to agriculture in DCs over time; find a definitive solution to the issue of export financing; reforms should help development in LDCs; no abuse of food aid	Adopt a transparent rules of origin; remove market access difficulties associated with SPS, inappropriate conditionalities and, potentially, with environment and labor standards; do not use NTBs as disguised protection	Give due importance to SDTs by applying SPS and TBTs as part of SDTs; pay special attention to problems faced by LDCs by maintaining asymmetric and preferential agreements	No arbitrary use or abuse of anti-dumping measures; reform and develop safeguards measures to adapt them to LDCs	Assist countries to build their capacity, improve trade infrastructure and help them address supply-side constraints; make assistance binding under WTO

AMS = Aggregate Measurement of Support—DCs = Developed Countries—LDCs = Least-Developed Countries—NTB/TBT = Non Tariff Barriers/Technical Barriers to Trade—SDT = Special and Differential Treatment—SPS = Sanitary and Phytosanitary Standards—STE = State Trading Enterprises—SS = Special Safeguards—TRIMs = Trade-Related Investment Measures—TRIPs = Trade-Related Intellectual Property Rights—TRQ = Tariff-Rate Quota

\* The Africa Group, which is composed by 41 African countries, has submitted a joint negotiating proposal on March 23, 2001. West African countries that authored that proposal are, beside the eight countries that appear in the present table, Benin, Chad, Ghana, Guinea, Guinea Bissau, Niger and Togo. It was not possible to find any record on position statements by Liberia and Cape Verde, which also belong to the West African Region.

**Table 5. Matrix of Policy Issues Positions of WTO Negotiating Partners**

Region/ Countries	Tariff Barriers	Domestic Support	Export Competition	Nontariff Barriers to Trade	Special and Differential Treatments	Contingency Measures	Technical Assistance
<b>Consensus position of West African Nations</b>	Duty-free market access to products originating in LDCs; eliminate tariff peak, tariff escalation, and countervailing duties or avoid their arbitrary use; condition further reductions to substantial reductions in all distorting policies in DCs	Abolish subsidies to agriculture in DCs; reform support policies in order to make them minimally distorting; reforms must account for special development needs of LDCs and help address poverty issues in poor households	Eliminate exports subsidies to agriculture in DCs over time; find a definitive solution to the issue of export financing; reforms should help development in LDCs; no abuse of food aid	Adopt a transparent rules of origin; remove market access difficulties associated with SPS, inappropriate conditionalities and, potentially, with environment and labor standards; do not use NTBs as disguised protection	Give due importance to SDTs by applying SPS and TBTs as part of SDTs; pay special attention to problems faced by LDCs by maintaining asymmetric and preferential agreements	No arbitrary use or abuse of antidumping measures; reform and develop safeguards measures to adapt them to LDCs	Assist countries to build their capacity, improve trade infrastructure and help them address supply-side constraints; make assistance binding under WTO
<b>Rest of Africa</b>	Same as West Africa	Same as West Africa  In addition, reduce domestic support in the DCs, especially in regard to inefficient industries and sectors	Same as West Africa	Same as West Africa	Same as West Africa  Also, preserve SDTs, which must be mandatory	Same as West Africa	Same as West Africa
<b>United States</b>	Reduce substantially or eliminate disparities in tariff levels among countries; eliminate tariffs, tariff escalation, in-quota tariffs and increase tariff-rate quotas; apply <i>ad valorem</i> tariffs, eliminate transitional special agricultural safeguard; promote universal market access.	Reduce substantially distorting subsidies and other measures; suggest 2 categories of domestic support: exempt support (no or minimal distorting effects) and nonexempt (distorting) support; reduce AMS to final bound;	Eliminate export subsidies and variable export taxes and discipline export State Trading Enterprises (STEs); negotiate export credit within the OECD		Allow LDCs to use exempt support measures essential to their development objectives; provide technical assistance, build capacity and improve market access opportunities for LDCs		Provide significantly expanded technical assistance to ensure that all members can meet their commitments; address issues of trade facilitation and custom valuation

Region/ Countries	Tariff Barriers	Domestic Support	Export Competition	Nontariff Barriers to Trade	Special and Differential Treatments	Contingency Measures	Technical Assistance
<b>European Union</b>	DCs should offer duty-free market access to the least developed countries; overall average reduction of tariff bounds and minimum reduction per tariff line; increase transparency, reliability and security of TRQs; recognize role of geographical origin in improved market access	Domestic support will be reduced or abolish on condition that beneficiaries are compensated by other means; maintain the concepts of “blue” and “green” boxes; further reduction in AMS starting from the final bound commitment levels; revisit criteria for categorizing policies into all three boxes	Will further reduce export subsidies provided actions are taken to discipline subsidized export credits, abuse of food aid, state-trading enterprises and some other forms of market support	Nontrade concerns--multifunctional role of agriculture, environment, poverty alleviation, food safety, consumer concerns, animal welfare--must be taken into account in the negotiations	Support to SDTs; DCs should give trade preferences to LDCs; allow LDCs to have flexibility using internal support to address key policy issues when applied; provide food aid only in the form of grant	Maintain special safeguards in agricultural trade	Provide technical assistance to help build capacity in LDCs
<b>Japan</b>	Intend to extend tariff-free treatment to essentially all products originating in LDCs; need for a comprehensive market access covering agriculture, service and industrial tariffs; tariffs must be product-specific and must be based on the need for multifunctionality and food security; need for transparent and impartial TRQs; no further reductions in sector-specific tariffs	A certain realistic level of domestic support is indispensable, and this should be based on climatic conditions and the state of agricultural policy reform in each country; maintain both green and blue boxes to address food security and agricultural multifunctionality issues; total AMS should be determined in a realistic manner, using the ceiling at the final commitment levels	Strengthen rules and disciplines on export measures covering export subsidies in future negotiations; reduce both levels of support and quantity of subsidized exports; improve transparency and predictability and reduce export tax, export state trading and all the other export restrictions	Review Agreement on TBTs to make international standards transparent and accessible to all; give flexibility to LDCs regarding the rules and disciplines on border measures and their application	Pay special attention to problems faced by LDCs; the issue of multifunctionality, including food security, falls under the SDTs; exempt LDCs from discipline on domestic support and state trading enterprises	Review the rules of anti-dumping, strengthen them and prevent protectionist abuse of the mechanism	
<b>The Cairns Group</b>	Place trade in agricultural goods on the same basis as trade in other goods; deep cuts to all tariffs, including tariff peak and escalation; increase tariff rate quotas	Eliminate all trade-distorting domestic subsidies	Eliminate export subsidies and set clear rules to prevent circumvention of export subsidy commitments		The principle of SDTs must not be compromised		

Region/ Countries	Tariff Barriers	Domestic Support	Export Competition	Nontariff Barriers to Trade	Special and Differential Treatments	Contingency Measures	Technical Assistance
<b>Consensus and differences</b>	Overall consensus on the need to reduce or even eliminate tariffs on products originating in the LDCs; African countries and the Cairns Group are in favor of the elimination of tariff peak, tariff escalation and countervailing duties, but the other partners are less clear on these issues; U.S. advocates a more universal and unconditional market access, while EU proposes conditional access with due consideration to geographical indications; Japan defends the need to link access to multifunctionality in agriculture	Africa, the Cairns Group and U.S. support the elimination of trade-distorting domestic support. Africa particularly requires that such elimination takes place not only in agriculture but also in inefficient industries and sectors in DCs. Both EU and Japan want to maintain the green and blue boxes but support reforms in the policies classified under these boxes; they further expect reductions in total AMS but these must start from the final bounds; Japan wants to link domestic support to multifunctionality and food security, a position also held by Africa	Africa and the Cairns Group favor a total elimination of export subsidy and credit, a treatment of export financing issues; U.S. wants more discipline on STEs and to negotiate export credit between OECD countries; EU links further reductions to reforms by other members of their export credit, export restrictions, and STEs systems; Africa and EU propose not to abuse food aid	Africa demands that the rule of origin be more transparent and that labor, environment and SPS not be used as disguised protection; Africa and Japan want a review of the agreements on TBTs and other NTBs, which must be based on transparent international standards; EU proposes that non-trade concerns be considered in the negotiations as regards to tariffs as well as domestic and export supports	All the major parties support the principle of SDTs for LDCs in order to address key internal policy issues; Africa wants to make the SDTs mandatory; Japan raises the issue of multifunctionality of agriculture, which must be considered as another form of SDTs.	Africa and Japan want a review of anti-dumping rules in order to prevent the abuse of the mechanism; EU wants special safeguards to be maintained; U.S. has not yet expressed a clear position on the issue	All agree on the need to provide some technical assistance to LDCs in order to help them meet their commitments, including the issues of trade facilitation and custom valuation. African countries also expect the assistance to help strengthen their competitiveness.

AMS = Aggregate Measurement of Support—DCs = Developed Countries—LDCs = Least-Developed Countries—NTB/TBT = Non Tariff Barriers/Technical Barriers to Trade—SDT = Special and Differential Treatment—SPS = Sanitary and Phytosanitary Standards—STE = State Trading Enterprises—SS = Special Safeguards—TRIMs = Trade-Related Investment Measures—TRIPs = Trade-Related Intellectual Property Rights—TRQ = Tariff-Rate Quota

West African countries consider the issue of tariff escalation as crucial to the diversification of their economies, and they, therefore, expect to see some improvements in that respect. Konandreas and Greenfield (1996) have observed a reduced tariff escalation in the early years of the post-Uruguay Round period and anticipated that this change could offer new opportunities for diversification to developing countries. However, in a recent statement on market access,<sup>6</sup> a group of developing countries — including four from Sub-Sahara Africa — noted that despite slight reductions in tariff escalation observed in the post-Uruguay period, most of the escalation, unfortunately, persists and has perverse effects. Tariffs are disproportionately escalated once the exporting countries add values to primary commodities. Lindland (1997) particularly stressed that on the average, developed countries still charge a 17% tariff difference between processed products and primary commodities from developing countries. This situation is believed to shift value-adding processing activities away from developing countries (Salinger, Amvouna, and Savarese 1998). The Cairns Group, based on UNCTAD's research results,<sup>7</sup> provides a relevant illustration of this case. The statement indicates that developing countries share 90% in the world markets for cocoa beans, 44% for cocoa liquor, 38% for cocoa butter, 29% for cocoa powder, and 4% for chocolate.

### **3.2. Tariffication and Tariff-rate Quotas**

The process of tariffication, as defined above, consists of converting agricultural quotas into tariffs or custom duties. The tariffication process is designed to ensure that the new tariffs provide an equivalent (often much higher) level of protection to importing countries. Importers must, however, grant a new access opportunity to exporters in the form of tariff-rate quotas.<sup>8</sup> The access should not only maintain the pre-agreement trade volumes, but also increase the volume by an amount of at least 3% (to be increased to 5%) of the domestic consumption of the in-quota product (Table 3). The application of tariff-quotas measures consists of charging lower nonprohibitive duties on specified quantities and higher duties for quantities that exceed the quota.

The system of tariff-rate quotas, designed to ensure continued access to traditional exporters following tariffication, is a source of particular complexity (Hertel and Martin 2000). As early as 1998, Normile et al., warned that the tariffication of nontariff barriers allow too much flexibility, which leads to tariffs levels that provided higher protection than had previously existed. The post-Uruguay Round period was particularly marked by such drastic increases in out-of quota

---

<sup>6</sup> See WTO document G/AG/NG/W/37 (September 28, 2000)—Statement on market access submitted by Cuba, Dominican Republic, Salvador, Honduras, Kenya, India, Nigeria, Sri Lanka, Uganda, and Zimbabwe.

<sup>7</sup> See WTO document G/AG/NG/W/60 (29 November 2000)—Statement by Australia on behalf of the Cairns Group at the Fourth Special Session Of The Committee On Agriculture, 15-17 November 2000. The UNCTAD's research may be found in UNCTAD (1999).

<sup>8</sup> A tariff-rate quota is a combination of tariff and quotas. Imports are taxed at an in-quota tariff rate as long as the volume is lower than a specified quota. An out-of-quota (and often higher) tariff is applied when the imports exceed the quota.

tariff rates, a practice strongly criticized and condemned by West African countries (Tables 4 and 5). These excessive tariff rates, known as tariff peaks, are still a matter of concern in most developing countries, including Sub-Saharan Africa.

In their statement submitted to WTO,<sup>9</sup> the coalition of developing countries confirmed the importance these countries attach to the reduction of tariff peaks. The statement points out that the post-Uruguay Round profile of many developed countries is characterized by high tariff rates on temperate products and lower rates on tropical products. The report further states that tariff rates in agriculture are most common in three product groups, namely major food staples, fruits and vegetables, and processed food. Earlier investigations by FAO (1999) and OECD (1999) confirm these statements. The FAO study gives the example of 1997, when there were 701 tariff peaks in the European Community (EC), 514 in Japan and 195 in the U.S., corresponding to 26%, 27%, and 11%, respectively, of the tariff lines in each of these countries. The OECD study finds that in 8 out of 10 OECD countries, the border protection to agriculture was higher in 1996 than in 1993, the EC being considered as one country.

