

# Rethinking Tropical Agricultural Commodities

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## Executive summary

This paper reviews the literature and evidence on agricultural commodity dependent developing countries (ACDDCs). It discusses the experience of national and international efforts to reduce agricultural commodity price declines and volatility and investigates some of the latest proposals for intervention based on recent sectoral discussions, most noticeably in the case of coffee.

Production of agricultural commodities continues to play a major economic role in many developing countries, especially in the small and Least Developed ones. An estimated 75% of the world's poor live in rural areas, and a large part of them are engaged to some extent in commodity production. Over the past few decades, the market for agricultural commodities has shown a pattern of long-term price falls and short-term price instability. Agricultural production has increased due to improved technology and a general fall in border protection. Demand for primary agricultural commodities has fallen as population growth has slowed and the number of substitutes and higher value-added products has expanded. While declining and volatile prices are unfavourable conditions for any commodity producing country, they have particularly adverse effects on ACDDCs. ACDDCs are often dependent on revenue gained from exporting only one or two specific agricultural commodities, so declining and volatile prices are harmful to both individual producers and governments, both of which face shrinking returns and high risk. Volatile and falling agricultural commodity prices can also aggravate the ratio of debt to exports, undermining debt sustainability.

Much of this problem lies in the failure of ACDDCs to diversify into other sectors. Efforts to diversify vertically into higher value-added processed agricultural products or horizontally into other (non-agricultural and agricultural) primary commodities have had only limited success, compared to efforts to diversify into new areas of economic activity such as manufacturing and services.

Beyond efforts to diversify, both the developed and developing world have considered and implemented various policies to reduce price declines and volatility. Over the last two decades, as government spending and the desire to intervene in markets has decreased, most of these traditional instruments have disappeared, in part due to the deregulatory and liberalising thrust of donor thinking and structural adjustment programmes.

First, there have been attempts, both nationally and internationally, at supply management. Nationally, supply of some agricultural commodities in developing countries has been managed by state marketing boards, which relied on national stockpiles to regulate and manage the supply of commodities for export. While state marketing boards proved beneficial in providing ancillary services to farmers, there were frequent problems with price setting, quality and efficiency of the board.

Internationally, the International Commodity Agreements of the 1970s and 1980s maintained physical buffer stocks to influence world prices. Although these managed to maintain price levels for a number of agricultural commodities (notably coffee), their eventual collapse reflects both the withdrawal of support by consuming countries and the difficulties involved in attempting to influence prices via output management in an environment of supply expansion brought about by productivity increases and limited financial resources.

Second, alongside supply management schemes were a number of broadly complementary international initiatives that made financial transfers to national governments in compensation for falls in agricultural export earnings: the IMF's Compensatory and Contingency Financing Facility and the EU's STABEX (and later the FLEX). All these schemes had drawbacks associated with their operation on an ex-post rather than an ex-ante basis; their strict eligibility requirements; and, the conditions they imposed in return for receiving finance.

Third, as donors have given up on supply management, they have increasingly switched attention to the use of market-based risk management tools such as derivatives and insurance. However, the use of these instruments remains limited in ACDDCs because of the costs associated with their use. Moreover, they are only suitable for addressing short-term price and volume instability, rather than long-term price falls.

This combination of deregulation, liberalisation and the shift to market-based policies has yet to produce an improvement in the livelihoods of commodity producers, or the situation of ACDDCs. Prices have become more volatile and their long-term decline has continued.

Against this background a number of new measures for dealing with the ‘commodity crisis’ have been put forward as increasing attention has been paid to the problems of long-term price decline and volatility in particular sectors, most recently in the cases of coffee and cocoa.

First, questions have been raised over the role of donor interventions in agricultural commodities with respect to their net poverty impact in different sectors. The concern is that while donor support, e.g. for raising productivity, may make benefit producers in one country or area, the cumulative effect will be to increase supply and further reduce prices, outweighing the positive effective of increased sales volume and leading to a net loss in producer welfare.

Second, responding to the challenges of ACDDCs may require an enhanced role for the state, in contrast to the deregulatory and market-based approaches of the past. Here the challenge is to ensure that the state does not replicate past mistakes, but equips the poor to engage with the market on more beneficial terms through providing assistance to diversify assets and improving social and physical infrastructure.

Third, more attention should be given in post-liberalisation countries to the need to deal with the fragmentation of the market which has disempowered producers relative to buyers. Strengthened producer organisations are essential if farmers are to establish a stronger bargaining position within the supply chain

Fourth, there has been increased interest in revisiting the feasibility of international supply management, given the relative success of the International Coffee Agreement compared to the events since its demise. The main obstacles to such strategies are likely to be opposition from consuming developed country members (who oppose higher prices) and resistance from other competitive developing country producers (who oppose controls on their production).

Fifth, ACDDCs are capturing an ever-smaller proportion of the final retail value relative to processors, wholesalers and retailers. This can be increasing concentration of international trading and processing of commodities. Any oligopsony has market power that must be regulated in some way to produce an efficient outcome. An international competition agreement could, therefore, support the development of competitive markets in agricultural commodities.

Sixth, the development of niche markets (such as Fair Trade and organic products) or the establishment of voluntary commodity funds may be able to assist agricultural commodity producers in developing countries. In particular it has been proposed that Fair Trade principles be mainstreamed into government procurement policies and that targets are set for Fair Trade as a proportion of total trade in some agricultural commodities. There are however, limits to the potential of these approaches to assist large numbers of producers.

Seventh, more attention is required to improve the effectiveness of compensatory funds, and there is a need to examine other income-raising options such as voluntary levies, or commodity-specific taxes in consumer countries.

In designing and refining policy in such areas, researchers need to seek a more evidence-based approach to the social and environmental impacts of past, present and proposed policies. More weight needs to be given in policy design to the lessons to be derived from specific historical evidence, rather than to general assertions about the relative merits of markets and states.

## **1. What is the problem and why is it important?**

The ‘commodity problem’ is often described as a combination of declining terms of trade (commodity prices rising less rapidly than those of manufactures) and price volatility. Producers therefore face the dual problem of low returns and high risks (Page and Hewitt, 2001).

This paper reviews the long history of thinking and literature on agricultural commodity dependence. It discusses the evidence and experiences of national and international efforts to reduce agricultural commodity price volatility and the adverse effects of this on poor people in poor countries. The focus is on ‘soft’ tropical agricultural commodities (such as coffee, cocoa and tea), which tend to be produced in developing countries and consumed in developed. These commodities display certain defining characteristics:

- they are often produced by a number of small producers in rural areas; and
- they are ‘low-tech’ primary products, as opposed to manufactures, and involve minimal levels of processing within the producer country (DTI, 2004).

For ‘hard’ agricultural commodities, notably sugar, cotton, wheat, beef, rice, and other commodities where market intervention is significant in developed countries, the trends in the levels and fluctuations in prices will be in part the result of such policies, which can lead to dumping at artificially low prices, driving developing country producers out of both their own and others’ markets. In such cases, reform of developed country policies may offer the most pro-development outcomes. This paper, however, focuses on ‘non-competing’ commodities such as coffee, cocoa and tea.

### ***1.1 Long-term decline in prices***

Analytical work (e.g. Prebisch, 1950; Singer, 1950) concluded that in the long run, the price of primary commodities declines relative to manufactures. This hypothesis has been repeatedly tested and found valid (e.g. Spraos, 1983; Bloch and Sapsford, 2000). Theoretical analysis suggests that agricultural commodity prices fall relative to others because of relatively inelastic demand and because of the lack of differentiation among producers, which means that the markets are competitive. Moreover, the decline in agricultural commodity prices is likely to continue. On the supply side, technological improvements, increased competition, reduced protection of markets and devaluation of some national currencies (e.g. CFA franc) of many agricultural commodity-producing countries (following structural adjustment programmes) have all contributed to significant increases in production. On the demand side, the development of synthetic substitutes, which further displace agricultural commodities as intermediate inputs and consumption items, and slower population growth will act to depress demand growth.

