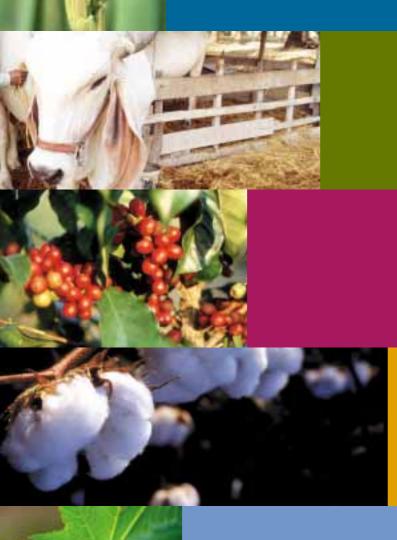
The State of Agricultural Commodity Markets



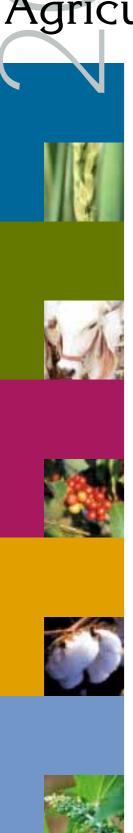


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The State of Agricultural Commodity Markets



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About this report

he State of Agricultural Commodity Markets 2004 is the first issue of a new biennial publication that is intended to expand FAO's existing series of "State of ..." reports. While the findings and conclusions presented rely on technical analysis by FAO commodity and trade specialists, this is not a technical report. Rather, it aims to present commodity market issues in an objective, transparent and accessible way to the attention of a wider public, including policy-makers, commodity market observers and all those interested in commodity market developments and their impact on developing countries.

A particular goal is to raise awareness of the impact that developments on commodity markets have on the livelihoods and food security of hundreds of millions of people in the developing world, as well as on the economies of dozens of developing countries that depend on commodity exports for a substantial portion of their export earnings.

The report is divided into four main sections, supplemented by tables that provide basic data on current conditions and historical trends for commodity prices and terms of trade.

The first section, Recent developments and long-term trends, considers trends and volatility in agricultural commodity prices and discusses current conditions and recent developments against this background.

The second section focuses on Food import bills. It looks at the changing pattern of food imports as developing countries have shifted from being net exporters to net importers of food and other agricultural products. The section also examines the impact of international food price movements on the food import bills of developing countries in general and the least developed countries in particular.

The third section, *Agricultural export earnings*, looks at the continuing importance of agricultural exports for the economies of many developing countries.

This section examines the implications of declining commodity prices and price volatility for commodity-dependent countries and investigates how tariffs and subsidies have impeded growth in agricultural exports from developing countries.

The fourth and final section explores Changing patterns of agricultural trade, with particular attention to their implications for commodity-dependent farmers and countries in the developing world. Issues addressed in this section include the shift in trade from primary to processed agricultural products, the growing importance and potential for commodity trade and regional trade agreements among developing countries, and the impact of increasing market concentration as agricultural commodity chains are increasingly dominated by a few transnational trading, processing and distribution companies.

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Foreword

ong-term trends and short-term shocks on agricultural commodity markets affect us all. They have a direct impact not only on the prices of the food we eat and the clothes we wear but on the economic well-being of households, communities and entire nations that depend on commodity exports. Less directly but just as inexorably, they affect the viability of rural communities and lifestyles, the pace of migration to urban areas and the prospects for sustainable development.

The impact is greatest on hundreds of millions of people and on many of the poorest countries in the developing world. An estimated 2.5 billion people in the developing world depend on agriculture for their livelihoods. For many of them, the sale of agricultural commodities or employment in producing and processing commodities for export represent their only sources of cash income. More than 50 developing countries, including a majority of the least developed countries (LDCs), depend on exports of three or fewer agricultural commodities, typically tropical products, for between 20 and 90 percent of their foreign exchange earnings. However, many LDCs are also net food importers, spending more than half their export earnings on commodity markets purchasing food imports to make up for shortfalls in domestic production. For these people and countries, developments on international commodity markets may literally spell the difference between feast and famine.

Declining prices, distorted markets

The long-term trend in real prices for agricultural commodities has been downwards but prices have also shown marked variability around that trend. In the second half of the 1990s, prices of a number of commodities exported by developing countries fell to their lowest levels since the Great Depression of the 1930s. The price of coffee plummeted 70

percent between 1997 and 2001, threatening the livelihoods of an estimated 25 million people who depend on coffee and triggering food emergencies in several countries in Africa and Central America. On the other hand, the lower prices for basic foods enabled many poor consumers, especially in urban areas, to meet their food needs at lower cost and to gain access to more nutritious diets.

Although commodity markets have rebounded in recent months, and dramatically so in the case of cereals, real prices in general continue their long-term downward trend. Many farmers and exporting countries still find themselves trapped by their dependency – producing and exporting more but earning less than they did in the past. At the same time, foodimporting countries have benefited from the downward trend, but are concerned by the variability and short-term increases in international food prices.

Many reasons can be cited for the longterm decline and short-term volatility of real commodity prices. Much of the steady downward trend appears to be structural, reflecting the basic forces of supply and demand that drive markets: global supplies have grown more rapidly than demand, fuelled by increased productivity and the emergence of major new producers.

Advances in agricultural productivity through improved technology potentially benefit both producers and consumers. The former stand to gain from lower costs and improved competitiveness, and the latter from lower prices. But it has mainly been producers in better-endowed and more-developed regions that have been able to take advantage of productivity gains to strengthen their position on world markets. The LDCs have seen their share of world agricultural trade shrink, even as their dependency on it has remained far higher than that of other developing countries.

The main beneficiaries of lower food prices have been consumers in developed countries and in urban areas of developing countries. However, for the vast majority of the world's poor and hungry people who live in rural areas of developing countries and depend on agriculture, losses in income and employment caused by declines in the prices of the products they market generally outweigh the benefits of lower food prices when commodity prices fall.

The problem of oversupply has been exacerbated by government policies in both developed and developing countries that have severely distorted agricultural markets.

Tariffs on agricultural imports in developed and developing countries have impeded growth in agricultural exports from developing countries. Tariff escalation, where higher tariffs apply to goods exported at more advanced stages of processing, has reduced opportunities for developing countries to export higher-value processed goods whose prices have been considerably more stable than those for basic commodities.

In addition to tariffs, farmers in developing countries must contend with competition from highly subsidized and highly mechanized producers in the industrialized countries. Producer support to farmers in developed countries currently adds up to more than US\$230 billion per year, almost 30 times the amount provided as aid for agricultural development to developing countries.

Tariffs and other barriers have also slowed the growth of trade among developing countries. South–south trade could expand rapidly, particularly where income growth is high and consumption levels remain low. But tariff barriers among developing countries can be higher than those imposed on imports by developed countries.

Another development in agricultural commodity markets has been the increasing concentration of market power in the hands of a few transnational corporations. Just three companies now control almost half the coffee roasting in the world, for example, and the 30 largest supermarket chains control almost one-third of grocery sales worldwide.

Such transnational enterprises have helped some smallholders integrate into the global market and have helped in the transfer of modern production and distribution technology. However, it is a matter of concern that market concentration has left others with little market power: FAO's Panel of Eminent

Experts on Ethics in Food and Agriculture warned four years ago that "there are serious power imbalances arising from the concentration of economic power in the hands of a few".

Making commodity markets work for all

Agricultural commodity prices have shown signs of recovery in recent months. However, that recovery does not appear to be secure and the long-term prospects for commodity-dependent farmers and countries in the developing world are not bright. On the other hand, further short-term commodity price rises for basic foods are likely, and may threaten livelihoods in many low-income food-deficit countries.

Agricultural commodity prices remain highly volatile, and the tendency for growth in the supply of agricultural commodities to outpace growth in demand at given prices persists. High tariffs and subsidies in developed countries still hamper market access and depress prices. While trade among developing countries is growing faster than trade between developing and developed countries, opportunities for increased trade among developing countries are still undermined by trade barriers. For some commodities, trade, processing and retailing have become dominated by a small number of transnational corporations, and the market power of farmers and exporting countries has become relatively limited. Concern has been expressed at the apparently small share of developing country producers in the final value of their production.

The commodity market crisis of the 1990s has focused attention on all of these problem areas and has highlighted the need for new approaches to resolving many of them.

Take the example of price volatility. Past efforts to deal with the problem emphasized measures to stabilize prices or revenues directly, by managing buffer stocks or providing compensation to countries that suffered from unforeseen shortfalls in export earnings. For the most part and for a variety of reasons, these measures failed. New approaches aim less at preventing price swings than at helping farmers and consumers protect themselves against their impact through schemes such as market-based price insurance or forward-pricing systems.

Efforts to address the long-term problem of excess production of traditional export crops must focus both on increasing demand and controlling supplies of some commodities and on reducing the vulnerability of farmers and countries that depend on these commodities.

Diversification strategies that would allow farmers to shift to growing higher-value crops or to producing and trading value-added processed goods can contribute to reducing both supplies and dependency.

Action must also be taken to improve our understanding of the impact that increasing concentration in commodity chains has had on competition, prices and the share of final retail value that goes to farmers and exporters of agricultural products. Careful monitoring and further analysis are urgently needed, along with support for efforts by exporters to increase their collective market power. Analysis must also be devoted to understanding how declining world prices of basic food commodities, as well as the changing market structures, affect the food security of the poor in both rural and urban areas.

With the launch of *The State of*Agricultural Commodity Markets, FAO
hopes to contribute to informed discussion
and decisive action in all of these areas.
This report will provide a biennial review of
important trends in commodity markets
and will highlight major policy issues and
options for action.

Given the significant role that agricultural commodities play in all of our lives and their vital importance for millions of the world's hardest working and most vulnerable people, increased attention and concerted action are long overdue.

Jacques Diouf FAO Director-General

Current conditions and recent developments on agricultural commodity markets

fter a steep and prolonged decline in the prices of many agricultural commodities to historic lows from the late 1990s through 2001, prices on world markets have rebounded, or at least levelled off, over the past two years.

The recent recovery reflects reduced supplies of some commodities and stronger demand for others, as markets have responded to chronic oversupply and falling prices caused by changes in technology, consumer preferences, and market structures, policies and institutions. A variety of short-term factors have also contributed to the recovery, including the weaker exchange rate for the United States dollar, which is used to denominate many commodity prices.

Fragile recovery for tropical beverages and sugar

Between 1997 and 2001, coffee prices fell by almost 70 percent, plummeting below the cost of production in many countries. This steep decline left coffee prices lower than they had been 30 years earlier, even in nominal terms, and precipitated food emergencies in several countries in Africa and Central America that depend heavily on coffee exports. Coffee prices have strengthened gradually over the past two years as producers, especially in Latin America, have responded to falling prices by reducing supplies.

Cocoa prices followed a similar trend but rallied earlier, starting in 2000. The recovery in cocoa prices began to falter by late 2003, however, as supplies started to rise again. The market has been weakened further by competition from "cocoa butter equivalent", as the European Union (EU) relaxed its regulations on the use of fats derived from other sources to replace some of the cocoa butter in chocolates.

Tea prices have also been under pressure, as production ran ahead of demand growth, reaching record levels in 2003.

Record production and surplus stocks have also continued to pressure world

sugar prices in the second half of the 2003/04 crop year.

Horticultural product prices remain sensitive to market balance

Increased supplies from Latin America and sluggish demand depressed banana prices in 2003. Frozen concentrated orange juice prices were similarly influenced, although fresh fruit prices were shored up by reduced production. While demand growth has been significant for tropical fruits, price levels remain sensitive to market balance.

Fibres and raw materials rebound

Shifts in the price trends for most agricultural raw materials have been less dramatic and there has been more variation among individual commodities. Nevertheless, a broadly similar pattern of recovery has emerged in most cases.

Cotton, rubber, jute, sisal and abaca prices have all benefited recently from stronger demand and slower supply growth. Prices for hides and skins, on the other hand, declined through 2003 in response to weak demand and increased supply.

Cereals and oilcrops register gains

International prices for most cereals surged during the second half of 2003, reflecting tight market conditions. In the case of rice, the tightness was exacerbated by the imposition of restrictions on exports in India and Myanmar. For wheat, reductions in exportable supplies in the EU and the Commonwealth of Independent States fuelled the price rise. Coarse grain prices continued to receive underlying support from sharply reduced exports by China, near-record low stocks in the United States and continuing increases in soybean prices.

The picture for oilseeds is rather different. In the past few years, prices have improved steadily from the low levels



recorded in 1999–2000 and producers have responded with a robust increase in production. The increase in prices was triggered mainly by a sustained growth in demand that outstripped the expansion in supplies.

With demand firm and stocks at relatively low levels, both global output and

prices for oilcrop products are expected to continue to rise in the short term.

Dairy prices strong but animal diseases disrupt the market for meat

Market balance is also currently favourable to dairy product prices. International prices

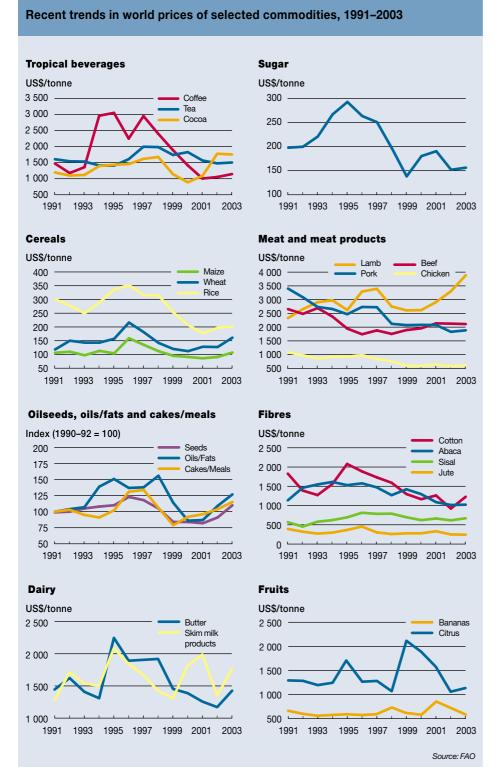
have been bolstered in recent months by limited export supplies and sustained import demand. Higher prices are expected to be maintained during 2004.

