7

International initiatives in agricultural trade

International cooperation in agricultural trade has long been accepted as an effective means of fostering economic growth in developing countries. Enthusiasm for cooperation has been dented, however, by the continued failure to liberalize agricultural trade and by the declining and volatile agricultural terms of trade faced by some developing countries. These factors have prompted a search for means other than unregulated commercial trade to serve the interests of developing countries.

This chapter describes how these initiatives have affected the international trading system and assesses their record. The first section examines the economics of commodity agreements and concludes that they have not lived up to expectations. The next section deals with schemes to compensate commodity producers for shortfalls in their export earnings. It concludes that such schemes involve certain practical difficulties but are more efficient than commodity agreements. The chapter then looks at attempts to improve developing countries' access to the markets of industrial countries. These efforts have often taken the form of preferential treatment being granted to particular groups of developing countries—an approach of limited value because it can create additional distortions of world trade and thus hurt other developing countries. The final section of the chapter considers food aid. In emergencies, famine relief has an obvious humanitarian role, and longer-term food aid can also be useful in special circumstances. However, since it can easily discourage local production of food, it needs to be offered only with careful consideration of the market consequences.

International commodity agreements

An international commodity agreement (ICA) is a formal arrangement between the countries producing and consuming a commodity to control the market for it in some respect. Some forty ICAs covering thirteen commodities have been concluded since 1931. Although the details of their objectives have varied, virtually all have sought to stabilize as well as increase the price of the commodity concerned. Most have run into severe difficulties. At the end of 1985 only four agreements capable of influencing prices were still in operation, and only one of these was actively doing so. It is questionable whether any of them are effectively stabilizing prices in 1986.

Objectives and instruments

The precise purposes of ICAs differ from case to case, but two overriding objectives are evident. First, to stabilize commodity prices. Second, to ensure "fair," "remunerative," or "equitable" prices—that is, generally to raise them. While the two aims are frequently combined, they are logically quite separate and even potentially contradictory. They have different distributional implications and require different tools of policy. The two main instruments of ICAs have been buffer stocks and controls on production or exports.

BUFFER STOCKS. The problems with international buffer stocks are similar to the problems of running national buffer stocks discussed in Chapter 5. The basic questions to ask are, why they are desirable and how they can work? By buying a com-

modity when its price is low and selling it when the price is high, a buffer stock manager behaves just like a profit-seeking speculator. In that case, why should stabilization not be left to private speculators? Why do governments need to undertake transactions that do not look attractive to private dealers? Three possible sets of reasons exist. First, speculation might not always be stabilizing: by action or merely the threat of it, a buffer stock manager may be able to offset or discourage destabilizing speculation. Second, the buffer stock manager might have better information than private speculators and thus be able to push the market toward the long-run price more directly than they. The manager could have access to confidential material concerning plans for trading by centrally planned countries, for example. Third, the buffer stock manager may have access to more or cheaper capital than private traders. These advantages would allow him to trade more, or on finer margins, and hence increase his power to stabilize prices. These arguments are largely hypothetical. Empirical studies have not found private speculation to be destabilizing. Nor does it appear that inside information or access to capital provides substantial advantage to public stabilization authorities in practice.

Even if greater price stability than would result from unregulated markets is deemed desirable, an international buffer stock would be a cost-effective means of achieving this only if it overcame several serious difficulties in the following tasks:

- *Fixing the target range for prices.* The narrower the range, the greater the chance that it will be breached. This possibility actually may precipitate fluctuations that would not occur in the absence of the buffer stock; the mere existence of a narrow range for target prices can encourage speculation against the ceiling and floor, as well as reduce the level of private stocks that might be used to moderate price changes outside the declared range.
- *Choosing the reference price on which the target range is centered.* Over the long run, buffer stocks should stay the same size, and so their price range must include the long-run market-clearing price. However, this price tends to change over time, which makes it hard for the buffer stock manager to know whether his current range will eventually exhaust his physical stocks on the one hand or his cash resources on the other.
- *Defining the price range with respect to both the location and grade of the commodity and the currency of denomination.* Even if the buffer stock stabilizes its chosen price perfectly, producers interested in other grades and other currencies will still face uncertainty.
- *Deciding the size of a buffer stock.* It is impossible to guarantee that a buffer stock will never exhaust its stocks or its cash: there can always be runs of good (or bad) years. For the ICA to be credible, however, the probability of exhaustion must be small. The optimum size of a stockpile depends on the tradeoff between the costs of holding it and the benefits of improved credibility.
- *Taking account of the deterrent effect that buffer stocks have on private holders of stocks.* It has been estimated that for every ton added to the United States' stockpile of wheat between 1977 and 1982, between half and three-quarters of a ton was withdrawn from private stocks. Such withdrawals obviously offset much of the buffer stock's stabilizing influence and add considerably to the strain on its resources.

These difficulties do not rule out a buffer stock operation, but they do reduce its chances for success. Against the possibility of success must be set the known costs of running a buffer stock. These include the administrative expenses of the organizational units that negotiate and monitor the ICA, interest forgone on the value of physical stocks, storage costs, physical wastage, and the interest differential between the returns to long-term productive investment and the short-term interest that the buffer stock manager can earn on his unused liquid reserves. He can, of course, make money by buying cheap and selling dear, but only if the buffer stock is able to achieve its goals. Since excess stocks have to be sold, potential profits often turn out to be actual losses.

A basic problem with the buffer stock approach is that it aims at stabilization of prices rather than of export earnings. If a country can offset fluctuations in earnings by borrowing or by using reserves, price instability in itself probably does little harm. Furthermore, stabilizing prices may not stabilize export earnings. This is easily seen by considering the case of weather-induced output variation in which market forces lead the price of the commodity to rise in the same proportion as quantity falls. The value of trade will then remain constant if prices are allowed to vary freely, whereas price stabilization would destabilize earnings.

PRODUCTION AND EXPORT CONTROLS. The second objective of ICAs—to raise commodity prices—can ultimately be achieved only with controls on production. ICAs that adopt such controls basically act as producer cartels and face the well-known

problems that plague all cartels. An ICA will be ineffective if any significant suppliers remain outside it. It will fail to raise producers' earnings (as opposed to prices) if the good can easily be replaced by other commodities, which would make the demand for it price responsive. And if it is to succeed, it will have to allocate quotas among producers and police its restrictions. Even in the case of oil, which was thought to be the most promising candidate for cartelization, these problems have not been overcome.

Few ICAs for agricultural products have tried to control output with internationally negotiated production quotas: the early agreements on coffee (1962) and cocoa (1972 and 1975) are perhaps the most prominent examples. It has been more common for producers to impose production quotas nationally so as to fulfill internationally agreed restrictions on exports. Examples of these include Brazilian coffee and set-asides for wheat in the United States. Recently, however, export controls have been supported more by national stockpiles than by production limits. Thus, their overall effect is similar to that of buffer stocks, for the ICA arrangements typically state that whenever the world price rises above some limit, export quotas may be increased and national stocks run down. Unlike production quotas, therefore, export controls principally stabilize prices rather than raise them.