### ***1.2 Price volatility***

In addition to their long-term decline, the prices of many agricultural commodities show a high degree of volatility, caused by time lags between production decisions and delivery to the market; delayed and inappropriate responses by producers to price signals; inelastic supply and natural shocks. The characteristic behaviour of commodity price cycles is one of ‘flat bottoms punctuated by occasional sharp peaks’ (Gilbert, 1999), i.e. periods of low prices endure for longer than price spikes.

There are two types of commodity price fluctuations (Cashin and Pattillo, 2000): short-term (under four years for half the shock’s effects to dissipate) and long-term (where there are permanent effects). This distinction is important for informing policy responses: short-term shocks should be dealt with by saving or borrowing, whether by private or public sector, or through market-based risk management mechanisms such as insurance. Long-term shocks require permanent changes in the economy (Page and Hewitt, 2001). Agricultural

commodities found to have shock persistence of less than a year include bananas and tea while long-term shocks affect coffee, cotton, and cocoa (Cashin *et al.* 1999a).

### ***1.3 The impact of agricultural commodity price decline and volatility***

These problems face all countries that produce commodities, but are more serious for agricultural commodity-dependent developing countries (ACDDCs). ACDDCs are defined as being those countries which are more dependent on agricultural commodity exports and specialise in producing one or a few commodities (Dehn, 2000). In many ACDDCs the producers and workers directly affected by agricultural commodity exports are among the poorest of the population. Cocoa, for example, provides livelihoods for 14 million rural workers on big plantations and for a further 2.5 million small producers. Coffee provides income for 25 million producers. Price falls or fluctuations put exceptional strains on efforts to reduce poverty. For many governments, uncertainty of foreign exchange earnings combined with lack of access to credit that could smooth fluctuations in income makes long-term planning of spending difficult. Debt sustainability then becomes a major issue. Sharp falls in prices can threaten the ability of Heavily Indebted Poor Countries (HIPC) to exit from unsustainable debt. If prices fall after the required level of debt relief has been pledged, this level will be insufficient by the time the country completes the process (DTI, 2004).

In some commodities such as bananas, palm oil and tea, NGOs claim that the downward pressure on prices has triggered a 'race to the bottom' in wages and working conditions on plantations, including casualisation of labour, the use of child labour, increased workloads, reduced benefits such as health provision, schooling and housing.

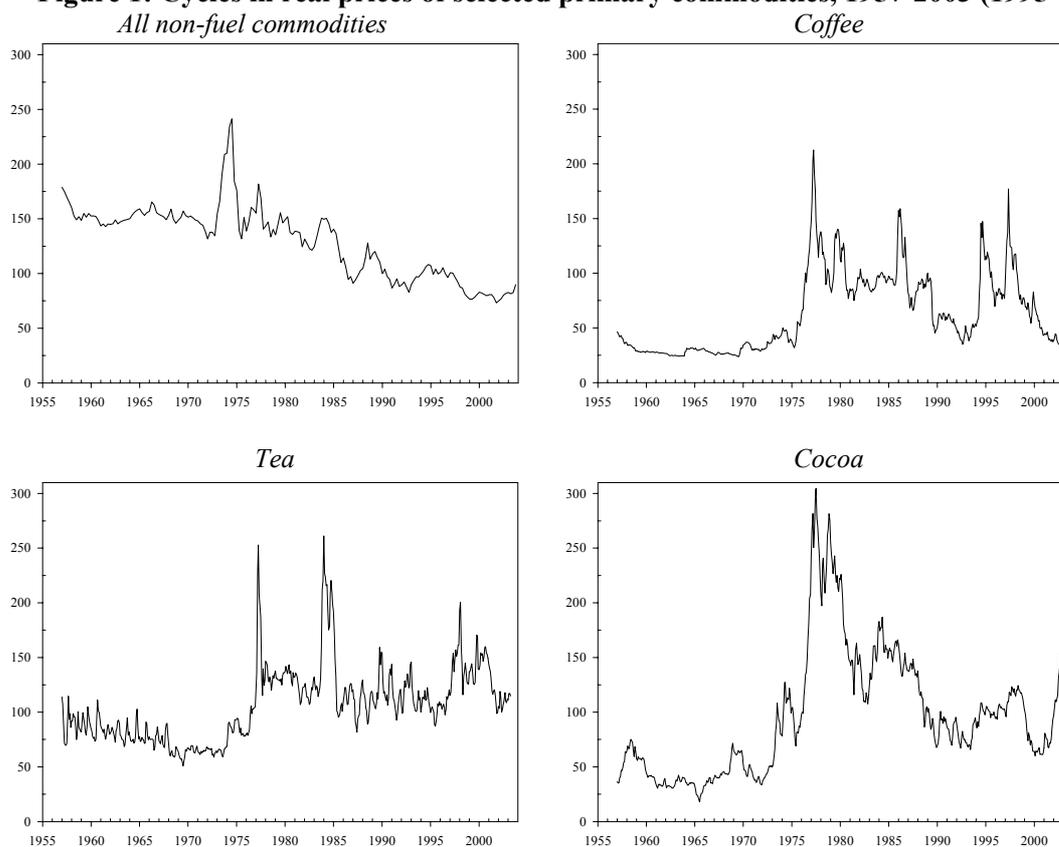
A number of authors also raise concerns about the environmental impact of some commodity sectors. Intensification in commodity production can lead to increased soil erosion and exhaustion, reduced biodiversity, increased pollution (e.g. through the excessive use of pesticides) and can divert scarce water supplies. At a global level, there are concerns over the use of fossil fuels (e.g. in fertilisers) and the impact on climate change of intensive soil use (Clay, 2004).

### ***1.4 Trends in agricultural commodity prices***

Markets for primary commodities are characterised by long periods of low prices and short periods of price rises (IMF, 2000). This trend is illustrated in Figure 1.

The UN notes 'the two groups for which the developing countries account for the largest shares in world exports, namely tropical beverages and vegetable oilseeds and oils, show the highest rates of decline in prices' (UN, 2000: 4). However, whereas the relative growth of global demand for traditional agricultural commodities (such as coffee) has weakened in recent years, that for some agricultural products has been on the increase. These new dynamic products include fruits, vegetables, fish, and dairy products. The different demand growth for different products reflects, in part, changing consumer habits (UN, 2002). In addition, recent price increases for some agricultural commodities since mid-2002 reflect strong demand growth in China, poor harvests, and speculative buying owing to political developments surrounding the oil market.

**Figure 1: Cycles in real prices of selected primary commodities, 1957-2003 (1995=100)**



Source: IMF, International Financial Statistics (2004).

### ***1.5 The extent of agricultural commodity dependence***

The effects of long-term declines and volatility in agricultural commodity prices are greater when a country remains particularly dependent on agricultural commodity exports. This is principally a problem of small developing countries which have found it difficult to diversify due to political, economic or entrepreneurial obstacles. Many of these countries are Least Developed and/or among the EU's associated countries in Africa, the Caribbean and the Pacific (ACP). Almost all of the countries in sub-Saharan Africa rely on primary commodities (including non-agricultural) for over half of their exports, with some countries relying particularly on one, two or three commodities (see appendix 2).

## **2. The current evidence: policies to help agricultural commodity dependent developing countries**

Over the past two decades many of the classical instruments for public intervention in agricultural commodities have disappeared as the scope for national policies has been constrained by pressures to cut government spending and reduce intervention in markets. At the same time, the increased openness of all countries to trade and improvements in transport and communications have increased pressures on commodity prices (Page and Hewitt, 2001).

### ***2.1 Reducing dependence on agricultural commodities***

In the long run, diversifying into other activities is the best way to reduce dependence on agricultural commodities and the associated vulnerability to negative price declines. There are three diversification routes available to ACDDCs: horizontal diversification into alternative crops; vertical diversification into agricultural products and processes that capture a higher proportion of the value chain; and, diversification into non-agricultural activities that exploit comparative advantage (such as manufactures and services). Of these, diversification into new areas of economic activity is the only solution in the long run and should, therefore, be a long-term objective of development strategies.