The international market for meats, on the other hand, continues to be disrupted by animal disease outbreaks. During the first half of 2004, approximately one-third of global meat exports were affected by outbreaks of avian flu or by identified cases of bovine spongiform encephalopathy (BSE). Import bans on poultry and beef from disease-affected countries are leading to higher prices for products originating from disease-free zones. Constrained export supplies of meat are also pushing up prices for other animal protein products.

Long-term decline continues

In general, it appears that the balance between supply and demand of agricultural commodities has improved, and with it the prospects for commodity prices after the sharp and persistent decline during the late 1990s. In spite of the recent strengthening, however, agricultural commodity prices generally remain close to historically depressed levels – and their longer-term decline relative to the prices of manufactured goods continues.

This secular downward trend is analysed further in the following sections of this report. For the latest information concerning commodity prices and trade, readers are referred to the Commodities and Trade Division pages on the FAO Web site at http://www.fao.org/es/ESC/en/index.html.



Long-term trends reveal structural changes

ovements in commodity prices on world markets provide a barometric reading on supply and demand conditions. Spikes or sharp drops in prices highlight the impact of shocks that affect the markets. Long-term trends in commodity prices, on the other hand, reflect the influence of changes in technology, consumer preferences, and market structures, policies and institutions.

A graph of agricultural commodity prices over the past 40 years reveals several striking features:

- Real prices of agricultural commodities, relative to prices of all manufactured goods, have declined significantly, even as nominal prices have risen.
- Real prices have fluctuated considerably around the long-term downward trend.
- Both the fluctuations and the long-term decline have been less pronounced since the mid-1980s.

Over the past four decades, real prices for agricultural commodities declined by about 2 percent per year. Several factors have contributed to this long-term decline.

Prices of agricultural commodities can be expected to decline relative to industrial products as technological advances reduce costs and make it possible, at given prices, to expand production at a rate that outstrips both population growth and increases in demand spurred by rising incomes.

Prices of some commodities have also been driven lower by oversupply, fuelled by intense global competition in production, reduced transportation costs and new technologies that have increased productivity and introduced synthetic alternatives to some commodities. In some cases, the emergence of major new producers has also affected market balance: between 1985 and 2001, for example, Viet Nam increased its coffee exports from less than 10 000 tonnes to more than 900 000 tonnes, becoming the world's second largest exporter, and continued to expand production even when prices plunged between 1995 and 2001.

Export subsidies and subsidies to producers in some developed countries have pushed down world prices for many agricultural products grown in temperate zones, reducing the export earnings of developing countries that export commodities such as cotton, sugar and rice.

Trends for real commodity prices reveal a distinct "breakpoint". Prior to the mid-1980s, prices fluctuated widely while the overall trend declined steeply. Since that time, both the fluctuations and the trend have flattened out considerably.

This change in the trend of real agricultural commodity prices is explained in part by a slowdown in the formerly rapid growth of prices for manufactured goods relative to commodities that had eroded the purchasing power of revenues from commodity exports in the past.

A number of global factors helped slow the rise in nominal prices for all traded goods, including trade policy reforms and increased trade in manufactured goods, whose prices have tended to fall more quickly as a result of technological advances and high productivity growth. One key factor was increased production and trade of manufactured goods by developing countries. Between 1980 and 2000, developing countries almost tripled their share of global manufacturing exports, which rose from 11 to 27 percent.

Trade liberalization and technological change have also played a part in diminishing price variability, by reducing the incidence of supply-side shocks. Trade liberalization has permitted a wider range of countries to participate in world commodity markets, reducing the relative importance of the supply situation in any one country, while technological advances have reduced the vulnerability of some crops to climatic influences. The low price levels reached in recent years have themselves limited the scope for extensive variability, at least downwards.



Impacts differ for both commodities and countries

Although real prices for all agricultural commodities have declined over the past 40 years, the rate of decline has varied from one commodity to another. Raw materials, tropical beverages, oilcrops, and cereals have experienced the steepest declines. The fall in real prices has been least severe for horticultural products, meat and dairy. Some developing countries have managed to take advantage of these trends by shifting production and trade into these higher-value sectors. By doing so, they have reduced their dependence on products whose prices

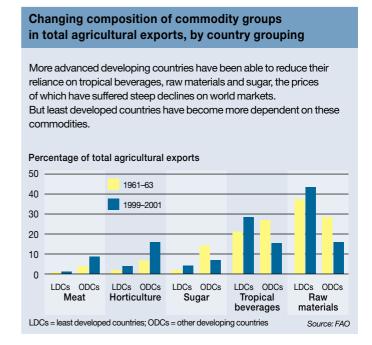
have fallen more sharply and remained highly erratic.

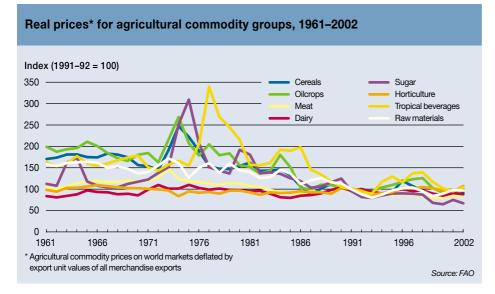
For the most part, it has been the more advanced and prosperous developing countries that have managed to do this. Developing countries other than LDCs have more than doubled the share of horticultural, meat and dairy products in their agricultural exports. At the same time, they reduced their reliance on tropical beverages and raw materials, bringing the share of these products in their total agricultural exports down from more than 55 percent in the early 1960s to around 30 percent in 1999–2001. But in the LDCs, dependence on these products for their agricultural export earnings actually

increased from 59 percent to 72 percent during the same period.

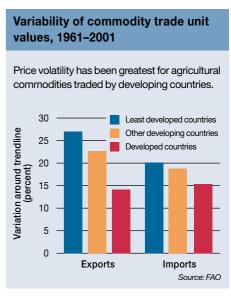
Many LDCs rely heavily on a few commodities whose prices not only have fallen sharply but have been highly erratic, further complicating economic planning and development. Over the past 40 years, prices have been most volatile for tropical beverages and raw materials - the same commodity groups that have experienced some of the steepest long-term declines. Overall, variability from trend levels has been highest for agricultural commodities traded by LDCs and other developing countries and has been lowest for agricultural products traded by developed countries, both for exports and for imports.

Agricultural commodity prices, 1961-2002 Real prices* for agricultural commodities have declined by almost 50 percent over the past 40 years, even though nominal prices have risen. Both trends have slowed significantly since the 1980s. Index (1991-92 = 100) 200 Nominal prices Real prices' Real price trend 150 MUV 100 50 n 1961 1996 2002 1966 1971 1976 1981 1986 1991 * Real prices deflated by export unit values of all merchandise exports ** MUV = Manufactures export unit value





Source: FAO



Changing terms of trade for agricultural commodities

or developing countries that depend heavily on commodity exports for foreign exchange, the cash price is analytically less revealing than is the purchasing power it provides. That purchasing power is reflected by the "barter" terms of trade – the ratio of prices of exported goods to the prices of imports. As this ratio diminishes, the quantity of imports that can be purchased from a given quantity of exports also shrinks.

For countries where agricultural trade accounts for a large proportion of total trade, movements in the terms of trade of agriculture can have important implications for the affordability of food imports and for food security. This is particularly true for LDCs and some other developing countries. During the commodity price boom of the mid-1970s and early 1980s, the prices of agricultural exports of developing countries increased more quickly than the prices of their agricultural (mainly food) imports. Since the mid-1980s, this trend has reversed. Many of these countries have suffered severe losses from deteriorating terms of trade, both between agricultural exports and imports and between the agricultural commodities they export and the manufactured goods they import.

At the aggregate level, terms of trade within the agriculture sector worldwide neither rose nor fell significantly between 1961 and 2002. However, looking at terms of trade separately for countries in different income groups reveals that developing countries experienced large and persistent fluctuations.

From the mid-1980s to the present, terms of trade for both the LDCs and for other developing countries have deteriorated significantly. For the LDCs, for example, agricultural terms of trade fell by half from a peak in 1986 to a low in 2001. Because many of these countries depend on commodity exports to finance food imports, a decline in terms of trade for agriculture threatens food security.

For developed countries, on the other hand, there has been no long-term trend in terms of trade in agriculture, and only minor fluctuations have occurred during the past 40 years.

Changing barter terms of trade between agriculture and manufactures

If deteriorating terms of trade in agriculture have hurt the balance of payments and increased the debt burden of many developing countries, the fall in terms of trade between agricultural commodities and manufactured imports has been even more persistent and more damaging.

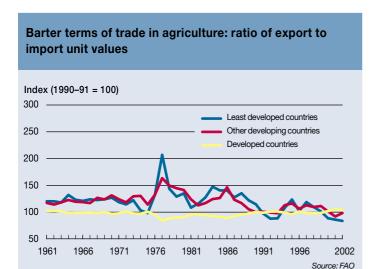
Between 1961 and 2001, the average prices of agricultural commodities sold by LDCs fell by almost 70 percent relative to the price of manufactured goods purchased from developed countries.

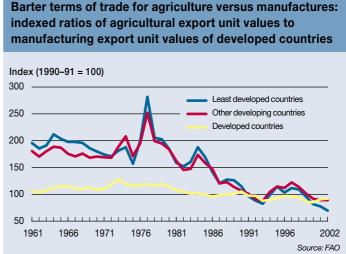
A decline over time in the barter terms of trade between primary goods and manufactured goods, with a consequent transfer of income from developing to developed countries, was noted some 50 years ago by economists Raul Prebisch and Hans Singer. They explained this in terms of the tendencies for economic growth to increase the demand for manufactured goods more than for primary products, and for productivity to increase more rapidly for primary products, thus driving the prices of primary products lower relative to those of manufactured goods. One recent study found that productivity increased 20 percent faster in agriculture than in manufacturing worldwide, and more than 100 percent faster in developing countries than in developed countries.

Most data do indicate a long-term decline in the barter terms of trade.

However, the rate of decline varies and, depending on the time period chosen, fluctuations in the data can make it difficult to distinguish trends from shorter-term variability. While there is a clear declining trend in the terms of trade for agriculture versus manufactures over the whole period, the nature of the trend clearly





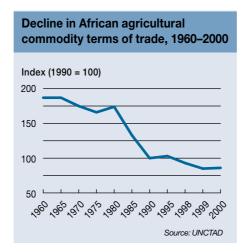


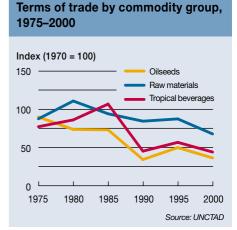
changes in the mid-to-late 1980s, and for the 1990s no significant downward trend is apparent.

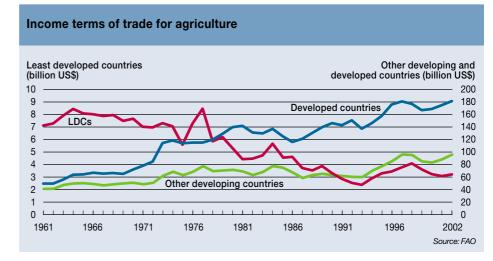
Impact of declining terms of trade on developing countries

Although it may be difficult to confirm and quantify a long-term global trend using statistical data, there is no doubt that terms of trade for agricultural exports from many developing countries have declined significantly. The decline has been most pronounced for the countries that can afford it least. Even during the 1990s, while the terms of trade for developed and other developing countries remained relatively stable, they plummeted by 25 percent for the LDCs.

A decline in the agricultural terms of trade can be counteracted by increases in the quantity produced and exported so as to maintain or increase the real value of export earnings. In fact, for developing countries as a group, increases in the quantity of agricultural exports have more than offset the effect of declining real export prices, such that the real value of their export earnings has risen by nearly 30 percent in the last two decades. In other words, their "agricultural income terms of trade" have increased. However, the evolution of the income terms of trade varied considerably among LDCs and other developing countries. For LDCs, export earnings failed to increase, and rising import prices further eroded their purchasing power. Real agricultural export earnings of LDCs fell by more than 30 percent over the same period. Over the last







40 years their income terms of trade have fallen by half.

The region that has suffered most from declining terms of trade is sub-Saharan Africa. Since the 1970s, their deterioration has led to a substantial reduction in the purchasing power of all African commodity

exports. World Bank estimates suggest that between 1970 and 1997 declining terms of trade cost non-oil-exporting countries in Africa the equivalent of 119 percent of their combined annual gross domestic product (GDP) in lost revenues. Export quantities have not grown sufficiently to cover the loss.

Changing consumption patterns and international trade

ver the course of the past 40 years, the net flow of agricultural commodities between developed and developing countries has reversed direction. In the early 1960s, developing countries had an overall agricultural trade surplus of almost US\$7 billion per year. By the end of the 1980s, however, this surplus had disappeared. During most of the 1990s and early 2000s, developing countries were net importers of agricultural products. FAO has projected that this agricultural trade deficit is likely to widen markedly.

The change has been even more pronounced for the LDCs, which over the same period have changed from being net exporters to significant net importers of agricultural commodities. By the end of the 1990s, imports by the LDCs were more than double their exports.

Food imports grow rapidly

Global trade in foodstuffs has grown rapidly and changed radically over recent decades. Between 1970 and 2001, gross world food imports, measured in terms of calorie equivalents, rose by almost 60 percent. But this growth differed markedly among both country and commodity groups.

Gross imports of food by developing countries grew by 115 percent over this period. Imports by developed countries, which already import a higher proportion of their food, grew by 45 percent. A closer look at the data reveals that food imports by developing countries increased rapidly during the 1970s, grew more slowly during the 1980s and accelerated again over the 1990s. This pattern holds true both for the volume of food imports and for the ratio of food imports to availability for consumption per capita. The expansion of food imports meant that the food trade surplus of US\$1 billion of developing countries was transformed into a deficit of more than US\$11 billion during this period. Moreover, this trend is expected to continue: according to FAO projections, by the year 2030, the net food trade deficit of developing countries is expected to swell to more than US\$50 billion in constant 1997-99 US\$.