Export controls are subject to the practical problems already mentioned, as well as some more of their own. First, quotas tend to ossify the pattern of supply. Even if they are initially allocated to low-cost producers, thereby minimizing the worldwide costs of supplying a certain volume of a commodity, they rarely continue to perform this function as economic conditions change. Potential newcomers are prevented from entering markets even if they have a comparative advantage. Second, the decentralized administration of quotas tends to produce "lumpy" stock movements. Once the market price rises to a point where countries are allowed to increase exports, there is a strong incentive to expand them rapidly before controls are reimposed. Third, policing the agreements can be very difficult.

Assessment

For all the reasons discussed in this section, ICAs have not been a success in practice. In recent years there have been four of them in agriculture—coffee, cocoa, rubber, and sugar—and one other in tin. The main features of the agricultural ICAs are summarized in Table 7.1 and their performance in Figure 7.1. Box 7.1 discusses their recent experience in some detail. All of them except coffee face uncertain futures. Negotiations on cocoa and sugar have collapsed. Negotiations on rubber continue, but their future is uncertain.

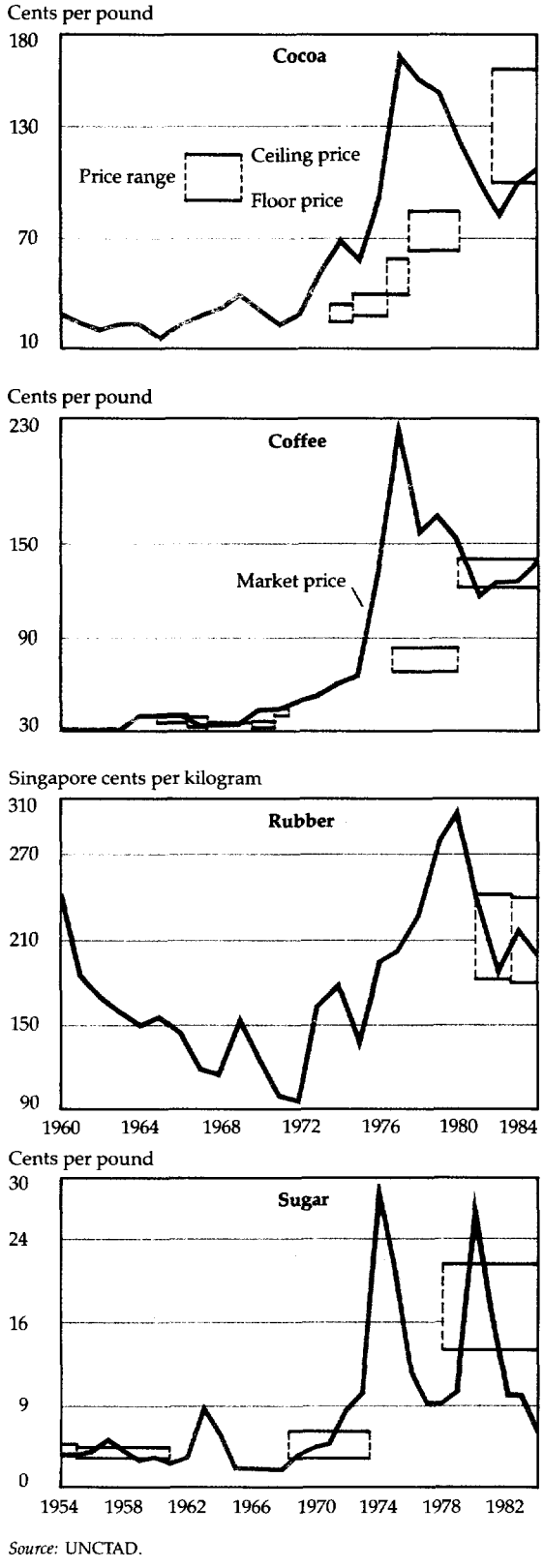
The prospects for ICAs are therefore bleak. Not only are specific agreements proving hard to operate and renegotiate, but much grander plans

Table 7.1 Current international commodity agreements in agriculture

Item	*Cocoa*	*Coffee*	*Rubber*	*Sugar*
Date of first agreement	1972	1962	1980	1954
Date of current agreement	1981[a]	1983	1980	1978[b]
Duration (number of years)	3	6	5	5
Extensions (number of years)	2	. .[c]	2	2
World trade (billions of dollars in 1984)	2.6	11.0	3.6	10.1
Percentage from developing countries	79	76	93	75
Percentage from low-income countries	14	16	6	2
Dependency[d]	6	21	3	9
Principal instrument	buffer stock	export quota	buffer stock	export quota
Permitted price range (percent)	±18	±15	±20	±13
Buffer stock as a percentage of 1980–83 average consumption	16	. .	15	. .

a. Expires September 1986; negotiations on renewal were abandoned in spring 1986.
b. Economic provisions expired December 1984.
c. Extended for an indefinite period.
d. Number of countries, based on a sample of eighty-eight, in which the commodity accounted for more than 10 percent of exports in 1980.
Source: Gilbert 1984, tables 7.1(A) to (E).

Figure 7.1 International commodity agreements: price ranges and prices



Source: UNCTAD.

Box 7.1 Recent commodity agreements in agriculture

The longest-lived agricultural ICA is the International Coffee Agreement. Based on export controls, it has probably raised coffee prices slightly above what they would have been otherwise. Although in recent years coffee prices have been kept mostly within the specified ranges, the agreement has had little success in stabilizing them over the long term. The agreement has been in operation for more than twenty years (with a five-year hiatus in the mid-1970s). An important factor in the ICA's longevity has been the support offered to it by the main coffee-consuming countries—largely for reasons of foreign policy. Periodic supply crises—most of them caused by adverse weather conditions in Brazil, such as the drought in 1985—have also contributed to its longevity, by permitting the release of stocks.

Two serious problems have recently confronted the coffee agreement and are likely to recur when the current supply crisis ends. First, the United States, the largest consumer, has been reassessing its commitment to the agreement. Second, increasing amounts of coffee have been traded outside the agreement's export restrictions. The agreement permits nonquota sales—small volumes of exports allowed in addition to normal export quota limits for the purpose of opening up new markets. Recently, however, the volume of nonquota sales has been growing, and some of it has

for strengthening market interventions have not been realized. The most prominent example was UNCTAD's proposal in 1976 for a common fund within the Integrated Program for Commodities (IPC). This would have established common financing for agreements in ten leading commodities. The plan led to the ICAs on cocoa and rubber, but that was all.