Another tariff-related area posing enormous problems to LDCs refers to special safeguards, which we discuss under general contingency measures in the next section.

### **3.3. Contingency Measures**

Contingency measures include antidumping, countervailing duties, and safeguards. They are a set of measures that a country may temporarily use if its protection levels are higher than bound tariffs (see Table 6 for bound tariff rates for West African countries).

Provisions on antidumping allow countries to adopt protection measures against exporters that sell at unfairly low prices, if proof of actual or potential material injury to the importing country is established. While this might seem normal, there is an overwhelming tendency to abuse antidumping measures for protectionist reasons (Heynen 2001). The danger for potential misuse of these measures has always fueled contentions in international trade relationships. African countries and Japan drew attention to the issue at the third WTO Ministerial Conference in 1999, as indicated in Tables 4 and 5.

Countervailing duties are used in situations when subsidized products in an exporting country cause (or threaten to cause) "material injury" to a domestic industry producing a like product. Application of safeguard measures is restricted to situations where the investigated imports cause "serious injury" to a domestic industry producing like or directly competitive products.<sup>10</sup> To use antidumping and countervailing duties, a country must confirm the existence of an injury (or of the threat of injury), following several investigation rules and procedures. The procedural requirements are much simpler in the case of safeguards, which are other forms of duties.

---

<sup>9</sup> Op. cit. see footnote 10.

<sup>10</sup> Details are available on the WTO web page, [www.wto.org](http://www.wto.org)



**Table 6. Bound Tariff Levels for Agricultural Products in West Africa and Chad**

Country	Average Bound Tariff Rates	Applied Tariff Rates
<b>Countries with High Bound Tariff Levels</b>		
Benin	119	10
Burkina Faso	150	
Côte d'Ivoire	215	17
Gambia	120	
Mali	110	
Niger	100	
Nigeria	230	47
Senegal	180	44
<b>Countries with Moderate Bound Tariff Levels</b>		
Chad	80	
Ghana	85	22
Guinea Bissau	65	
Mauritania	90	
Sierra Leone	60	
Togo	83	
<b>Countries with Low Bound Tariff Levels</b>		
Guinea	40	

Adapted from FAO 2000

According to a FAO study, the EU applied 26 price-based and 47 quantity-based special safeguard measures between 1995 and 1998. The corresponding figures in U.S. are 24 and 6, respectively, and in Japan the same figures were 4 and 73, respectively.<sup>11</sup> EU, Japan, and U.S. accounted for more than 70% of price-based and almost all quantity-based special safeguards in the world over the same period (FAO 2000). The study also estimates that over 6,000 tariffs may potentially come into use as safeguard measures in the world. Besides the three major partners mentioned earlier, the use of special safeguards is likely to be concentrated in Europe, particularly in Switzerland, Norway, Poland, Ireland, and the Czech Republic. In Africa, countries that would potentially use special safeguard measures are South Africa, Botswana, Swaziland, Morocco, Namibia, and Tunisia.

The right to use safeguard measures is reserved to countries that have “tariffed” their quota system. It follows that most countries in Sub-Sahara Africa are not eligible to use this instrument while the bulk of their exports may be confronted with special safeguards in developed countries. The use of special safeguards is, so far, concentrated on products such as meat, cereals, fruits and vegetables, oilseeds, vegetable oil, and dairy products. The FAO study cited above has pointed out that while special safeguards and other contingency measures may have offered new trade opportunities (because they are used in conjunction with tariff-rate quotas),

<sup>11</sup> These numbers are based on 8-digit level of classification except for Japan where the data was based upon 9-digit classification.

their implementation is usually not transparent. In general, exports from developing countries may enjoy limited exemptions from safeguard measures, provided imported quantities are below a specified level of total imports in the product of interest.

## 4. DOMESTIC SUPPORT

Domestic support provisions are divided into those that are subject to reduction commitments (amber box) and those that are exempt from such reductions. Exempt support measures may be grouped into “green box” and “blue box” policies that are considered to have minimal distortions on agriculture. Green box policies refer to government services such as research, disease control, infrastructure development, food security, direct income support, assistance to restructure agricultural production, and direct payments under environmental and regional assistance programs. Blue box supports include policies involving expenditures below the *de minimis*<sup>12</sup> amount (5% for developed countries, 10% for developing countries, and unrestricted for the least developed countries—see Table 7). They also include direct payments to farmers under eligible production-limiting programs, as well as government assistance to agricultural and rural development in developing countries.

**Table 7. Overview of Commitments on Domestic Support from the Uruguay Round Agreement on Agriculture**

Category/Item	Developed Countries (DCs)	Developing Countries (Excluding LDCS)	Least Developed Countries (LDCS)
<b>Categorization</b>	Amber box*, green box** and blue box policies***	Same as DCs	Same as DCs
<b>Level of support</b>	Reduce 20% over six years	Reduce 13.3% over 10 years	Exempt
<b>Aggregate Measurement of Support (AMS)</b>	<i>De minimis</i> provision exempts commodity if less 5% of total value of production	<i>De minimis</i> provision exempts commodity if less 10% of total value of production	Not applicable

Adapted from Regmi, Trueblood, and Shapouri 2000

\* The “amber box” contains all domestic support measures that are subject to reduction commitments under the Agreement on Agriculture. They are considered to have direct impacts on production and trade and must, therefore, be cut back.

\*\* The “blue box” contains policies that are considered to have a minimum effect on trade. These policies include some direct payments to farmer (e.g., for acreage reduction) as well as policies included in the amber box, provided the support level is less than the *de minimis*, that is, 5% and 10% of the total value of the product for the developed and developing countries, respectively.

\*\*\* The “green box” regroups policies that are considered to have no or little impacts on trade, and are consequently not subject to reduction commitment. They primarily include government services, such as research, regulation and infrastructure.

<sup>12</sup> *De minimis* is the maximum level of support that can be provided based on the total value of the product(s) supported. Blue box supports must not exceed 5% of the value of a product in developed countries (10% in developing countries). The least developed countries are exempted of these measures.

As regards domestic support policies subject to reduction commitments (amber box), developed countries are required to reduce the level of their aggregate support by 20% by the year 2000 and developing countries 13.3% by the year 2004. The least developed countries are not to exceed the annual aggregate support level established in the base period 1986-1988. Aggregate support, as defined in the agreement, is the annual level of support expressed in monetary terms, thus referred to as Aggregate Measurement of Support (AMS). This includes both product specific and non-product specific support (Yap 1996).

It is extremely difficult to evaluate how these commitments have been implemented over the past six years, as several countries have not notified<sup>13</sup> their aggregate support levels beyond 1997 or 1998. There is, however, some evidence of a repackaging of domestic support practices away from the restrictive amber box measures towards the less or not restrictive blue and green box policies (WTO 2001). This is commonly known as the “reinstrumentation” (WTO 2001) of domestic support programs, a practice that will clearly limit the scope of the reforms anticipated in the support programs.

African countries generally have null or even negative AMS because most of these countries undertook liberalization reforms (under the structural adjustment programs) before concluding the Uruguay Round Agreements. FAO (2000) explains that most countries in Sub-Sahara Africa did not notify their domestic support measures for several reasons, including: (i) domestic support measures are lower than allowed; (ii) there are no supports subject to reductions; and (iii) there is a lack of capacity to evaluate and notify different types of support. The last reason falls under the issue of technical assistance, which will be discussed below.

As in the case of tariff barriers (Tables 4 and 5), African countries agree that agricultural subsidies in developed countries should be abolished, as they believe this would shift to the South the production in industries that are no longer efficient in the North. In general, all parties—particularly Africa, the U.S., and the Cairns Group—are in favor of reducing domestic supports. Thus, the U.S. proposes that these policies be simplified into exempt supports (which are minimally trade-distorting) and nonexempt supports (which are subject to reduction commitments). However, the EU, and Japan, while desiring more reforms in domestic support policies, stress the need to maintain the current three categories in order to properly address the Multifunctionality<sup>14</sup> and other nontrade concerns in agriculture. For example, support to rural rice producers in Japan responds to a traditional and cultural need, which forms the cornerstone of social stability in the country. African countries also agree that it is necessary to use domestic supports to tackle internal policy issues, but only to respond to their critical development needs and to reduce poverty. An official Senegalese document (MPSG 1999) forcefully argues that domestic support may have little or no distorting effects on the world market. One could question the relevance of such a position for a country such as Senegal, which does not have the necessary means to match the support levels of developed countries.

---

<sup>13</sup> Countries are required to report (notify) the level of their domestic support to the Secretariat of WTO.

<sup>14</sup> Multifunctionality is often used in reference to the different roles agriculture plays in a given country’s economy. These roles include, but are not limited to, ensuring food security, protecting the environment, managing structural adjustment programs, supporting rural development, and alleviating poverty.

The level of domestic support in OECD countries in the post-Uruguay Round period is still high and was estimated to 280 billion dollars in 1998 (MPSG 1999). In general, the transmission of domestic supports to the world market may result in distorted prices and unfair competition between countries. However, it is believed that domestic support measures implemented in developed countries have reduced the world price for some basic commodities, especially food products. Since most West African countries have a negative trade balance in products such as rice, sugar, and wheat, it is reasonable to view any support to these products as income transfer from governments in support-giving countries to West African consumers. Equally, one could argue that the artificially low world prices resulting from domestic support measures has encouraged imports, and thus created a disincentive that weakened the region's capacity to domestically supply these key products. The most relevant question today is to know to what extent reductions in domestic support measures, as committed under the WTO, would affect the agricultural production and food consumption in West Africa.

West Africa could face new challenges of food insecurity that would inevitably arise from a possible relaxation of domestic support policies in developed countries. Given the current economic situation in the region, there appears to be little room to ensure food security through growth in agricultural productivity and a more effective market coordination, unless states intervene and support producers in relation to input, training, research, infrastructure, and assistance to commercialization. The limited progress made in agriculture over the past years suggests that there is a need to increase productivity-enhancing investments in the sector while developing institutional mechanisms to improve the performance of the marketing system. These interventions may conflict with budget priorities followed under the structural adjustment programs (SAPs), but they are necessary and thus require more attention.

The Sahelian countries would also need to develop their untapped irrigation potentials in order to achieve a more sustainable growth in food production through enhanced productivity and reduced yield variability. The *Conseil Inter-état de Lutte contre la Sécheresse dans le Sahel* (CILSS) is currently developing a priority water management program for a sustainable agriculture in the region. Preliminary budget estimates indicate that the program will cost about 2 billion U.S. dollars.

## 5. EXPORT COMPETITION

The Agreement on Agriculture prohibits the introduction of new agricultural export subsidies while requiring countries to reduce both the volume of, and the budgetary outlays corresponding to, the existing subsidies. Developed countries are expected to reduce the governmental export subsidy budget by 36% and the volume of subsidized exports by 21% over six years from the base level of the period 1986-1990. Developing countries committed a 24% reduction in the value and 14% in the quantity of subsidized exports over 10 years starting from the same base (Table 8). They are also allowed to subsidize transportation and marketing costs on exports during the first six years of the implementation period. With regards to the least developed countries, they are exempted from any reduction commitment but are not allowed to increase the level of their export subsidy. The issues of export credits and guarantees (or insurance) are open for further negotiations (Table 8).

Similar to the case of domestic support, the use of export subsidies in the least developed countries, if any, was limited and reduced to actions aimed at supporting marketing and transport costs on exported products. Instead of subsidy, the feature of most Sub-Sahara African economies was to tax exports as many, including Schiff and Valdés (1992), have noted. This was done directly through export taxes and levies, or indirectly through exchange rate overvaluation. Currently, the utilization of these policy instruments in West Africa is considerably reduced following the implementation of successive adjustment programs and devaluations.

Most West African countries continue to face serious difficulties balancing their budget and cannot afford to provide subsidies to their exporters in the foreseeable future. They have no means to match the level of support in developed countries, where subsidies are used both to support farmers' incomes and gain strategic shares on the world market. West African countries are seriously concerned and expect that corrective measures will be taken regarding the latitude given to developed countries to use export subsidies so long as these are within the range of their commitments.