Despite substantial differences in the trade and dietary profiles of developed and developing countries, imports of particular commodities appear to be evolving in a similar manner.

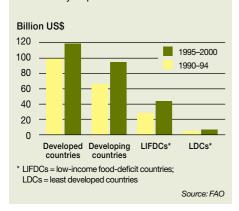
Among the five broad food commodity groups – cereals, edible oils, animal



Agricultural trade balance of least developed countries, 1961-2002 Since the late 1980s, the least developed countries have become major net importers of agricultural products. 10 000 9 000 8 000 7 000 Net deficit 6 000 5 000 4 000 3 000 2 000 Net surplus 1 000 0 2002 1961 1966 1971 1976 1981 1986 1991 1996 Agricultural imports Agricultural exports

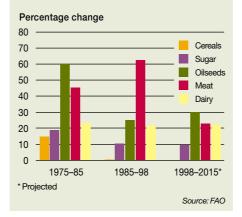
Food import bills by country group, 1990–2000

During the 1990s, developing countries increased their nominal food imports by 43 percent and low-income food-deficit countries by 54 percent.



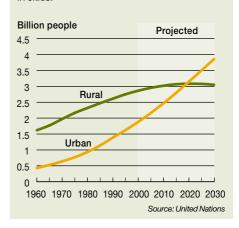
Changes in per capita food consumption in developing countries

Consumption of meat, oils, and dairy products has increased rapidly. Cereal consumption has not.



Urbanization in developing countries, 1960–2030

By the year 2020, a majority of the more than 6 billion people in the developing world will live in cities.



products, sugar, and fruit and vegetables – cereal foodstuffs once dominated international trade. Now, however, the share of cereals in total agricultural imports has fallen below 50 percent in developing countries and below one-third in developed countries. While the share of cereal imports has declined, both developed and developing countries are importing greater quantities of higher-value and processed foods, particularly edible oils, livestock products and fruits and vegetables.

The falling relative importance of cereal trade has masked divergent trends among different grains. Trade shares of the "premium" cereals – wheat and rice – have registered strong growth, but calorie dependence on traded coarse grains has decreased sharply.

The relative importance of imported sugar also has been in long-term decline. With expanded production and use of noncane sugar and other sweeteners, sugar imports by developed countries have fallen.

Changing diets, changing trade

Changes in patterns of production, advances in technology and changes in domestic and trade policies play an important role in determining the structure of international trade. However, the diets and preferences of consumers and the demands of an increasingly concentrated food industry have driven many of the shifts in trade among commodities. These have been further influenced by globalization and

the spreading presence of the fast-food industry in developing countries.

Income growth, relative price changes, urbanization and shifts in consumer preference have altered dietary patterns in both the developed and developing countries. When people have more money to spend, they add more variety and more expensive and high-value foods to their diets. These changes are reflected in both the volume and the composition of world trade in agricultural commodities.

Expenditures on foodstuffs and responses to income changes differ between developing and developed countries. In the latter, most consumers can already afford the foods they prefer. When their incomes rise, changes in their diets and food purchases are therefore relatively small.

In developing countries, on the other hand, rising incomes have an immediate and pronounced impact on diets and consequently on trade in both commodities and processed foods, as people adjust their budgets to include higher-value food items. Similarly, declining real food prices have allowed poor consumers access to improved diets at existing income levels.

Since the mid-1970s, for example, per capita meat consumption in developing countries has more than doubled. Over the same period, these countries have changed from being net exporters of more than 500 000 tonnes of meat to net importers of more than 1.2 million tonnes. FAO has estimated that over the next 30

years people in the developing world will increase the quantity of meat, dairy products and oils in their diets by 30 percent or more. Per capita consumption of cereals in these countries is not expected to change, although total cereal use per person may continue to rise owing to the growing use of coarse grains as feed.

In addition to rising incomes, rapid urbanization has contributed to changes in lifestyles, food preferences and the structure of commodity trade. As their numbers and purchasing power have grown, citydwellers have increased demand not only for more dietary diversity, but also for products that require less time to prepare. Imports of high-value and processed food products have risen to meet this demand. A growing problem of overnutrition and obesity in both developed and developing countries has appeared alongside the existing problem of undernutrition.

According to United Nations estimates, the world's urban population is expected to increase by 70 percent over the next three decades. Most of this growth will take place in developing countries, particularly in Africa and Asia. As recently as 1985, almost 70 percent of the population in developing countries lived in rural areas; by the year 2020, more than half of these 6 billion people are expected to live in cities. Their higher incomes and urban lifestyles are likely to bring about further changes in the structure of global imports, accelerating the trend towards higher-value and processed foodstuffs.

Food import bills strain economies

ecent increases in food imports have been particularly significant among many of the countries that are most vulnerable to food insecurity. For developing countries as a whole, the volume of gross food imports grew at an annual rate of 5.6 percent – far higher than the 1.9 percent annual growth in developed countries.

The economic performance of individual developing countries played an important part in determining how quickly they increased their food imports during the 1990s. Countries that recorded strong overall economic growth, as measured by per capita GDP, increased food imports more quickly. Rapid growth in the agriculture sector had the opposite effect. Where agricultural value added per capita grew more quickly, food imports generally did not.

Neither of these effects is surprising. Food production responds relatively slowly to changes in demand, as it takes some time for farmers to increase plantings, harvests or herd sizes. Expansion of domestic production can also be hindered

by inherent weaknesses in domestic food production and distribution systems. Examples of such weaknesses include low productivity, inefficiencies in supply chains and marketing systems needed to reach urban consumers, and lack of competitiveness with imported supplies - especially where the latter may have benefited from developed country subsidies. Thus, when incomes and demand rise rapidly, imports can scale up more quickly than domestic production. More rapid growth in the agriculture sector, on the other hand, often increases the availability of domestic foods, reducing the demand for imports.

Paying for food imports can strain the resources of countries where economic growth lags and foreign exchange earnings are limited. Examining how large a slice food import bills take out of GDP and export earnings (total merchandise exports) provides a way of gauging the level of "stress" food imports may represent.

Over the past three decades, the share of gross food import bills in GDP more than



Share of gross food imports (excluding food aid) in total apparent food consumption, 1970-2001 Since 1970, the proportion of imported food in total food consumption (in kcal terms) has increased in developing countries. Percentage 25 20 10 Other developing countries Low-income food-deficit countries Least developed countries 1975 1980 1985 2000 1970 1990

Share of food aid in total value of food imports by least developed countries, 1970–2001

Food aid accounted for an increasing share of total food imports in least developed countries through the mid-1980s, but has declined since then.



doubled for an average developing country. The increase was most pronounced for the LDCs, where the value of food imports rose from about 1 percent of their GDP to over 4 percent. This means that the growth of gross food import bills has outstripped overall economic growth in developing countries, straining their economic resources.

Comparing the cost of gross food imports with export earnings reveals the strain food bills may place on foreign exchange. It also reveals that over the past 30 years the countries most vulnerable to food insecurity (the LDCs) have spent, on average, an increasing share of their limited foreign exchange earnings to import food. In the early 1970s, they spent around 43 percent of their export earnings on commercial food imports, with the other developing countries spending around 36 percent. Since that time, however, the average share for the LDCs increased to 54 percent but declined to 24 percent for the other developing countries.

Food imports and food aid

In addition to spending an increasing share of their GDP and foreign exchange earnings on food imports, LDCs are also major recipients of food aid. When less food aid flows to countries that suffer from food shortages, it might be expected that commercial food imports would

Share of food imports in GDP in developing countries, 1970–2001 Since 1970, the share of GDP spent on food imports has increased sharply in developing countries. Among the least developed countries the share has almost tripled. Percentage 6 5 4 3 2 Least developed countries Other developing countries

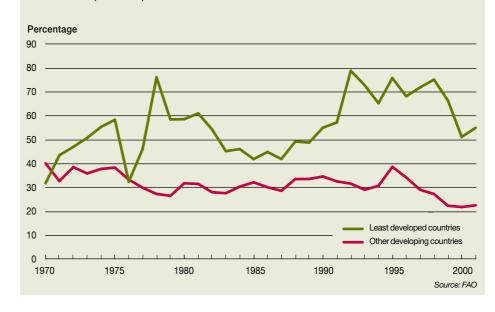
Share of food import bills in total value of merchandise exports, 1970-2001

1980

Since 1990, least developed countries have spent between 50 and 80 percent of the foreign exchange earned from exports to import food.

1985

1990



increase – and the data tend to confirm that this is the case.

1975

1970

When the value of food aid increased as a share of total food imports during the early 1980s, LDCs spent a significantly smaller share of their GDP and export earnings on commercial food imports. Since the mid-1980s, however, this trend has reversed. The value of food aid has declined significantly compared with the

total value of food imports. LDCs appear to have compensated by dedicating a larger share of domestic resources to boosting commercial food imports and maintaining national food security.

1995

2000

Source: FAO

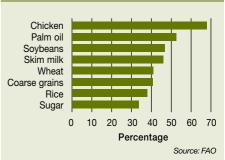
Sources of variation in food import bills of least developed countries

ariations in food import bills result from variations in both the prices and the quantities of food imported. Import price variation is largely the result of international market volatility. Increasing prices reduce the demand for imported foods and, if import demand is inelastic, lead to higher import bills at a lower quantity of imports, with negative consequences for food security. The opposite occurs where import prices fall. Import quantity variation is affected not only by price, as demand adjusts to price changes, but also by other important factors, including exogenous changes in domestic production and demand. Analysing the contribution of changes in prices and quantities of food imports to changes in the food import bills of LDCs could shed some light on the types of policy that would be appropriate for reducing market risks and uncertainties faced by vulnerable developing countries at the national level.

The results of a study of a sample of important food commodities – wheat, coarse grains, rice, sugar, chicken, skim milk, soybeans and palm oil – reveal consistent differences among commodities in the relative importance of price and quantity variation in determining changes in food import bills. The contributions of the

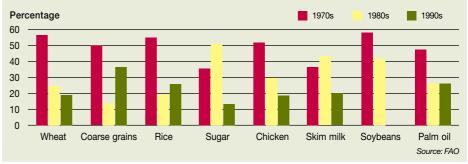
variations in import prices to import bills ranges from around 35 percent to nearly 70 percent. The contribution of price variations is significantly (in statistical terms) lower for basic staples (such as sugar, rice, coarse grains and wheat) than for those products with higher price and income elasticities (such as chicken and palm oil). This implies that food import bills for staple foods in LDCs are more influenced by variations in domestic production that prompt adjustments in imports to satisfy domestic basic food consumption needs. For instance, a large negative shock to domestic staple food production, given the high self-sufficiency in

Contribution of price variations to variations in import bills for selected basic food commodities for least developed countries



Distribution of the incidence of import price spikes for selected basic food commodities faced by least developed countries, 1970–2000

The frequency of spikes in prices for basic food commodities has diminished since the 1970s for all the commodities surveyed.





basic foods of most LDCs, translates into a large increase in demand for imports. Given the inelastic food-security consumption needs of LDCs, such large increases in import demand are not influenced greatly by international prices. From a policy perspective, these findings suggest that measures designed to address instability in domestic markets for basic food staples may play a relatively greater role in reducing instability in their food import bills.

However, measures to cope with the effects of international price instability may still be an important component of an overall strategy to address the uncertainty that is inherent in food import bills. Import price changes have a strong influence on LDC food import bills and, with so much of their limited foreign exchange earnings being spent on food imports, LDCs are particularly vulnerable to unexpected price spikes and instability in international food markets. A price spike is defined as an unpredictable extreme price increase beyond what could be expected as a normal response to the evolution of prices and quantities. Spikes in international prices for basic foods can impose serious strains on foreign exchange reserves, especially when they occur simultaneously with negative shocks in domestic food production.

Although the number of price spikes has diminished for many basic food commodities since the 1970s, many LDCs have suffered from extreme price volatility, with a large number of spikes in the prices of basic food commodities they must import to ensure the food security of their population.

Most of these spikes coincided with major events that affected food production and markets worldwide, such as the "global food crisis" of 1974–75. Others, however, coincided with important policy decisions in major industrialized regions, such as changes in domestic support policies in the United States and the EU that exacerbated price changes in international markets resulting from normal supply and demand variations.

Over the past 30 years, the food import bills of LDCs have grown much faster than both their overall economies and their export earnings. LDCs have also experienced much greater volatility in their food import bills, particularly in relation to their overall economic growth and export earnings. The combination of high and

Food imports, economic development and food security

Developing countries that suffer from widespread hunger tend to depend heavily on agriculture for employment and incomes and on exports of agricultural commodities for foreign exchange revenues. Even though their populations tend to be predominantly rural and their economies agricultural, these countries also rely increasingly on food imports and spend a high proportion of their foreign exchange earnings to purchase them.

Analysis of a wide range of variables related to economic and agricultural development, food imports and food insecurity suggests that the nature and degree of involvement in international trade by developing countries are associated with levels of hunger and food insecurity in developing countries.

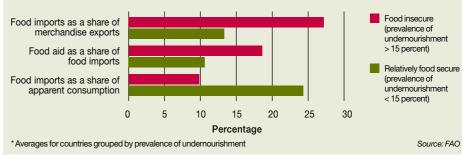
The relationships between food imports, involvement in international trade and food security can be demonstrated by dividing developing countries into two broad groups, based on the proportion of their population that is chronically hungry. Countries where more than 15 percent of the population is undernourished are classified as food insecure. Those where the prevalence of

undernourishment is less than 15 percent are considered to be relatively food secure.

Statistical analysis reveals that food insecurity is highly correlated with a composite index based on three indicators related to the structure of their international trade – the share of food imports in total merchandise exports, the share of food aid in food imports and the share of total food imports in calories available for consumption.

It appears that countries where hunger is widespread spend a far higher proportion of their export earnings on food imports. Despite this heavy expenditure of limited foreign exchange, however, these foodinsecure countries cover a smaller share of their apparent consumption from food imports. This suggests that food-insecure countries might import even more food to cover shortfalls in domestic production and ensure food security if they were not constrained by limited export earnings. It also suggests that the need to expend such a high proportion of foreign exchange resources on food imports may reduce the ability of these food-insecure countries to invest in other areas that would stimulate development and reduce their long-term vulnerability.