The argument for ICAs is that price fluctuations and uncertainty are harmful. Rather than try (and almost certainly fail) to eradicate price movements, it may be more useful to find ways of alleviating their effects. One obvious remedy is to encourage traders to use forward, futures, and options markets. Though their details vary, in general each allows a trader to negotiate the terms on which he will trade in the future, and thus transfer the risks of price fluctuations to speculators in these markets. This reduces uncertainty and achieves basically the same result as a successful attempt to stabilize prices. In addition, each market participant can choose how much stability he wants (at the

been reexported from new markets to traditional quota-bound ones. Although this may be efficient in the sense that it suits all the trading parties, it is not as efficient as free trade in coffee would be, because it increases transaction and transport costs and introduces unnecessary uncertainty.

The international cocoa agreements have been almost wholly unsuccessful. The first cocoa agreement, signed in 1972, was designed mainly to defend a floor price. Its advent coincided with a surge in prices that resulted from declining output and booming demand. Thus, market prices exceeded target prices throughout the 1970s. Since the agreements had no accumulated stocks, they were powerless to hold down prices.

Negotiations for the third cocoa agreement began in 1981 and proved protracted and difficult. Neither the principal consumer (the United States) nor the principal supplier (Côte d'Ivoire) took part. The United States felt the target price range was too high; Côte d'Ivoire thought it was too low. Subsequent events bore out the U.S. view. Cocoa prices have fallen substantially since 1981 as new production, stimulated by previous high prices, has become available. During the third cocoa agreement, therefore, the market price has almost always been below the target range. The agreement's executive arm intervened to support the price, but, lacking the support of the United States and Côte d'Ivoire, was ineffective. In the negotiations which began in 1985 for a fourth cocoa agreement, old disagreements resurfaced between producers, who want to charge $1.10 a kilogram, and consumers, who want to pay only $0.85 a kilogram. A plan to buttress the buffer stock with export controls was proposed, which opened new areas of disagreement. The negotiations have since been abandoned, at least temporarily.

The International Natural Rubber Agreement, having successfully defended a floor price for several years after it was set up in 1980, has been unable to divest itself of its large stocks, despite cuts in its target prices. The agreement was extended until 1987, although the decision to do so was made at the last minute, and it is unclear whether producers and consumers will be able to agree to a further renewal.

Recent international sugar agreements have had no material influence on the world sugar price. The free market accounts for only about 15 percent of world sugar trade; the rest is shipped under long-term or preferential agreements. The result is that the free market price of sugar is the most volatile of all agricultural commodity prices. The sugar agreement has had to cope with the EC's shift from being a major importer to a major exporter: the EC refused to sign the 1977 sugar agreement because it said its export quota was too low. Market support operations were abandoned in 1984, and the sugar agreement now merely collects data and fosters discussions.

going price) rather than having to accept the choice of a buffer stock manager. The markets are not at present suited to the needs of small commodity producers, but they could be adapted and developed (see Box 7.2).

Compensatory finance

The main argument for stabilizing commodity prices is that it stabilizes the export earnings of commodity producers and hence minimizes disruptive fluctuations in their imports, investment, and fiscal balances. The previous section showed that buffer stock policies could not be relied on to stabilize prices over the medium term, and that even if they could, they are expensive to operate and do not necessarily stabilize export earnings. This section examines an alternative approach—borrowing to stabilize a country's financial situation when its export earnings are fluctuating. Compensatory borrowing offers a cheaper route to stability because money is cheaper to store and administer than commodities. It can also be easily extended to cover temporary rises in import prices, for example, or even increases in import requirements when crops fail.

Individual countries have two potential sources of compensatory financing. First, they can accumulate international reserves in good years and use them in bad ones. However, they thereby lose the returns they would have had if they had undertaken productive investments instead of holding liquid assets. Second, they could borrow on private markets when their export earnings fall. The possible drawbacks of this approach are the costs and difficulties of private borrowing, especially for the poorest countries. Since both sources are particularly difficult for developing countries to use, this group benefits most from official schemes of compensatory lending.

The two schemes currently in existence represent different approaches to compensatory financing. The IMF's Compensatory Financing Facility (CFF), established in 1963, is designed to address

Box 7.2 Commodity futures and options

Futures markets allow commodities to be bought and sold today for delivery at a future date. Such markets exist in London, New York, Winnipeg, Sydney, and elsewhere, but the most widely used exchanges are in Chicago, where contracts for corn, soybeans, wheat, cattle, and hogs are bought and sold for delivery up to eighteen months from the trading date. Futures contracts can be used to speculate on price, but they also allow buyers and sellers to fix a price for goods that are to be purchased or sold later. Thus, the contracts can be used to transfer the risks of price fluctuations from risk-averse farmers to risk-seeking speculators. A wheat farmer can sell wheat futures when he plants his wheat. Later, when the wheat is harvested, he can sell the wheat and simultaneously buy the futures back. The whole process, which is called hedging, is equivalent to a forward sale in that both determine the price that the farmer receives at the time the crop is planted. Similarly, by buying futures a processor of wheat can hedge anticipated purchases.

Hedging via futures reduces, but does not eliminate, risk. If a farmer sells forward 1,000 tons of wheat and then his crop fails, he may have to buy at high prices to meet the commitments of his futures contract. Futures purchases can backfire in similar ways. In developing countries serious problems can arise for farmers when the local price does not vary consistently with the Chicago price or the price in other futures markets because of such factors as exchange rate fluctuations and changes in government policies: the possibility of this happening is known as basis risk. A futures sale in Chicago will do a producer little good if the local price falls in comparison with the Chicago price. When this problem is serious, the development of a local futures market denominated in local currency is an alternative that should be considered.

Many buyers and sellers do not wish to lock in a fixed price, because that forecloses potential gains as well as losses. Instead, sellers would like to insure themselves against extremely low prices, and buyers against extremely high prices. Such insurance can be accomplished by trading in options on futures contracts. Options are traded on sugar and cotton in New York and on soybeans, corn, hogs, and cattle in Chicago. A farmer can insure against low prices by purchasing a "put" option to sell at a specified "strike" price. If the actual price falls below the strike price, he exercises the option; if the price rises above it, he loses what he paid for the option but sells his crop for a higher cash price. There are several strike prices below the futures price, providing a range of insured price levels. Similarly, a buyer insures against high prices by purchasing a "call" option to buy at a strike price of his choice. The market price of options determines the cost of the insurance.

The usefulness of international futures and options markets for developing countries is greatly reduced because of basis risk. The alternative of a local futures market may be viable, but it requires active speculators to whom hedgers may transfer risk. In addition, a stable financial and regulatory environment is needed if futures markets are to thrive. Although farmers, corporations, and parastatal agencies in developing countries have made little use of futures and options, the opportunities for their use have been expanding. They may become important, especially if liberalized agricultural trade ties the world's agricultural commodity markets even more closely together.

the adverse effects on a country's overall balance of payments of a shortfall in its total export earnings. The EC's export earnings stabilization scheme (STABEX) is a commodity-specific arrangement that provides compensation to individual countries associated with the EC for shortfalls in their export earnings from individual agricultural commodities. Whereas a basic requirement for use of the CFF is the existence of a balance of payments problem, there is no such requirement under STABEX.