#### Horizontal diversification

Diversification into other internationally-traded agricultural commodities has a principal disadvantage: with few exceptions, the prices of all agricultural commodities appear to be in decline, so the problem of declining terms of trade will remain. In order to reduce exposure to risk, countries need to diversify into several different agricultural commodities. For a small country, even if agro-ecological constraints can be overcome (e.g. limited internal market, climate changes, vulnerability to natural disasters), this may imply quantities that are too small for efficient production, transport or marketing (Page and Hewitt, 2001). Alternatively, for countries that are heavily dependent on one or two agricultural commodities for the bulk of their export earnings, but also produce and export several other commodities (although in lesser quantities), ‘diversification’ could mean increasing production of these minor exports, rather than necessarily finding new commodities. For smallholders in developing countries, existing patterns of diversification for food crops are typically well-established and may be so entrenched that they constitute a barrier to further diversification into new cash crops (Gibbon, 2003). A further problem is that of ‘adding-up’. Agricultural commodity prices could become further depressed if all countries diversify into the same products simultaneously – prawns and pineapple became notorious examples in the 1980s (Page, 1990).

A further possibility is to diversify into crops for the domestic market. The key issue here is that agricultural-based growth is perhaps the best way to reduce poverty, but a number of countries have achieved this kind of take-off by producing cereals for the domestic market, rather than by export-led growth (Green and Morrison, 2004). The potential for cereal-based import substitution strategies is not an argument for a shift to a more protectionist stance for all developing countries. Indeed the general strategy of openness and state withdrawal may well be appropriate for middle income developing countries, but for some least developed countries import substitution may be a better way forward.

#### Vertical diversification

Higher value-added agricultural exports offer good prospects for long-term growth due to their relatively high income elasticities (Gibbon, 2003). However, there are a number of problems and difficulties associated with this approach. High transaction costs (associated with storing and processing) are perhaps the most important impediment (Delgado and Siamwalla, 1997). Other major obstacles to the development of modern processing

capabilities in developing countries are poor infrastructure; the lack of investment; and, the high marketing costs and constantly-rising product standards faced in penetrating retail outlets in developed countries.

#### Diversification into new activities

The main benefits of diversification away from agricultural commodities (and primary commodities in general) are reduced risk and more stable export revenues. A number of developing countries have succeeded in diversifying away from agricultural commodities into new areas such as manufacturing and services. For manufactures, this has mainly been the case in Asia (e.g. Malaysia, Indonesia) and Latin America (e.g. Brazil). For services, the Caribbean has shown some success in diversifying into tourism and financial services. This has occurred as a result of the promotion of long-term economic transformation, often involving an enhanced role for the state, for example in industrial policy. Export promotion and tariff preferences in export markets have been less important and, where these have existed, unhelpful. High investment and savings were significant in developing supply capacity, while public investment in infrastructure and education, as well as foreign direct investment, played key roles (Page and Hewitt, 2001).

Nevertheless, diversification into manufactured products and services (destined for the world market or to substitute for current imports) presents its own challenges. The significant investment associated with tree crops (e.g. cocoa and coffee) makes producers reluctant to destroy these in order to move into other sectors. Already established players provide fierce competition. Banking systems and capital markets in many ACDDCs, particularly in sub-Saharan Africa, are underdeveloped, making it difficult for new producers to raise the necessary capital to move into new sectors.

#### Trade preferences and diversification

Commodity protocols for bananas, beef/veal, rum, and sugar attached to the Cotonou Agreement (and before it under the Lomé agreements) extend quota access to the highly protected (high price) European market for those products from traditional exporting countries of the ACP group. For many ACP states, these generated substantial foreign exchange revenue and employment. In some cases preferences also encouraged export diversification by providing tariff exemption for most other ACP exports. Examples include Mauritius (from sugar to clothing and services) and Zimbabwe (from tobacco to textiles, clothing and horticulture). In general, however, preferences (especially for protocol beneficiaries) have stifled diversification, by making commodity-dependence profitable. Exporters of bananas in St. Vincent and St. Lucia remain vulnerable in this respect: exports of bananas account for over 90% of their exports to the EU and about 50% of their exports to the world.

## ***2.2 Supply management***

### National: State Marketing Boards

In some developed countries, a form of price stabilisation policy has been that of buffer stock intervention by a central authority that maintains commodity prices at a particular level by buying up excess supply and releasing stocks whenever the market tightens and prices rise. The most notorious example has been the EU's Common Agricultural Policy. Such interventions have helped prevent large temporary shocks from affecting producers. They have, however, faced a number of problems because they have relied on administratively set prices; they were not designed to address the issue of declining terms of trade; and, they were intended to shift risk away from individual producers to national governments (DTI, 2004). Efforts to support prices by controlling supply are difficult to enforce (particularly for

agricultural commodities where artificially high prices encourage new producers to enter the market) and can be undermined by competition from substitutes.

The experience of developing countries, however, has been different. Often producing a narrow range of agricultural commodities on which they depend for foreign exchange and government revenues, and enjoying only limited shipping outlets for sale on to international markets, ACDDCs have relied on national stockpiles to regulate and manage the supply of the commodity for export. These were until recently run by state-owned market boards, or *caisses de stabilisation*, which served the additional purpose of collecting output from small and large producers across the country, notably in the cases of tree crops/tropical beverages, e.g. West African cocoa and coffee. The national stockpile was therefore part of a much larger exercise (UNCTAD, 2003a). For marketing boards, the government would normally set an annual price at which it would purchase the commodity through intermediaries (cooperatives or licensed traders), who were given a fixed margin. *Caisse de stabilisation* systems differed in that although they controlled export contracts they did not handle, export or acquire physical ownership of the commodity in question: primary processing, marketing and exporting was done by cooperatives, private traders or state enterprises. Marketing boards and *caisse de stabilisation* had the advantage that farmers knew the price they would receive at harvest. By aggregating the output of a large number of small producers, they also strengthened their bargaining power relative to buyers.

The records of marketing boards have been mixed. In the late 1970s and early 1980s, they struggled to determine the right level of support prices. In several instances, the value of administered prices was not sufficiently and regularly adjusted to reflect inflation in the domestic economy, exchange rate movements, or the medium-term trend in world prices. If administered prices were too low, farmers were cheated, while excessive prices created financial difficulties for the marketing board. In addition, they provided little incentive for quality improvements and suffered from inefficiency and rent-seeking behaviour.

Some argue that crop marketing boards did play a vital role in the development of the agricultural export sectors in several African countries and the policy of dismantling them as part of structural adjustment programmes has been widely criticised (see, for example, UNCTAD, 1998a; WTO, 2003). Apart from their role in stabilising prices, they were important for providing ancillary services, such as extension and rural infrastructure, including input provision, product distribution services and credit (UNCTAD, 1998b).

State marketing boards also played a role in building globally-recognised national quality standards. These territorial reputations were built on local specificities of climate, soil etc., but state bodies ensured consistency in sorting, grading and description, and applied sanctions when these standards were violated. National reputations established in this way attracted premia for growers of higher quality products (Gibbon, 2003).

#### International: International Commodity Agreements (ICAs)

John Maynard Keynes included a commodity control organisation in his grand design for the Bretton Woods institutions (Keynes, 1943). However, the US opposed any restriction of free trade (Henningson, 1981). The General Agreement on Tariffs and Trade (GATT, 1947) allowed commodity agreements in some circumstances, specifying in article XXXVIII that contracting parties shall:

‘where appropriate, take action, including action through international arrangements, to provide improved and acceptable conditions of access to world markets for primary products of particular interest to less-developed contracting parties and to devise measures designed to stabilize and improve conditions of world markets in these products including measures designed to attain stable, equitable and remunerative prices for exports of such products’

Measures taken in compliance with a commodity agreement are also explicitly allowed as legitimate exceptions to normal MFN treatment under Article XX, subject to agreement by all contracting parties.

The 1970s saw a brief period of ‘commodity power’ (1973–79), which put control of supply in the hands of developing country exporters. Collective action was taken first for phosphates and then, in 1973–74, for crude petroleum. In the case of these particular (non-agricultural) commodities, this strategy worked. Stocking costs for non-perishable standard products were relatively modest. These were supplied by developing countries and enjoyed strong international demand, concentrated in developed countries. The strategy also worked because the commodities themselves were not easily or cheaply substitutable. The formation of supplier cartels or quasi-cartels seemed to show that concerted producer supply-regulation could raise international prices.