**Table 8. Overview of Commitments on Export Subsidy from the Uruguay Round Agreement on Agriculture**

Category/Item	Developed Countries (DCs)	Developing Countries (excluding LDCs)	Least Developed Countries (LDCs)
<b>New subsidies</b>	Disallowed	Disallowed	Disallowed
<b>Reduction of old subsidies</b>	Reduce value by 36% and quantity by 21% over six years from base (1986-90)	Reduce value by 24% and quantity by 14% over 10 years from base	Exempt, but no increases
<b>Credit guarantees</b>	To be negotiated further	Same as DCs	Same as DCs

Adapted from Regmi, Trueblood, and Shapouri 2000

Apart from European Union countries, all trade partners considered in this report strongly support the elimination of export subsidies (Tables 4 and 5). There is a lot of speculation regarding the effects the elimination of export subsidies would have on world prices. While some contend that this would result in an increase in world prices, and ultimately in an increased food insecurity in Africa (Sarris 2000), others believe that the elimination would materialize in terms of reduced custom duties that will leave price levels unchanged. The elimination of export subsidies could also potentially lead to increased demand for foreign exchanges for the food bill, as well as a decrease in budgetary receipts. It is also believed, as was the case with domestic support, that a reduction in export subsidies would stimulate agricultural production in the least developed countries through increased productivity. The debate remains widely open and empirical works will be needed to clarify and document the West African position on export subsidy issues.

Closely related to export subsidy concerns are the issues of export credits and insurances, State Trading Enterprises (STEs), export restrictions, and food aid. African countries and the Cairns Group strongly support the elimination of export credits as well as an increased discipline on other export financings. They argue that these different support measures create unfair competition between their countries and other countries that heavily utilize these mechanisms to increase their exports. The U.S. calls for more discipline on STEs and specifically proposes that export credit issues be negotiated first between the OECD countries. The EU and Japan are also in favor of reforming the STEs and want to see reductions in export credits and more transparency and predictability in export restrictions. The need not to abuse food aid is also stressed by the EU and African countries. This is a criticism specifically directed to U.S., which is accused of using food aid as disguised form of export subsidy. However, in practice, most African states have an ambiguous position on food aid, as ultimately they could limit it if they wanted to.

Export support policies tend to be easier to track than internal supports, so they have received a lot of attention over the past six years and this attention is likely to continue in the future. Africa will have to elaborate more on the role of STEs in reducing poverty and other basic development goals in their countries. The continent must also stress, as Nigeria suggests, the need to understand and regulate the role of multinational firms in the global food system.

## 6. TECHNICAL REGULATIONS

Technical regulations, mainly the Sanitary and Phytosanitary Measures (SPS), constitute the most serious nontariff barriers faced by exports from Sub-Sahara Africa. In general, regulations, standards, testing, and certification procedures vary widely among countries, and this creates serious difficulties for producers and exporters. The aim of the Agreement on Technical Barriers to Trade (TBT) is mainly to ensure that trade regulations do not constitute a disguised form of protection. The Agreement allows countries to adopt their own standards but also encourages them to use appropriate international standards when possible.<sup>15</sup> Technical regulations have a direct implication for **trade facilitation**, that is, the simplification and harmonization of international trade procedures. **Trade procedures** are defined, according to WTO texts, as “activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade.” Facilitating the sampling, testing, and certification procedures on agricultural exports will be relevant in this respect for African countries.

However, most propositions to facilitate the movement of goods and services between countries have so far collided along North-South interest lines (Tables 4 and 5). Custom regulation issues seem to constitute the most important concern developed countries face as they trade with the developing and least developed countries. For the Northern countries, customs procedures in the South are lagging compared to the rapid intensification of world trade. For example, Messerlin and Zarrouk (2000) report that world imports costs are 7-10% higher than what they should be without bureaucratic red tape in customs procedures. Also, importers and exporters in the North face significant administrative inefficiencies in developing countries, particularly in the interregional transport sector. Developing and the least developed countries observe that the most advanced economies adopt increasingly demanding technical regulations, irrespective of the special development needs and the level or the technological development in poor countries. Often cited regulations cover the rules of origin,<sup>16</sup> the regulations on labor, environment, and SPS. Poor countries also perceive these regulations to be complex, demanding and inconsistent across situations, and that, in practice, they become disguised forms of protection. Developing countries, therefore, suggest that a clear distinction be made between mandatory rules based on scientific standards, and optional guidelines based on individual countries’ laws.

The temptation to abuse technical regulations has become particularly high, as the tariffication process is increasingly dismantling the traditional nontariff protection instruments, such as quotas. African countries and Japan have also pointed out that the WTO agreements on Technical Barriers to Trade (TBTs) lack transparency and predictability and these shortcomings

---

<sup>15</sup> Relevant international standard bodies would be the FAO/WHO Codex Alimentarius Commission (food safety), the International Animal Health Organization (animal health) and the FAO’s Secretariat of International Plant Protection Convention (plant health).

<sup>16</sup> The rules of origin are the criteria used to determine where a product is made. The feeling among the least-developed countries is that these rules are not transparent. The rules of origin are necessary to implement a wide range of trade policies such as quotas, antidumping, countervailing duties, preferential tariffs, and so on.



need to be addressed (Tables 4 and 5). They propose that attention be given to international standards that are accessible to all.

The SPS agreements are of particular interest to developing countries in general, and particularly to West African countries. These agreements mainly regulate the acceptable level of residual pesticides in products and the production processes, as well as the inspection rules of products. As mentioned earlier, African countries support the idea that SPS and TBTs rules should be accessible to poor countries, as these agreements anticipate that developed countries will set their standards while considering special needs of developing countries, particularly their needs in terms of trade and development.<sup>17</sup> Unfortunately, many least developed countries noted that developed countries have imposed arbitrarily high standards, regardless of the climatic, geographic or fundamental technological problems faced by developing countries.

The most common practical problems faced by the least developed countries in terms of technical standards are highlighted in UNCTAD (2000). These include: (i) the lack of timely and accurate information on new standards; (ii) the lack of scientific data for specific thresholds or limit values; (iii) the inconsistent application of procedures; (iv) the uncertainty due to rapidly changing environmental and sanitary requirements in overseas markets; (v) the variation in standards and regulations from one market to another; and (vi) the costs and difficulties of testing and verification procedures.

Thus, the least developed countries view the SPS agreements as cumbersome in a number of ways. For example, EU regulations on aflatoxins have affected the Senegalese groundnut sector (Box 2 in the Annex). Also, West African countries face tremendous difficulties meeting technical requirements of the U.S. markets (Table 9). It appears, from Table 9, that from February 2000 to January 2001 the U.S. Food and Drug Administration (FDA) issued 175 detention orders on exports from West African countries. Ghana, Côte d'Ivoire, and Nigeria are the three countries most affected by these measures. These numbers may seem small if compared to the total annual detentions in the U.S. during the same period, but they illustrate the difficulty West African countries encounter in their attempt to export commodities to markets in developed countries. They also justify the need to increase technical assistance and capacity building in trade related areas in the region. Most of the detention reasons indicated in Table 9 are simple technical requirements that could have been avoided, were the exporters adequately trained or informed.

The least developed countries have also denounced the imprecision in some of the legal texts on technical regulations. This vagueness allows for loose interpretation of the regulations, and thus offers many opportunities for abuse. In this respect, many West African countries voice clearly that the conformity assessment procedures<sup>18</sup> must be simplified because they constitute

---

<sup>17</sup> Article 10:1 of the Agreements of SPS and Article 12 of the Agreement on TBTs.

<sup>18</sup> The conformity assessment procedures are part of the Agreements on Technical Barriers to Trade, particularly in its Articles 5 to 9. The aim of these procedures is to assess whether a traded good complies with technical standards. These procedures must not discriminate between domestic and foreign firms.

**Table 9. Number of Detentions Issued by the U.S. Food and Drug Administration (FDA) on Imports from West Africa: February 2000-January 2001**

Country	Number of Detentions	Common Products	Common Reasons for Detentions
Benin	1	Not indicated	Not Indicated
Burkina Faso	0		
Chad	0		
Cape Verde	0		
Côte d'Ivoire	57	Cocoa beans, Annatto seeds	Filthy, salmonella, unsanitary
Gambia	10	Frozen fish	Filthy
Ghana	62	Medicines, canned foods (cocoa butter, soups, fish), dry/smoke fish, oils, cosmetics	Unlisted, unapproved, unregistered manufacturer, salmonella, misbranding, labeling
Guinea	2	Tinned custard	Unregistered manufacturer
Guinea Bissau	0		
Liberia	0		
Mali	0		
Mauritania	0		
Niger	0		
Nigeria	42	Dry fish (tilapia), cosmetics	Poisonous, unapproved, restricted importation
Senegal	0		
Sierra Leone	0		
Togo	1	Vegetable	Unsafe additive
West Africa & Chad	175		

unnecessary financial burden on their fragile economies. They express their need for an effective technical and financial assistance in order to meet requirements of WTO standards. In MPSG (1999), Senegal makes basic recommendations on ways to reduce standard-related distortions in world trade. Minimal conditions include: (i) a more rapid and regular notification and discussion of standards set by developed countries;<sup>19</sup> (ii) increased participation of African countries to standards setting within international organizations; (iii) technical cooperation in order to improve the evaluation procedure of conformity assessment; and (iv) mutual recognition of national grades and standards authorities. In addition to these four recommendations, it would also be useful to create a centralized database on all SPS standards that would contribute substantially to fill the information gap in the field.

<sup>19</sup> Article 2, Annex B of the Agreements on SPS suggests that a “reasonable” period be observed between the introduction and the enforcement of new rules. However, this term “reasonable” has different interpretations in developed countries, where variable time frames are applied (MPSG 1999). Doha 2001 further specifies the meaning of “reasonable,” which now stands for “at least six months.”

Finally, it seems essential that the least-developed countries take note of the demand-driven rapid changes in technical requirements in developed countries. There is, indeed, increasing demand for more demanding, technical, social food safety, and environmental standards from consumers in developed countries. These are inevitable dynamics that will decide the future of technical standards in the global trade. With the increasing importance of multinational firms in the world trade, any expansion and diversification of West Africa's export market will require that issues related to standards be tackled seriously. A realistic negotiation strategy cannot ignore these ongoing changes, but must also ensure that the new privately developed standards do not violate WTO agreements. This is certainly a very tough task in a world increasingly pushed into competition, but West African countries must find a way to bring their smallholder-dominated production to meet the challenges of more and more demanding standards.

## **7. TECHNICAL ASSISTANCE AND SPECIAL AND DIFFERENTIAL TREATMENTS**

The need of Special and Differential Treatments (SDTs) for the least developed countries arises from the asymmetry in the level of development between WTO members. For West African countries, it is important to maintain the asymmetrical nature of SDTs, a necessary condition for a smooth and adequate transition into the global economy. It is a general feeling among African countries that the SDTs for the least developed countries contained in many WTO Agreements have not been implemented.

All members recognize the numerous difficulties faced by African countries in complying with global agricultural trade reforms, and this is acknowledged under the SDTs regulations. They support the idea of providing some kinds of technical assistance to the least developed countries to help them increase their understanding of the WTO agreements, improve their capacity to use the global trading system, and enhance their chance for economic and social development. They also agree to give flexibility to African countries to use support measures to address development and welfare needs.

African countries, themselves, expect that the assistance should help them strengthen their competitiveness, but it is not clear how this would be done. The African proposal emphasizes the need to make technical assistance binding under the WTO agreements, however, this is not likely to occur, considering the silence of other countries on the issue. Specifically, African countries propose that the assistance should be directed towards building local expertise in global trade, strengthening trade infrastructure, and addressing the so-called supply-side constraints.<sup>20</sup> The assistance must also help them to overcome transitional costs and achieve development goals.

Over the past few years, a number of international institutions have contributed to trade capacity building in Sub-Sahara Africa—for example through training, dissemination of information and regional seminars—but the needs remain enormous. The WTO annual budget allocated to technical assistance is less than 0.6 million U.S. dollars. The bulk of the technical assistance money, about 8.8 million U.S. dollars in 1999, comes from voluntary contributions from WTO members. These contributions might not be accessible to all countries. The scarce technical assistance money is likely to be most useful if it is spent to assist LDCs in drafting legal texts that comply with WTO requirements, and to support locally technical expertise in SPS and other technical regulations.

The maintenance of asymmetric and preferential agreements between the ACP and the EU may also be viewed as a form of SDT. The decision by Doha 2001 to uphold the provisional ACP-EU agreements up to 2007 is perceived by many West African countries as a positive outcome. Whether or not these trade preferences promote West African trade remains, however, an ambiguous question.

---

<sup>20</sup> Supply-side constraints refers to the different institutional limitations that preclude a poor country from taking advantage of a market access opportunity. For example, Mali exported fish to Europe via Senegal in 2001.

The concept of SDTs is becoming increasingly confusing, as countries such as Japan are proposing Multi functionality-related issues as beneficiary candidates of the special and differential treatments. In addition, Regmi, Trueblood, and Shapouri (2000) report that the SDTs extended to African countries face an increasing opposition from middle-income developing countries such as Argentina and Brazil. These countries support unconditional freer trade in agriculture and, thus, consider SDTs to reduce the economic benefits of trade reform.