The IMF's Compensatory Financing Facility

The purpose of the CFF is "to provide financial assistance to members experiencing balance of payments difficulties resulting from export shortfalls that are temporary and due largely to factors beyond the member's control" (International Monetary Fund 1984b, p. 47). The facility is open to all IMF members, but since the conditions for its use are more frequently met by countries that depend heavily on trade in primary commodities, its use has, in practice, been largely confined to developing countries. Coverage of the facility was expanded in 1981 to include cereal imports, but in most instances the CFF has been used to make up for shortfalls in merchandise exports.

Eligibility to use the CFF is subject to certain criteria: (1) there must be a balance of payments need; (2) the export shortfall must be temporary and due to factors largely beyond the control of the member; and (3) the IMF must be convinced that the member will cooperate with it in efforts to find

appropriate solutions for its balance of payments difficulties. In addition, for requests that have the effect of raising outstanding CFF drawings above 50 percent of quota (upper tranche), the IMF must be satisfied that the member has already been cooperating with the IMF to find appropriate solutions for its balance of payments difficulties. All of these judgments can be difficult in practice.

A special provision relating to agriculture allows countries to borrow when they face balance of payments problems caused by increases in the cost of their cereal imports owing to circumstances beyond their control—such as weather-induced declines in domestic food supplies. Under the cereal decision the amount of a drawing is determined as the sum of the export shortfall and the cereal import excess, subject to quota limits. Since January 1984, the quota limits on drawings under the cereal decision have been 83 percent of quota for cereal import excesses and 83 percent of quota for export shortfalls, subject to a joint limit of 105 percent of quota for both components.

Since May 1981, there have been thirteen drawings under the cereal decision amounting to SDR 1.1 billion, of which SDR 0.5 billion was attributable exclusively to excess cereal imports. The limited use of the cereal decision largely reflects a global food supply situation from 1981 to 1985 characterized by record world cereal production levels, large stocks, declining cereal prices, and a substantial volume of food aid. All thirteen drawings under the cereal decision were caused by the effects of adverse weather on domestic food supplies.

The CFF is not commodity-specific, and it finances shortfalls in agricultural exports only to the extent that these contribute to the shortfalls in total export earnings. However, since agricultural products are subject to greater instability than most other products and constitute a significant share of the total export earnings of developing countries, shortfalls in agricultural exports have contributed to a large number of drawings by the developing countries.

STABEX

The EC's STABEX compensatory finance scheme was established under the first Lomé Convention of 1975. It is restricted to the EC's African, Caribbean, and Pacific (ACP) states and aims to stabilize their export earnings. Exports of forty-eight agricultural products are covered, mineral exports being the subject of a separate scheme. A total of ECU 375 million ($460 million) was allocated for the duration of the first convention (1975–79), ECU 550 million for the second (1980–84), and ECU 925 million for the third (1985–89), with the funds in each case divided evenly among the years concerned.

Subject to the threshold limits discussed below, compensable export shortfalls are calculated for each commodity separately—thus excess exports of one commodity do not offset shortfalls in exports of another. The intention is that compensatory payments should be directed to producers of the shortfall commodities, and claimants of STABEX funds must declare beforehand how they intend to use the funds and afterward how they did so. Usually, only exports to the EC are covered, although in certain cases coverage has been extended to exports to other ACP states or the world as a whole.

To qualify for compensation under the third STABEX, in use since 1985, a commodity must generally account for 6.5 percent of the country's export earnings and be 6.5 percent below the reference level. (Both limits are set at 1.5 percent for some countries.) The reference level is calculated as the arithmetic mean value of exports in the preceding four years. Export shortfalls must not be due to national policy.

The repayment provisions are generous. The least developed countries repay nothing. All loans are interest free. In the period 1975–82, STABEX made 205 transfers to 44 ACP countries, amounting to about $800 million. STABEX transfers exceeded aid flows from the European Development Fund (EDF) in several cases and represented a significant portion (10–66 percent) of the aid flow from the EDF for just under half of the ACP countries. Payments have been unevenly spread over commodities, countries, and time. Thus, under STABEX I (1975–79) three beneficiaries—Mauritania, Senegal, and Sudan—accounted for 30 percent of payments, and four others for another 20 percent. Prominent among the commodities supported are cotton, sisal, coffee, cocoa, and groundnuts. The EC Commission estimates that 69 percent of the transfers were due to weakening economic conditions and 31 percent to local circumstances, such as drought, disease, and flood.

The EC rejects a significant number of claims as ineligible—28 percent during 1975–79 and 32 percent during 1980–82. In 1980 and 1981, STABEX exhausted its funds and was able to honor only 53 percent and 43 percent of eligible claims, respectively, although unused funds from subsequent

years allowed the coverage of these claims to be restored to 65 percent for both years.

For the ACP countries the most attractive feature of STABEX is its high grant elements. For the least developed countries—which repay nothing—all transfers are grants; for the remainder, the zero rate of interest and the possible waiver if exports stay depressed for a long period implied grant elements of about 60 percent during the period 1975–83. However, the grants were very unevenly distributed, and there is no discernible relationship between grant components and indicators of poverty or the need for foreign assistance. The principal beneficiaries are listed in Table 7.2.

STABEX affects the allocation of economic resources both within and between countries. For example, by supporting particular sectors STABEX seems likely to encourage excessive production of covered commodities, especially those which have the greatest market risks. Internationally, non-ACP countries producing STABEX commodities are put at a disadvantage because they do not receive protection from risk, and they may have to switch to producing goods in which their comparative advantage is less. Also, the restriction of STABEX to exports to the EC market redirects and distorts international trade.

Table 7.3 summarizes the main features of the CFF and STABEX. While they differ in many practical aspects, they are addressed to similar problems. A full assessment of their value is difficult. Both have assisted a large number of countries.

Table 7.2 The principal beneficiaries of STABEX's grant elements, 1975–83

A. Absolute amounts

Country	*Receipts (millions of 1983 dollars)*	*As a percentage of 1983 exports*
Senegal	77	13.2
Sudan	61	9.8
Côte d'Ivoire	33	1.6
Mauritania	30	10.5
Tanzania	23	6.2

B. Per capita amounts

Country	*Receipts (1983 dollars)*	*As a percentage of 1983 estimated GNP per capita*
Dominica	62	6.6[a]
Kiribati	53	11.5
Tonga	43	5.8
Western Samoa	40	7.1
Vanuatu	38	6.5

a. GDP per capita.
Source: Koester and Herrmann (background paper).