International momentum built up in the 1970s for an international Integrated Programme for Commodities (IPC), which had managed buffer stocks as its key element. UNCTAD took the lead in promoting the IPC, which had as an explicit objective raising the price of commodities.

International Commodity Agreements (ICAs), by contrast with OPEC, played by GATT rules and incorporated both consumers and producers. Those that were negotiated under the auspices of UNCTAD in the 1970s were designed ostensibly to prevent unexpected price fluctuations through price controls and subsidies. However such international efforts to replicate OPEC for agricultural and other primary commodities met with less success and eventually collapsed, often after the withdrawal of consuming countries. The ICAs no longer maintain physical buffer stocks. Many of them have reduced their activities to those of mere study groups, some with new purposes, such as providing data and research and promoting sustainability (UNCTAD, 2003b).

The Common Fund for Commodities (CFC) was initially envisaged as an instrument to fund buffer stocks of core commodities that were to form part of the IPC.<sup>1</sup> The Agreement establishing the CFC was signed in 1980 but only became operational in 1989. By then, the world had changed. National, as well as international, markets had been liberalised. In response, the commodity agreements that were to serve as the foundation for the buffer stocks had dropped the objective of market stabilisation. Consequently, there was no longer a role for the main ‘first account’ of the Fund (CFC, 2002) and it was left with other supporting activities to be financed through its ‘second account’ – undertaking technical assistance pilot projects in developing countries (focusing on individual commodities) and multi-country projects examining market chain strategies.

A number of reasons have been advanced as to why this generation of commodity agreements failed. Some believe that the breakdown reflects the difficulties involved in attempting to influence prices via output management, in an environment of supply expansion brought about by productivity increases (Reinhart and Wickham, 1994). Others propose that it is difficult, if not impossible, to agree on price ranges (Gilbert, 1996) or to determine accurately the correct long-term price trend. Lack of enforcement mechanisms and the free-rider problem (Cashin *et al.*, 1999b) have also been suggested. The ICAs’ failure to curb supply has also been cited, while in the case of competing commodities, such as sugar, the impact of developed country farm policies played an important role in undermining the agreement (Koning, 2004). On the other hand, it has been argued that many of these challenges would

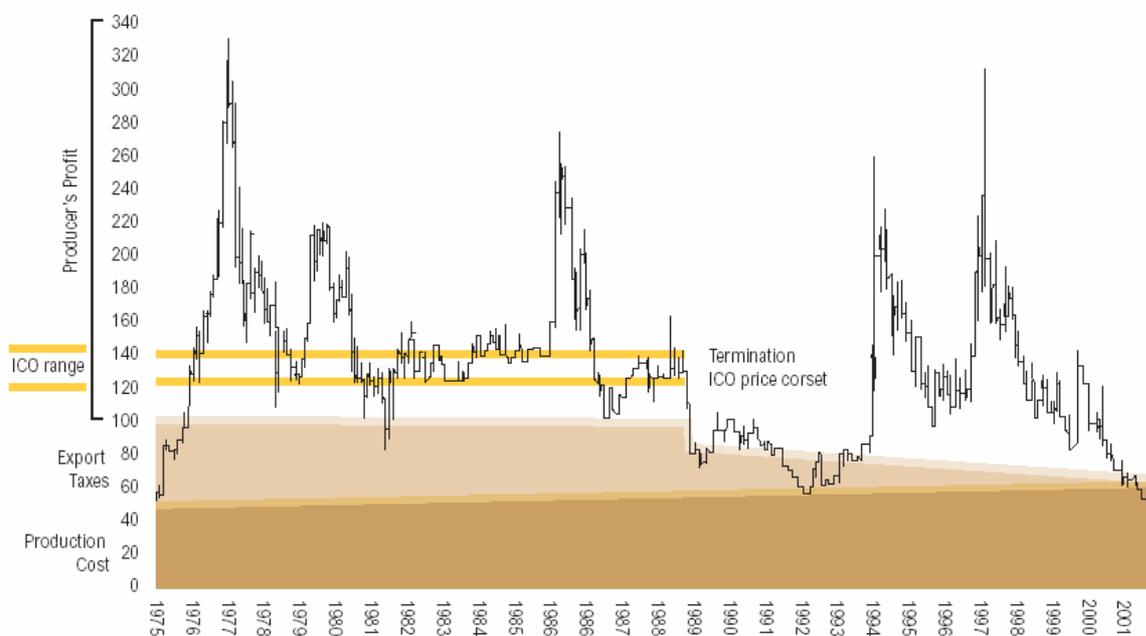
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<sup>1</sup> Cocoa, coffee, sugar, rubber, wheat/coarse grains, jute, tropical timber, copper, cotton, lead/zinc, nickel, olive oil, and tin.

not have been insurmountable had there been sufficient political will and financial resources (Rangarajan, 1993; Robbins, 2003).

While some authors see ICAs as a policy dead end, doomed to fail, others feel that the obituaries are premature. Oxfam views the International Coffee Agreement, which lasted from 1975-89, as a ‘golden era of good and stable prices.’ (Oxfam, 2002). The International Coffee Agreement regulated exports and imports within price bands, but the economic clause in the agreement was abandoned in 1989. Until 1989, governments in both producing and consuming countries sought to agree to pre-determined supply levels by setting export quotas for producing countries. The aim was to keep the price of coffee relatively high and stable, within a price band ranging from US\$1.20 - US\$1.40 per pound. The agreement succeeded in stabilising prices and persistently raised them by 24-30% over what would otherwise have been market clearing levels (Palm and Vogelvang, 1991; Hermann *et al.* 1993). As Figure 2 illustrates, from 1975-89, though prices fluctuated significantly, they remained relatively high and rarely fell below the price floor.

**Figure 2: Monthly New York coffee futures<sup>2</sup>**



Source: Oxfam (2002)

## 2.3 Policies to alleviate the effects of volatility in agricultural commodity prices

### 2.3.1 Compensation schemes for exporters

Both the IMF (through the Compensatory and Contingency Financing Facility) and the EU (with STABEX, FLEX, SYSMIN and COMPEX) have operated schemes that have made financial transfers to national governments in compensation for falls in export earnings. All these schemes are now essentially defunct.

The EU-ACP STABEX arrangement was established in 1975 under the first Lomé Agreement and continued through until the recent Cotonou Agreement. In the form in which it operated in the 1990s, the instrument had serious drawbacks. First, transfers had to be used by the recipient government to support the commodity sector that had suffered the price falls, even if

<sup>2</sup> Monthly, nominal spot prices. Real prices (taking inflation into account) would show an even sharper long-term decline.

this aggravated the commodity dependence problem. Secondly, the EU placed ever-greater restrictions on the use of transfers, which had to be spent according to provisions negotiated with each recipient country, so transfers frequently remained unspent for long periods of time. Thirdly, time delays built into the system for assessing and making transfers and approving expenditures, coupled with the cyclical nature of international prices for commodities, meant that support often arrived just as commodity prices were rebounding, exacerbating rather than mitigating the impact of price instability.

In the end, at least half of the EU member states wanted STABEX abolished because they deemed it inefficient, inequitable and counter-productive (Hewitt, 1996). The ACP maintained solidarity in demanding that STABEX continue, even though only a handful of countries (Senegal and Côte d'Ivoire in the early years but a broader range towards the end) obtained most of the transfers. Some small countries like the Solomon Islands and Comoros became highly dependent on regular STABEX payments (Commonwealth Secretariat, 1999).

In total, STABEX transfers totalled €4.4 billion and were by far the fastest disbursing instrument in the EU's aid portfolio. The leading commodities triggering STABEX payments were coffee, cocoa, groundnuts, cotton and copra (representing four-fifths of total transfers).

