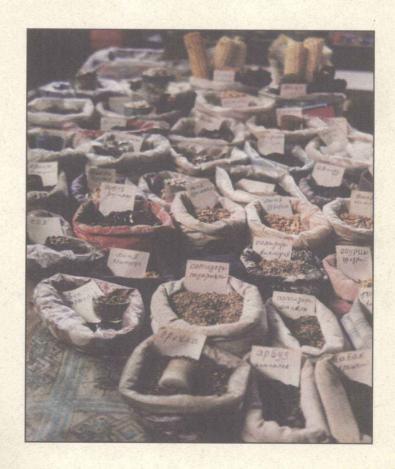
Commodity Market Reforms

Lessons of Two Decades



TAKAMASA AKIYAMA

JOHN BAFFES

DONALD LARSON
PANOS VARANGIS



Commodity Market Reforms

Lessons of Two Decades

EDITED BY
TAKAMASA AKIYAMA
JOHN BAFFES
DONALD F. LARSON
PANOS VARANGIS

THE WORLD BANK WASHINGTON, D.C.

©2001 The International Bank for Reconstruction and Development/The World Bank 1818 H Street N.W. Washington, D.C. 20433, USA

All rights reserved Manufactured in the United States of America First printing March 2001 1 2 3 4 04 03 02 01

The findings, interpretations, and conclusions expressed in this book are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent. The World Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use. The boundaries, colors, denominations, and other information shown on any map in this volume do not imply on the part of the World Bank Group any judgment on the legal status of any territory or the endorsement or acceptance of such boundaries.

The material in this publication is copyrighted. The World Bank encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly.

Permission to photocopy items for internal or personal use, for the internal or personal use of specific clients, or for educational classroom use is granted by the World Bank, provided that the appropriate fee is paid directly to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA; telephone 978-750-8400, fax 978-750-4470. Please contact the Copyright Clearance Center before photocopying items.

For permission to reprint individual articles or chapters, please fax a request with complete information to the Republication Department, Copyright Clearance Center, fax 978-750-4470.

All other queries on rights and licenses should be addressed to the Office of the Publisher, World Bank, at the address above or faxed to 202-522-2422.

Cover photograph of a seed market in the Kyrgyz Republic by Tjaart W. Schillhorn-van Veen, Environmentally and Socially Sustainable Development Unit, Europe and Central Asia Region, the World Bank.

Library of Congress Cataloging-in-Publication Data

Commodity market reforms : lessons of two decades / edited by Takamasa Akiyama ... [et al.].

p. cm. -- (World Bank regional and sectoral studies) ISBN 0-8213-4588-5

1. Produce trade--Government ownership--Africa--Case studies. 2. Produce trade--Government ownership--Developing countries--Case studies. 3. Privatization--Africa--Case studies. 4. Privatization--Developing countries--Case studies. 5. Primary commodities--Government policy--Africa--Case studies. 6. Primary commodities--Government policy--Developing countries--Case studies. 7. Africa--Economic policy. 8. Developing countries--Economic policy. I. Akiyama, T. (Takamasa), 1944– II. World Bank. III. Series.

HD9017.A2 C627 2000 380.1'41'096--dc21

Contributors and Acknowledgments

Contributors

Takamasa Akiyama, Lead Economist, Development Research Group, World Bank, Washington, D.C., United States of America.

John Baffes: Senior Economist, Development Prospects Group, World Bank, Washington, D. C., United States of America.

Brent Borrell, Chief Market Economist, Centre for International Economics, Canberra, Australia.

Jonathan Coulter, Principal Economist, Marketing and Enterprise Development, Natural Resources Institute, University of Greenwich, Chatham, United Kingdom.

Donald Larson: Senior Economist, Development Research Group, World Bank, Washington, D.C., United States of America.

Colin Poulton: Research Officer, Research Fellow, Agricultural Economics and Business Management Research Group, Imperial College at Wye, Wye, United Kingdom.