Box 7.3 The Lomé Convention

The EC's arrangements with African, Caribbean, and Pacific states, which replaced former colonial preference schemes, were formalized under the first Yaoundé Convention of 1963 and are now enshrined in the Lomé Convention, the third of which was signed in 1984. The STABEX compensatory financing facility is a principal feature of the Lomé Convention. Other features are the free access for most ACP goods into the EC and the European Development Fund, which administers foreign aid to ACP countries.

The Lomé Convention covers most of the EC members' former colonies, with the exception of the industrial and Asian members of the British Commonwealth. They were denied membership in 1973 on the grounds that they were either much bigger or much richer than the original associated states. There are sixty-six developing-country members of Lomé at present, the majority of which are among the smallest and poorest nations.

The preferences granted to ACP states in agricultural trade fall into three groups. First, small preferences are granted on commodities covered by the CAP. Since such commodities are mostly temperate-zone crops, however, this matters little to the ACP states, which are by and large tropical. Second, preferences are extended for tropical products that are supplied principally by the ACP states and that pose little threat to the EC's domestic producers. Such goods are typically granted unrestricted tariff-free access. However, since similar rights accrue to many other exporters through the EC's other preferential arrangements or because tariffs are zero anyway, the margins enjoyed by the ACP countries over other developing countries are limited. More than half of the ACP exports are covered by other EC preference schemes.

Third, there is a small class of goods for which special arrangements exist—rum, bananas, beef, rice, and sugar. ACP rum quotas remain unfilled, and the ACP countries have not been able to increase their shares of the export market for bananas. In contrast, the arrangements for sugar grant the ACP countries both the right and the duty to sell in the EC at a fixed price. In general, this price far exceeds the world price, and so the system transfers income to the ACP countries. In the cases of both sugar and beef, the system transfers income to ACP countries. In some years the transfers

But by their very nature they do not fully compensate for earnings shortfalls. The purpose of compensatory finance is to maintain spending in the face of a temporary fall in export receipts. To be successful, compensatory schemes must have clear objectives, permit quick identification of shortfalls, and provide prompt payments without complicated conditions. Neither the CFF nor STABEX has been ideal in these respects. While, on average, the compensation rate has been around 60 percent,

Table 7.3 Characteristics of the CFF and STABEX

Item	*CFF*	*STABEX*
Year of initiation	1963	1975
Eligibility	Members of the IMF (137)	Sixty-six ACP states
Drawings 1977–82		
Number of transactions	112	171
Amount	$7.3 billion	$0.8 billion
Shortfall	$11.9 billion	$1.3 billion
Compensation rate	62 percent	59 percent
Coverage	Total exports (may include services and exclude cereal imports)	Forty-eight commodities
Shortfall	Net	Gross (sum of individual shortfalls)
Reference level	Five-year moving average, centered on shortfall year	Four-year moving average, centered two and a half years previous to shortfall year
Limits	Country-specific quotas	Overall budget limit
Interest rate	IMF standard (7.8 percent currently)	None
Repayment schedule	Three to five years after loan	Two to seven years after loan
Repayment obligation	In full	None for low-income economies, conditional for other countries
Grant element	Around 20 percent	More than 80 percent

have been huge. In 1979 up to 7 percent of Botswana's GNP came from beef transfers, and 22 percent of Mauritius' GNP came from sugar transfers in 1975–76. But the arrangements for sugar cause economic inefficiencies because they encourage some ACP countries to expand their output unduly. They also generate excessive transport costs because the EC, which produces more sugar than it consumes, also exports sugar.

The Lomé Convention also grants ACP countries preferential access for manufactured and semimanufactured exports. However, since most manufactures face low general tariffs and are covered by the GSP, the preference is small. Only where the GSP limit on tariff-free access is tight have the ACP countries been able to exploit their preferences.

It has proved hard to measure the effects of the Lomé Convention on world trade, not least because the historical trading links that bind former colonies to Europe are weakening. Since 1965 most ACP states have diversified their exports away from Europe, although their share in EC imports has not changed dramatically. But do ACP countries continue to depend disproportionately upon the EC market? One study of the ACP states examines trade intensity indices—the ratio of an exporter's share of a particular market relative to its share of the world market. Trade intensity has always been high between "related" states—for example, between Britain and the Commonwealth. It is correspondingly low between less related parties. With the advent of the Lomé Convention, however, ACP trade intensities with non-EC markets declined while those with EC markets rose. This was especially noticeable in the case of ACP states' trade with the United States.

While these facts suggest that the Lomé Convention has altered the pattern of world trade, the change has not been large. Moreover, it is difficult to say whether the Lomé Convention has increased trade or merely redirected it. The ACP countries may merely have taken market share in the EC away from other developing countries by diverting exports away from other markets. To put the argument in an extreme form, it is possible that all the Lomé Convention has achieved is to change the direction of world trade, without increasing it, while adding to transport costs.

there has been considerable variation from country to country that is not clearly attributable to either need or the ability to repay. Delays have occurred that might have been avoidable. Still, both schemes have provided valuable assistance on some occasions.

Trade preferences

The industrial countries have introduced several schemes that give access to imports from developing countries at reduced or zero tariffs. In theory, such preferences should increase the exports of developing countries, largely at the expense of those countries excluded from the schemes. The idea is to improve the economic welfare of developing countries. The actual benefits, however, have been limited, partly because the terms of the preferences are restrictive. The schemes exclude, or place tight limits on, precisely those products in which developing countries could be most competitive. Among the least favored goods are many agricultural products. Overall, these arrangements have had little impact on agricultural trade.

Trade preferences have a long history. Although the General Agreement on Tariffs and Trade (GATT) embodies the principle of nondiscrimination, from the start it accepted the continuation of special schemes such as the British Commonwealth Preferences. Later, the EC countries established preferences for their former colonies, preferences which continue today in the Lomé Convention linking the EC to sixty-six ACP states. The principle of nondiscrimination further eroded in 1964, when the GATT allowed developing countries to receive preferential access to industrial markets. This section considers the Generalized System of Preferences (GSP), which is open to all developing countries, as well as restricted schemes such as the EC's Lomé agreement with the ACP states and the Caribbean Basin Initiative (CBI) of the United States.

The Generalized System of Preferences

Under the GSP, developing countries' exports to markets in industrial countries enjoy tariff reductions or exemptions. The scheme has had little effect on exports, however, partly because its product coverage is so limited. Imports from beneficiaries are only a fraction of the total imports of industrial countries. For many imports, regular tariffs are zero. Overall, about 2 percent of OECD imports qualify for preferences, equivalent to about 7 percent of developing countries' total exports.

Many agricultural goods are excluded. For example, the United States excludes sugar and dairy products (both of which are subject to overall import quotas), peanuts, and long-staple cotton. It does so because increased imports would make it harder to run a system of price support for domestic farmers. For the same reason, the EC and Japan also exclude most agricultural products.

Box 7.4 The EC's Sugar Protocol

The Sugar Protocol of the Lomé Convention allows eighteen developing countries to export fixed amounts of sugar to EC members free from the usual import restrictions. In addition to the countries that are signatories to the Sugar Protocol, India benefits from similar provisions.