With the entry into force of the EU-ACP Cotonou Agreement, a new instrument was established to compensate countries for sudden falls in export earnings: the FLEX. FLEX allows ACP governments to use the finance for a wider range of purposes, e.g. in order to safeguard macroeconomic and sectoral reforms. It provides support to countries that have registered a 10% loss in exports earnings (2% in the case of LDCs) *and* a 10% worsening of the programmed public deficit. Initial experiences with the FLEX have shown that several countries that experienced significant losses in export earnings were not eligible for compensation, due to the stringent eligibility criteria (European Commission, 2004). It has therefore been proposed to extend to landlocked countries and island states the special clause applied to LDCs, lowering the eligibility threshold to a 2% loss in export earnings, and to also reduce to 2% the benchmark on the worsening in the programmed public deficit. Had the proposed criteria been applied from 2000–02, ACP countries would have received €255 million through the FLEX system, six times more than the amount actually disbursed.

UNCTAD (2003b) supports the continued use of compensatory finance to insulate developing countries from international price volatility. It has made a number of proposals to make existing schemes, such as the FLEX, more effective, including: operation on the basis of *ex-ante* rather than *ex-post* mechanisms; easing eligibility requirements, and ending conditionalities for receiving finance.

### *2.3.2 Market-based risk management*

As donors have given up on supply management for agricultural commodities, they have increasingly switched their attention to the use of market-based risk management instruments such as futures, options and swaps. These are intended to enable producers, whether farmers' organisations or governments, to limit the risks arising from price volatility by transferring some of the risk to financial providers, in exchange for a fee.

In 1999, the World Bank, with the assistance of UNCTAD, convened an International Task Force (ITF) to assist developing countries in piloting these approaches. The ITF consists of international institutions, producers' and consumers' groups, commodity exchanges, commodity trading firms and private sector entities from the commodities sectors.

Although the use of derivative instruments is not widespread in ACDDCs some African countries, such as Côte d'Ivoire and Ghana, have sold forward their cocoa exports, and some West African countries their cotton exports (UNCTAD, 2003a). Several reasons have been

put forward for the narrow use of these instruments in developing countries: limited know-how and awareness of the alternative instruments available; regulatory and institutional barriers; and creditworthiness problems that make it difficult for developing countries to access financial markets. In addition, the coffee market is rather atypical of most commodity markets, in that it is traded on major futures markets, whereas many commodities are traded only by private contracts between buyers and producers, greatly complicating the use of derivatives. Finally, derivatives are unsuitable for addressing long-term instability (for agricultural commodities, coverage is generally restricted to a few months) and they cannot maintain higher prices for sellers.

Five years on, the ITF has carried out an active and innovative series of pilot projects, but has yet to produce significant breakthroughs on price risk management. According to delegates at the Annual Meeting of the ITF in Rome in May 2004, pilots and research continue to show bottlenecks and constraints rather than workable solutions: the minimum size of commercially viable transactions (put at US\$50,000 in premiums per client by one finance house, with an initial setup cost to opening an account of US\$5-30,000) is proving extremely hard to generate. Finally, security concerns are placing increasing legislative demands (e.g. the European Investment Directive) on financial houses to 'know your client', which is both time-consuming and requires levels of data that are sometimes unavailable in ACDDCs. Microinsurance, along the lines of microcredit, seems to offer little hope, given its much higher demands in terms of data, proof of loss and danger of moral hazard.

An alternative, but potentially more realistic, approach might be to encourage the use of longer-term contracts between producers and buyers. This would not only solve the problem of declining prices, but would provide a measure of stability that would allow producers to plan several years ahead, thus avoiding some of the negative consequences of price volatility (DTI, 2004). Although long-term contracts are frequently used in Latin America, this approach, for Africa, suffers from the perception of traders that African producers cannot supply consistent qualities and quantities of some key agricultural commodities such as coffee.

#### ***2.4 Market concentration and the value chain***

Agricultural products are linked to final consumers through so-called global value chains. A value chain describes the full range of activities that are required to bring about a final product from the growth of a primary commodity, through the intermediary phases of production (transformation and producer service inputs), delivery to final consumers and final disposal after use (Kaplinsky, 2000).

As with all raw agricultural producers, ACDDCs are capturing less and less of the value of their markets relative to processors, wholesalers and retailers. This can be explained in part by a loss of market share and market power in agricultural commodity exports.

In addition, two closely related changes have occurred in the market structure for most agricultural commodities. First, in producer countries, farming is highly fragmented, and the destruction of marketing boards has further reduced the capacity of farmers to raise their share in value chain rents by removing a useful intermediary that could improve farmers' bargaining power with large corporate buyers (UN, 2000). Secondly, the international markets for agricultural commodities have become much more concentrated. Perhaps in response to declining profit margins (UNCTAD, 1999), large trading companies dealing in many commodities have replaced smaller and specialised companies, while the total share of all trading companies has fallen relative to direct purchases by processors or final sellers. In coffee and cocoa, 4-5 branded processing companies jointly control 60-70% of world production (Gibbon, 2003). The concentration and the removal of the buffer layer of traders tend to weaken producers' market power, although the removal of the middle level may increase the share of the price going to producers. The growing role of integrated companies

also leads to more direct control of what is produced (technical and quality standards). The interaction of these two trends has meant that some of the services formerly provided by governments, e.g. finance and stockholding, are now provided by foreign companies, decreasing the share of commodity income remaining in the producing country.

The stage in the value chain where concentration is largest tends to acquire a large share of the profits, with a smaller share of the final price going to other stages. African producers have incurred income losses while traders and firms in higher stages of the value chain have received significant benefits. In the early 1990s earnings by coffee producing countries (exports f.o.b) were some US\$10-12 billion and the value of retail sales of coffee, largely in industrialised countries, about US\$30 billion. Now the value of retail sales exceeds US\$70 billion but coffee producing countries only receive US\$5.5 billion. (Osorio, Executive Director of ICO, 2002). The asymmetrical character of power in the coffee value chain helps explain the increasingly unequal distribution of total incomes. At the importing end of the chain, importers, roasters and retailers compete with each other for a share of the rents but combine to ensure that few of these accrue to producer countries (Fitter and Kaplinsky, 2001). Real profits in the agricultural commodity chain are made by those who control critical points along the chain, own established brands, or have access to shelf space in supermarkets (UN, 2002). A major implication of this for developing country producers is that they must enter into networks if they want access to developed country markets. These networks disseminate information about markets to producers and enable buyers to obtain information about and develop confidence in the suppliers (UNCTAD, 2003a).

The concentration of agricultural markets is unquestionable. Although there is no substantive evidence of deliberate abuse of market power (DTI, 2004), it is a commonplace of theory on oligopoly (Chamberlin, 1933) that no formal collusion is necessary for monopolistic pricing to occur: oligopolistic companies can tacitly understand that it is in none of their interests to challenge each other's prices. Any oligopoly has market power that must be regulated in some way to produce an efficient outcome. Some have advocated an international competition agreement to strengthen the framework to support competitive markets.

### **3. What we don't know – new and revised initiatives to assist agricultural commodity-dependent developing countries**

#### ***3.1 Donor support for expansion and diversification into other agricultural commodities***

Most donors have invested heavily in projects aimed at diversification of agricultural commodities, as well as increasing productivity via credit-based input supply measures (Gibbon, 2003). Advocates of such programmes highlight that if agricultural commodities can be produced more efficiently in new locations, or with new technologies, then they can be of benefit nationally and improve the total efficiency of world production. Opponents criticise such approaches citing the 'adding-up problem': they may reduce world prices for the commodities concerned and may be damaging to producing countries *as a whole*.

#### ***3.2 The role of the state***

Responding to the challenges of small or Least Developed ACDDCs may require an enhanced role for the state, in contrast to the generally deregulatory and market-based approaches of the 1980s and 90s. Here, the challenge is how to ensure that the state does not replicate past mistakes, but equips poor producers to engage with the market on more beneficial terms. Rather than get involved too directly in production, successful Latin American initiatives in the 1980s/90s focused on providing services such as acting as an information point for new entrants and new buyers. Governments in Asia and Mauritius were more active, ensuring a broad level of cooperation between the state and the private sector.

General state support to enhance and diversify assets, and to increase productivity and value-added through the development of agro-processing, includes: access to finance, rural credit facilities to non-farm activities, provision of extension services, and training. Improving social infrastructure, health and education, or physical infrastructure that can enable new economic sectors to emerge - transport and communications - will also enhance productivity.