Gotz Schreiber, Lead Economist, Environmentally and Socially Sustainable Development Unit, Europe and Central Asia Region, World Bank, Washington, D.C., United States of America.

Panos Varangis: Senior Economist, Development Research Group, World Bank, Washington, D.C., United States of America.

Acknowledgments

The authors would like to thank Dr. Ron Duncan, Dr. Bruce Gardner, Dr. Yujiro Hayami, and Dr. John McIntire for improving earlier drafts.

Foreword

Structural reform of the economies of developing countries has been in the forefront of development interest since the early 1980s. This interest stems from a recognition within the development community that the structures and institutions of these countries are critical to any enhancement of economic and social development.

One of the key reforms has been that of primary commodity markets, especially agricultural commodity markets, because many developing countries, including the poorest, depend heavily on these for foreign exchange earnings and employment, and hence for poverty reduction.

This book focuses on the political economy and institutional aspects of agricultural commodity market reform. In order to explore in detail factors that are critical to the processes, consequences, and substance of reform, the authors have focused the analysis and evaluation on five commodities important in many developing countries, specifically cocoa, coffee, sugar, cotton, and cereal. In doing so, they highlight important lessons on how agricultural sector reform can be launched and implemented. Some of the factors identified in the book as being key to successful reform include the recognition that commodity markets often affect communities and even politics, that the initial conditions of markets are critical, and that government intervention can crowd out private sector initiatives, especially when it comes to building the institutions necessary for the development of a healthy agricultural sector.

The discussions in the book highlight the importance to the development process of polities and institutions. In so doing, they supplement a rich literature on structural reforms that has tended to focus primarily on economic consequences. Through these discussions it is clear that structural reforms have profound long-term ramifications for the development processes of developing countries.

The authors come to their analyses and discussions from the perspective of their own direct and extensive involvement in the market reform process. We trust that policymakers and others interested this area will find this book valuable, convincing, and highly relevant to the task of raising living standards of poor people in developing countries.

NICHOLAS H. STERN SENIOR VICE PRESIDENT AND CHIEF ECONOMIST THE WORLD BANK

Contents

Co	ntributors and Acknowledgmentsix
Fo	rewordxi
Int	roduction1
1.	Market Reforms: Lessons from Country and Commodity Experiences
2.	Cocoa Market Reforms in West Africa
3.	Coffee Market Liberalization since 1990
4.	Sugar Policy and Reform
5.	Policy Reform Experience in Cotton Markets
6.	Cereal Market Liberalization in Africa

Data Appendix257					
In	dex .				
Fi	gures				
	2.1	Market Shares of Cocoa-Producing Countries			
		During 1997/98			
	2.2	Constant and Current Cocoa Prices, 1950–9839			
	2.3	Marketing Costs and Taxes as a Percentage of the Selling Price, 1989			
	2.4	Marketing Costs and Taxes as a Percentage of the			
		Export Price, 1995			
	2.5	Farmgate Prices as a Percentage of f.o.b. Prices			
		in Early 1994–95			
	2.6	Cocoa Producer Prices in West Africa, 1983–84 to 1997–98 45			
	2.7	Producer Prices in West Africa as a Percentage of the			
		World Price, 1983–84 to 1997–98			
	2.8	Cocoa Producer Prices in Cameroon, 1993/94–1994/9550			
	2.9	Nominal and Real Producer Prices in			
		Côte d'Ivoire, 1975/76–1997/98			
	2.10	Distribution of Share in the ICCO Daily Price,			
		1983/84–1997/98			
	2.11	Nominal and Real Cocoa Producer Prices			
		in Nigeria, 1975/76–1997/98			
	3.1	World Coffee Prices			
	3.2	India's Preliberalization Marketing Chain			
	3.3	India's Marketing System after Liberalization92			
	3.4	Grower Price in India as a Percentage of Export Unit Value 94			
	3.5	India's Production and Exports94			
	3.6	Uganda's Marketing System before Liberalization			
	3.7	Uganda's Marketing System after Liberalization100			
	3.8	Development of Producer Prices in Uganda			
	3.9	Togo's Marketing System before Liberalization			
	3.10	Togo's Marketing System after Liberalization			
	3.11	Development of Producer Prices in Togo			
	3.12	Togo's Production and Exports			
	4.1	Average Share of World Sugar Production for			
		Selected Countries, 1994–98			
	4.2	Net Trade in Sugar for Brazil, China, and India, 1976–96128			
	4.3	Sugar Quotas for Preferential Imports from African,			
		Caribbean, and Pacific Group Countries			
	4.4	Sugar's Average Share of Total Merchandise Exports,			
		Selected Countries 1994–96			