West African countries have consistently shown a consensus regarding the provision of technical assistance and SDTs. They also present many common views regarding other elements in the WTO agreements, as shown in Tables 4 and 5 and discussed throughout the report. It appears that there may be some economies of scale in gathering and processing information aimed at improving the region's importunity in the global agricultural trade. The active participation of the region in the formulation of global trade policy necessitates qualified human resources. There are about 260 West African representatives in international organization in Brussels, Geneva, and New York (Table 10).

**Table 10. Number of WTO Delegates from West Africa and Chad Resident in Geneva, Brussels, and New York in the First Half of 1999**

Countries	Geneva		EU Brussels	UN New York	Total
	UN	WTO			
Benin	0	0	10	10	20
Burkina Faso	0	0	6	6	12
Chad	0	0	1	3	4
Côte d'Ivoire	2	8	11	9	30
Gambia	0	0	5	8	14
Ghana	3	9	7	10	29
Guinea	2	3	5	10	20
Guinea-Bissau	0	0	5	4	9
Mali	0	0	4	5	9
Mauritania	1	1	4	4	10
Niger	0	0	4	2	6
Nigeria	6	10	8	26	50
Senegal	2	9	6	11	28
Sierra Leone	0	0	3	6	9
Togo	0	0	8	6	14
West Africa and Chad	16	40	87	120	263

Adapted from Blackhurst, Lyakurwa, and Oyejide 1999

## 8. CONCLUDING REMARKS

The main message from this review is that the world in the 21<sup>st</sup> century is irreversibly engaged in a multilateral trading system. However, six-year implementation of WTO agreements reveals that important disagreements exist between member countries. Particularly, most of the least developed countries, including those of West Africa, find themselves increasingly marginalized by the global commercial tide. It is expected that WTO will continue the work towards meeting one of its key objectives, in particular, ensuring that the least developed countries have a fair share of the growth in global trade.

While WTO's reports consistently indicate an increase in the global trade volume in the post-Uruguay Round era, efforts to liberalize the world agricultural trade are still limited by policies such as tariff peaks and tariff escalations, domestic supports and export subsidies, as well as nontariff barriers. There is a little quantitative evidence on the impacts of these various measures on the agricultural production and trade in West Africa. This gap needs to be filled in subsequent studies.

In general, West African and other least-developed countries have little or no control over domestic agricultural policies in developed countries. Poor countries may, in principle, use the WTO dispute settlement mechanism in order to seek fairer treatments, if they are denied access to markets in developed countries. However, they will need important (often nonavailable) financial and human resources to prepare and follow-up litigations. Also, access to foreign agricultural markets may be made difficult through disguised means, as discussed earlier in the report.

The compliance with WTO Agreements in developed countries may be limited or delayed by persistent lobbying of powerful farmers' organizations. These organizations in Europe and Northern America have their own agendas, which include the maintenance or even the increase in current support levels. West African countries must take note of this fact and use not only the WTO forum, but also other diplomatic conduits that will increase market access opportunities for the region. In particular, some developed countries have also made provisional market concessions to the least developed countries. Examples of such concessions include the U.S. AGOA legislation or the European "Everything but Arms" agreements. These are potentially positive initiatives for the West African region, and there is a need to investigate their effectiveness in improving the market access and competitiveness of countries in the region.

The liberalization of world agricultural markets is not a short-term task. West African countries are wise not to count on any sizeable increase of their share in the global agricultural trade in the near future. This discouraging reality should, however, not prevent the region from intensifying its targeted trade liberalization efforts, especially in relation to intra-regional trade. The region may also make proper use of the WTO special and differential provisions regarding, for example, domestic supports. Countries in the region may invest in agricultural research, market information systems, infrastructure, and productivity-enhancing technologies. Market access is certainly meaningless if countries lack the necessary capacity to produce goods or services demanded by the markets. Investments in technologies and in capacity building are, therefore, central to the short-term survival and the long-term competitiveness of the region.

The effective provision of special and differential treatments and trade-related technical assistance to the least-developed countries is a puzzling question. If sufficiently provided, technical assistance may improve the competitiveness of poor countries which will compete in the same markets with richer countries. The international community must honestly answer this following question: To what extent are richer countries willing to see competitive poor countries emerge? Civil societies in both rich and poor countries can influence the actions of governments around the world for a more equitable and mutually beneficial multilateral trading system. The West African economy will continue to be substantially dependent on international trade, and it is hoped that the region will take appropriate actions in order to translate trade opportunities into better living conditions for the poor.

## ANNEX

### **Box 1. Fiscal and Commercial Policies in the West African Economic and Monetary Union (WAEMU)**

The fiscal and commercial policies in WAEMU countries were characterized by a complicated tax structure aimed at protecting the industrial sector while providing a substantial income to governments. There were also important disparities between countries. In the early 1980s the sources of government revenue were heavily weighed toward indirect taxes, especially taxes on international trade. The tax system was heavily dependent on specific excise, export and import taxes and was characterized by both regular and ad hoc large tax exemptions to sectors whose imports and domestic turnover accounted for significant share of industrial and commercial activity (IMF 1999a). In conjunction with SAPs in late 1980s, a comprehensive tax reform aiming at improving tax administration was attempted in most WAEMU countries. Key measures included the strengthening of the customs administration and control as well as the reduction of ad hoc exemptions. The reform also targeted the simplification of the tax system as well as the broadening of the tax base. The current fiscal regime concerns mainly the common external tariff (CET) and the value-added tax (VAT).

#### **Common External Tariff**

Fiscal policy reforms took a regional dimension in late 1997, when WAEMU decided to proceed with the initiative for a union-wide CET with the objective to put in place by January 1, 2000, a tariff structure consisting of four rates: 0%, 5%, 10%, and 20%. The initial phase of the CET began July 1, 1998, when all imports duties were subject to an overall ceiling of 30% and tariffs on intra-community trade were reduced by 60%. A second phase, implemented six months later (January 1, 1999), limited the number of tariff rates to four: 0%, 5%, 10%, and a temporary maximum rate of 25%. In addition, provisions are made for a statistical tax that would not exceed 1% (IMF 1999a). The four tariff rates applicable since January 2000 correspond to product categories 0, 1, 2, and 3, respectively. Category 0 is composed of a limited number essential social goods; Priority goods, basic primary commodities, equipment goods and specific inputs form Category 1; Category 2 groups inputs and intermediary goods; and Category 3 covers final consumption goods as well as other goods not mentioned in the three other categories.<sup>21</sup>

In addition to the CET, which corresponds to the custom duty (DD), imports are subject to the solidarity tax (PCS), the statistical tax (RS) and, when applicable, the variable tax on imports (TCI) and the decreasing tax of protection (TDP). The TCI is applicable to agricultural, agro-industrial, livestock and fishery products with the exception of fish and fish-based products. The aim is to compensate “important” protection losses that result from the erratic price variation on

---

<sup>21</sup> More information on the tariff system within WAEMU is available on [www.izf.net](http://www.izf.net).



the world market. The meaning of “important” was left unexplained. The TDP applies to industrial and agro-industrial products with the aim to compensate important protection losses associated with the implementation of the CET. Products proposed to benefit from the TDP are: concentrated milk, vegetable oil, sugar, concentrated tomato, cigarettes, detergent powder, meat products, batteries, bags in jute and polypropylene. Concerning the PCS and RS, they are each applied at the rate 1% of the c.i.f value of imports. Reforms in relation to the CET also include from January 1, 2000, a full tariff dismantling on intra-WAEMU trade in agricultural goods and approved industrial products of local origin. Authorities will endeavor to limit the application of the TDP and TCI (IMF 1999b).

### **Value-Added Tax**

In 1998, the WAEMU Council of Ministers adopted, in the form of regional directives, a program to harmonize the VAT and excise regulations. The VAT regulations aim at (a) implementing a single rate (ranging from 15% to 20%), (b) broadening the VAT base (e.g., by extending it to all services, agricultural inputs, and petroleum products), (c) reducing the number of exemptions and improving the exemption control, and (d) improving the refund procedures. Regulations regarding excise taxes are aimed at (a) limiting the number of goods subject to these taxes, (b) implementing *ad valorem* rates, (c) harmonizing excise rates, and (d) unifying the excise rate for domestically produced and imported goods. Each member country is expected to introduce these measures into its legislation by January 2000 (IMF 1999c). There is a need to evaluate how these measures have been implemented since their entry into force.

**Box 2. Challenges to the Groundnut Sector in Senegal (Adapted from MPSG 1999)**

Groundnuts have traditionally played a central role in the Senegalese economy by providing a living to people both in rural and urban areas, supporting the production of local industry and procuring foreign exchange to the country. The implementation of the new agricultural policy since 1985 progressively resulted in a quantitative and qualitative depletion of seed capital, as well as a drastic reduction in the use of fertilizers.

On the main export markets, notably the U.S.A. and EU, there is a decreasing trend in the consumption of groundnut oil while the use of other vegetable oils like sunflower, and rapeseeds appears to be increasing. Oilseed production on these markets receives important domestic support, in the form of direct payments of the “blue box” policies. These measures increase the competitiveness of domestic oilseed production in these countries, and thereby negatively affect export from traditional exporters.

Senegal directs about 90% of its groundnut exports towards the EU market. In July 1998, a stricter regulation<sup>22</sup> concerning the maximum aflatoxin contents in exported groundnut was enacted and supported by a new and reinforced directive on sampling procedures.<sup>23</sup> These new norms are based on scientific evidence that cannot be easily challenged within WTO, as Senegal itself faces serious health issues that may be linked to aflatoxin. However, the sampling and analysis procedures may be reassessed and Senegalese authorities may negotiate more flexibility in applying the new requirements to their exports, arguing the specific climatic conditions in the Sahel. The compliance with stringent technical norms increases unit cost of products and reduces their competitiveness on the world market.

---

<sup>22</sup> Regulation CE No. 1525/98 adopted on July 16, 1998 and effective since January 1, 1999. Original norms were set between 1-50 ppm depending on the primary commodity and its final use. The new regulation limits the maximal content to 4 ppm for total aflatoxin (i.e., B1 + B2 + B3 + B4) and to 2 ppm for aflatoxin B1 alone if the nuts are to be directly consumed or used as ingredient in a food product. The maximal contents in aflatoxins for groundnuts intended for other uses are 15 ppm and 8 ppm for the total aflatoxin and aflatoxin B1, respectively.

<sup>23</sup> Directive No. 98/53 CE that requires, for each 15 tons of product, a global sample of 30 Kg is to be collected in 100 small samples of 300g each which are further mixed into 3 sub-samples of 10 Kg upon which all the analysis are performed.

## REFERENCES

- Blackhurst, R., B. Lyakurwa, and A. Oyejide. 1999. Improving African Participation in the WTO. Paper commissioned by the World Bank for a Conference at the WTO, 20-21 September. Online: <http://www1.worldbank.org/wbiep/trade/papers/Sept99confp.pdf>
- FAO. 1999. *Issues at Stake Relating to Agricultural Development, Trade and Food Security*. FAO Symposium on Agriculture, Trade and Food Security Paper No. 4, 23-24 September, Geneva.
- FAO. 2000. L'Accord sur l'Agriculture: Alternatives pour Soutenir la Sécurité Alimentaire dans les Pays de l'Afrique sub-saharienne, Regional Seminar on Trade, Environment and Sustainable Development: Toward an Agenda for Western and Central Africa, July 13-14, Libreville, Gabon.
- Hertel, T. W., and W. Martin. 2000. Liberalizing Agriculture and Manufactures in a Millennium Round: Implications for Developing Countries. *The World Economy* 23 (4): 455-469.
- Heynen, T. C. 2001. Policy and Strategy Formulation on the Globalization Process-Emergence of A New World Economic System. Lecture notes in Political Science and International Affairs, Asian University of Science and Technology. Online: <http://www.worldcapitalforum.com/intraddev.html>
- IMF. 1999a. Mali: Selected Issues and Statistical Appendices. IMF Staff Country Report Series No. 99/20. Washington, D.C.: IMF.
- IMF. 1999b. Mali: Medium-Term Policy Framework Paper, 1999-2002. Washington, D.C.: IMF.
- IMF. 1999c. Togo: Selected Issues. IMF Staff Country Report Series No. 99/54. Washington, D.C.: IMF.
- Konandreas, P., and J. Greenfield, eds. 1996. Implications of the Uruguay Round for Developing Countries: Introduction - An Overview of the Issues. *Food Policy* 21 (4/5): 345-350.
- Lindland, J. 1997. *The Impact of the Uruguay Round on Tariff Escalation in Agricultural Products*. Rome: ESCAP/FAO.
- Messerlin, P. A., and J. Zarrouk. 2000. Trade Facilitation: Technical Regulations and Customs Procedures. *The World Economy* 23 (4): 577-593.
- MPSG (*Mission Permanente du Sénégal à Genève*). 1999. Troisième Conférence Ministérielle de l'OMC: Note sur les Accords OMC qui Posent Problèmes aux Pays en Développement. Document d'Information Préparé par la Mission Permanente du Sénégal auprès des Nations Unies, Novembre, Genève.