The benefits of these arrangements to the favored exporters depend on the sizes of their quotas, which are unevenly distributed. In 1981–82, five countries accounted for 77 percent of the total quota, with Mauritius alone receiving 38 percent. Four countries had quotas covering half or more of their domestic production (80 percent for Mauritius), while four had quotas below 10 percent of domestic output (see Box table 7.4).

One of the peculiarities of the Sugar Protocol is that even net importers of sugar export to the EC. Kenya, which produced less sugar than it consumed between 1976 and 1978, still exported to the EC. The peculiarities are compounded by the fact that the EC itself is a net exporter and thus reexports the sugar imported under the protocol. Since transport, insurance, handling, and waste account for up to 20 percent of the value of sugar trade, the losses involved are considerable—about $42 million in 1981–82.

By paying producers more than the world price for sugar, the Sugar Protocol transfers income from consumers in the EC to producers in developing countries. Since the world price of sugar fluctuates widely, the transfer varies from year to year, but it is nearly always positive. Negative transfers occur when the world price rises above the guaranteed price at which developing countries are obliged to supply sugar.

The estimates for income transfers quoted in the table are exaggerated to the extent that the Sugar Protocol reduces the world price. If exporters behaved in a profit-maximizing way, world prices would not be affected by the protocol. This is because the high guaranteed price is received on only a fixed quantity of sugar, so there is no virtue in producing more sugar for the

EC market than the quota allows. Also, an ACP country is free to choose the cheapest way of obtaining the sugar it supplies to the EC. If, in the absence of the protocol, it would have imported sugar because its own production costs exceeded the world price, then with the protocol it should just import sugar and reexport it to the EC.

But this practice is rare. More frequently, the countries covered by the protocol tend to pay domestic producers a price somewhere between the EC price and the price in the world market. The marketing board in Mauritius, for example, pays producers more for producing sugar in excess of the EC quota than they could get in the world market. Some of the transfers from the EC are passed on to producers in this manner. The additional supplies due to this policy lower the world price of sugar.

Because quotas are determined largely by historical levels of sugar exports, the protocol tends to freeze world trade patterns. This puts new producers or countries which have improved their efficiency at a disadvantage.

Finally, as a part of the mechanism for fixing the EC's internal sugar price, the protocol helps to isolate the EC from the world market. It also tends to isolate ACP producers. This increases the burden of adjustment elsewhere and the instability of world market prices.

Box table 7.4 EC sugar quotas and transfers, 1981–82

	Annual delivery quotas in 1981–82				*Maximum transfer, 1981–82*[a]		
Preferred countries	*Quantity (tons)*	*Percentage of total quota*	*Exports as a percentage of quota, 1981*	*Quota as a percentage of production, 1981*	*Total ECU (million)*	*ECU per capita*	*As percentage of GDP or GNP*
Barbados	49,300	3.8	100	51	7.5	28.8	0.8
Belize	39,400	3.1	111	38	6.0	40.0	4.1
Fiji	163,600	12.7	116	34	21.8	33.0	2.3
Guyana	157,700	12.2	127	49	23.9	26.5	4.7
India	25,000	1.9	0	0	3.4	0.0	0.0
Jamaica	118,300	9.2	105	58	17.9	7.9	0.6
Kenya	93	0.0	0	0	1.4	0.1	0.0
Madagascar	10,000	0.8	0	9	1.5	1.6	0.5
Malawi	20,000	1.6	105	11	3.0	0.5	0.2
Mauritius	487,200	37.8	94	80	75.8	79.8	6.4
St. Christopher and Nevis	14,800	1.1	107	45	2.2	36.6	4.3
Suriname	2,667	0.2	. .	33	0.4	10.8	0.3
Swaziland	116,400	9.0	106	32	18.9	32.0	3.5
Tanzania	10,000	0.8	0	8	1.5	0.1	0.0
Trinidad and Tobago	69,000	5.4	98	74	10.5	8.7	0.2
Uganda	409[b]	0.0	. .	. .	. .	. .	. .
Zaire	4,957	0.4	0	31	0.8	0.5	0.0
Total	1,288,826	100.0	100	14	196.5	0.2	. .

a. Allowing for transport, insurance, and handling costs.
b. Quota abolished in 1981.

The Lomé Convention

The Lomé Convention, described in Box 7.3, is the best known of the other preferential schemes. While the effective preference margins under the convention are reduced by the preferences offered under the GSP, the margins are quite significant for some products, such as canned tuna, certain tropical fruit products, and tobacco. Among agricultural products, the impact of the convention on sugar is significant. Eighteen ACP countries have quotas to export sugar to the EC. As Box 7.4 shows, these quotas insulate ACP producers and EC consumers from world prices and thereby destabilize the unrestricted world sugar market. They discourage efficiency among producers, prevent EC consumers from buying cheaply, increase transport and handling costs, discriminate against efficient sugar producers outside the arrangement, and encourage higher world output of sugar. They

Box 7.5 Agricultural trade among developing countries

In 1980, agricultural trade among developing countries was worth $21 billion; it accounted for 25 percent of developing countries' total agricultural exports. From 1970 to 1980, developing countries' agricultural exports to one another grew faster than their corresponding exports to industrial countries, but the former still grew more slowly than the developing countries' agricultural imports from industrial countries.

About two-thirds of farm trade among developing countries takes place between regions. Asia trades with other developing regions the most, Africa and the Middle East the least. A few commodities—mainly rice, sugar, raw cotton, and coffee—dominate the trade among developing countries.

There may be good reasons why this trade remains relatively small. The expansion of trade among developing countries should be pursued within the overall aims of economic development; it is not a goal in itself. But the low volume of farm trade among developing countries also reflects a variety of constraints:

- Tariffs in developing countries tend to be biased against the types of goods exported by other developing countries; nontariff barriers tend to restrict agricultural trade more than manufactured trade. Among the fifteen largest developing-country importers, quotas, conditional prohibitions, and licensing are applied to 31 percent of agricultural imports but only 23.5 percent of manufactured imports. Although tariffs on rice are low, half of world rice imports are subject to direct government control and a further 20 percent are regulated by licenses.
- Transport and communication between developing countries are often inadequate. It is easier, cheaper, and more profitable to seek out information on large markets; this means that the trading potential of other developing countries may not be fully exploited.
- Subsidized exports from industrial countries, often combined with overvalued currencies in developing countries, tend to reduce developing countries' competitiveness.
- Slow growth in the demand for imported food by industrial countries discourages developing countries from increasing production and reduces their access to the foreign exchange they need in order to import from other developing countries.