4.5 4.6 6.1	Prices Paid by the Soviet Union for Cuban Sugar
Tables	
2.1	Key Characteristics of Different Cocoa-Marketing and -Pricing Systems
4.1	Producer and Consumer Subsidy Equivalents for Sugar, 1982–92
4.2	Results of Selected Studies on Sugar Trade Liberalization
4.3	Reductions in Sugar Export Subsidies Pledged during the Uruguay Round
4.4	Tariff Bindings for Raw Sugar Pledged under WTO Agreements
4.5.	Tariff Bindings for Raw Sugar Pledged under WTO Agreements
4.6	Selected Policy Variables for the Mexican-U.S. Agreement on Sugar Trade
4.7	U.S. Sugar Quota Allocations, 1996–97
4.8	Payments Systems for Cane146
5.1	Cotton's Importance to Developing and Transition Economies, 1993–94
5.2	World Cotton Production, Exports, and Yield Profiles, 1997–98
5.3	Composition of the Cotlook A and B Indexes
5.4	Cotton Production and Area Planted in East Africa, 1990–98
5.5	Public Institutions Involved in Uganda's Cotton Industry175
5.6	Cotton Production and Area Planted in Selected West African Countries, 1990–98
5.7	Grower Prices in Selected Developing Countries, 1989–90–1994–95
5.8	Cotton Production, Area Planted, and Net Exports in Egypt, Mexico, Pakistan, and the United States, 1990–98
6.1	
6.2.	Cereal Imports and Exports in Sub-Saharan Africa
	Cereal Imports and Exports in Sub-Saharan Africa
6.3.	The Cost of Shipping Maize from the United States to Lusaka, Zambia, 1995
6.4.	Progress of Liberalization in Nine African Countries
A6.1	Average Monthly Maize Wholesale Price in Dar es Salaam, 1993–94 to 1995–96, Highs and Lows

Introduction

SINCE THE 1980S MANY COUNTRIES have redefined the role of government in their economies. Reforming agricultural commodity markets has been an important part of this effort. The reforms have revamped market structures and eliminated or refashioned the mandates of key institutions, changing the way agricultural markets perform. As a result agricultural commodity markets are in transition, and their transformation has important ramifications for market players and supporting institutions.

Commodity market reforms are intended to boost an economy's efficiency—that is, to enhance the productivity of human talents and physical assets. In practice these reforms rely heavily on markets to allocate resources and to direct future investment. In the context of this book, the term *market reform* refers to the steps that are taken to reduce the state's involvement, open domestic and export markets to competition, and put in place public and private institutions that support free-market activities. Governments generally take a number of steps to achieve these goals in commodity markets. These measures include (but are not limited to) eliminating government marketing agencies and statutory monopolies in output and input markets, replacing prices set by the government with prices determined by markets, reducing explicit and implicit taxes, and privatizing marketing and processing assets.