- Normile, M. A., F. Nelson, E. Young, S. Leetmaa, K. Ackerman, D. Roberts, J. Wainio, G. Hasha, D. Skully, and K. Brosch. 1998. Uruguay Agreement on Agriculture: The Record to Date. *Agricultural Outlook* December: 28-33.
- OECD. 1999. Preliminary Aspects of Market Access Aspects of UR Implementation. Document COM/AGR/APM/TD/WP (99) 50, June. Paris: OECD.
- Regmi, A., M. Trueblood, and S. Shapouri. 2000. Emerging Trade Issues for Developing Countries. *Agricultural Outlook* April: 20-23.
- Salinger, B. L., A. M. Amvouna, and D. M. Savarese. 1998. New Trade Opportunities for Africa. EAGER Discussion Paper Number 6. Online: <http://www.eagerproject.com/discussion6.shtml>
- Sarris, A. H. 2000. Has World Cereal Market Instability Increased? *Food Policy* 25: 337-350.
- Schiff, M., and A. Valdes. 1992. A Synthesis of the Economics of Agricultural Pricing in Developing Countries. In *The Political Economy of Agricultural Pricing Policies Vol. 4*, eds. A. Krueger, M. Schiff, and A. Valdes. Baltimore: Johns Hopkins University Press.
- UNCTAD. 1999. Examining Trade in the Agricultural Sector, with a View to Expanding the Agricultural Exports of the Developing Countries, and to Assisting Them in Better Understanding the Issues at Stake in the Upcoming Agricultural Negotiations, TD/B/COM.1/EM.8/2, 23 February.
- UNCTAD. 2000. Market Access. December 15. Online: [http://www.unctad.org/trade\\_env/marketa.htm](http://www.unctad.org/trade_env/marketa.htm)
- WTO. 2001. Market Access: Unfinished Business—Post Uruguay Inventory and Issues. WTO Special Studies 6, Geneva.
- Yap, C. L. 1996. Implications of the Uruguay Round on the World Rice Economy. *Food Policy* 21 (4/5): 377-391.

# MSU International Development Papers

## How to order from the MSU Bulletin Office:

All domestic orders under \$100 must be prepaid either by check or credit card. Make checks payable to MICHIGAN STATE UNIVERSITY. Charges against credit cards (VISA and MasterCard) must be accompanied by the card's full number and expiration date and the cardholder's signature and daytime business/home phone number. Orders totaling \$100 or more can be billed by MSU. Institutions and firms should use their official purchase order.

All foreign orders must be prepaid only in U.S. dollars by American Express Money Order, International Money Order, U.S.A. Postal Money Order, U.S. Dollar World Money Order, or check, which must be drawn on a United States bank.

For foreign orders, include an additional 20 percent for surface postage. For air mail orders, please call for the appropriate amount due.

Please do not send cash. Payment must be included with orders. All sales are final. When ordering from the Bulletin Office by mail, you will need each item's complete identification number and price. Be sure to print your complete address, including ZIP code.

### Fill out and send the order form provided to:

MSU Bulletin Office  
10-B Agriculture Hall  
Michigan State University  
East Lansing, MI 48824-1039  
Fax: (517)353-7168  
Tel: (517)355-0240  
E-mail: distbulk@msue.msu.edu

Selected copies are available free of charge to individuals in developing countries, although supplies of these are limited. If free copies are no longer available, MSU will send you order information. USAID officials may obtain free copies through USAID's Center for Development Information and Evaluation (CDIE) or single copies are available free of charge by writing to the above address at Michigan State University.

## Available from the MSU Bulletin Office

### MSU INTERNATIONAL DEVELOPMENT PAPERS

- IDP 13 ..... *Sources and Effects of Instability in the World Rice Market* by T. S. Jayne. 1993. 104 pp. \$11.00 (CDIE reference PN-ABJ-359)
- IDP 14 ..... *The Impact of Agricultural Technology in Sub-Saharan Africa: A Synthesis of Symposium Findings* by James F. Oehmke and Eric C. Crawford. 1993. 33 pp. \$7.00 (CDIE reference PN-ABP-321)
- IDP 14F ..... *L'Impact de la technologie agricole en Afrique subsaharienne: Synthese des conclusions du colloque* par James F. Oehmke and Eric W. Crawford. 1993. 34 pp. \$7.00 (CDIE reference PN-ABQ-056)
- IDP 15 ..... *Market-Oriented Strategies to Improve Household Access to Food: Experience from Sub-Saharan Africa* by T.S. Jayne, D.L. Tschirley, John M. Staatz, James D. Shaffer, Michael T. Weber, Munhamo Chisvo, and Mulinge Mukumbu.\* 1994. 61 pp. \$9.00 (CDIE reference PN-ABS-755)
- IDP 16 ..... *Improving the Measurement and Analysis of African Agricultural Productivity: Promoting Complementarities between Micro and Macro Data* by Valerie Kelly, Jane Hopkins, Thomas Reardon, and Eric Crawford. 1995. 44 pp. \$7.00 (CDIE reference PN-ABX-166)
- IDP 17 ..... *Promoting Food Security in Rwanda Through Sustainable Agricultural Productivity: Meeting the Challenges of Population Pressure, Land Degradation, and Poverty* by Daniel C. Clay, Fidele Byiringiro, Jaakko Kangasniemi, Thomas Reardon, Bosco Sibomana, Laurence Uwamariya, and David Tardif-Douglin. 1995. 115 pp. \$11.00 (CDIE reference PN-ABX-501)
- IDP 18 ..... *Promoting Farm Investment for Sustainable Intensification of African Agriculture* by Thomas Reardon, Eric Crawford, and Valerie Kelly. 1995. 37 pp. \$7.00 (CDIE reference PN-ABX-753)
- IDP 19 ..... *Effects of Market Reform on Access to Food by Low-Income Households: Evidence from Four Countries in Eastern and Southern Africa* by T.S. Jayne, L. Rube, D. Tschirley, M. Mukumbu, M. Chisvo, A. Santos, M. Weber, and P. Diskin. 1995. 83 pp. \$9.00. (CDIE reference PN-ABX-754)

- IDP 20 ..... *Cash Crop and Foodgrain Productivity in Senegal: Historical View, New Survey Evidence, and Policy Implications* by Valerie Kelly, Bocar Diagona, Thomas Reardon, Matar Gaye, and Eric Crawford. 1996. 140 pp. \$13.00 (CDIE reference PN-ABY-173)
- IDP 21 ..... *Fertilizer Impacts on Soils and Crops of Sub-Saharan Africa* by David Weight and Valerie Kelly. 1999. 96 pp. \$11.00 (CDIE reference PN-ACG-493)
- IDP 22 ..... *Determinants of Farm Productivity in Africa: A Synthesis of Four Case Studies* by Thomas Reardon, Valerie Kelly, Eric Crawford, Thomas Jayne, Kimseyinga Savadogo, and Daniel Clay. 1996. 50 pp. \$7.00 (CDIE reference PN-ABZ-220)
- IDP 23 ..... *Targeting of Food Aid in Rural Ethiopia: Chronic Need or Inertia?* by T.S. Jayne, John Strauss, Takashi Yamano, and Daniel Molla. 2000. 84 pp. \$9.00 (CDIE reference PN-ACH-396)
- IDP 24 ..... *Smallholder Income and Land Distribution in Africa: Implications for Poverty Reduction Strategies* by T.S. Jayne, Takashi Yamano, Michael Weber, David Tschirley, Rui Benfica, David Neven, Anthony Chapoto, and Ballard Zulu. 2001. 42 pp. \$7.00 (CDIE reference PN-ACN-726)

### WORKING PAPERS

- IDWP 39/1 .... *The Impact of Investments in Maize Research and Dissemination in Zambia. Part I: Main Report.* Julie Howard with George Chitalu and Sylvester Kalonge. 1993. 112 pp. \$11.00 (CDIE reference PN-ABS-724)
- IDWP 39/2 .... *The Impact of Investments in maize Research and Dissemination in Zambia. Part II: Annexes.* Julie Howard with George Chitalu and Sylvester Kalonge. 1993. 81 pp. \$9.00 (CDIE reference PN-ABS-727)
- IDWP 40 ..... *An Economic Analysis of Research and Technology Transfer of Millet, Sorghum, and Cowpeas in Niger* by Valentina Mazzucato and Samba Ly. 1994. 104 pp. \$11.00. (CDIE reference PN-ABT-283 or PN-ABS-728)