Several measures have been proposed to increase agricultural trade among developing countries, including a global system of trade preferences and an international information system on trade financing. Trade preferences—either general or regional—are not likely to be very effective. There are now eleven economic integration or clearing arrangements among developing countries. Most offer tariff preferences among members but little relaxation of nontariff barriers. These groups account for a significant fraction of total agricultural trade among developing countries but only rarely for more than 20 percent of their members' trade. Increased emphasis on market information and intelligence holds out a better hope for assisting developing countries to expand their agricultural exports. Such systems are not cheap to develop, and countries that export similar crops need similar information. So it may be most economical for regions or groups of countries to cooperate in setting up market information systems. This could be supported by technical cooperation, harmonization of standards, increased use of long-term contracts, and joint ventures.

do, however, transfer a large amount of income to those who hold quotas.

Although the economic effects of the Lomé Convention are hard to quantify, there are several reasons for thinking that they are relatively small: first, preference margins are slim; second, the main effect of most preferences seems to have been to divert trade rather than to boost it; third, market structures sometimes allow monopsonistic European importers to capture the tariff preferences; and fourth, the ACP countries have not always taken (or been able to take) full advantage of any increase in trade opportunities that has arisen. The last point applies particularly to the smallest and least developed countries. In return for these generally small and uncertain benefits, the ACP countries are bound into EC protectionism. Fearing the erosion of their preferences, they tend to oppose more widespread trade liberalization.

The Caribbean Basin Initiative

The CBI of the United States, signed in August 1983, gave twenty-seven Caribbean states duty-free access for most of their exports to the United States. In return, the Caribbean states agreed to certain changes in taxation and economic policy. While all the parties enjoy several obvious benefits from the CBI, its trade provisions have had negligible effects so far. Textiles, clothing, footwear, canned tuna, and petroleum are among the items excluded from preferences; sugar and beef are subject to special treatment. Sugar quotas for CBI countries have been reduced from about 1.5 mil-

lion tons in 1980 to 1.0 million tons in 1986. The U.S. Food Security Act of 1985 requires them to be reduced further if they conflict with the domestic sugar price support program. Beef quotas are also subject to U.S. domestic policy constraints.

Preference schemes among developing countries

Apart from schemes already described, there are several other preference arrangements that developing countries use for trade among themselves; these normally involve regional groups. To the extent that these arrangements create extra trade, they are beneficial; but like other preference schemes, they tend to divert at least as much as they create. And too great a concentration on regional markets tends to blind countries to the advantages of supplying the world market, which offers more scope for exploiting comparative advantage and greater security from regional economic shocks. Box 7.5 discusses agricultural trade among developing countries.

Food aid

During the 1960s and early 1970s, many governments and observers were concerned about widespread shortages of food. The Food and Agricul-

Box 7.6 Food aid institutions

Large-scale international food aid started with the passing of U.S. Public Law 480 in 1954. This legislated for the disposal of grain surpluses abroad

> to expand international trade among the United States and friendly nations . . . to make maximum efficient use of surplus agricultural commodities in furtherance of the foreign policy of the United States, and to stimulate and facilitate the expansion of foreign trade in agricultural commodities produced in the United States by providing a means whereby surplus agricultural commodities in excess of the usual marketings of such commodities may be sold through private trade channels (68 Stat. 457).

The United States and other donors have also adopted the FAO's Principles of Surplus Disposal to minimize the disincentive effect that food aid has on commercial markets. A consultative subcommittee was set up to monitor the distribution of food aid and ensure that the so-called usual marketing requirements were being met. These require recipient countries to maintain commercial imports at a specified level even though they are also receiving food aid. The rule is still insisted upon and monitored by the subcommittee, although its effectiveness is questionable.

The impact of dumping surplus food gave rise to considerable concern, and the hope of correcting it was one of the motives behind the creation of the World Food Program (WFP) in 1961. Established under the joint auspices of the United Nations and the FAO, the WFP was the first multilateral food aid agency. It aims to supply and coordinate food aid not only for relief and emergency purposes, but also for development projects. It is hampered, however, because its food donations may not be sold in the recipient countries' markets. Donated food can be used for projects only if it is distributed through cumbersome channels such as direct feeding or food-for-work programs. By 1983–84, about 25 percent of all food aid shipments were handled by the WFP, compared with 5 percent in the late 1960s.

Food aid reached record levels—17 million tons—in 1965–66. Almost immediately, concern arose that adequate flows might not be maintained because the United States appeared to be stepping up its policy of restricting the area planted to grain. This concern was manifest in the Food Aid Convention of 1967, which was adopted as part of the International Wheat Agreement. Under the convention, member countries promised to provide 4.5 million tons of cereal food aid a year.

The so-called world food crisis of 1972–74 led to the convening of a World Food Conference in 1974. The conference set up a variety of institutions to promote food production, including the International Fund for Agricultural Development (IFAD) and the World Food Council. It also sought to increase food aid. In 1979 the conference recommended a target of 10 million tons of cereal food aid a year and the establishment of an international emergency reserve of 500,000 tons, to be replenished annually. The current Food Aid Convention, signed in 1980, guarantees minimum supplies of 7.6 million tons a year from twenty-two donor countries.

The world food crisis also provided an impetus for using food aid for development purposes as well as for emergency relief. In 1977 the United States amended Public Law 480, allowing conversion of food loans to grants under a new Title III—"Food for Development." Its aims are to help small farmers, sharecroppers, and landless laborers increase food production and to stimulate rural development in general. The EC also adopted new food aid guidelines in 1983 to integrate food aid better with the development strategies of recipient countries and to reduce the adverse effects of such aid on local production and consumption patterns.

Table 7.4 Food aid in cereals, 1971–83

Region	Percentage share		
	1971–72	1976–77	1982–83
Africa	8.3	28.4	50.4
Sub-Saharan Africa	2.5	10.4	26.9
Asia	52.7	59.7	32.3
Bangladesh	3.4	17.3	13.6
India	10.1	16.2	3.1
Indonesia	6.1	2.0	1.7
Latin America	3.9	7.7	13.7
Colombia	0.9	3.8	0.0
Honduras	0.0	0.2	1.0
Memo items			
Low-income countries	43.1	79.0	84.2
Least developed countries	1.3	26.7	32.3
World total (thousands of tons)	17,513	6,847	9,198

Source: FAO and World Bank data.

ture Organization (FAO) had long maintained that food supplies were chronically inadequate to meet the basic needs of many of the world's people and were also prone to periodic crises. As a result, various international and bilateral arrangements were made to cope with both chronic and temporary food shortages (see Box 7.6).

Although famine relief is the most visible form of food aid, it is much less common than project food aid (assistance to particular development projects given or lent in the form of food) and program food aid (food donated as balance of payments or budgetary support). In all its forms, food aid accounts for a relatively small share of foreign assistance to developing countries. With commodities valued at world prices, food aid in recent years has amounted to about $2.6 billion annually, about 10 percent of official development assistance. In 1984–85, twenty-five donor countries provided more than 100 developing countries with about 12 million tons of cereals, 430,000 tons of vegetable oil, 356,000 tons of skimmed milk powder, 98,000 tons of other dairy products, and 21,000 tons of meat and fish products. Of this, only about 660,000 tons, less than 5 percent of food assistance, was for emergency food aid. The United States is the largest donor (about 50 percent of food aid), followed by the EC (about 30 percent). Australia, Canada, and Japan contribute about 14 percent collectively.