Despite these similarities, commodity market reforms differ in scope across countries and commodities. The variations are significant, largely because the natures of the commodities and their markets differ, as do the social, political, and economic conditions prevailing at the time of reform. For this reason the outcomes of these liberalization efforts also differ. For example interventionist policies tend to tax export crops such as coffee, cocoa, and cotton. In countries where intervention in these markets has been heavy, reforms have improved the producer's share of world prices. Another example involves cotton and sugar markets, which are particularly difficult to reform because the production process is fragmented, including processors, producers, and publicly owned processing facilities. Further, policies affecting grains and sugar commonly favor urban consumers or promote food self-sufficiency, increasing the number of groups affected by reform. And in the sugar market, ongoing preferential trade arrangements help perpetuate existing interventions.

This book discusses the process of commodity market reform in the specific context of cocoa, coffee, cotton, grain, and sugar markets, drawing on experiences in those markets to provide lessons for policymakers. The book is also designed to provide a more general audience with a discussion of the issues associated with commodity market reform. The chapters focus on market-specific conditions that have facilitated or slowed the pace of reform, including the relationship between changing markets and changing institutions.

The examples illustrate the ramifications of market reform for the institutions that produce, market, and process the specific commodities as well as for the political economy. Many of the chapters look at African countries where agricultural commodities account for a significant share of GDP, export revenues, and employment and where reforms of agricultural commodity markets have become common in recent years.

This book supplements a rich literature on structural adjustment in commodity markets. The particular markets covered in this book warrant special attention, for several reasons. First, these commodities play an especially important role in many developing countries. Reforms—and the process of reform—in these markets can affect communities, entire economies, and even political power structures in significant ways. In these cases lessons from experiences with similar reforms can smooth the process of reform and help limit the costs of adjustment.

Second, these markets demonstrate the importance of taking initial conditions into account when designing reforms. They also show how a commodity's special features (derived in part from the production characteristics of the commodities and in part from historical developments) can affect the reform process. Consequently the experiences reported in this book can assist policymakers as they adapt general approaches to reform to the specific needs of key commodity subsectors.

Third, experience from these commodity markets illustrates how longstanding interventions like marketing boards and public ownership of proIntroduction 3

cessing facilities can crowd out private sector activities. The history of these markets shows how policymakers and the private sector cope with missing markets and institutions. And finally a close examination of policies in different commodity subsectors illustrates the practical ways that changes in marketing systems can shift political power away from the government to the private sector. This shift is significant, since it provides players in commodity markets with the autonomy they need to adapt to future events.

The first chapter of the book places the reforms in context by discussing the background against which they took place, including the political events and the economic thinking that drove them. In many cases reforms to agricultural commodity markets were undertaken only after state-run systems had become dysfunctional and international donors made further aid conditional on reform. In other cases new regimes were the agents of change. In still other instances external shocks made existing polices unsustainable.

Chapter 2 evaluates in detail the effects of reform on the marketing systems of four major cocoa-producing countries—Cameroon, Côte d'Ivoire, Ghana, and Nigeria. An examination of producer prices before and after liberalization in these countries (especially Cameroon and Nigeria) convincingly reveals that liberalization benefits producers. And while liberalization in these two countries has had some negative effects, these problems are arguably specific to the country itself and not to the cocoa subsector in general. Reforms in Côte d'Ivoire and Ghana have been gradual, focusing on promoting competition in the internal marketing system while maintaining controls on exports. The experience of these countries demonstrates how systems designed to provide stable incomes and orderly markets can evolve into systems that reduce smallholder incomes.

Chapter 3 examines coffee market liberalization in India, Uganda, and Togo. The chapter argues that the collapse of the export quota system under the International Coffee Agreement, along with conditions attached to World Bank financing, were instrumental in initiating the liberalization process. It also shows that liberalization has affected political institutions as well as institutions in the coffee markets themselves, considerably expanding the power of the private sector in designing and implementing policy.