- IDWP 41 ..... *Agricultural Research Impact Assessment: The Case of Maize Technology Adoption in Southern Mali* by Duncan Boughton and Bruno Henry de Frahan. 1994. 95 pp. \$11.00 **(CDIE reference PN-ABS-729)**
- IDWP 42 ..... *The Rate of Return to Agricultural Research in Uganda: The Case of Oilseeds and Maize* by Rita Laker-Ojok. 1994. 56 pp. \$7.00 **(CDIE reference PN-ABS-730)**
- IDWP 43 ..... *Assessing the Impact of Cowpea and Sorghum Research and Extension in Northern Cameroon* by James A. Sterns and Richard H. Bernstein. 1994. 48 pp. \$7.00 **(CDIE reference PN-ABS-731)**
- IDWP 44 ..... *Food Security II Cooperative Agreement: Project Fact Sheets (1994 Version)* by MSU Food Security II Research Team. 1994. 104 pp. \$11.00 **(CDIE reference PN-ABW-277)**
- IDWP 45 ..... *The Potential Returns to Oilseeds Research in Uganda: The Case of Groundnuts and Sesame* by Rita Laker-Ojok. 1994. 50 pp. \$7.00 **(CDIE reference PN-ACF-662)**
- IDWP 46 ..... *Understanding Linkages among Food Availability, Access, Consumption, and Nutrition in Africa: Empirical Findings and Issues from the Literature* by Patrick Diskin.\* 1994. 47 pp. \$7.00 **(CDIE reference PN-ABS-732)**
- IDWP 47 ..... *Targeting Assistance to the Poor and Food Insecure: A Review of the Literature* by Mattias Lundberg and Patrick Diskin.\* 1994. 56 pp. \$7.00 **(CDIE reference PN-ABS-733)**
- IDWP 48 ..... *Interactions Between Food Market Reform and Regional Trade in Zimbabwe and South Africa: Implications for Food Security* by T.S. Jayne, T. Takavarasha, and Johan van Zyl. 1994. 39 pp. \$7.00 **(CDIE reference PN-ACA-239)**
- IDWP 49 ..... *A Strategic Approach to Agricultural Research Program Planning in Sub-Saharan Africa*, by Duncan Boughton, Eric Crawford, Julie Howard, James Oehmke, James Shaffer, and John Staatz. 1995. 59 pp. \$9.00 **(CDIE reference PN-ABU-948)**
- IDWP 49F ..... *Une approche stratégique pour la planification du programme de recherche agricole en Afrique subsaharienne*, by Duncan Boughton, Eric Crawford, Julie Howard, James Oehmke, James Shaffer et John Staatz. 1997. 67 pp. \$9.00 **(CDIE reference PN-ACA-071)**
- IDWP 50 ..... *An Analysis of Alternative Maize Marketing Policies in South Africa*, by T.S. Jayne, Milan Hajek and Johan van Zyl. 1995. 51 pp. \$7.00 **(CDIE reference PN-ABW-091)**
- IDWP 51 ..... *Confronting the Silent Challenge of Hunger: A Conference Synthesis*, by T.S. Jayne, David Tschirley, Lawrence Rube, Thomas Reardon, John M. Staatz, and Michael Weber. 1995. 37 pp. \$7.00 **(CDIE reference PN-ABW-276)**
- IDWP 52 ..... *An Ex-Ante Evaluation of Farming Systems Research in Northeastern Mali: Implications for Research and Extension Policy*, by Bruno Henry de Frahan. 1995. 82 pp. \$9.00 **(CDIE reference PN-ABW-761)**
- IDWP 53 ..... *Who Eats Yellow Maize? Preliminary Results of a Survey of Consumer Maize Preferences in Maputo, Mozambique*, by David L. Tschirley and Ana Paula Santos. 1995. 16 pp. \$7.00 **(CDIE reference PN-ABX-988)**
- IDWP 54 ..... *Food Security II Cooperative Agreement: Project Fact Sheets (1995/96 Version)*, compiled by MSU Food Security II Research Team. 1996. 151 pp. \$13.00 **(CDIE reference PN-ABY-072)**
- IDWP 55 ..... *Trends in Real Food Prices in Six Sub-Saharan African Countries*, by T.S. Jayne, et al. 1996. 70 pp. \$9.00 **(CDIE reference PN-ABY-172)**
- IDWP 56 ..... *Food Marketing and Pricing Policy in Eastern and Southern Africa: Lessons for Increasing Agricultural Productivity and Access to Food*, by T.S. Jayne and Stephen Jones. 1996. 40 pp. \$7.00 **(CDIE reference PN-ABY-547)**
- IDWP 57 ..... *An Economic and Institutional Analysis of Maize Research in Kenya*, by Daniel David Karanja. 1996. 24 pp. \$7.00 **(CDIE reference PN-ABY-548)**
- IDWP 58 ..... *Fighting an Uphill Battle: Population Pressure and Declining Land Productivity in Rwanda* by Daniel C. Clay. 1996. 28 pp. \$7.00 **(CDIE reference PN-ABM-627)**
- IDWP 59 ..... *Finding the Balance Between Agricultural and Trade Policy: Rwanda Coffee Policy in Flux* by David Tardif-Douglin, Jean-Léonard Ngirumwami, Jim Shaffer, Anastase Murekezi, and Théobald Kampayana. 1996. 14 pp. \$7.00 **(CDIE reference PN-ABY-802)**
- IDWP 60 ..... *Agriculture R&D and Economic Growth* by Elias Dinopoulos. 1996. 25 pp. \$7.00 **(CDIE reference PN-ABY-804)**
- IDWP 61 ..... *Zambia's Stop-And-Go Revolution: The Impact of Policies and Organizations on the Development and Spread of Maize Technology* by Julie A. Howard and Catherine Mungoma. 1996. 39 pp. \$7.00 **(CDIE reference PN-ABY-803)**
- IDWP 62 ..... *Intrahousehold Allocations: A Review of Theories, Empirical Evidence and Policy Issues* by John Strauss and Kathleen Beegle. 1996. 60 pp. \$9.00 **(CDIE reference PN-ABY-848)**
- IDWP 63 ..... *Transforming Poultry Production and Marketing in Developing Countries: Lessons Learned with Implications for Sub-Saharan Africa* by Laura L. Farrelly. 1996. 46 pp. \$7.00 **(CDIE reference PN-ABY-849)**
- IDWP 64 ..... *Market Information Sources Available Through the Internet: Daily to Yearly Market and Outlook Reports, Prices, Commodities and Quotes* by Jean-Charles Le Vallée. 1999. 30 pp. \$7.00 **(CDIE reference PN-ACF-672)**
- IDWP 65 ..... *Food Security II Cooperative Agreement: Project Fact Sheets (1996 Version)* by MSU Food Security II Research Team. 1997. 190 pp. \$15.00 **(CDIE reference PN-ABZ-902)**
- IDWP 66 ..... *Improving the Impact of Market Reform on Agricultural Productivity in Africa: How Institutional Design Makes a Difference* by T.S. Jayne, James D. Shaffer, John M. Staatz, and Thomas Reardon. 1997. 39 pp. \$7.00 **(CDIE reference PN-ACB-867)**
- IDWP 67 ..... *Final Report—Workshop on Experiences and Options for Priority Setting in NARS, August 12-16, 1996, Nairobi, Kenya*, edited by Julie Howard and Eric Crawford. 1997. 76 pp. \$9.00 **(CDIE reference PN-ACB-868)**
- IDWP 68 ..... *The Effect of Liberalization on Grain Prices and Marketing Margins in Ethiopia*, by T.S. Jayne, Asfaw Negassa, and Robert J. Myers. 1998. 21 pp. \$7.00 **(CDIE reference PN-ACC-230)**
- IDWP 69 ..... *What Makes Agricultural Intensification Profitable for Mozambican Smallholders?* by Julie A. Howard, José Jaime Jeje, David Tschirley, Paul Strasberg, Eric W. Crawford, and Michael T. Weber. 1998. 98 pp. \$11.00 **(CDIE reference PN-ACD-889)**
- IDWP 70 ..... *Incentives for Fertilizer Use in Sub-Saharan Africa: A Review of Empirical Evidence on Fertilizer Response and Profitability* by David Yanggen, Valerie Kelly, Thomas Reardon, and Anwar Naseem. 1998. 109 pp. \$11.00 **(CDIE reference PN-ACD-890)**
- IDWP 71 ..... *Effects of Agricultural Commercialization on Food Crop Input Use and Productivity in Kenya* by Paul J. Strasberg, T.S. Jayne, Takashi Yamano, James Nyoro, Daniel Karanja, and John Strauss. 1999. 28 pp. \$7.00 **(CDIE reference PN-ACE-364)**
- IDWP 72 ..... *Successes and Challenges of Food Market Reform: Experiences from Kenya, Mozambique, Zambia, and Zimbabwe* by T.S. Jayne, Mulinge Mukumbu, Munhamo Chisvo, David Tschirley, Michael T. Weber, Ballard Zulu, Robert Johansson, Paula Santos, and David Soroko. 1999. 45 pp. \$7.00 **(CDIE reference PN-ACE-389)**
- IDWP 73 ..... *Macro Trends and Determinants of Fertilizer Use in Sub-Saharan Africa* by Anwar Naseem and Valerie Kelly. 1999. 31 pp. \$7.00 **(CDIE reference PN-ACE-290)**

- IDWP 74 ..... *Effects of Cash Crop Production on Food Crop Productivity in Zimbabwe: Synergies Or Trade-offs?* by Jones Govereh and T.S. Jayne. 1999. 23 pp. \$7.00 **(CDIE reference PN-ACF-371)**
- IDWP 75 ..... *Workshop on Agricultural Transformation in Africa: Abidjan, Cote d'Ivoire, September 26-29, 1995* by Moussa Batchily Ba, John M. Staatz, Laura Farrelly, Youssouf Camara, and Georges Dimithè. 1999. 51 pp. \$7.00 **(CDIE reference PN-ACF-624)**
- IDWP 75F ..... *Atelier Sur la Transformation de l'Agriculture en Afrique*, by Moussa Batchily Ba, John M. Staatz, Laura Farrelly, Youssouf Camara, et Georges Dimithe. 1999. 48 pp. \$7.00 **(CDIE reference PN-ACF-390)**
- IDWP 76 ..... *Green Revolution Technology Takes Root in Africa* by Julie A. Howard, Valerie Kelly, Julie Stepanek, Eric W. Crawford, Mulat Demeke, and Mywish Maredia. 1999. 66 pp. \$9.00 **(CDIE reference PN-ACF-370)**  
*Statistical Annex and Copies of Questionnaire* **(CDIE reference PN-ACF-623)**
- IDWP 77 ..... *Increasing Seed System Efficiency in Africa: Concepts, Strategies and Issues* by Mywish Maredia, Julie Howard, and Duncan Boughton, with Anwar Naseem, Mariah Wanzala and Kei Kajisa. 1999. 60 pp. \$7.00 **(CDIE reference PN-ACG-551)**
- IDWP 78 ..... *Food Markets, Policy, and Technology : The Case of Honduran Dry Beans* by Pedro V. Martel, Ribhard Bernsten, and Michael T. Weber. 2000. 39 pp. \$7.00 **(CDIE reference PN-ACH-614)**
- IDWP 79 ..... *Linkages Between Agricultural Growth and Improved Child Nutrition in Mali* by James Tefft, Christopher Penders, Valerie Kelly, John M. Staatz, Mbaye Yade and Victoria Wise, with the participation of Modibo Diarra Isaac Niambélé, Keffing Cissoko and Modibo Kamaté. 2000. 50 pp. \$7.00 **(CDIE reference PN-ACM-467.)**
- IDWP 80 ..... *Trading out of Poverty: WTO Agreements and the West African Agriculture: A Report of the Food Security II Cooperative Agreement* by Kofi Nouve, John Staatz, David Schweikhardt, and Mbaye Yade. 2002. 37 pp. \$7.00 **(CDIE reference pending.)**

..... \* Also published by A.I.D./Washington

# ORDER FORM

for Papers Available from MSU

Mail your marked form  
(via mail or fax) to:

MSU Bulletin Office

10-B Agriculture Hall

Michigan State University

East Lansing, MI 48824-1039

Fax: (517) 353-7168

Phone: (517) 355-0240

E-mail:  
distbulk@msue.msu.edu

## Required with all charge card orders:

Check one: ☐ VISA ☐ MasterCard

Card number: \_\_\_\_\_

Signature: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ Daytime Phone Number: ( ) \_\_\_\_\_

## SHIP TO:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Domestic orders totaling \$100 or more can be billed by MSU. Institutions and firms should use their official purchase order. All other orders, including foreign orders, must be pre-paid.

Mark each choice with the quantity needed and enter total charges.

<input type="checkbox"/> IDP 13 \$11.00	<input type="checkbox"/> IDWP 45 \$7.00	<input type="checkbox"/> IDWP 63 \$7.00
<input type="checkbox"/> IDP 14 \$7.00	<input type="checkbox"/> IDWP 46 \$7.00	<input type="checkbox"/> IDWP 64 \$7.00
<input type="checkbox"/> IDP 14F \$7.00	<input type="checkbox"/> IDWP 47 \$7.00	<input type="checkbox"/> IDWP 65 \$15.00
<input type="checkbox"/> IDP 15 \$9.00	<input type="checkbox"/> IDWP 48 \$7.00	<input type="checkbox"/> IDWP 66 \$7.00
<input type="checkbox"/> IDP 16 \$7.00	<input type="checkbox"/> IDWP 49 \$9.00	<input type="checkbox"/> IDWP 67 \$9.00
<input type="checkbox"/> IDP 17 \$11.00	<input type="checkbox"/> IDWP 49F \$9.00	<input type="checkbox"/> IDWP 68 \$7.00
<input type="checkbox"/> IDP 18 \$7.00	<input type="checkbox"/> IDWP 50 \$7.00	<input type="checkbox"/> IDWP 69 \$11.00
<input type="checkbox"/> IDP 19 \$9.00	<input type="checkbox"/> IDWP 51 \$7.00	<input type="checkbox"/> IDWP 70 \$11.00
<input type="checkbox"/> IDP 20 \$13.00	<input type="checkbox"/> IDWP 52 \$9.00	<input type="checkbox"/> IDWP 71 \$7.00
<input type="checkbox"/> IDP 21 \$11.00	<input type="checkbox"/> IDWP 53 \$7.00	<input type="checkbox"/> IDWP 72 \$7.00
<input type="checkbox"/> IDP 22 \$7.00	<input type="checkbox"/> IDWP 54 \$13.00	<input type="checkbox"/> IDWP 73 \$7.00
<input type="checkbox"/> IDP 23 \$9.00	<input type="checkbox"/> IDWP 55 \$9.00	<input type="checkbox"/> IDWP 74 \$7.00
<input type="checkbox"/> IDP 24 \$7.00	<input type="checkbox"/> IDWP 56 \$7.00	<input type="checkbox"/> IDWP 75 \$7.00
<input type="checkbox"/> IDWP 39/1 \$11.00	<input type="checkbox"/> IDWP 57 \$7.00	<input type="checkbox"/> IDWP 75F \$7.00
<input type="checkbox"/> IDWP 39/2 \$9.00	<input type="checkbox"/> IDWP 58 \$7.00	<input type="checkbox"/> IDWP 76 \$9.00
<input type="checkbox"/> IDWP 40 \$11.00	<input type="checkbox"/> IDWP 59 \$7.00	<input type="checkbox"/> IDWP 77 \$7.00
<input type="checkbox"/> IDWP 41 \$11.00	<input type="checkbox"/> IDWP 60 \$7.00	<input type="checkbox"/> IDWP 78 \$7.00
<input type="checkbox"/> IDWP 42 \$7.00	<input type="checkbox"/> IDWP 61 \$7.00	<input type="checkbox"/> IDWP 79 \$7.00
<input type="checkbox"/> IDWP 43 \$7.00	<input type="checkbox"/> IDWP 62 \$9.00	<input type="checkbox"/> IDWP 80 \$7.00
<input type="checkbox"/> IDWP 44 \$11.00		

Sub-Total	\$ _____
20% (foreign orders, surface mail)	\$ _____
International Airmail postage (call or e-mail for rates)	\$ _____
<b>Total Amount</b>	<b>\$ _____</b>

**The MSU International Development Papers published before 1993**  
(IDP numbers 1-11, IDWP numbers 1-38, and RP numbers 1-31) may be obtained through USAID's Center for Development Information and Evaluation (CDIE) and are not available from the MSU Bulletin Office.



---

# How to Order MSU International Development Papers from USAID:

The MSU International Development Papers published before 1993 (IDP numbers 1-11, IDWP numbers 1-38, and RP numbers 1-31) may be obtained **only** through USAID's Center for Development Information and Evaluation (CDIE).

The CDIE reference numbers are shown on the following list. Document identification necessary to order the full document in paper or microfiche form from the USAID Development Experience Clearinghouse (DEC) is included with the citations.