Average value of food-trade-related variables for least developed countries grouped by prevalence of undernourishment, 1999–2001*



unpredictable food import bills undoubtedly strains the ability of some LDCs to ensure food security at a national level.

Sudden changes in the markets triggered by major policy decisions appear to have had a measurable and potentially damaging impact on these vulnerable countries. Analysis of these price spikes and their relation to decisions on agricultural and trade policies taken by developed countries highlights the need to assess the potential impacts of the latter on LDCs during international policy deliberations, such as those in the World Trade Organization (WTO), and to plan measures to mitigate them. In addition, steps should be taken to reduce the vulnerability of LDCs and ensure their access to a steady supply of food on international markets by addressing problems of short-term world price volatility.

The risks of dependency on commodity exports

any developing countries depend on exports of a small number of agricultural commodities, even a single commodity, for a large share of their export revenues. This concentration leaves such countries highly vulnerable to unfavourable market or climatic conditions. A drought or a drop in prices on the international markets can quickly drain their foreign exchange reserves, stifle their ability to pay for essential imports and plunge them into debt.

As many as 43 developing countries depend on a single commodity for more than 20 percent of their total revenues from merchandise exports. Most of these countries are in sub-Saharan Africa or Latin America and the Caribbean and depend on exports of sugar, coffee, cotton lint or bananas. Most suffer from widespread poverty. More than three-quarters of these 43 countries are classified as LDCs, where per capita GDP is less than US\$900 per year.

Furthermore, recent data show that few of the countries concerned are reducing their commodity dependency. In 14 of the countries, dependency on a single agricultural commodity actually increased

between 1986–88 and 1997–99, and only seven countries succeeded in reducing their reliance on a single commodity. Over the past 20 years, real prices for many of the commodities these countries depend upon have fluctuated widely and fallen significantly overall (see page 11).

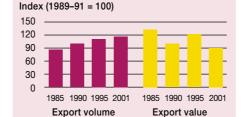
Declines and fluctuations in export earnings have battered income, investment and employment in these countries and left many of them deeply in debt. The International Monetary Fund (IMF) and World Bank have classified 42 countries as Heavily Indebted Poor Countries (HIPCs). Thirty-seven of these rely on primary commodities for more than half of their merchandise export earnings. More than half the world's cocoa and more than a quarter of its coffee are produced in countries classified as HIPCs.

The high cost of declining prices

Most agricultural commodities have experienced a downward trend in real prices, and the long-term forecasts are not encouraging. According to World Bank estimates for 2015, although real prices of

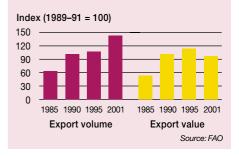
Exporting more coffee, earning less

Since coffee prices peaked in the mid-1980s, countries that depend on coffee for more than 20 percent of their export earnings have increased the volume of coffee they trade by 26 percent. But their income from coffee exports has fallen by almost a third.



Cotton exports grow but income lags

During the 1990s, countries that depend on cotton exports for more than 20 percent of their trade revenues increased the volume of exports by over 40 percent. But their revenues fell by 4 percent following a steep drop in cotton prices.





Dependence on agricultural export earnings from a single commodity, 1997/99

Forty-three developing countries depend on exports of a single agricultural commodity for more than 20 percent of their total revenues from merchandise exports. Most of them suffer from widespread poverty, with more than three-quarters classified as least developed countries. Most common among the commodities they depend upon are coffee, cocoa, cotton, sugar and bananas.



most agricultural commodities are projected to rise above current levels, they would still remain below their mid-1990s peaks.

For some developing countries, the collapse of commodity prices was traumatic, triggering rising rural unemployment and a steep decline in export earnings. Lower income from exports has jeopardized their ability to pay for food imports, particularly in countries where food import bills account for a high share of the GDP.

If prices for the ten most important (in terms of export values) agricultural commodities exported by developing countries had risen in line with inflation since 1980, these exporters would have received around US\$112 billion more in 2002 than they actually did. This is more than twice the total amount of aid distributed worldwide.

The high cost of price volatility

Although the extent of volatility has declined over the last 20 years, prices of many agricultural commodities remain highly volatile. Spikes or drops in prices can be triggered by a drought or a bumper crop. They are prolonged and deepened by the fact that both supply and demand for commodities, especially perennials, respond slowly to price changes.

When stocks are low and prices high, farmers can increase their planting, but they cannot compress the time it takes for crops to ripen to harvest. In the case of perennial crops such as coffee or cocoa, that can take years. When farmers eventually do increase

production, prices fall as supplies quickly outgrow demand in importing countries, given that demand does not grow significantly in response to lower prices. The result is a pattern of short-lived booms followed by lingering slumps.

Overall, instability tends to be higher for agricultural raw materials and tropical beverages than for temperate-zone products. The former are key commodities for export earnings in developing countries.

Declining prices and price volatility cost both farmers and governments in the developing world dearly. A steep or prolonged slump in commodity prices can make debt repayment difficult, turning short-term borrowing into long-term debt. A recent IMF/World Bank publication cited a sharp drop in the prices of key export commodities as the main reason why the ratio of debt to exports had worsened dangerously in 15 heavily indebted poor countries.

Because exports provide the foreign exchange needed to repay debts, the debt-to-exports ratio is often used to gauge whether debts are sustainable. The report noted that the countries in question depended on exports of cotton, coffee, cashews, fish and copper, all of which had experienced steep price reductions.

Some countries have managed to limit, at least temporarily, the adverse effects of falling real prices on export earnings and incomes through productivity improvements and cost reduction. However, widespread adoption of cost-reducing innovations can add to the downward pressure on prices for all, while those exporters not sharing in productivity increases (often the LDCs) may find themselves squeezed between falling prices and costs that are higher than average.

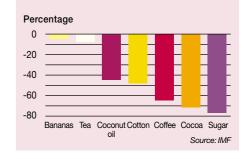
Instability of nominal world prices for selected commodities, 1986-99

Commodities traded by developing countries tend to be more volatile than temperate zone products exported by developed countries.

Average of annual deviation from trend (percent) 25 20 15 10 Beef Coarse Wheat Cocoa Sugar Coffee grains Source: FAO

Decline in nominal prices for selected commodities, 1980–2000

Several of the commodities exported by commodity-dependent countries have experienced steep declines over the past two decades.



Barriers to trade in developed countries – tariffs, tariff escalation and producer support

he high level of agricultural protection in both developed and developing countries and the high level of domestic support in the former have impeded growth in agricultural exports from developing countries. With the WTO Agreement on Agriculture, the Uruguay Round of trade negotiations initiated the process of reducing barriers to agricultural trade. But the level of protection remains high.

For Organisation for Economic Co-operation and Development (OECD) countries, the average bound tariff for agricultural products is 60 percent, compared with an average rate of 5 percent for industrial goods. Average applied tariffs on agricultural imports from developing countries, are estimated to be 12 percent in the United States, 20 percent in the EU, 17.5 percent in Canada and 22 percent in Japan. (Of course, these averages can only give a broad indication of relative tariff incidence, and will be influenced by the commodity and country composition of trade flows.) At the same time, preferential trade arrangements offered by some developed countries,

particularly for the LDCs, have provided many opportunities for these countries to expand and diversify their exports. These have increasingly included duty-free and quota-free access to imports from LDCs as under the EU's "Everything but Arms" initiative. However, trade preferences have been underutilized in many cases. Tariffs applied by developing countries can also be high and are a constraint on the expansion of trade among them.

Tariff peaks hit hard

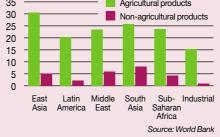
Average tariffs faced by developing countries may be low, but "tariff peaks" that are substantially higher than the average are applied for a number of the commodities they export, such as sugar and horticultural products. For each commodity group, the developed countries have more tariff peaks and higher average peak tariffs than the developing countries. According to the WTO, the highest tariff peaks on agricultural imports in developed countries are as high as 350 percent for tobacco, 277 percent for chocolate, 171 percent for oilseeds, and 134 percent for poultry.

According to FAO estimates, if tariffs were reduced by 40–60 percent in developed countries and 25–40 percent in developing countries, with tariff peaks being subjected to the biggest cuts,

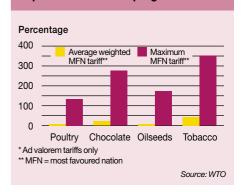
Developed countries' tariffs on agricultural and non-agricultural products by region, 1997

Developed countries levy much higher tariffs on agricultural exports from developing countries than on those from other developed countries.





MFN tariff peaks in developed country markets on agricultural imports from developing countries*





agricultural exports of LDCs could increase by as much as 18 percent.

Tariff escalation deters diversification

Exports from developing countries are also faced with tariff escalation, in which higher tariffs are levied on goods exported at more advanced stages of processing. Tariff escalation is pervasive for many agricultural commodity chains – the sequences of processing steps through which a basic commodity such as cocoa beans is transformed into a final product such as chocolate.

A recent FAO study of 16 commodity chains concluded that 12 suffer from tariff escalation, mostly at the first stage of processing. The study also found that tariff escalation is particularly pronounced in commodity sectors (such as meat, sugar, fruit, coffee, cocoa, and hides and skins) that are important to many of the poorest developing countries.

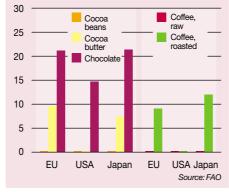
The food-processing industry includes some of the highest levels of tariff escalation and tariff peaks. Tariffs on fully processed foods in many cases are more than double the tariffs on the basic food commodities. This is seen as one reason for the limited involvement of developing countries in exporting processed products. Another recent study by FAO found that for developing countries about 57 percent of agricultural export earnings came from processed agricultural products compared with 68 percent in developed countries. For LDCs the share of processed products in agricultural exports amounted to only 20 percent. However, tariff escalation discourages investment in agricultural processing in developing countries and blunts efforts to reduce dependence on primary commodities and diversify into more highly valued products. There are, of course, other reasons, including domestic supply constraints and entry barriers arising from concentration in international markets, which discourage vertical diversification into the production of value-added forms of commodities by developing countries.

Reducing tariff escalation has been identified as one of the most important market access issues in the current WTO negotiations on agriculture. Thirteen of the 45 negotiating proposals that have been submitted called for substantial reductions in tariff escalation, particularly in the developed countries.

Tariff escalation on coffee and cocoa products in some developed countries

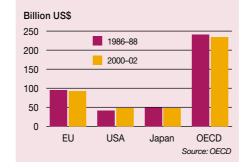
Tariffs on processed coffee and cocoa products exported to developed countries are far higher than tariffs on raw beans.

Tariffs on selected products (percent)



Support to agricultural producers in developed countries

Farm support in the developed countries totals more than US\$200 billion per year and has declined only marginally since the late 1980s.



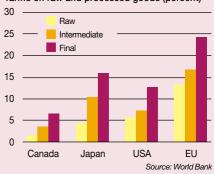
Subsidies in developed countries

While tariffs have generally been falling, other policies that may further limit exports from developing countries have not been substantially modified. For example, although the value of such support has declined in both nominal and real terms, export subsidies and domestic support in some developed countries have remained high and have depressed prices on world markets, eroding the incomes and market share of producers in non-subsidizing developing countries and draining the foreign exchange reserves of many countries that depend heavily on commodity exports.

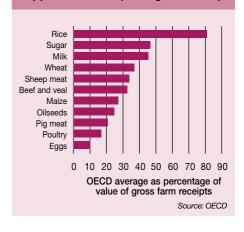
Tariff escalation with level of processing in developed countries

Developed countries impose far higher tariffs on processed goods, making it difficult for developing countries to export higher-value products.

Tariffs on raw and processed goods (percent)



Subsidies to agricultural producers in OECD countries: producer support estimate (average 2000–02)



Total support to farmers in the OECD countries adds up to more than US\$200 billion per year. Support has been particularly high for products such as rice, sugar, milk, wheat and meat. As the World Bank recently observed, "although official export subsidies may be small and shrinking, effective export subsidies created by domestic support are increasing". The extent to which domestic support has an impact on world market prices for agricultural commodities obviously depends on the form that support takes and the extent to which it is "decoupled".

In the case of cotton, while there are no export subsidies in the United States and the EU, various forms of direct support

allow farmers to produce cotton that is then exported at prices below the costs of production. The cost of competing with exports of heavily subsidized cotton from these countries has been high for cotton farmers and cotton-exporting countries in the developing world (see box). Similarly, with subsidies to sugar beet farmers totalling more than US\$2.2 billion per year, the EU has become the world's largest exporter of sugar. European sugar is exported at prices that are 75 percent below its production cost.

Constraints in developing countries

Tariffs, subsidies and other trade-distorting policies in developed countries have to a large extent eroded the market share and revenues of exports by developing countries. But policies, priorities and conditions within the developing countries themselves have also contributed to their loss of competitiveness and inability to diversify into more profitable and less volatile sectors.

During the 1980s and 1990s, many developing countries dismantled the state marketing boards that had previously exerted monopoly control over domestic trade and prices for agricultural commodities. Farmers were no longer compelled to sell at prices set far below the value of their produce on world markets. Cocoa farmers in Ghana, for example, received only 6 percent of the export price of cocoa in the early 1980s. Now they get

more than 40 percent. Elimination of what amounted to confiscatory taxation on agriculture has restored incentives for farmers to increase investment and production.

In many cases, however, the abolition of marketing boards has left an institutional vacuum. Farmers often relied upon the boards for credit, fertilizer and other inputs, and for access to extension and training. Now that the boards are gone, in many cases neither government nor the private sector has taken on these roles.

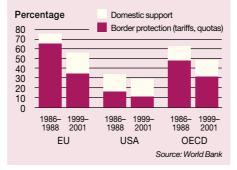
Smallholders in many developing countries have been confronted by loss of access to credit and soaring prices for inputs. Poor market infrastructure and information channels leave them vulnerable to price volatility and exploitation by trading companies that have often stepped in to replace the state monopoly with a private one. At the same time, public expenditures in agriculture have dwindled. In many countries, both yields and quality of commodities have fallen since the marketing boards were abolished.