In conjunction with international schemes, national supply management approaches have also been encouraged. UNCTAD (2003b) cites the example of Malaysia's levy on palm oil production, imposed in times of high prices and then used in periods of low prices to subsidise the use of palm oil in a non-traditional way, namely, for electricity generation. In West Africa studies by the French Government (Gergely, 2004) have concluded that the remaining *caisses de stabilisation* offer a more effective means to protect small cotton producers from price volatility than new market-based risk management approaches. The researchers propose the creation of national 'stabilisation fund mechanisms', building on embryonic mechanisms in Cameroun and Burkina Faso. The stabilisation funds, which could be either private or publicly run, but in either case require a single nation-wide purchasing organisation to be viable, would be akin to collective self-insurance, taking a share of any surplus in good years and redistributing it to farmers and ginners in bad years. A regional fund, capitalised by donors, would underwrite national stabilisation funds against exhaustion.

If donors are to revisit the issue of state marketing boards, they need to consider the increasing pressures on state trading enterprises within the WTO. Although these are largely targeted at developed country state trading enterprises, such as the Canadian Wheat Board, any move towards rules that prevent a new generation of more effective state interventions in ACDDCs may have unintended negative consequences for the poor.

### ***3.3 Producer organisations***

A closer examination of the role of producer organisations in improving the outcomes for small farmers and poor farm labourers could also produce new policy ideas, especially in post-liberalisation situations where the role of the state remains constrained. At least five types of producer organisation can be identified (Gibbon 2003): large estates, small estates, large modern cooperatives, small cooperatives and contract farming and outgrower schemes. Scale and organisational model affect the benefits that accrue to farmers. For example the FNC, the Colombian national coffee growers' federation, claims 500,000 members with an average of 2 ha of coffee each. FNC operates an extension service with over 800 staff, as well as its own agricultural colleges and a research and development centre. It runs a price stabilisation scheme and has diversified downstream into freeze-drying and own label sales. Cooperatives in Africa on the other hand, have often failed to grapple successfully with the market and high demands on quality and reliability.

In cotton, post liberalisation structures fall into three groups: geographical monopolies (Ghana, Mozambique), systems with numerous players (Tanzania, Uganda) and oligopolies (Zimbabwe, Zambia). Gibbon (2003) concludes that the last category produces the best outcomes, by combining the positive benefits of competition with a scale that can deliver price stabilisation and other benefits and that 'rebuilding local-level economies of scale is becoming a strategic issue in the wake of increasing buyer-drivenness on a global plane on the one hand, and the fragmentation of that has frequently followed market liberalisation on the other.'

### ***3.4 Revisiting supply management***

There has recently been increased interest among the academic community, NGOs and some developing country governments in revisiting the feasibility of international supply management, not least because effective schemes would help secure higher incomes for commodity producers, potentially providing investment for long-term diversification efforts (Robbins, 2003). International commodity arrangements are specifically allowed under the GATT.

Advocates of this approach cite the qualified success of the International Coffee Agreement, compared to events since its demise (see above), as well as examples such as diamonds. In the case of the latter the monopoly producer De Beers has traditionally maintained a large stockpile and acted as supplier of last resort in order to keep prices high, although it now claims to be moving more toward demand management under pressure from the US, where it has been barred from operating since the early 1990s for alleged antitrust activities. Arrangements to manage the gold market in the same way have prevented price falls over the last decade. Gold and diamonds, however, are not agricultural commodities and are not included in the CFC or under the IPC. Each of these examples works quite differently from each of the others. This is no accident, since each commodity market is different. This may be one of the reasons for the ICAs' failure: they followed a one-size-fits-all policy. Successful attempts at international supply management have often depended on a dedicated core of producer countries, with a common sense of solidarity. Examples include the Middle Eastern countries in OPEC and Indonesia, Malaysia and Thailand in the tin agreement. Coffee offers a counter-example, where international supply management has proved difficult because of the free rider and coordination problems that arise when a large number of countries export the commodity.

Oxfam (2004) has proposed a high-level review of the issue, involving UNCTAD, the WTO and the CFC. Citing coffee as an example, Oxfam proposes that a large proportion of export supply be removed from the market. However, given the difficulties with previous efforts at international supply management, a weakness of the proposal is that it fails to elaborate on the

mechanisms that should be employed to do this, other than offering broad support for a renewed effort by producing and consuming countries to bring supply in line with demand on a more systematic basis across a range of agricultural commodities, and noting that limiting supply by means of quality criteria could be an option.

Several agencies have looked at the issue of quality. UNCTAD has proposed the introduction of 'a rigid system of quality assurance' to reverse the decline in quality which in many cases has followed deregulation, adding that quality improvement should be complemented by programmes that 'fund the withdrawal of productive capacity in high-cost producing countries and of low-quality stocks.' The International Coffee Organisation has proposed a similar instrument, the Coffee Quality Improvement Mechanism, setting target standards for exportable coffee. The ICO argues that poor quality is a more important factor than price in slowing demand growth. In a paper for ICO, Kaplinsky (2002) argues that major roasting companies should work together to reposition coffee as a consumer product comparable to wine, greatly increasing the possibilities for developing regional and speciality coffees. However, measures to remove the production of low-value coffee from the market can be criticised for raising prices for poor consumers.

Contributors to DFID's 2004 International E-forum on New Directions for Agriculture in Reducing Poverty argued that production cuts are the only way forward on supply management, perhaps involving export taxes and production quotas – other approaches such as buffer stocks and export quotas merely lead to the problems of oversupply and circumvention that brought down previous ICAs.

A new generation of supply management agreements would also have to involve farmers associations to a far higher degree than the previous generation of ICAs. One participant believed the present climate is actually more conducive to ICAs than the 1970s, when they were set up – low prices should galvanize support in developing countries, while improved information technology makes it easier to administer production controls (presumably this could involve satellite photography, as has been done in coca eradication programmes).

The main obstacles to such strategies are likely to be political. Without the assent of the consuming developed country members, international supply management is extremely difficult. Winning that assent may involve demonstrating that inadequate farm income can be linked to pressure to increase narcotic drug production, political and economic instability, and a shrinking market for goods and services from developed countries – all of which are of significant concern to the main consuming countries of agricultural commodities. In addition, there is likely to be resistance to such schemes from other competitive developing country producers, who would oppose controls on their production e.g. Vietnam in the case of coffee.

Any supply management scheme will at some point come under unpredictable financial strain, and provisions to accommodate that strain should be in-built. Finally, effective international supply management schemes would need to demonstrate determination and credibility in bringing supplies more in balance with demand. If sentiment can be changed in this way, market traders will purchase the commodity in the expectation of selling it at some future date at a higher price, thus pushing up prices and completing a virtuous circle.

### ***3.5 Incorporating price and volume risk into debt sustainability calculations***

Volatile and falling agricultural commodity prices can aggravate the ratio of debt to exports, yet commodity price risks have so far not been sufficiently considered in design of debt relief schemes such as the HIPC initiative. A substantial drop in the prices of key export commodities explains the deterioration in the net present value of debt-to-export ratios relative to ratios projected at decision point for 2001 of 15 HIPCs, of which 13 were African (IMF and World Bank, 2002a). Uganda found itself in an unsustainable debt situation at completion point, due to steep declines in the price of coffee (IMF and World Bank, 2002b)

and completion point debt relief for Burkina Faso had to be topped up by US\$129 million because of the decline in the price of its main export, cotton (UNCTAD, 2003a).

In addition, there remains concern about the low priority being accorded to the agricultural sector in PRSPs, and the consequent impact on levels of investment, e.g. in rural infrastructure. The failure to tackle the link between agricultural commodity dependence and extreme poverty has been dubbed as a ‘conspiracy of silence’ by President Chirac, and described as the ‘major sin of omission’ in current international efforts to reduce poverty (UNCTAD 2004a). Although implementing such strategies may not require large financial resources from governments, they would require sufficient technical capacity and political will, something that has been an impediment in the past. UNCTAD (2003b) has called for increased donor support to build such capacity.