If you would like to order any of the pre-1993 IDP's, IDWP's or RP's, please do not request them from MSU, but send your request--with the correct CDIE reference number--directly to the DEC:

**Mail:** USAID Development Experience Clearinghouse  
1611 North Kent Street, Suite 200  
Arlington, VA 22209-2111 USA

**Electronic:**  
Web site: <http://www.dec.org>  
Email address: [docorder@dec.cdie.org](mailto:docorder@dec.cdie.org)

**Telephone:** +1 703-351-4006

**Fax:** +1 703-351-4039

*If you cannot provide the CDIE reference number for the publication you wish to order, contact the USAID Library, who will supply you with the complete order information:*

Telephone: +1 202-712-0579  
Fax: +1 202-216-3515

## Prices

Documents are provided to USAID employees without charge. Others are required to pay reproduction and mailing/handling costs. Current prices may be obtained by contacting the Document Distribution Unit ([docorder@dec.cdie.org](mailto:docorder@dec.cdie.org)) or by searching the Development Experience System (DEXS) available through the DEC's web site (<http://www.dec.org>). A limited number of microfiche copies are provided without charge to LDC institutions.

## Exchange programs

CDIE has established reciprocal agreements with selected development organizations who provide documents or other information resources to CDIE in exchange for distribution of CDIE documents or information. The materials received as a result of these exchange agreements are located in CDIE.

## Deposit accounts

Deposit accounts may be established by USAID contractors and other users to facilitate the payment for documents ordered.

# Available in A.I.D.'s Development Information System (CDIE)

## MSU INTERNATIONAL DEVELOPMENT PAPERS

- IDP 1 ..... *Research on Agricultural Development in Sub-Saharan Africa: A Critical Survey* by Carl K. Eicher and Doyle C. Baker. 1982. 346 pp. **(CDIE reference PN-AAL-692)**
- IDP 1F ..... *Etude Critique de la Recherche sur la Développement Agricole en Afrique Subsaharienne* par Carl K. Eicher et Doyle C. Baker. 1982. 345 pp. **(CDIE reference PN-ABA-840)**
- IDP 2 ..... *A Simulation Study of Constraints on Traditional Farming Systems in Northern Nigeria* by Eric W. Crawford. 1982. 136 pp. **(CDIE reference PN-AAP-677)**
- IDP 3 ..... *Farming Systems Research in Eastern Africa: The Experience of CIMMYT and Some National Agricultural Research Services, 1976-81* by M.P. Collinson. 1982. 67 pp. **(CDIE reference PN-AAM-826)**
- IDP 4 ..... *Animal Traction in Eastern Upper Volta: A Technical, Economic and Institutional Analysis* by Vincent Barrett, Gregory Lassiter, David Wilcock, Doyle Baker, and Eric Crawford. 1982. 132 pp. **(CDIE reference PN-AAM-262)**
- IDP 5 ..... *Socio-Economic Determinants of Food Consumption and Production in Rural Sierra Leone: Application of an Agricultural Household Model with Several Commodities* by John Strauss. 1983. 91 pp. **(CDIE reference PN-AAM-031)**
- IDP 6 ..... *Applications of Decision Theory and the Measurement of Attitudes Towards Risk in Farm Management Research in Industrialized and Third World Settings* by Beverly Fleisher and Lindon J. Robison. 1985. 105 pp. **(CDIE reference PN-AAU-740)**
- IDP 7 ..... *Private Decisions and Public Policy: The Price Dilemma in Food Systems in Developing Countries* by Peter Timmer. 1986. 58 pp. **(CDIE reference PN-AAZ-091)**
- IDP 8 ..... *Rice Marketing in Senegal River Valley: Research Findings and Policy Reform Options* by Michael L. Morris. 1987. 89 pp. **(CDIE reference PN-AAZ-092)**
- IDP 9 ..... *Small Scale Industries in Developing Countries: Empirical Evidence and Policy Implications* by Carl Liedholm and Donald Mead. 1987. 141 pp. **(CDIE reference PN-AAZ-734)**
- IDP 10 ..... *Maintaining the Momentum in Post-Green Revolution Agriculture: A Micro-Level Perspective from Asia* by Derek Byerlee. 1987. 57 pp. **(CDIE reference PN-AAZ-093)**
- IDP 11 ..... *The Economics of Smallholder Maize Production in Zimbabwe: Implications for Food Security* by David D. Rohrbach. 1989. 100 pp. **(CDIE reference PN-ABD-549)**

## WORKING PAPERS

- IDWP 1 ..... *Farming Systems Research (FSR) in Honduras, 1977-81: A Case Study* by Daniel Galt, Alvaro Diaz, Mario Contreras, Frank Peairs, Joshua Posner, and Franklin Rosales. 1982. 48 pp. **(CDIE reference PN-AAM-827)**
- IDWP 2 ..... *Credit Agricole et Credit Informal dans la Region Orientale de Haute-Volta: Analyse Economique, Performance Institutionnelle et Implications en Matiere de Politique de Developpement Agricole* by Edouard K. Tapsoba. 1982. 125 pp. **(CDIE reference PN-AAZ-527)**
- IDWP 3 ..... *Employment and Construction: Multicountry Estimates of Costs and Substitutions Elasticities for Small Dwellings* by W.P. Strassmann. 1982. 42 pp. **(CDIE reference PN-AAM-455)**
- IDWP 4 ..... *Sub-Contracting in Rural Areas of Thailand* by Donald C. Mead. 1982. 53 pp. **(CDIE reference PN-AAN-192)**

- IDWP 5 ..... *Microcomputers and Programmable Calculators for Agricultural Research in Developing Countries* by Michael T. Weber, James Pease, Warren Vincent, Eric W. Crawford, and Thomas Stilwell. 1983. 113 pp. **(CDIE reference PN-AAN-441)**
- IDWP 6 ..... *Periodicals for Microcomputers: An Annotated Bibliography* by Thomas Stilwell. 1983. 70 pp. **(CDIE reference PN-AAN-443)**
- IDWP 7 ..... *Employment and Housing in Lima, Peru* by Paul Strassmann. 1983. 96 pp. **(CDIE reference PN-AAN-396)**
- IDWP 8 ..... *Faire Face a la Crise Alimentaire de l'Afrique* by Carl K. Eicher. 1983. 29 pp. **(CDIE reference PN-AAN-444)**
- IDWP 9 ..... *Software Directories for Microcomputers: An Annotated Bibliography* by Thomas C. Stilwell. 1983. 14 pp. **(CDIE reference PN-AAN-442)**
- IDWP 10 ..... *Instructional Aids for Teaching How to Use the TI-59 Programmable Calculator* by Ralph E. Hepp. 1983. 133 pp. **(CDIE reference PN-AAP-133)**
- IDWP 11 ..... *Programmable Calculator (TI-59) Programs for Marketing and Price Analysis in Third World Countries* by Michael L. Morris and Michael T. Weber. 1983. 105 pp. **(CDIE reference PN-AAP-134)**
- IDWP 12 ..... *An Annotated Directory of Statistical and Related Microcomputer Software for Socioeconomic Data Analysis* by Valerie Kelly, Robert D. Stevens, Thomas Stilwell and Michael T. Weber. 1983. 165 pp. **(CDIE reference PN-AAP-135)**
- IDWP 13 ..... *Guidelines for Selection of Microcomputer Hardware* by Chris Wolf. 1983. 90 pp. **(CDIE reference PN-AAR-106)**
- IDWP 14 ..... *User's Guide to BENCOS A SuperCalc Template for Benefit-Cost Analysis* by Eric W. Crawford, Ting-Ing Ho and A. Allan Schmid. 1984. 35 pp. **(CDIE reference PN-AAQ-682)**
- IDWP 15 ..... *An Evaluation of Selected Microcomputer Statistical Programs* by James W. Pease and Raoul Lepage with Valerie Kelly, Rita Laker-Ojok, Brian Thelen, and Paul Wolberg. 1984. 187 pp. **(CDIE reference PN-AAQ-683)**
- IDWP 16 ..... *Small Enterprises in Egypt: A study of Two Governorates* by Stephen Davies, James Seale, Donald C. Mead, Mahmoud Badr, Nadia El Sheikh and Abdel Rahman Saidi. 1984. 187 pp. **(CDIE reference PN-AAU-610)**
- IDWP 17 ..... *Microcomputer Statistical Packages for Agricultural Research* by Thomas C. Stilwell. 1984. 23 pp. **(CDIE reference PN-AAZ-516)**
- IDWP 18 ..... *An Annotated Directory of Citation Database, Educational, System Diagnostics and Other Miscellaneous Microcomputer Software of Potential Use to Agricultural Scientists in Developing Countries* by Thomas C. Stilwell and P. Jordan Smith. 1984. 34 pp. **(CDIE reference PN-AAZ-523)**
- IDWP 19 ..... *Irrigation in Southern Africa: An Annotated Bibliography* by Amalia Rinaldi. 1985. 60 pp. **(CDIE reference PN-AAZ-524)**
- IDWP 20 ..... *A Microcomputer Based Planning and Budgeting System for Agricultural Research Programs* by Daniel C. Goodman, Jr., Thomas C. Stilwell and P. Jordan Smith. 1985. 75 pp. **(CDIE reference PN-AAZ-525)**
- IDWP 21 ..... *Periodicals for Microcomputers: An Annotated Bibliography, Second Edition* by Thomas C. Stilwell. 1985. 89 pp. **(CDIE reference PN-AAZ-526)**
- IDWP 22 ..... *Software Directories for Microcomputers: An Annotated Bibliography, Second Edition* by Thomas C. Stilwell. 1985. 21 pp. **(CDIE reference PN-AAZ-528)**