Meeting challenges and opportunities

Lack of access to credit, extension and good market information threatens farmers' ability to break their dependence on traditional primary commodities and diversify into higher-value agricultural exports. In recent years, demand for fruits, vegetables and other non-traditional agricultural exports (NTAEs) has grown,

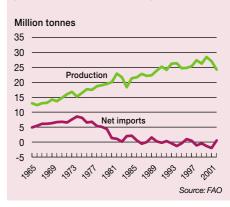
Support as share of farm-gate prices

Tariffs, quotas and domestic support to farmers account for around 30–50 percent of farmers' revenues in OECD countries. While tariffs have decreased since the late 1980s, direct subsidies to producers have grown.



Production and net imports of sugar in the European Union, Japan and the United States, 1965–2002

High protection and support for sugar in the developed countries have increased domestic production and reduced net imports.





while prices for commodities traditionally exported by developing countries have stagnated or declined.

But shifting to new crops and markets requires training and investment. New entrants to the NTAE market must also meet the high quality standards and strict delivery deadlines set by the supermarkets and large retailers who dominate the market for these goods.

Small producers in developing countries face increasing marginalization unless they adjust to these conditions. To enter the fresh fruit and vegetable sector, for example, small farmers need to establish marketing groups, develop communications systems and acquire the training and tools to deliver their produce washed, trimmed, cut, graded and labelled.

While some small producers have managed this transition effectively, the challenges are proving difficult. In general, it has been the more affluent farmers and certain more affluent developing countries that have succeeded in diversifying into NTAEs. The LDCs, on the other hand, have seen their share of both NTAEs and total agricultural exports continue to decline.

Cotton subsidies in developed countries depress world prices, national economies and rural livelihoods

More than 10 million people in Central and West Africa depend on cotton production for their livelihoods and food security. For many countries in the region, cotton exports provide the main source of foreign exchange revenues and rural employment. In 2001, cotton accounted for more than 50 percent of the total agricultural exports and 2.5–6.7 percent of the GDP of Benin, Burkina Faso, Chad, Mali and Togo.

Working small plots of 1–2 hectares and relying on manual labour, farmers in West Africa rank among the lowest-cost producers of cotton in the world. Since the mid-1990s, however, they have been battered by a collapse in cotton prices and by competition with cotton exports from the United States. Production costs in the United States are three times higher than those in West Africa. But United States cotton farmers also benefit from US\$3–4 billion per year in direct support – more than the entire GDP of Burkina Faso, where 2 million people depend on cotton production.

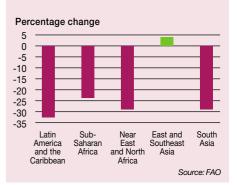
Between 1998 and 2001, as cotton prices slumped to record lows, cotton production in the United States grew by more than 40 percent and the volume of exports doubled.

The collapse of cotton prices is estimated to have cost eight West African countries nearly US\$200 million in lost annual export revenues. The cost to millions of rural households for which cotton is the only source of cash income has also been high. One recent study by the World Health Organization found that West African households that grew cotton in addition to maize had better nutrition and higher incomes. When cotton production grew by 175 percent between 1993 and 1998, poverty decreased by 16 percent.

Cotton subsidies in the developed countries are not the only reason that cotton prices have fallen for domestic producers in some developing countries. In some cases, domestic policies have also penalized cotton producers. Moreover, technological change and competition from artificial fibres have been pushing the world cotton price down over the past 50 years. However, a study by FAO suggests that eliminating all domestic support – not only support notified to the WTO – would increase world cotton prices by 5–11 percent, and would prompt an expansion in African exports of at least 9 percent and possibly as much as 38 percent.

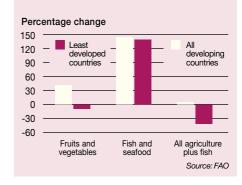
Share of expenditure on agriculture in total government expenditures in developing regions, 1990–92 to 1996–98

Government expenditure on agriculture has fallen in proportion to total government spending in all developing regions except East and Southeast Asia.

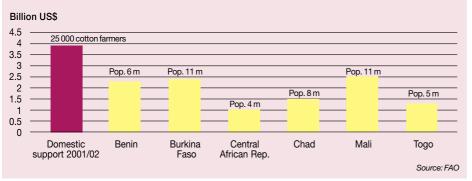


Developing country and least developed country shares in world agricultural exports, 1980–81 to 2000–01

Overall, developing countries have increased their share of exports in rapidly growing subsectors such as fruits, vegetables and seafood enough to make up for losses of market share and revenues in other agricultural products. Least developed countries have not. Much of the least developed countries' gains in seafood came from developed-country fleets fishing in their waters.



United States domestic support for cotton and gross national incomes for selected West African countries



The evolution of trade in primary and processed agricultural products

ver the past 20 years, the value of world trade in processed agricultural products grew more quickly than trade in primary agricultural products. Exports of processed agricultural products grew 6 percent per year during the period 1981–2000, compared with 3.3 percent for primary products. As a result, the share of processed products in total agricultural trade increased from 60 percent in 1981–1990 to 66 percent in 1991–2000. Growth rates have been exceptionally high (above the average of 6 percent) for the processed forms of cereals, fruit, vegetables, pulses, tropical beverages and poultry products.

A number of factors have contributed to the decreasing share of primary commodities in agricultural trade. On the demand side, rising incomes globally and changing lifestyles have prompted consumers to spend an increasing share of their incomes on manufactured and processed goods. On the supply side, continuous improvements in packaging and processing technologies as well as lower transport costs and reductions in barriers to trade have increasingly facilitated trade in processed products. The high costs associated with processing,

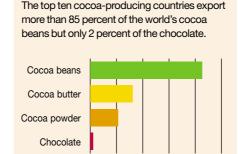
packaging, advertising, marketing and distribution mean that the share of the primary commodity in the value (price) of the final processed product has inevitably diminished. The use of agricultural raw materials in other sectors of the economy has also diminished with the development of synthetic alternatives.

Although some developing countries increased their share of world exports of processed agricultural products, the developed countries captured most of the rapidly growing trade in this sector. Many developing countries, particularly the LDCs, still depend heavily on exports of primary agricultural products. The share of developing countries in world exports of processed agricultural products decreased from 27 percent in 1981–1990 to 25 percent in 1991-2000. For the LDCs as a group, their share in processed agricultural exports fell from a negligible 0.7 percent to 0.3 percent over the same period.

Developing countries lose ground

Developing countries' shrinking share of exports of processed products has been

Share of cocoa-producing developing countries in primary and processed cocoa products



Source: FAO

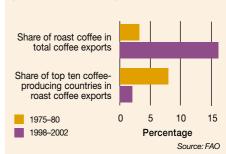
Percentage share of top ten cocoa-producing countries in world exports

60

40

Changes in shares of roast coffee in coffee exports, 1975–80 to 1998–2002

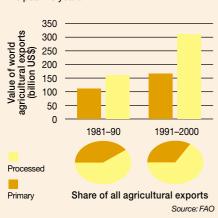
The share of roast coffee in total coffee exports jumped from 3 to 16 percent between 1975–80 and 1998–2002. But the share of the top ten coffee-producing countries in these exports plummeted from 8 to 2 percent.





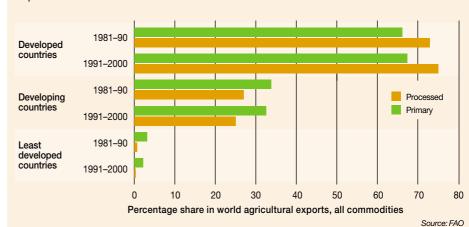
Value and share of primary and processed agricultural products, 1981–90 to 1991–2000

Global trade in processed agricultural products grew faster than trade in primary products over the past 20 years.



Developing and developed country shares in exports of primary and processed agricultural products, 1981–90 to 1991–2000

Developed countries increased their share in world exports of processed agricultural products from 73 to 75 percent over the past 20 years. Developing countries saw their share shrink from 27 to 25 percent.



particularly evident in such products as cocoa and coffee. The share of the top ten cocoa-producing developing countries in world exports has declined as the stage of processing has increased. While the share of chocolate exports in total cocoa trade rose from 22 percent in 1975–80 to 58 percent in 1998–2002, the share of these countries in chocolate exports declined from 2.4 percent to 2 percent during the same period.

Similarly, the top ten coffee-producing developing countries' share in green coffee exports remained unchanged at about 67 percent between 1975–80 and

1998–2002, but their share in roasted coffee declined from 8.5 to 1.8 percent during the same period.

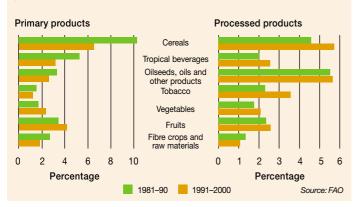
Market access and market entry barriers in importing countries have limited the ability of developing countries to expand exports of their processed products. Tariff escalation, in particular, constitutes a major barrier to market access for most of the processed agricultural exports of developing countries.

Several studies have shown that agricultural commodity chains, particularly those of high-value crops and processed products, are increasingly dominated by a few transnational enterprises and distribution companies with significant market power.

Internal supply constraints also limit the ability of many developing countries, particularly LDCs, to take advantage of opportunities to trade processed agricultural products. These include obsolete technology; inadequate transport, storage and marketing infrastructure; inadequate legal and regulatory frameworks; and trade and economic policies that are biased against agriculture and exports.

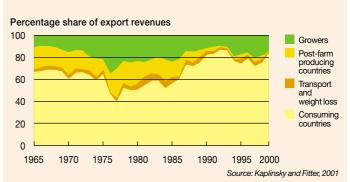
Share of primary and processed products in world agricultural exports, 1981–90 to 1991–2000

The share of many primary products in total agricultural exports has declined, even as the share of processed goods made from the same products has increased.



Growers' share in coffee export revenues declines as consuming countries' increases

After increasing to more than 20 percent during the 1970s and early 1980s, the growers' share of coffee export revenues has fallen by almost half. During the same period, the share of consuming countries has increased to more than 80 percent.



Commodity trade and regional integration among developing countries

uch attention has understandably focused on tariffs and other trade barriers that limit developing countries' commodity exports to the developed world. But several studies have suggested that in the long run developing countries stand to gain a great deal from reducing barriers to agricultural trade among themselves as well.

Since the mid-1980s, agricultural trade among developing countries has grown rapidly, at an annual rate of 8.8 percent, outstripping the 4.2 percent increase in shipments to developed countries. The share of agricultural exports that move between developing countries has increased by more than one-third, from 31 percent to 44 percent.

Much of this increased trade took place between neighbours in developing regions. Latin America registered the most rapid growth in intraregional trade, with an increase of more than 90 percent in the proportion of exports shipped to other countries in the region.

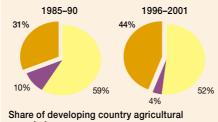
Regional trade agreements

The proliferation of regional trade agreements (RTAs) has contributed to reducing trade barriers and stimulating trade among developing countries. In many developing regions, RTAs are seen as a vehicle for promoting and diversifying trade. This is particularly true of those agreements that have reduced tariffs and other barriers to agricultural trade within their regions. A recent FAO study concluded that regional trade agreements had been the main trigger for rapid growth of agricultural trade within Latin America.

Some of the RTAs among poorer developing countries, however, have not seen significant growth in agricultural trade. Many have been hampered by major structural and policy obstacles, including inadequate transport and communication facilities and poor information about markets and investment opportunities. The lack of standardized packing, grading and quality control systems at regional

Increase in agricultural trade among developing countries, 1985-90 to 1996-2001

The share of agricultural exports from developing countries that went to other developing countries increased from 31 to 44 percent between 1985-90 and 1996-2001.



exports to:

Developing countries Developed countries

Central and Eastern European countries

Intraregional trade among developing countries, 1985-90 to 1996-2001

Intraregional trade increased as a share of total agricultural trade in all developing regions between 1985-90 and 1996-2001.

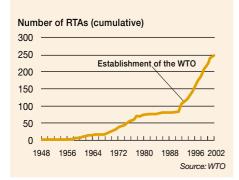
Percentage share of intraregional trade in total agricultural trade





Regional trade agreements notified to the General Agreement on Tariffs and Trade/World Trade Organization, 1948–2002

The number of regional trade agreements (RTAs) has grown at a rate of 15 per year since 1995, more than five times the rate during the previous 45 years.



levels also continues to frustrate efforts to expand trade.

In the past, many RTAs deliberately excluded significant parts of agricultural trade. Often agricultural commodities or food products were classified as "sensitive", allowing members to reduce tariffs more slowly and retain them at higher rates for these products or to exempt them altogether.

RTAs formed in the past decade are more comprehensive in their treatment of agriculture. The North American Free Trade Agreement (NAFTA) and the Southern Common Market (MERCOSUR) have removed nearly all agricultural trade barriers.

Growth in the number and scale of RTAs

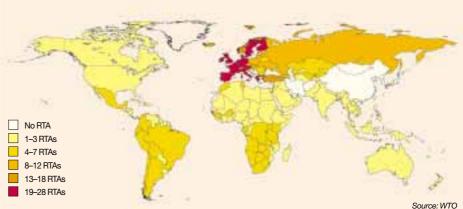
The number of RTAs has grown rapidly since the late 1980s. As many new RTAs have been formed since the WTO was established in 1995 as during the preceding 37 years. On average, each WTO member is involved in five RTAs, though some belong to ten or more (see map).

The configuration of RTAs is also becoming increasingly complex.

Many RTAs overlap. Networks of RTAs span within and across continents. A number of schemes, such as NAFTA, straddle the North-South divide, involving both developing and developed countries. NAFTA's impact on Mexican

Membership in regional trade agreements (RTAs) and emerging megablocs of RTAs, 2000

Almost every country in the developing world, with the exception of Afghanistan, China, Iran and Mongolia, belongs to at least one RTA; most belong to several. Many have also joined, or are currently negotiating membership in, broader interregional trading blocs.