Chapter 4 illustrates how the physical characteristics of a product affect market structure. For instance, sugar cane is difficult to store, so determining quality is not easy. Milling capacity is fixed, and scheduling deliveries requires cooperative action. The chapter argues that those managing reforms of the sugar subsector must understand these characteristics, which often explain past interventions and suggest potential approaches to reform. Governments have often been required to intervene in sugar markets when the necessary cooperative agreements between sugar growers and mills break down and to maintain the special access to protected markets on which some countries depend. Thus policymakers considering sugar mar-

ket reform may also need to address the institutional and economic consequences of long-standing government interventions. The chapter also examines policies that affect domestic policy regimes and international trade in sugar and discusses approaches to problems such as trade-related distortions, cane pricing, privatization, and the sequencing of reforms in domestic sugar markets.

Chapter 5 focuses on the liberalization of the cotton subsectors in Uganda, Tanzania, and Zimbabwe. It discusses recent efforts by West African cotton-producing countries to reform their cotton subsectors and looks briefly at reforms in the Arab Republic of Egypt, Mexico, Pakistan, and the United States. In Uganda and Zimbabwe, where liberalization has been completed, it has not only raised producer prices but also generated a considerable supply response. In Tanzania producer prices have risen, but the supply response has been minimal. Reforms in West Africa have also been designed to raise producer prices in a sector that is already performing well in terms of production and yields. Reforms in Egypt and Pakistan have been less ambitious, mainly because of the governments' unwillingness to delink reforms in the cotton and textile industries—a move that is essential to successful reform. In the United States and Mexico, where the governments have traditionally subsidized the subsector, reforms have taken a different path and are intended to compensate producers.

Chapter 6 presents grain market reforms experience for Ghana, Mali, Tanzania, and Zimbabwe. It discusses the approaches to market liberalization various countries have adopted in light of past government involvement. Grains are particularly important, as they affect economic development, political stability, and the welfare of the poorest groups (who also happen to be net buyers). For this reason many countries—including Mali, Tanzania, and Zimbabwe—have had statutory monopolies in the procurement and distribution of grains, either a marketing board or a stabilization fund. In some countries, like Ghana, the grain-marketing system has always been relatively open, with the majority of the trade in private hands.

Together the chapters illustrate that the positive and negative lessons from reform are both heterogeneous. Economic theory remains the best guide to reform but will not fully illuminate the most successful approaches. Theory tempered by a careful understanding of the markets, informed by lessons from earlier experience and blessed by good fortune, fosters the most successful reforms.

Market Reforms: Lessons from Country and Commodity Experiences

Takamasa Akiyama, John Baffes, Donald Larson, and Panos Varangis

During most of the 20th century, most governments intervened in primary commodity markets. In fact such interventions were an accepted part of the development policy framework. While the instruments of intervention varied across both countries and crops, a dominant architecture emerged. Designed to stabilize producer incomes, this architecture was based on a marketing board that provided a single channel for exports and imports, state ownership of processing centers such as cotton gins and sugar mills, and administered domestic prices that were normally panseasonal, panterritorial, and detached from international prices. International institutions took on the challenge of finding collective instruments to stabilize prices and reverse declining terms of trade.

The prevailing policy recommendations of development economists and institutions encouraged these interventions. But the policies, which had only limited success, soon generated a new set of problems. International commodity agreements failed, and the commodity parastatals found themselves financially strained. At the same time steady productivity gains in agriculture, transportation, and communication began eroding the efficacy of intervention instruments. Economists and policymakers turned increasingly to market-based approaches, which took on institutional form when the World Bank and other international organizations began a series of structural adjustment loans and credits conditional on certain policy reforms. At the same time, a series of political and economic events made reform inevitable.

The pace and consequences of reform varied across commodities and countries. The goals of reform were generally not sector specific; rather, the reforms were intended to boost general economic growth. Nonetheless commodity exports were generally taxed, and for this reason reform generally brought immediate income gains to producers (primarily smallholders) in the sectors covered in this volume. Frequently, the reform process also brought unintended consequences and often initially left public and private institutions poorly equipped to support private markets.