- IDWP 23 ..... *A diagnostic Perspective Assessment of the Production and Marketing System for Mangoes in the Eastern Caribbean* by Alan Hrapsky with Michael Weber and Harold Riley. 1985. 106 pp. **(CDIE reference PN-AAZ-529)**
- IDWP 24 ..... *Subcontracting Systems and Assistance Programs: Opportunities for Intervention* by Donald C. Mead. 1985. 32 pp. **(CDIE reference PN-AAZ-943)**
- IDWP 25 ..... *Small Scale Enterprise Credit Schemes: Administrative Costs and the Role of Inventory Norms* by Carl Liedholm. 1985. 23 pp. **(CDIE reference PN-AAU-615)**
- IDWP 26 ..... *Subsector Analysis: Its Nature, Conduct and Potential Contribution to Small Enterprise Development* by James J. Boomgard, Stephen P. Davies, Steve Haggblade and Donald Mead. 1986. 57 pp. **(CDIE reference PN-AAZ-101)**
- IDWP 27 ..... *The Effect of Policy and Policy Reforms on Non-Agricultural Enterprises and Employment in Developing Countries: A Review of Past Experiences* by Steve Haggblade, Carl Liedholm, and Donald C. Mead. 1986. 133 pp. **(CDIE reference PN-AAV-001)**
- IDWP 28 ..... *Rural Small Scale Enterprises in Zambia: Results of a 1985 Country-Wide Survey* by John T. Milimo and Yacob Fisseha. 1986. 76 pp. **(CDIE reference PN-AAZ-102)**
- IDWP 29 ..... *Fundamentals of Price Analysis in Developing Countries' Food Systems: A Training Manual to Accompany the Microcomputer Software Program 'MSTAT'* by Stephen Goetz and Michael T. Weber. 1986. 148 pp. **(CDIE reference PN-AAZ-103)**
- IDWP 30 ..... *Rapid Reconnaissance Guidelines for Agricultural Marketing and Food System Research in Developing Countries* by John S. Holtzman. 1986. 75 pp. **(CDIE reference PN-AAZ-104)**
- IDWP 31 ..... *Contract Farming and Its Effect on Small Farmers in Less Developed Countries* by Nicholas William Minot. 1986. 86 pp. **(CDIE reference PN-AAZ-105)**
- IDWP 32 ..... *Food Security Policy and the Competitiveness of Agriculture in the Sahel: A Summary of the "Beyond Mindelo" Seminar* by Thomas S. Jayne and Nicholas Minot. 1989. 27 pp. **(CDIE reference PN-ABF-570)**
- IDWP 33 ..... *Small Scale Manufacturing Growth in Africa: Initial Evidence* by Carl Liedholm and Joan Parket. 1989. 18 pp. **(CDIE reference PN-ABB-945)**
- IDWP 34 ..... *Food Security and Economic Growth in the Sahel: A Summary of the September 1989 Cereals Workshop* by Victoire C. D'Agostino and John M. Staatz. 1989. 44 pp. **(CDIE reference PN-ABD-956)**
- IDWP 35 ..... *User's Manual for the SADCC Cereals Trade Database Compiled by the University of Zimbabwe and Michigan State University* by David Kingsbury. 1989. 44 pp. **(CDIE reference PN-ABF-378)**
- IDWP 36 ..... *Managing Food Security Action Programs in Botswana* by Sisay Asefa. 1989. 36 pp. **(CDIE reference PN-ABF-377)**
- IDWP 37 ..... *User's Guide to BENCOS Lotus 1-2-3 Templates for Benefit-Cost Analysis* by Eric Crawford and A. Allan Schmid. 1990. 23 pp. **(CDIE reference PN-ABF-530)**
- IDWP 38 ..... *Research Methods in the MSU Food Security in Africa Project: Conceptualizing and Implementing Policy Relevant Studies* by James F. Tefft with Michael T. Weber and John M. Staatz. 1990. 128 pp. **(CDIE reference PN-ABU-249)**
- RP 4 ..... *Cereals Marketing in the Senegal River Valley* by Michael L. Morris. 1987. 126 pp. **(CDIE reference PN-AAZ-120)**
- RP 5 ..... *The Food Security Equation in Southern Africa* by Mandivamba Rukuni and Carl K. Eicher. 1987. 32 pp. **(CDIE reference PN-AAZ-121)**
- RP 6 ..... *Economic Analysis of Agronomic Trials for the Formulation of Farmer Recommendations* by Eric Crawford and Mulumba Kamuanga. 1988. 41 pp. **(CDIE reference PN-AAZ-370)**
- RP 6F ..... *L'Analyse Economiques des Essais Agronomiques pour la Formulation des Recommandations aux Paysans* par Eric Crawford et Mulumba Kamuanga. 1987. 33 pp. **(CDIE reference PN-AAZ-122)**
- RP 7 ..... *Economic Analysis of Livestock Trials* by Eric Crawford. 1987. 36 pp. **(CDIE reference PN-AAZ-371)**
- RP 7F ..... *L'Analyse Economique des Essais Zootechniques* par Eric Crawford. 1987. 36 pp. **(CDIE reference PN-AAZ-123)**
- RP 8 ..... *A Field Study of Fertilizer Distribution and Use in Senegal, 1984: Summary Report* by Eric Crawford and Valerie Kelly. 1987. 32 pp. **(CDIE reference PN-AAZ-124)**
- RP 8F ..... *Enquete sur la Distribution et l'Utilisation de l'Engrais au Sénégal, 1984: Résumé Analytique* par Eric Crawford et Valerie Kelly. 1988. 43 pp. **(CDIE reference PN-ABC-173)**
- RP 9 ..... *Improving Food Marketing Systems in Developing Countries: Experiences from Latin America* by Kelly Harrison, Donald Henley, Harold Riley and James Shaffer. 1987. 135 pp. **(CDIE reference PN-AAZ-125)**
- RP 10 ..... *Policy Relevant Research on the Food and Agricultural System in Senegal* by Mark Newman, Eric Crawford and Jacques Faye. 1987. 30 pp. **(CDIE reference PN-AAZ-126)**
- RP 10F ..... *Orientations et Programmes de Recherche Macro-Economiques sur le Systeme Agro-Alimentaire Sénégalais* par Mark Newman, Eric Crawford et Jacques Faye. 1987. 37 pp. **(CDIE reference PN-AAZ-127)**
- RP 11 ..... *A Field Study of Fertilizer Distribution and Use in Senegal, 1984: Final Report* by Eric Crawford, Curtis Jolly, Valerie Kelly, Philippe Lambrecht, Makhona Mbaye, and Matar Gaye. 1987. 106 pp. **(CDIE reference PN-AAZ-128)**
- RP 11F ..... *Enquête sur la Distribution et l'Utilisation de l'Engrais au Sénégal, 1984: Rapport Final* par Eric Crawford, Curtis Jolly, Valerie Kelly, Philippe Lambrecht, Makhona Mbaye, et Matar Gaye. 1987. 106 pp. **(CDIE reference PN-ABC-173)**
- RP 12 ..... *Private and Public Sectors in Developing Country Grain Markets: Organization Issues and Options in Senegal* by Mark D. Newman, P. Alassane Sow, and Ousseynou NDoye. 1987. 14 pp. **(CDIE reference PN-AAZ-129)**
- RP 13 ..... *Agricultural Research and Extension in Francophone West Africa: The Senegal Experience* by R. James Bingen and Jacques Faye. 1987. 23 pp. **(CDIE reference PN-AAV-929)**
- RP 13F ..... *La Liaison Recherche-Developpement en Afrique de l'Ouest Francophone: L'Experience du Sénégal* par James Bingen et Jacques Faye. 1987. 32 pp. **(CDIE reference PN-AAZ-130)**
- RP 14 ..... *Grain Marketing in Senegal's Peanut Basin: 1984/85 Situation and Issues* by Mark D. Newman. 1987. 16 pp. **(CDIE reference PN-AAZ-131)**
- RP 15 ..... *Tradeoffs between Domestic and Imported Cereals in Senegal: A Marketing Systems Perspective* by Mark D. Newman, Ousseynou NDoye, and P. Alassane Sow. 1987. 41 pp. **(CDIE reference PN-AAZ-372)**
- RP 15F ..... *Céréales Locales et Céréales Importées au Sénégal: La Politique Alimentaire a Partier Systemes de Commercialisation* par Mark D. Newman, Ousseynou NDoye, et P. Alassane Sow. 1987. 48 pp. **(CDIE reference PN-ABC-326)**
- REPRINT PAPERS**
- RP 1 ..... *The Private Sector Connection to Development* by Carl Liedholm. 1986. 19 pp. **(CDIE reference PN-AAW-353)**
- RP 2 ..... *Influencing the Design of Marketing Systems to Promote Development in Third World Countries* by James D. Shaffer with Michael Weber, Harold Riley and John Staatz. 1987. 21 pp. **(CDIE reference PN-AAV-230)**
- RP 3 ..... *Famine Prevention in Africa: The Long View* by Carl K. Eicher. 1987. 18 pp. **(CDIE reference PN-AAZ-119)**

- 
- RP 16 ..... *An Orientation to Production Systems Research in Senegal* by R. James Bingen. 1987. 88 pp. **(CDIE reference PN-AAZ-373)**
- RP 16F ..... *Orientation de la Recherche sur les Systemes de Productions au Sénégal* par R. James Bingen. 1987. 94 pp. **(CDIE reference PN-AAZ-374)**
- RP 17 ..... *A Contribution to Agronomic Knowledge of the Lower Casamance (Bibliographical Synthesis)* by J.L. Posner. 1988. 47 pp. **(CDIE reference PN-AAZ-375)**
- RP 17F ..... *Contribution a la Connaissance Agronomique de la Basse Casamance (Synthese Bibliographique)* par J.L. Posner. 1988. 47 pp. **(CDIE reference PN-ABC-167)**
- RP 18 ..... *Acquisition and Use of Agricultural Inputs in the Context of Senegal's New Agricultural Policy: The Implications of Farmers' Attitudes and Input Purchasing Behavior for the Design of Agricultural Policy and Research Programs* by Valerie Auserehl Kelly. 1988. 30 pp. **(CDIE reference PN-AAZ-376)**
- RP 18F ..... *Acquisition et Utilisation d'Intrants Agricoles dans le Contexte de la Nouvelle Politique Agricole du Sénégal: Implications des Attitudes et du Comportement d'Achat d'Intrants des Exploitants pour l'Elaboration d'une Politique Agricole et de Programmes de Recherches* par Valerie Auserehl Kelly. 1988. 35 pp. **(CDIE reference PN-AAZ-377)**
- RP 19 ..... *Farmers' Demand for Fertilizer in the Context of Senegal's New Agricultural Policy: A Study of Factors Influencing Farmers' Fertilizer Purchasing Decisions* by Valerie Auserehl Kelly. 1988. 47 pp. **(CDIE reference PN-AAZ-378)**
- RP 19F ..... *Demande d'Engrais de la Part des Exploitants dans les Contexte de la Nouvelle Politique Agricole au Sénégal: Une Etude des Facteurs Influençant les Decisions d'Achat d'Engrais Prises par les Exploitants* par Valerie Auserehl Kelly. 1988. 58 pp. **(CDIE reference PN-AAZ-379)**
- RP 20 ..... *Production Systems in the Lower Casamance and Farmer Strategies in Response to Rainfall Deficits* by J.L. Posner, M. Kamuanga, and S. Sall. 1988. 33 pp. **(CDIE reference PN-ABC-162)**
- RP 20F ..... *Les Systemes de Production en Basse Casamance et les Stratégies Paysannes Face du Deficit Pluviométrique* par J.L. Posner, M. Kamuanga, et S. Sall. 1988. 33 pp. **(CDIE reference PN-ABC-163)**
- RP 21 ..... *Informing Food Security Decisions in Africa: Empirical Analysis and Policy Dialogue* by Michael T. Weber, John M. Staatz, John S. Holtzman, Eric W. Crawford, and Richard H. Bernstein. 1989. 11 pp. **(CDIE reference PN-ABE-627)**
- RP 21F ..... *Comment Informer les Decisions Traitant de la Sécurité Alimentaire en Afrique: Analyses Empiriques et Dialogue Politique* par Michael T. Weber, John M. Staatz, John S. Holtzman, Eric W. Crawford, et Richard H. Bernstein. 1989. 13 pp. **(CDIE reference PN-ABD-104)**
- RP 22 ..... *The Creation and Establishment of Production Systems Research in a National Agricultural Research Institute: The Senegal Experience* by Jacques Faye, James Bingen, and Etienne Landais. 1988. 25 pp. **(CDIE reference PN-ABC-161)**
- RP 23 ..... *Foreign Trade of Agricultural Products and Inputs in Senegal from 1975 to 1984* by Frederic Martin and Alioune Dieng. 1988. 45 pp. **(CDIE reference PN-ABC-164)**
- RP 23F ..... *Le Commerce Exterieur de Produits et d'Intrants Agricoles du Sénégal de 1975 a 1984* par Frederic Martin et Alioune Dieng. 1990. 45 pp. **(CDIE reference PN-ABF-529)**
- RP 24 ..... *Regulatory Uncertainty and Government Objectives for the Organization and Performance of Cereal Markets: The Case of Senegal* by Mark D. Newman, P. Alassane Sow, and Ousseynou NDoye. 1988. 24 pp. **(CDIE reference PN-ABC-159)**
- RP 24F ..... *Incertitude Réglementaire, Objectifs Gouvernementaux, Organisation et Performances des Marchés Céréalières: Le Cas du Sénégal* par Mark D. Newman, P. Alassane Sow, and Ousseynou NDoye. 1988. 24 pp. **(CDIE reference PN-ABC-160)**
- RP 25F ..... *Etude sur la Commercialisation des Céréales dans la Région du Fleuve Sénégal: Méthodologie* par Michael Morris. 1988. 48 pp. **(CDIE reference PN-ABC-172)**
- RP 26 ..... *The Regulation and Organization of Cereal Markets in Senegal: Report on the Marketing Campaigns of 1983/84 and 1984/85* by P. Alassane Sow and Mark D. Newman. 1988. 29 pp. **(CDIE reference PN-ABC-165)**
- RP 26F ..... *La Réglementation et l'Organisation des Marchés Céréalières au Sénégal: Situation des Campagnes des Commercialisation 1983/84 et 1984/85* par P. Alassane Sow et Mark D. Newman. 1988. 35 pp. **(CDIE reference PN-ABC-166)**
- RP 27 ..... *Farm Level Cereal Situation in Lower Casamance: Results of a Field Study* by C.M. Jolly, M. Kamuanga, S. Sall, and J.L. Posner. 1988. 35 pp. **(CDIE reference PN-ABC-157)**
- RP 27F ..... *Situation Céréalière en Milieu Paysan en Basse Casamance: Résultats d'une Enquête de Terrain* par C.M. Jolly, M. Kamuanga, S. Sall, et J.L. Posner. 1988. 41 pp. **(CDIE reference PN-ABC-158)**
- RP 28F ..... *Budgets de Culture au Sénégal* par Frédéric Martin. 1988. 54 pp. **(CDIE reference PN-ABC-168)**
- ..... *Annexe 1 Budgets de Culture et Analyse des Marges dans le Bassin Arachidier*. 1988. 134 pp. **(CDIE reference PN-ABC-169)**
- ..... *Annexe 2 Budgets de Culture et Analyse des Marges au Sénégal Oriental et en Casamance*. 1988. 204 pp. **(CDIE reference PN-ABC-170)**
- ..... *Annexe 3 Budgets de Culture et Analyse des Marges dans la Vallée du Fleuve Sénégal*. 1988. 214 pp. **(CDIE reference PN-ABC-171)**
- RP 29 ..... *Agricultural Development and Policy in Senegal: Annotated Bibliography of Recent Studies, 1983-89* by Eric Crawford, R. James Bingen, and Malcolm Versel. 1990. 254 pp. **(CDIE reference PN-ABE-271)**
- RP 30 ..... *Lowland Cropping Systems in the Lower Casamance of Senegal: Results of Four Years of Agronomic Research (1982-1985)* by Joshua Posner, Mulumba Kamuanga, and Mamadou Lo. 1990. 130 pp. **(CDIE reference PN-ABU-251)**
- RP 31 ..... *Farming Systems Research in Southern Senegal: The Djiblor Experience (1982-1986)* by Mulumba Kamuanga and Joshua L. Posner. 1992. 57 pp. **(CDIE reference PN-ABT-624)**
-