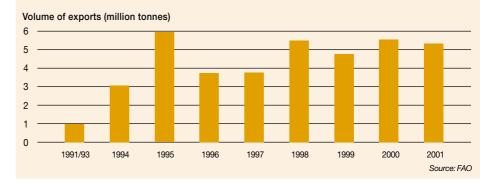


NAFTA and the Mexican maize sector

The NAFTA agreement has had a significant influence on the structure of Mexican agricultural production and trade. On the one hand, large-scale producers, often linked to United States agribusiness interests, have expanded production of fruits and vegetables, resulting in a considerable increase in exports to the United States. Net exports of tomatoes, for example, have almost doubled from their pre-NAFTA levels. On the other hand, the replacement by Mexico of import licensing by tariff quotas and the decision not to impose the transitional out-of-quota tariffs allowed under

NAFTA, have permitted maize imports from the United States, mainly for feed use, to more than treble. Maize prices have fallen by 50 percent, to the benefit of livestock producers and consumers. Maize production on Mexico's large-scale, irrigated farms has declined, suggesting that more prosperous farmers have shifted to other crops. However, it appears that the brunt of the price deterioration has been borne relatively more by the 3 million small-scale maize farmers producing on non-irrigated hillside fields, who do not have the flexibility to shift into other crops.

Exports of United States maize to Mexico, 1991/93 to 2001



agriculture, however, provides a cautionary reminder that RTAs can produce losers as well as winners, particularly when they include countries at

starkly different levels of economic development (see box).

Market concentration and vertically integrated food chains

gricultural commodity chains, particularly those of high-value crops and processed products, are increasingly dominated by transnational trading, processing and distribution companies. On its way from farmer to consumer, for example, nearly 40 percent of the world's coffee is traded by just four companies and 45 percent is processed by just three coffee-roasting firms.

Increasingly, these large companies dominate world agricultural commodity markets and wield direct and increasing influence on what is produced, and how. As the UNCTAD World Investment Report 2001 noted, this can bring significant advantages as a result of economic linkages established through sourcing from domestic producers, the development of new suppliers and the upgrading of existing ones. Reliable quantities and consistent quality are key to the business operations of the transnational companies and they have developed their relationships with suppliers so as to ensure them. This includes collaboration in product development, technology transfer and training, contract farming and financial assistance. For some producers and exporters, therefore, these changes are

opening up unprecedented opportunities. However, without assistance to improve their efficiency and competitiveness, many smallholders and domestic traders will struggle to meet the new market requirements.

The increasing dominance of large companies can be seen at three levels – the exporting developing countries, the international markets and the retail markets of importing countries.

Large companies dominate export trade in developing countries

In exporting developing countries, particularly following the elimination of many marketing boards, large companies with warehousing and shipping facilities have been able to exploit their financial and logistical advantages. Many now buy produce directly from farmers, specifying their requirements and prices. Intensified competition favours those farmers and traders with access to cheaper finance and good logistics. Larger enterprises have advantages in both respects.

In Kenya, for example, exports of fruits, vegetables and cut flowers have become the second biggest source of foreign

Concentration of market power in the global coffee chain Four companies control almost 40 percent of global trade in coffee and only three roasters (Philip Morris, Nestlé and Sara Lee) control 45 percent of the global market. 500 million 4 international traders: Neumann, Volcafe ECOM, Dreyfus consumers (39%)30 grocers: Wal-Mart, Carrefour, Ahold, Kroger, Metro Group, Target, Tesco, Costco, Albertsons, Rewe, Aldi, JCPenney, Safeway (USA), ITM, Kmart, Walgreens, Ito-Yokado, Edeka, Auchan, Sainsbury's, Aeon, Tengelmann, CVS, Leclerc, Schwartz Group, Casino, Delhaize Group, Daiei, Publix, Rite Aid (33%)3 roasters: Philip Morris, 25 million Nestlé, Sara Lee farmers and (45%)workers Source: UK Food Group



exchange. The industry earns US\$300 million per year and employs more than 70 000 people. However, as the scale of exports has grown, the number of suppliers and the share produced by smallholders and shipped by small- and medium-sized domestic exporters has shrunk.

Prior to the horticultural export boom in the 1990s, smallholders produced 70 percent of fruits and vegetables exported from Kenya. By the end of the 1990s, 40 percent of the produce was grown on farms owned or leased directly by importers in the developed countries and another 42 percent was produced on large commercial farms. Smallholders' share of this lucrative business had dwindled to just 18 percent. Among exporters, seven large companies controlled more than 75 percent of the market.

Concentration in international trade

At the international level, a few vertically integrated companies have gained increasing control over agricultural trade. In cocoa, the number of trading houses in London shrank from 30 in 1980 to around ten in 1999. Similarly, the six largest chocolate manufacturers account for 50 percent of world sales.

A handful of vertically integrated companies now dominate the production, distribution and international trade of both oilseeds and oils. Just three global companies control 80 percent of the soybean crushing market in Europe and more than 70 percent in the United States.

Grain trading, storage, processing and milling is also dominated by a few big companies. Three or four companies control 60 percent of the terminal grainhandling facilities, 61 percent of the flour milling, 81 percent of the maize exports and 49 percent of the ethanol production in the United States.

Supermarkets dominate retailing

At the retail level, supermarkets have grown rapidly in both developed and developing countries. In Latin America, for example, supermarkets increased their share of food retailing from less than 20 percent in 1990 to 60 percent in 2000. Worldwide, the top 30 supermarket chains now control almost one-third of grocery sales. At the national level, the five biggest retailers control between 30 and 96 percent

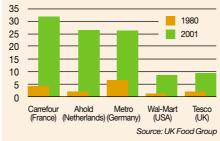
Share of final sales value accruing to different links in the coffee value chain



Global expansion of the five largest transnational food retailers, 1980-2001

Between 1980 and 2001, each of the five largest global supermarket chains expanded the number of countries where it operates by at least 270 percent.

Number of countries operational



of food retailing in the EU and the United States.

Supermarkets' domination of the market gives them significant leverage over production, distribution and trade, including through direct involvement with developing country suppliers. To simplify operations, most supermarkets prefer to work with a limited number of suppliers who have the resources to meet their quality requirements and delivery schedules.

As in the example of Kenyan horticulture cited above, a few large commercial producers typically benefit from this expanded trade. The majority of smallholders are left out.

The farmers' share in final product prices

Much attention has been focused on the apparently small share of farmers and

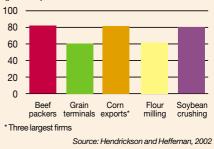
Share of retail value of bananas retained by each actor in the chain



Product concentration ratios in United States food manufacturing, 2002

A handful of companies control more than 50 percent of most agricultural markets in the developed countries.

Concentration ratio of four largest firms



producing countries in the revenues eventually derived from their exports.

Growers' prices do typically represent a small fraction of the retail price for finished products, ranging from as low as 4 percent for raw cotton to 28 percent for cocoa.

Even with bananas, which require almost no processing, international trading companies, distributors and retailers claim 88 percent of the retail price; less than 12 percent goes to the producing countries and barely 2 percent to the plantation workers.

However, without knowing the cost structure of marketing and distribution, it is difficult to judge what an "appropriate" farmers' share might be. It is also inevitable that a greater value-added content in the final product will reduce this share. More important is the absolute value of the return to farmers. More detailed analyses of commodity value chains are needed to establish whether margins are competitive.

Challenges and policy responses

armers and countries that depend on commodity exports have to contend with the long-term decline and shortterm volatility of real commodity prices on international markets. The long-term decline in real prices reflects the tendency for productivity and production to grow at a faster rate than demand. Volatility reflects the impact of exogenous factors such as the weather. These problems are exacerbated by market distortions, arising from tariffs and subsidies in developed countries, tariffs in developing countries and the market power in some commodity supply chains of large transnational corporations. These distortions also limit access to lucrative markets and hinder attempts to secure a greater share of the final product price on the part of producers and exporting countries.

Production gains outstrip demand

Average yields for the major agricultural export commodities increased by almost one-third over the past two decades. At the same time, major new producers entered the market for several commodities – Viet Nam and coffee, for example.

While increased productivity and new producers fuel rapid increases in supplies, demand for commodities rises slowly, even in the face of falling prices and rising consumer incomes. In the 1990s, trade in primary commodities grew at less than one-third of the rate for trade in manufactured goods.

Volatility in international commodity prices can blur longer-term price trends that should lead to adjustments in supply and demand. Furthermore, on the supply side, farmers cannot scale production up or down quickly when prices change, especially where perennial crops are concerned. Production, therefore, can be maintained even in the face of falling prices, exacerbating problems of market imbalance. On the demand side, lower prices generally do not stimulate

consumers in developed countries to increase their purchases of foods and other commodity-based products significantly. Many commodity-based products are viewed as necessities that must be purchased regardless of variations in the price. In any case, changes in commodity prices can be barely perceivable at retail, as the price of basic commodities typically represents a small fraction of the final retail price for processed goods. In developing countries, where the degree of processing may be smaller, demand for the basic product can increase more quickly in response to lower world prices. In many of these countries, however, a variety of policy interventions may imply that domestic prices do not reflect world price trends.

Coping with problems of oversupply

In the 1970s and 1980s, governments attempted to address commodity price problems through international commodity agreements (ICAs) to stabilize prices. The ICAs relied on export quota agreements or stock management, but are generally regarded to have failed in their mission of maintaining stable, remunerative prices. By the end of the 1980s most had disbanded or had shifted their focus to exchanging information and improving market transparency.

The collapse of commodity prices in the late 1990s revived interest in controlling supplies through "producer-only agreements". In the case of coffee, for example, producing countries forged an alliance that attempted to hold back exports and push up prices. Maintaining discipline among members proved difficult, however, particularly when faced with aggressive competition from non-member "free riders".

The difficulties of sustaining cooperative market interventions have stimulated interest in price insurance, forward-pricing systems and other schemes to manage the



risks of commodity price volatility. While promising, the institutional arrangements for their widespread application remain to be established.

In the long run, oversupply of some commodities can best be eliminated by reducing production in highly protected and high-cost markets while simultaneously improving demand through poverty alleviation and income growth in poorer countries. In developed countries this implies taking land and labour out of production of oversubsidized commodities and enabling producers to shift to other sources of employment and income. In markets free of tariffs, subsidies and other distortions, the first producers to exit should be those with the highest production costs. In some cases, such as cotton, sugar, dairy and rice, these may be farmers in the EU or the United States who have benefited from ample subsidies, rather than farmers in LDCs who strive to produce high-quality products at lower cost. However, the elimination of OECD farm support will not automatically lead to increased exports from LDCs. The main immediate beneficiaries are likely to be nonsubsidizing developed country exporters and some of the more advanced developing countries.

Diversification can provide producers in developing countries with a way to escape from dependence on commodities for which supplies have outgrown demand. However, this can happen only if farmers have a wide range of alternative options, including higher-value crops, processing of basic commodities into value-added forms, and non-agricultural activities. Furthermore, diversification requires access to the credit, training and other resources they would need to take advantage of these opportunities.

Several developing countries have become successful exporters of fruits, vegetables and other non-traditional products. For the most part, however, it has been large-scale commercial farmers in countries with more developed

infrastructures who have benefited. Small producers and the LDCs have been less able to mobilize the investment and training required to shift to new crops and meet the high quality standards and strict delivery deadlines of supermarkets. Building the institutional structures that will help smallholders to participate in these developments is a challenge that remains.

Processing basic commodities into value-added forms is another way in which producers can diversify and increase their share of the final product value. The difference in value between the basic commodity and the consumer product can be large. However, opportunities for such vertical diversification are often blocked by tariff escalation, particularly in developed countries, and by barriers to entry arising from concentrated market structures.

Demand-side solutions for oversupply problems

Problems of oversupply can also be addressed from the other side of the market, with measures aimed at boosting demand in consuming countries.

Generic promotion campaigns have proven effective in stimulating demand for some commodities. Unlike advertising for specific products and brands, generic promotion aims to increase aggregate demand for a commodity such as bananas or tea. A long-running campaign promoting bananas as a source of energy contributed to a threefold increase in consumption in the United Kingdom, making them the most popular fresh fruit in the country.

Similar generic promotion campaigns could boost consumer demand for other commodities. Without careful analysis and planning, however, processors and retailers may reap most of the benefits, leaving little or nothing for farmers in developing countries. Finding an institutional manager for such programmes

and a means of financing them that minimizes free-rider problems can also be a challenge.

Consumer concerns about food safety, environmental issues and social justice have created another niche of opportunity. Farmers selling certified organic and "Fair Trade" products tend to enjoy better market access and higher prices than conventional farmers. While the market share of certified foods remains small, sales of these products have been growing steadily and rapidly. Certification can also bring further benefits to farmers in enhancing their bargaining position and access to credit.

Despite these benefits, small-scale farmers in developing countries face many obstacles when trying to take advantage of social and environmental certification. Conversion to organic farming requires investment and training. At least initially, it may also raise production costs and reduce vields.

While farmers may be able to recoup their investment by selling to premium markets, the certification process itself can be costly, especially for small farmers in developing countries that lack local certification bodies and must rely on foreign agencies. Extensive requirements for record-keeping and traceability may also pose serious problems for small-scale producers. As a result, some certification programmes tend to favour large commercial farms. The Fair Trade system, which was established specifically to help small producers in developing countries, currently reaches a very limited market in developed countries.

Eliminating market distortions

Problems of oversupply on world commodity markets have been exacerbated by government policies and market concentration. High agricultural tariffs and producer subsidies in developed countries limit market access and depress

commodity prices. Developing country markets for agricultural products are the fastest-growing but are also generally heavily protected.

In many cases, domestic support insulates farmers in developed countries from market forces, encouraging them to expand production even when prices are low and allowing them to export at prices substantially below their costs of production. The United States and the EU rank as the world's largest exporters of cotton, wheat, maize, skim milk powder and sugar. These commodities are exported at prices below those that would prevail under undistorted markets, and in some cases at prices below production costs.

With world market prices defined at these artificially low levels, farmers in developing countries suffer from lost market share and unfair competition in local markets. Subsidies also distort the cost structures in several producing countries and give less-efficient producers an incentive to expand production. The burden of oversupply is transferred to farmers in developing countries, even though they are able to produce at lower costs. At the same time, liberalization could have a negative impact on food-importing developing countries, as the removal of tariffs and subsidies would lead to higher food prices and import bills.