### **3.6 Proposals to reduce the adverse impact of market concentration**

A number of recent studies point to the high concentration of both international trading and processing in agricultural commodities among a few countries (e.g. for the case of coffee see Carfat and Flores, 2001). These studies assert that high rents are being extracted by enterprises in developed countries (although they often do not provide any supporting evidence). Consequently, a number of measures have been proposed that would contribute to reducing market concentration and thereby would increase competition in these segments of the marketing chain. The main proposal is that developed countries assist in the creation of domestic trading companies in producing countries that would process products in the latter countries in association with developed country processors.

Within WTO negotiations a separate debate is under way on the issue of developing multilateral rules for competition policy. In their communication to the WTO (2003), Tanzania, Uganda and Kenya requested that the WTO examine steps to deal with anti-competitive behaviour of large foreign firms and to improve the bargaining position of small producers *vis-à-vis* these firms. If core principles on competition such as non-discrimination and transparency and an undertaking to outlaw hard-core cartels can be established then this could be relevant to agricultural commodity markets.

Unfortunately, the controversy surrounding this makes the likelihood of a multilateral agreement difficult to achieve. Many developing countries see the WTO as an inappropriate forum for such a competition agreement, arguing that the agenda there is more likely to be driven by transnational corporations’ desire for improved market access than by a concern to improve development outcomes. Some authors and NGOs believe a pro-development competition agreement is more likely to be achieved elsewhere in the UN system. They do, however see other roles for the WTO. Current WTO rules require governments to complete questionnaires about any state trading enterprises operating in their country. That approach could be expanded to include any company, public or private, with more than a given percentage of the import or export market. Such improved transparency would help in checking restrictive business practices at an international level. In June 2004, for example, delegates from 70 countries attending a ‘World Farmers’ Congress’ organised by the International Federation of Agricultural Producers adopted resolutions to collect and publicise concentration information and demand that government anti-trust agencies provide economic impact statements of proposed mergers and joint ventures. IFAP (2004) supports introducing a pre-established level of concentration that triggers a presumption of a violation of anti-trust law.

### **3.7 Niche markets – Fair Trade and organic agricultural commodities**

Fair Trade organisations have created a parallel marketing chain that allows consumers to pay a premium that directly supports agricultural producers. This constitutes a different approach to marketing, in that buyers are informed and concerned about the nature of production, not only about the quality and other characteristics of the product (Page, 2003). Proponents of

Fair Trade argue that paying producers a 'living' price, above the cost of production, is the only sustainable long-term strategy for consuming countries. They also point to the positive impact of the community projects funded by such schemes.

Fair Trade commodities represent a small share of world trade in commodities. Westlake (2002), for example, estimates that Fair Trade coffee (the most important fair-traded commodity) only accounts for 1.0–1.5% of total global trade in coffee. However, year on year growth far exceeds that of trade as a whole, with UK fair-trade produce sales rising 46% in the year 2002-03.

While it remains to be seen whether Fair Trade agricultural products can secure a significant share of the conventional market for any particular commodity, there are questions in any case about the long-term effectiveness of such a solution on a large scale. Sceptics argue that Fair Trade arrangements are analogous to a voluntary tax or charitable contribution paid by developed country consumers. They question the potential for helping a large number of poor producers in this way because of the correspondingly large number of consumers required to contribute.

Some organisations (e.g. the International Fair Trade Association) have proposed that Fair Trade principles be mainstreamed into (donor) government procurement policies and that targets are set for Fair Trade as a proportion of total trade in some commodities as part of the Millennium Development Goals. There are two main problems with these approaches. First, EU and UK government rules on value for money place severe limits on governments, although there may be ways that procurement contracts be drawn up (and audited) from developed country governments specifying that a certain percentage of the retail price go to the farmer. Second, for example in the case of coffee, if large roasters agreed to cooperate in purchasing Fair Trade coffee this might well violate strict US antitrust laws.

The emergence of organic commodities, which also compete with Fair Trade products, has allowed some production to be marketed at a price premium. The emergence of organic coffees, in particular, is frequently cited as a major reason for the consumption of coffee in the US not falling, despite health concerns.<sup>3</sup> An increase in organically produced commodities represents a potentially attractive means of assisting poor producers, since the poorest farmers are the least able to acquire chemical fertilisers and sprays. However, in practice the processing and marketing of these commodities is more difficult and complex than for those traditionally produced. In particular, the system requires that the commodity be traceable from its source through the value chain. This requires comprehensive inspection and certification, which is much easier for large farms in developed countries than for scattered smallholders in developing countries (Wheeler, 2001). The price premiums obtainable from producing organic commodities may therefore not cover the additional marketing, certification and inspection costs and would yield lower returns than investing similar resources in efficiency or quality-enhancing measures at the national level.

### ***3.8 Voluntary commodity funds***

A number of proposals have been made (often for the coffee sector) for introducing voluntary commodity levies to fund demand, efficiency and livelihoods-enhancing measures in the agricultural sector.

UNCTAD and Oxfam have both proposed an 'international diversification fund' (UNCTAD 2004b, Oxfam 2004). The Walter Zwald proposal (for the International Coffee Organisation) was for importers to pay a voluntary levy of US\$20/tonne into a coffee fund which would

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<sup>3</sup> In the US the market for organic and speciality coffees has been growing annually at around 30% since 1999 and today accounts for 17% of coffee imports by value and for 40% of coffee retail sales (Ponte, 2002).

raise an estimated US\$84 million per year (Zwald, 2001). The fund would be used for promotional activities aimed at expanding demand and for a range of production-related activities, including support for sustainable livelihoods.<sup>4</sup> In return for their contribution, roasters would be permitted to use the fund's logo on their packaging, which would yield publicity benefits in terms of increased sales.

There are a number of problems with these proposals as they currently stand. In particular, there is no guarantee that participating enterprises will not pass the cost of the levy on to consumers in the form of higher prices (reducing demand and therefore lowering producer prices) or that the levy will not be passed back directly in the form of lower producer prices.

A further idea that has arisen in the context of the reform of the EU sugar regime is that a compensation fund for the impact of European sugar policies on developing countries could be financed by a small tax on European sugar consumption. This would also ease health concerns over the impact of a sudden fall in sugar prices, following a shift to a more liberalised regime.

### ***3.9 Poverty and environmental impact***

Much of the discussion on commodities takes place in something approaching an evidential vacuum, concerning the actual social and environmental impact of particular commodity booms and busts. In many cases, evidence exists, but policy makers are unaware of it, or find the generalisations of economic modelling simpler to use, despite its mixed predictive track record. There is a clear case for a greater degree of case study-based research into the poverty, gender and environmental impact of processes such as export-promotion, liberalisation and market concentration, as a means of informing future policy choices.

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<sup>4</sup> The proposal was subsequently revised by the ICO in that the fund would be administered by the ICO, and a minimum of 80% would be spent to provide assistance to coffee workers with primary healthcare and basic education for their children (ICO, 2001).

## 4. Closing the policy gap

Several avenues of possible research arise out of this discussion of agricultural commodity dependence that would help promote understanding of the impact of different commodity experiences on poverty.

### Global value chains

While much work has been done in analysing international commodity markets in terms of global value chains, it has so far generated little in the way of public policy ideas. Two areas of work which merit further research, and dialogue with both producers and buyers, are:

- Poverty Impact: which global value chains are more/less poverty reducing and why? For example, are those that have a higher level of smallholder involvement more desirable than those that rely on large farm production, and what are the features that determine the nature of the supply base?
- What public policy interventions at national or international level might improve the poverty outcome of the trend towards buyer-driven global value chains?

### Supply management

There is clearly a demand for DFID to revisit this issue of supply management, if only to satisfy itself that its current pessimism is justified. Areas that should be covered include:

- A review of past international and national supply management efforts to establish the success and failure factors behind the varied experiences.
- A comparison of price stability and poverty impact under ICAs with that of the post-ICA regime.
- Some initial thinking on the design of possible international supply management schemes based on production cuts, taking a crop-by-crop approach and looking at the political economy of implementation (including free-rider issues); the strengths and weaknesses of producer-only and joint producer-consumer agreements; the threat of crop substitution in response to price rises; the technical feasibility of production control and surveillance and good practice in farmer participation.