This volume draws lessons from experiences with agricultural commodity market reform. Reform efforts have produced outcomes ranging from success to failure. The chapters that follow address the specific market reform experiences for the following commodities: coffee, cocoa, cotton, sugar, and food grains. These commodities differ in their production processes and market organization, and these differences have directly influenced the rationale for and the pace and consequences of reform. Yet the reforms also share common features, and the outcomes provide us with common lessons. The remainder of this chapter covers these shared themes.

The Rise of Commodity Market Interventions

An examination of the specific factors that contributed to government intervention in commodity markets during the second half of the 20th century shows that governments had a variety of reasons for undertaking these strong measures. Experiences with famine and shortages convinced many governments in Asia and in newly independent Sub-Saharan Africa that control of the food crop sector was necessary in order to maintain food security. Controls were frequently extended to cash crops, which had a strategic value as a source of foreign exchange and tax revenues.

Colonialism had also left unanticipated legacies that postindependence governments sometimes addressed through intervention. In some instances—Kenya's tea and coffee markets, for instance—governments allowed parastatals to continue operating. These governments argued that the parastatals were necessary to encourage smallholder participation in cash crop markets that had been closed to small farmers under colonial rule. Similarly shortly after independence the Indonesian government converted plantations established under Dutch rule into government-owned "people's plantations" in order to ensure that plantation resources would be used to promote national goals. In Latin America many government interventions in the coffee and sugar industries date to the 1930s and were in part a reaction to the uneven distribution of land and wealth that prevailed at that time. Trade relationships established during colonial times were later institutionalized in bilateral and multilateral trade arrangements—for example, the agreements that provide preferential access to protected U.S. and

European Union (EU) domestic sugar markets. These arrangements in turn gave rise to domestic controls and institutions in favored producer countries designed to allocate and administer the benefits of preferential trade.

Development theory and practical political considerations also encouraged continued intervention. Many developing countries in Africa, Asia, Latin America, and the Middle East, influenced by the example of the Soviet Union, believed strongly in state-dominated economic development.² Moreover governments frequently pursued policies that taxed agriculture in order to promote industrial development. These approaches received support from many development economists in the 1950s.

In countries where one or two commodities were especially important to employment and export revenue, control of the rest of the commodity markets was linked to the larger goal of economic and sometimes social planning. Gunnar Myrdal (1956) argued for government control in economic management as a means of responding to poorly functioning markets or filling gaps where no markets existed. Arthur Lewis (1954) postulated that the transfer of labor from the farming sector to the industrial sector facilitated economic growth when agricultural labor was always abundant. Policymakers used Lewis's argument to justify policies that favor industrialization and implicitly or explicitly taxed agriculture. Hirschman (1958) reinforced this policy, theorizing that investing in industry rather than agriculture would lead to rapid and broad-based economic growth. Moreover, misguided interpretations of immiserizing growth arguments put forward by Johnson (1953) and Bhagwati (1958)—the so-called adding-up problem also provided theoretical justification for the practice of taxing commodity exports.3 Some analysts argued that the terms of trade of export commodities had been declining and would continue to fall (Prebisch 1950; Singer 1950). Together these arguments encouraged a development strategy that encouraged resource transfers through policies that discriminated against agriculture.4

Practical and political considerations often provided a further rationale for intervening in commodity markets. Commodities were often useful revenue sources, and some policymakers saw taxing commodity exports as the most convenient and practical way to finance state activities (Bates 1981). Government-controlled systems provided a source of political patronage—for example, politicians could reward supporters with trading licenses or high-level appointments to marketing boards. Further, state management often provided politicians and government officials with funding for discretionary expenditures. Government control of key commodity markets created opportunities for corruption. Indirect taxes on export commodities (including overvalued currencies and parallel exchange rates, which generated a black market in foreign exchange) provided financial benefits to the urban elite, who were important political allies (Lipton 1977; Bates 1981). As