Control of commodity value chains by a small number of powerful corporations can also drive down commodity prices and erode the share of the final product price that goes to producers. When markets bring together large numbers of competing suppliers against a handful of large-scale buyers, the buyers are likely to have most leverage in setting prices. When the buyers are also linked to processors and retailers in vertically integrated commodity chains, they are in a strong position to capture a greater share of the value of the final product for traders, processors and retailers. On the other hand, it must be acknowledged that given, the substantial

economies of scale present in most segments of the food industry, links between large transnational companies and small producers may offer a way out of marginalization for poor rural producers in LDCs.

Studies have shown that when commodity prices rise, the higher price is quickly passed along to consumers. But when commodity prices fall, retail prices rarely follow suit. Since the early 1990s, for example, even as coffee prices have plummeted, the value of global retail sales of coffee has more than doubled. The share of those sales received by coffee-exporting countries fell from around 35 percent to less than 10 percent.

An agenda for action

Addressing problems of oversupply and eliminating market distortions will require a variety of actions at the national and international levels.

In the context of the WTO negotiations, priority must be given to reducing agricultural tariffs, producer support and export subsidies in developed countries and to eliminating tariff escalation that penalizes exports of processed goods from developing countries. At the same time, developing countries should reduce tariffs in order to encourage trade among developing countries and to allow their consumers to benefit from lower world prices. Special attention must be given to the LDCs, many of which depend heavily on commodity exports and food imports. Measures that could be taken to help developing countries take advantage of commodity markets include:

- building capacity to take advantage of trading opportunities and to participate effectively in trade negotiations;
- addressing the erosion of trade preferences for low-income economies and the possible case for compensating them for any loss of these preferences in the context of ongoing trade liberalization;



- mobilizing resources to support generic promotion campaigns, diversification into non-traditional agricultural exports and adding value by exporting processed goods;
- designing programmes at national and international levels to help farmers insure against shocks that could damage their crops or undermine prices on international markets. Weather insurance, forward-pricing systems and market-based price insurance are some of the schemes that have been proposed to deal with the inherent volatility of agricultural commodity markets;
- improving the flow of information to producers and traders about opportunities for contractual arrangements with supermarkets and the technical requirements for organic agriculture and Fair Trade certification;
- designing international programmes to increase the flow of resources to agriculture and rural development, increasing the competitiveness of agriculture and developing nonagricultural sectors that will provide alternative sources of employment and income;
- supporting cooperatives and other actions by producers to organize commercially in order to increase their leverage in markets dominated by powerful transnational corporations;
- ensuring that farmers have access to the information, training, credit and other resources they need to diversify into higher-value crops, processing or other income-generating activities;
- increasing investments to improve the productivity of domestic food production in developing countries and make it more competitive with food imports.

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Table 1 Commodity prices in real terms

	1961–63	1971–73	1981–83	1991-93	2001-02	2000	2001	2002
Bananas	43	25	29	24	22	17.5	23.5	20.7
Beef	87	195	115	271	143	180.8	142.7	
Butter	165	160	152	91	53	59.5	58.3	47.7
Cocoa	114	125	143	56	38	36.3	42.5	32.8
Coffee	n.a.	188	196	66	40	56.9	39.2	40.4
Cotton	146	158	128	70	40	52.3	41.3	38.7
Hides	69	93	67	85	70	71.0	72.8	67.6
Jute	1 189	1 035	457	333	264	246.9	283.6	243.5
Maize		5.5	4.4	2.5	1.7	1.6	1.6	1.7
Rice	726	685	565	290	155	180.3	148.6	160.8
Rubber	129	72	74	41	26	27.7	23.5	29.2
Sisal	1 434	1 107	964	649	577	556.3	601.5	552.8
Sorghum	229	245	193	111	84	77.9	82.0	85.2
Sugar	n.a.	25.28	18.11	10.15	6.56	7.24	7.44	5.68
Tea	266	159	138	95	88	96.1	89.1	86.0
Tobacco		3 975	4 002	3 498	2 431	2 644.4	2 572.3	2 289.8
Wheat	8.4	7.3	7.3	3.3	2.9	2.8	2.9	2.8

Notes:

Prices are deflated by the United States

Consumer Price Index (1995 = 1).

n.a. = not applicable; ... = not available.

Basis for prices for individual commodities:

Bananas (Ecuador) US cents/lb

Beef (Argentina) US cents/lb

Butter (New Zealand) US cents/100 lb

Cocoa (Ghana) US cents/lb

Coffee (United States) US cents/lb

Cotton (United States) US cents/lb

Hides (United States) US cents/lb

Jute (Bangladesh) US\$/tonne

Maize (United States) US\$/bushel

Rice (Thailand) US\$/tonne

Rubber (Malaysia) US cents/lb Sisal (East Africa) US\$/tonne

Sorghum (United States) US\$/tonne

Sugar (London and New York) US cents/lb

Tea (Sri Lanka) US cents/kg

Tobacco (United States) US\$/tonne

Wheat (Argentina) US\$/bushel

Production of selected commodities by ten largest producers

	2001	2002	2003	Share of world total 2001–2003
		(thousand tonne	s)	(percentage)
Cereals				
China, Mainland	396 482	397 988	377 045	19
United States	325 480	298 787	348 645	16
India	243 375	211 750	236 313	11
European Union (15)	202 526	214 972	191 082	10
Brazil	56 478	50 237	65 426	3
Russian Federation	83 320	84 849	65 397	4
Indonesia	59 808	61 106	62 670	3
Canada	43 329	36 288	50 129	2
Bangladesh	38 014	39 528	39 683	2
Viet Nam	34 270	36 958	37 546	2
World	2107954	2 031 540	2 067 618	100
Oilcrops				
United States	16 979	15 749	14 307	14
China, Mainland	15 129	15 390	15 920	13
Malaysia	13 483	13 546	14 956	12
Indonesia	11 287	13 225	13 085	11
Brazil	7 688	8 476	10 207	8
European Union (15)	7 764	7 323	7 691	7
India	7 651	7 055	7 974	7
Argentina	6 405	7 130	7 970	6
Canada	2 532	2 366	3 351	2
Nigeria	2 352	2 359	2 359	2
World	112 088	114 545	120 894	100
Meat				
China, Mainland	63 339	65 870	67 857	27
United States	37 811	39 195	39 106	16
European Union (15)	36 010	36 433	36 184	15
Brazil	15 167	16 605	17 059	7
India	5 566	5 762	6 038	2
Mexico	4 636	4 808	4 883	2
Russian Federation	4 430	4 690	4 975	2
Canada	4 121	4 268	4 277	2
Argentina	3 810	4 058	4 163	2
Australia	3 885	3 801	3 847	2
World	237 845	246 257	249 851	100

Table 2 (continued) Production of selected c	ommodities by	ten largest լ	oroducers	
	2001	2002	2003	Share of world total 2001–2003
		(thousand tonnes	;)	(percentage)
Sugar				
Brazil	20 400	23 810	24 780	16
India	20 480	20 475	22 100	15
European Union (15)	15 911	18 413	16 504	12
China, Mainland	9 312	11 565	10 948	7
United States	7 171	7 608	7 994	5
Thailand	4 865	5 947	7 286	4
Mexico	4 924	4 872	4 928	3
Australia	4 162	4 987	5 371	3
Cuba	3 591	3 775	3 775	3
Pakistan	2 717	3 507	4 004	2
World	132 399	145 306	147 934	100
Tropical beverages				
Brazil	2 014	2 677	2 176	17
Côte d'Ivoire	1 460	1 198	1 198	10
Indonesia	1 167	1 238	1 233	9
India	1 156	1 170	1 208	9
Viet Nam	916	778	769	6
China, Mainland	719	762	767	6
Colombia	700	745	749	5
Ghana	342	382	382	3
Mexico	350	359	359	3
Nigeria	344	344	344	3
World	13 438	13 731	13 303	100
Fibres				
China, Mainland	6 005	5 876	6 186	24
United States	4 420	3 747	3 968	16
India	4 109	3 568	4 085	16

1 807

1 159

1 036

902

875

712

745

26 224

Pakistan

Uzbekistan

Bangladesh

Australia

World

European Union (15)

Brazil

Turkey

Continued

7

4

4

4

3

3

2

100

1 820

1 017

934

947

817

608

260

24 836

1 738

1 028

995

851

817

607

341

23 479

Table 2 (continued) Production of selected commo	dities by	ten largest p	roducers	
	2001	2002	2003	Share of world total 2001–2003
		(thousand tonnes)	1	(percentage)
Citrus (total)				
Brazil	18 752	20 003	18 779	19
United States	14 701	14 684	13 763	14
China, Mainland and Hong Kong SAR	12 070	12 461	12 711	12
European Union (15)	10 256	10 397	11 278	10
Mexico	6 324	6 164	6 293	6
India	4 400	4 580	4 580	4
Iran	3 730	3 732	3 703	4
Nigeria	3 250	3 250	3 250	3
Egypt	2 562	2 527	2 527	2
Argentina	2 798	2 566	2 470	3
World	103 092	103 449	102 685	100
Bananas				
India	16 450	16 450	16 450	24
Brazil	6 177	6 504	6 469	9
China, Mainland	5 477	5 783	5 826	8
Ecuador	6 077	5 528	5 609	8
Philippines	5 060	5 264	5 500	8
Indonesia	4 300	3 683	3 683	6
Costa Rica	2 130	2 050	2 000	3
Mexico	1 982	2 076	1 944	3
Thailand	1 750	1 800	1 800	3
Burundi	1 548	1 602	1 602	2
World	67 792	68 014	68 279	100
Milk (total)				
European Union (15)	126 139	125 754	125 328	21
India	81 960	84 020	86 960	14
United States	74 980	77 247	78 155	13
Russian Federation	32 909	33 369	33 100	6
Pakistan	26 284	27 032	27 811	5
Brazil	21 283	22 773	23 453	4
China, Mainland and Hong Kong SAR	14 490	17 269	17 245	3
New Zealand	13 161	14 078	14 200	2
Ukraine	13 444	14 422	13 878	2
Poland	11 885	11 873	11 845	2
World	585 402	598 022	600 978	100

Table 3 Exports of selected commodities by ten largest exporters

	2001	2002	2003	Share of world total
	,	W	-1	2001–2003
	(thousand tonnes	5)	(percentage)
Cereals	07.050	04.007	00.004	0.4
United States	87 358	84 227	82 204	31
European Union (15)	65 426	55 159	54 772	22
Argentina	23 728	23 309	19 584	8
Australia	21 826	18 894	19 344	7
Canada	22 885	21 523	14 666	7
China, Mainland	13 831	8 837	14 916	5
Thailand	6 207	8 227	7 538	3
Ukraine	1 286	5 311	12 175	2
Russian Federation	1 263	3 425	13 532	2
India	2 822	5 432	9 570	2
World	272 858	262 871	279 557	100
Oilseeds				
United States	28 358	30 205	29 005	41
Brazil	11 519	15 684	15 978	20
Argentina	4 662	7 640	6 634	9
European Union (15)	5 662	5 437	6 096	8
Canada	5 482	5 490	3 864	7
Australia	2 304	2 114	1 863	3
Paraguay	1 820	2 361	404	2
China, Mainland	804	940	1 020	1
Russian Federation	1 285	302	121	1
Hungary	510	331	466	1
World	67 909	75 149	69 016	100
Meat				
European Union (15)	10 026	9 585	10 297	40
United States	4 694	4 851	4 433	19
Brazil	1 550	2 310	3 022	9
Australia	1 599	1 676	1 642	7
Canada	1 187	1 315	1 480	5
China, Mainland	779	900	917	3
New Zealand	857	816	802	3
China, Hong Kong SAR	862	746	662	3
Thailand	403	524	565	2
Argentina	358	192	370	1
World	24 357	24 801	26 245	100
	-··		· -	Continued

Table 3 (continued) Exports of selected commodities by ten largest exporters

	2001	2002	2003	Share of world total 2001–2003
	(t	housand tonnes,)	(percentage)
Sugar				
Brazil	6 692	11 528	13 852	26
European Union (15)	8 858	8 467	7 444	20
Thailand	4 241	3 335	4 205	10
Cuba	3 237	2 382	2 663	7
Australia	4 172	3 551	129	6
South Africa	1 474	1 538	1 165	3
Guatemala	1 260	1 130	1 360	3
India	349	1 541	1 790	3
Colombia	1 065	928	1 183	3
Turkey	609	933	118	1
World	39 892	42 108	41 920	100
Tropical beverages				
Côte d'Ivoire	1 422	1 249	1 149	14
Brazil	973	1 260	1 559	14
Viet Nam	790	999	793	9
Indonesia	777	652	789	8
European Union (15)	567	547	556	6
Colombia	509	561	581	6
India	363	329	346	4
Ghana	366	221	312	3
Sri Lanka	287	294	291	3
China, Mainland	231	261	264	3
World	9 472	9 144	9 304	100
Fibres				
United States	1 754	2 145	2 480	27
Australia	1 333	1 499	1 118	17
Uzbekistan	740	760	740	9
European Union (15)	754	690	754	9
Bangladesh	335	236	302	4
Syrian Arab Republic	230	244	280	3
Benin	244	152	183	2
China, Mainland	300	59	159	2
Turkmenistan	249	151	109	2
Côte d'Ivoire	205	131	147	2
World	7 936	7 712	7 983	100