The distribution, quantity, and nature of food aid sometimes bear little relation to dietary deficiency. For example, 20 percent of all cereal aid goes to Egypt, a middle-income country where the average calorie intake is about 28 percent more than needed for a healthy diet. By contrast, Togo—a low-income and food-deficit country—receives only 6 percent per person of what Egypt does. Over the past decade, donor governments have tried to send more food aid to areas where dietary deficits are largest, and they have made some progress in this direction (see the bottom part of Table 7.4). Food aid is now generally directed toward poorer countries, but some countries that are not poor receive significant aid.

The quantity of food aid is more closely related to the needs of donors than to those of recipients. For example, U.S. legislation on food aid—Public Law 480—makes explicit mention of foreign policy considerations, surplus disposal, and the avoidance of conflict between commercial and concessional exports. Donors have found food aid a convenient way of disposing of surplus stocks, particularly of milk products. The level of food prices also affects the amount of food aid. In 1973–74, when food was in short supply and prices were high, wheat shipments were less than 4 million tons, compared with around 10 million tons a year in the late 1960s.

International food aid is only part of the answer to famine. To begin with, it does not solve the massive problems of internal food distribution. India's recent success in avoiding famine-related deaths has owed much to its ability to shift grains from regions with surplus food to those with deficits and to provide aid to the needy, either as food or in the form of an income supplement. By contrast, the recent relief operations in Ethiopia and Sudan have been dogged by transport and communications failures and other problems, which have hindered the flow of food to many of the worst af-

fected areas. These and other problems of emergency food aid are discussed in Box 7.7.

Food aid is also provided to supplement domestic production in normal times. As a result, domestic prices may fall, discouraging local production and reducing farm profits. To minimize this effect, food aid can be directed to the very poor, who are less likely to use it as an alternative to local supplies. But, in practice, food aid has not been so directed in many cases. In 1982–83, for example, Bangladesh received cereal food aid worth about $160 million at world prices. This was distributed through the general food subsidy scheme, which—like such schemes in many other countries—benefits both the poor and the relatively affluent groups.

Two ways exist by which food aid can in principle be prevented from deterring local production. First, countries could resell food on the world market and buy back only as much as is genuinely

Box 7.7 The challenges of emergency food aid

The distribution of free food would appear to be a straightforward solution to the immediate problem of starvation. But emergency food aid will be effective only if certain conditions are met.

The first requirement is information. Famines do not happen suddenly. Farmers in Africa, accustomed to erratic rainfall, have evolved traditional means of coping with food shortages, especially in the first year of drought. But in the second year, widespread shortages may become unmanageable, and international aid may become necessary. Given the long period between the first signs that the harvest may fail and the point at which a large number of people starve, the provision of information would not seem too difficult. In many instances, however, the governments of affected countries have been reluctant to release details of impending famine and have hindered international agencies (both official and private) that wanted to publicize the emergency. Logistical difficulties (for example, in Ethiopia in 1973–74 and 1983–84 and in Mozambique in 1983–84) and sometimes merely lack of attention (as in Mali and Chad in 1983–84) have made the collection of information difficult.

The second requirement is the prompt reaction of donor countries. In the Sahelian drought of the late 1960s and early 1970s, large-scale relief efforts did not start until 1973, five years after the drought and famine had begun. The FAO announced late in 1982 that Ethiopia would need large quantities of food aid the following year. However, large-scale relief efforts did not start until late 1984. One possible solution to such political difficulties is to grant multilateral agencies, especially the World Food Program, a more prominent role in emergency relief. Currently they handle only between 10 and 20 percent of total emergency aid.

It would be a mistake, however, to assume that a simple shipment of food would cure starvation. In many cases aid throws substantial burdens onto fragile storage and distribution systems. In Sudan only 64 percent of the food aid pledged was distributed in 1984–85, although 91 percent was delivered to the ports. In Ethiopia only three-quarters of the food delivered was actually distributed.

The problem of transport is especially serious for landlocked countries. Imports into Burkina Faso, Chad, Mali, Niger, Zambia, and Zimbabwe must be handled in the ports of neighboring countries. Reports of delays are numerous. Take the case of Mali, which can import food through Senegal, Côte d'Ivoire, or Togo. Transportation through Senegal is by rail, and capacity is limited. It is often difficult to obtain trucks for the trip through Côte d'Ivoire because Mali may not have a cargo to send back and because trucks are not always available, especially during the busy season from November to June when they are used to transport Côte d'Ivoire's export crops to the ports. The route from Togo passes through Niger, where, because of unpaved roads, the going is very slow, especially during the rainy season. Food could be transported through Nigeria, but Nigeria's ports are frequently congested.

Food can also be held up on the seas or at the dockside. Estimates of the damage caused by delays in shipping and off-loading in Somalia in 1985 vary from 10 to 30 percent of total food aid flows. If aid is delayed, it can actually hinder the recovery from famine. When food that had been promised in late 1984 arrived six months later in Sudan and Ethiopia, the rainy season had begun. Many of the roads were impassable, and so the food could not be distributed. But when the rain ended and the harvest was gathered, the food aid became not only less urgent but also potentially counterproductive, because it forced prices below even the seasonal low point. Kenya did not have enough storage capacity for its own record food crop of 1985, but food aid was still arriving in response to 1984's drought. As a result, the Kenyan Marketing Board (the monopoly maize buyer) may have to refuse to buy some maize, delay payments to farmers, and even export maize at a loss.

Early-warning systems, quicker donor response, and improved distribution systems are all needed to make emergency food aid more effective.

needed in extra demand. Second, they could reduce commercial imports by the amount of the food aid. Donors of aid typically set terms which prohibit both means, with the intent of ensuring that food aid does not reduce the commercial demand for their food. If this prohibition is effective, food supplies in the recipient country will rise proportionately more than incomes, making the disincentive effects particularly hard to avoid. However, these provisions are so little enforced that the disincentive effects may be slight in practice.

Since food aid cannot legally be converted into cash, much of it has to be distributed in kind. This saddles recipient governments with extra costs of administration, and often of transport as well. The food-for-work projects—by which food aid pays in kind for infrastructural development—are at times inefficient and poorly designed, and thus further reduce the real benefits of food aid. To promote net additions to demand for their surplus products, aid-granting exporters sometimes supply commodities that are not part of the recipients' normal diets. The resulting distortions of consumption patterns tend to increase the dependency of aid recipients on continued food aid. While such problems do not undermine the case for food aid, they do show how the limits on its use can sharply reduce its worth. There is growing awareness among donors about these limitations, as mentioned in Box 7.6.