Table 3 (continued) Exports of selected commodities by ten largest exporters

	2001	2002	2003	Share of world total 2001–2003
	(i	thousand tonnes)	1	(percentage)
Citrus (total)				
European Union (15)	4 359	4 020	4 368	50
South Africa	639	790	805	7
United States	717	688	674	8
Turkey	406	556	552	5
Morocco	471	430	417	5
Argentina	270	389	397	3
Mexico	280	65	284	3
China, Mainland	193	151	201	2
Australia	166	177	168	2
Egypt	91	276	148	1
World	8 634	8 728	9 003	100
_				
Bananas				
Ecuador	3 993	3 533	4 296	27
Costa Rica	2 079	1 959	1 873	14
Philippines	1 599	2 129	1 684	13
Colombia	1 564	1 344	1 424	10
Guatemala	801	873	980	6
Honduras	374	31	441	3
Panama	489	426	403	3
Côte d'Ivoire	243	255	256	2
Brazil	72	105	241	1
Cameroon	238	254	238	2
World	14 347	14 115	14 718	100
NA:II. (total)				
Milk (total) European Union (15)	13 480	10 860	11 105	28
New Zealand	8 657	9 343	11 034	23
Australia	5 579	4 933	6 118	13
United States	2 885	4 9 33 2 762	2 616	7
Argentina	1 140	953	1 425	3
Poland	996	1 391	1 355	3
Canada	990 656	868	843	2
Czech Republic	732	814	783	2
Belarus	732 497	634	763 721	1
				2
Ukraine	671	1 158	652	
World	41 388	39 974	43 886	100

Imports of selected commodities by ten largest importers

	2001	2002	2003	Share of world total 2001–2003
	(thousand tonnes	5)	(percentage)
Cereals				
European Union (15)	40 491	44 701	53 619	17
Japan	27 012	26 239	26 605	10
Mexico	14 065	15 303	14 092	5
Korea, Republic of	12 801	12 385	13 389	5
Egypt	9 655	9 244	10 322	4
Brazil	10 478	8 857	7 809	3
Iran, Islamic Rep. of	9 928	9 852	6 551	3
Algeria	7 509	6 682	8 611	3
Indonesia	6 863	4 776	7 927	2
China, Taiwan Province of	6 324	6 500	6 576	2
World	269 920	260 660	276 894	100
Oilseeds				
European Union (15)	23 855	28 049	27 021	36
China, Mainland	13 405	15 708	11 954	19
Japan	7 548	7 458	7 550	10
Mexico	5 413	5 865	5 708	8
China, Taiwan Province of	2 351	2 487	2 586	3
Korea, Republic of	1 695	1 574	1 717	2
Thailand	1 357	1 409	1 574	2
Indonesia	1 436	1 273	1 507	2
Canada	691	1 133	1 172	1
Brazil	825	857	1 057	1
World	68 974	75 608	72 506	100
Meat				
European Union (15)	8 327	8 361	8 683	35
Japan	2 696	2 707	2 583	11
Russian Federation	1 280	2 342	2 669	9
United States	1 832	1 883	1 967	8
China, Hong Kong SAR	1 400	1 290	1 177	5
Mexico	1 081	1 150	1 233	5
China, Mainland	1 043	854	800	4
Korea, Republic of	536	438	638	2
Canada	482	545	570	2
Saudi Arabia	419	407	447	2
World	23 449	24 099	25 447	100

Table 4 (continued) Imports of selected commodities by ten largest importers

	2001	2002	2003	Share of world total 2001–2003
	((thousand tonnes))	(percentage)
Sugar				
Russian Federation	4 842	5 566	4 619	13
European Union (15)	3 902	4 728	4 780	12
Japan	1 566	1 534	1 478	4
Korea, Republic of	1 463	1 516	1 527	4
United States	1 413	1 344	1 419	4
Indonesia	1 654	1 376	1 029	4
Malaysia	1 187	1 275	1 482	3
United Arab Emirates	971	1 127	1 356	3
Nigeria	775	1 267	1 304	3
Canada	873	1 183	1 189	3
World	36 097	39 972	39 292	100
Tropical beverages				
European Union (15)	3 992	4 093	4 063	45
United States	1 857	1 688	1 580	19
Japan	490	491	502	6
Russian Federation	247	237	258	3
Canada	200	212	184	2
Malaysia	132	174	204	2
Poland	171	180	157	2
Algeria	114	96	121	1
Pakistan	111	107	99	1
Switzerland	94	99	98	1
World	9 002	8 962	8 906	100
Fibres				
European Union (15)	1 319	1 250	1 233	16
Mexico	707	734	750	9
Indonesia	563	763	630	8
Turkey	749	489	599	8
Korea, Republic of	419	454	470	6
Thailand	423	434	433	6
Japan	453	408	393	5
India	280	466	377	5
United States	357	335	279	4
China, Taiwan Province of	278	265	346	4
World	7 955	7 785	7 538	100
				Continued

Table 4 (continued) Imports of selected commodities by ten largest importers

	2001	2002	2003	Share of world total 2001–2003
	(thousand tonnes)	(percentage)
Citrus (total)				
European Union (15)	4 157	4 179	4 334	49
United States	351	309	391	4
Russian Federation	458	539	668	6
Poland	364	366	355	4
Japan	238	222	204	3
Saudi Arabia	312	273	348	4
Canada	344	327	352	4
China, Hong Kong SAR	259	247	256	3
Ukraine	76	99	119	1
Romania	77	82	86	1
World	8 507	8 498	9 062	100
Bananas				
United States	4 030	3 840	3 906	28
European Union (15)	3 298	3 203	3 287	23
Japan	1 078	990	936	7
Russian Federation	502	612	649	4
Canada	398	405	417	3
China, Mainland	593	413	347	3
Poland	285	270	240	2
Argentina	339	330	229	2
United Arab Emirates	98	126	214	1
Sweden	186	182	205	1
World	14 436	13 640	13 920	100
Milk (total)				
European Union (15)	3 062	2 833	2 712	8
China, Mainland	2 245	2 063	2 626	6
Mexico	2 310	2 779	2 581	7
United States	1 952	1 870	2 032	5
Algeria	1 552	1 808	1 976	5
Japan	1 676	1 683	1 635	4
Philippines	1 713	1 596	1 581	4
Russian Federation	1 007	1 599	1 454	4
Malaysia	1 292	1 260	1 327	3
Thailand	1 140	1 126	1 291	3
World	37 881	37 093	38 728	100

Table 5 Terms of trade in agriculture and versus manufactures

		eloped ntries Manufactures**		eveloped ntries Manufactures**		eveloping ntries Manufactures**	in tra	ntries nsition Manufactures**	World agricultural export prices (deflated)***
1961–62	102	105	120	190	115	175	134	209	128
1970–72	99	112	121	175	125	169	157	229	129
1980–82	94	109	120	165	125	164	130	188	127
1990–92	100	100	100	100	100	100	100	100	100
2000-02	104	89	86	76	97	90	114	91	92
2002	105	92	84	70	98	89	115	93	94

- * Prices of agricultural exports relative to prices of agricultural imports. Prices are unit values. For agriculture, unit values are the summation of weighted commodity unit export values. Weights are computed by dividing the export value of each commodity by its share in the total value of agricultural exports in the country group under consideration. The coefficients are subsequently indexed to the base period 1990-92 = 100. The same methodology applies for unit value of imports.
- ** Prices of exported agricultural products relative to the prices of exported manufactured products. These are estimated in the same way as in the previous note, but the denominator is the unit value of manufacturing exports.
- *** World agricultural export prices. These are unit values of exports, estimated as above and deflated by the unit value of world manufacturing exports with the base 1990-92 = 100.

Table 6

Shares (in value) of individual commodity groups in total agricultural exports and imports in each country group (percentage)

	Export shares 1961–63					Import shares 1961–63			
	Least developed countries	Other developing countries	Transition countries	Developed countries	Least developed countries	Other developing countries	Transition countries	Developed countries	
Cereals	16	8	30	33	41	48	23	15	
Oilcrops	20	11	8	13	13	10	8	14	
Meat	1	4	16	12	4	3	4	10	
Dairy	0	0	5	8	4	5	1	4	
Sugar	2	14	11	3	14	8	12	7	
Horticulture	2	7	6	9	3	4	5	10	
Tropical beverages	21	27	0	2	7	6	5	16	
Raw materials	38	29	24	20	15	17	41	24	
All agricultural	100	100	100	100	100	100	100	100	

	Export shares 1999–2001				Import shares 1999–2001			
	Least developed countries	Other developing countries	Transition countries	Developed countries	Least developed countries	Other developing countries	Transition countries	Developed countries
Cereals	5	11	19	16	40	27	12	8
Oilcrops	14	26	16	14	24	24	15	15
Meat	1	9	15	21	4	9	14	20
Dairy	0	1	11	11	5	7	4	8
Sugar	4	7	3	3	9	5	11	2
Horticulture	4	15	6	14	2	6	13	20
Tropical beverages	28	15	7	7	3	4	12	13
Raw materials	43	16	25	15	13	19	19	13
All agricultural	100	100	100	100	100	100	100	100

Table 7 Growth rates in export and import unit values, by country group (percentage)

		Exports		Imports			
	Least developed countries	Developing countries	Developed countries	Least developed countries	Developing countries	Developed countries	
Cereals	-3.18	-2.79	-2.50	-2.84	-2.79	-2.05	
Oilcrops	-2.34	-2.88	-2.06	-3.37	-2.78	-2.37	
Meat	-1.69	-1.34	-1.51	-2.91	-2.77	-1.01	
Dairy	-2.48	-1.50	-0.45	-1.08	-0.80	-0.26	
Sugar	-1.44	-2.43	-1.56	-2.42	-2.12	-1.21	
Horticulture	-1.38	-1.35	-0.56	-3.13	-0.96	-0.84	
Tropical beverages	-2.74	-2.59	-0.92	-2.29	-2.74	-1.58	
Raw materials	-2.67	-2.20	-1.50	-2.79	-1.19	-2.02	
All agricultural	-1.35	-2.52	-1.58	-2.73	-2.36	-1.56	

Note:

Growth rates have been calculated by fitting a logarithmic trend to each unit value index over the period 1961–2001. Nominal value indices have been deflated by the United States Consumer Price Index (1995 = 1).

Variability in nominal export and import unit values (coefficients of variation) (percentage)

		Exports		Imports			
	Least developed countries	Developing countries	Developed countries	Least developed countries	Developing countries	Developed countries	
Cereals	23.2	23.2	20.3	20.7	23.9	19.2	
Oilcrops	22.3	22.6	18.3	24.9	21.6	19.1	
Meat	18.1	13.8	13.2	20.1	17.2	11.7	
Dairy	24.4	7.9	7.3	5.5	5.2	8.4	
Sugar	22.5	38.6	29.2	36.4	37.7	20.8	
Horticulture	12.1	4.2	5.8	33.9	9.7	3.3	
Tropical beverages	35.1	32.7	17.3	21.8	16.8	28.2	
Raw materials	26.7	23.1	13.9	26.6	14.0	21.2	
All agricultural	27.0	22.6	14.1	20.1	19.2	15.4	

Note:

Coefficients of variation have been calculated using the variation around an estimated logarithmic trend line over the period 1961-2001.

FAO Commodities and Trade Division publications, 2003-04

Commodity Market Review 2003–2004 (2004)

FAO Commodities and Trade Technical Papers

- 5. Voluntary standards and certification for environmentally and socially responsible agricultural production and trade (2004)
- 4. The European market for organic and fair-trade products from West Africa (2004)
- 3. The market for non traditional agricultural exports (2004)
- 2. Environmental and social standards, certification and labelling for cash crops (2003)
- 1. Medium-term prospects for agricultural commodities: projections to the year 2010 (2003)

FAO Commodity Studies

- 2. Issues in the global tobacco economy: selected case studies (2003)
- 1. The world banana economy 1985–2002 (2003)

FAO Commodity and Trade Policy Research Working Papers

2004

- 10. Agricultural trade liberalization in the Doha round. Alternative scenarios and trategic interactions between developed and developing countries (P. Conforti and L. Salvatici)
- 9. The EU cotton policy regime and the implications of the proposed changes for producer welfare (G. Karagiannis)
- 8. The impact of domestic and trade policies on the world cotton market (D. Poonyth, A. Sarris, R. Sharma and S. Shui)
- 7. Price transmission in selected agricultural markets (P. Conforti)
- 6. The marketing potential of date palm fruits in the European market (P. Liu)
- 5. World markets for organic citrus and citrus juices: current market situation and medium-term prospects (P. Liu)
- 4. Agricultural policy indicators (T. Josling and A. Valdés; also issued as ESA Working Paper No. 2004/4)

2003

- 3. Quantifying appropriate levels of the WTO bound tariffs on basic food products in the context of the Development Box proposals (R. Sharma)
- 2. The WTO and environmental and social standards, certification and labelling in agriculture (C. Dankers)
- 1. The Brazilian ethanol programme: impacts on world ethanol and sugar markets (T. Koizumi)

Further information on all publications listed above is available on the FAO Commodities and Trade Division's Web pages (at http://www.fao.org/es/ESC/en/index.html).

The State of Agricultural Commodity Markets

echnical developments that increase productivity and reduce costs mean that the long-term trend in real agricultural commodity prices on international markets is gradually downwards but that trend is dominated by significant short-term variability. Many developing countries, and especially the least developed countries, continue to depend on just a few agricultural commodities for the bulk of their export earnings. For them, commodity price variability has a strong impact on incomes, employment and government revenues, compromising macroeconomic planning and development efforts more generally. However, developing countries are also as a group increasingly reliant on food imports. The least developed countries are already net food importers. In these circumstances, falling international food prices are obviously beneficial but increasing reliance on imported food also means greater exposure to the variability in international food prices and hence food import bills.

Developing countries need to contend with variability of international commodity prices in their efforts to increase their export earnings or manage their food import bills. At the same time, they must also contend with the market distortions introduced by the import tariffs and export and production subsidies used by both developed and developing countries, and by the market power in many commodity value chains of large transnational companies. The traditional international responses to commodity market instability based on market interventions or compensation schemes are not currently favoured and new approaches are needed. These new approaches, such as market-based price risk management, are aimed less at preventing price swings than at helping producers and consumers predict and manage better their adverse impacts.

The State of Agricultural Commodity Markets 2004 is the first issue of a new biennial publication that aims to present commodity market issues in an objective and accessible way to policy-makers, commodity market observers and all those interested in agricultural commodity market developments and their impacts on developing countries. It is intended to raise awareness of the impacts of international commodity price movements on the livelihoods and food security of hundreds of millions of people in the developing world as well as the economies of dozens of developing countries that depend on commodity exports for a substantial part of their export earnings or on food imports for a substantial share of their available food supplies.