### Donor interventions

- Issues of compensation funds, transitional assistance to promote diversification and (potential) funding for social security are likely to arise in a large number of commodities facing preference erosion (e.g. sugar, bananas). DFID should ensure a pro-poor design of any future schemes.
- How could price and volume risk be better taken into account in calculations of debt sustainability? (a pilot in an ACDDC HIPC could be helpful here).

### Diversification

A comprehensive approach to diversification should include:

- A review of past experiences, especially successful ones, with an analysis of the relative merits and feasibility of vertical and horizontal diversification, and of livelihoods diversification (e.g. into manufactures or services) versus switching into other crops.
- An examination of the impacts of reforms to improve labour market flexibility, governance and the business climate in developing countries.
- Whether an international diversification fund is desirable and, if so, how could it be financed and administered?
- How can farmer and ACDDC participation be improved in (formal and informal) standard setting?

#### Finding a more effective role for the state

There is clearly a case for a review of the role of the state in ACDDCs. Such a review could explore:

- The most effective use of scarce resources in direct producer support, infrastructure provision or national supply management schemes.
- Whether a return to the use of state marketing boards is a viable option. What would be the political and economic obstacles to such a move? Do WTO negotiations on state trading enterprises pose a threat to any such effort?

#### Reviving producer organisations

- More attention needs to be paid to the role of producer organisations in improving and smoothing the prices the prices received by farmers. This should seek policies that can reverse the fragmentation and disempowerment often experienced by producers as a result of the abolition of state marketing boards and other collective entities. However, private sector structures such as co-operatives or contract farming may prove more feasible and effective than any attempt to return to publicly-run bodies.

#### Niche markets

- To what extent do Fair Trade and organic commodities offer significant potential for improving the poverty impact of agricultural commodity trade? What policy interventions could improve the outcomes?

#### Poverty and Environmental Impact

- More research is required into the poverty, gender and environmental impact of processes such as export promotion, liberalisation and market concentration.

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### Appendix 1: Real export prices of primary commodities, 1993-2003 (1995=100)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Non-fuel commodities	82.43	91.49	99.99	98.24	95.16	81.56	76.08	79.43	76.23	76.65	82.11
Food	91.18	94.13	100.00	108.21	98.61	87.78	77.60	78.93	80.74	81.33	86.09
Wheat	79.86	80.15	100.00	122.10	96.13	74.83	71.05	67.26	73.35	73.75	92.74
Maize	82.66	87.30	100.00	133.27	94.91	82.31	73.14	71.46	72.59	80.46	85.20
Rice	81.68	154.03	100.00	116.46	68.88	101.96	83.89	84.47	65.23	70.63	79.94
Barley	68.62	69.85	100.00	115.05	93.49	81.77	73.01	74.26	90.31	104.77	100.68
Coconut oil	67.53	90.84	100.00	116.81	101.16	97.14	116.19	72.35	47.78	60.57	67.42
Groundnut oil	74.46	103.20	100.00	90.56	101.97	91.69	79.39	71.90	67.80	69.43	126.21
Linseed oil	68.21	78.59	100.00	86.06	86.88	107.64	77.95	60.74	58.14	79.12	103.15
Olive oil	60.09	69.98	100.00	132.57	94.15	71.72	81.13	66.23	59.28	64.46	84.38
Palm oil	61.42	77.64	100.00	81.68	81.22	96.69	68.14	47.36	39.82	57.65	68.28
Soybean oil	76.78	98.57	100.00	88.24	90.34	100.12	68.46	54.10	56.56	72.80	88.88
Sunflower oil	77.16	91.78	100.00	83.11	83.88	104.86	73.28	56.29	69.89	86.04	85.47
Beef	137.27	122.33	100.00	93.61	97.30	90.51	96.11	101.49	111.61	110.29	103.74
Lamb	109.60	110.95	100.00	128.42	132.69	102.42	102.28	99.64	115.00	128.95	141.10
Swine meat	102.75	89.83	100.00	147.28	116.03	72.65	70.72	94.42	97.83	75.26	85.04
Poultry	98.54	99.64	100.00	112.31	109.92	113.83	108.08	107.15	114.68	113.70	119.33
Fish	104.94	104.94	100.00	86.11	78.01	77.87	74.75	76.34	60.56	61.54	62.69
Shrimp	84.21	96.75	100.00	97.08	109.23	105.12	108.01	112.85	113.48	77.82	84.98
Sugar	71.66	77.88	100.00	97.85	112.98	97.38	107.18	81.85	89.43	91.97	99.88
Bananas	99.53	98.81	100.00	105.50	117.40	110.58	84.01	94.87	131.36	118.54	84.29
Oranges	81.38	77.40	100.00	92.51	86.36	83.24	82.46	68.34	112.05	106.22	128.52
Beverages	60.50	99.47	100.00	85.22	111.70	96.98	76.37	64.85	54.39	63.38	66.48
Coffee	40.42	93.26	100.00	80.89	115.73	85.75	64.22	59.05	35.30	28.21	34.83
Cocoa beans	77.57	97.43	100.00	101.59	113.00	117.00	79.23	63.10	75.98	124.19	122.38
Tea	94.50	92.56	100.00	126.46	134.48	143.67	115.16	119.93	117.10	113.36	119.21
Agricultural raw materials	87.68	96.77	100.00	96.33	91.75	76.45	77.41	80.83	76.83	78.18	81.11
Timber	114.53	109.30	100.00	101.73	93.84	75.94	84.67	85.68	75.90	74.83	79.16
Cotton	59.02	81.09	100.00	81.93	80.60	66.66	54.05	60.07	48.83	47.06	64.54
Wool	60.73	81.65	100.00	82.24	90.69	69.39	60.14	63.79	65.79	93.96	107.99
Rubber	55.54	68.93	100.00	89.44	65.18	45.81	40.22	43.48	37.96	45.31	62.65
Hides and skins	90.80	98.50	100.00	99.07	100.13	87.01	81.86	91.02	95.99	91.62	77.49
Metals	71.22	82.68	100.00	88.68	89.74	73.84	73.01	81.92	73.89	71.87	80.44
Copper	65.31	78.63	100.00	78.22	77.60	56.40	53.63	61.89	53.89	53.22	60.69
Aluminium	63.15	81.75	100.00	83.48	88.60	75.21	75.35	85.95	80.15	74.85	79.38
Iron ore	102.50	93.27	100.00	105.71	106.24	109.23	97.22	101.45	105.41	103.35	111.04
Tin	86.44	86.05	100.00	99.81	86.38	89.27	86.96	89.79	71.95	66.91	79.79
Nickel	64.55	77.00	100.00	91.25	84.21	56.22	72.99	104.95	72.59	82.49	117.11
Zinc	93.51	95.17	100.00	98.08	75.13	58.45	61.14	65.14	52.85	44.90	47.27
Lead	64.73	87.20	100.00	123.02	99.01	83.73	79.73	72.17	75.70	71.87	81.71
Uranium	86.39	80.76	100.00	133.77	103.72	89.05	85.86	71.02	73.90	84.25	96.33
Energy	96.68	91.88	99.99	116.37	110.01	76.92	100.14	156.30	138.37	137.58	160.62
Natural gas	96.37	85.77	100.00	102.00	99.05	83.27	67.02	128.11	143.66	98.90	129.31
Crude petroleum	97.57	92.70	100.00	118.42	111.99	75.99	104.51	164.11	141.42	145.02	167.93
Coal	79.58	82.04	100.00	96.70	89.15	74.24	65.76	66.67	82.07	68.73	70.45

Source: IMF, International Financial Statistics (2004).

**Appendix 2: Countries dependent on primary commodities for export earnings (Annual average export data, US dollars, 1995–2000)**

	>50% of export earnings	20–49% of export earnings	10–19% of export earnings
Countries in Africa			
Crude petroleum	<i>Angola</i> (92%) <i>Congo</i> (57%) <i>Gabon</i> <sup>a</sup> (70%) <i>Nigeria</i> (96%) <i>Libya</i> (61%) <i>Equatorial Guinea</i> (91%)	<i>Cameroon</i> <sup>a</sup> (37%) <i>Algeria</i> <sup>a</sup> (41%)	<i>Egypt</i> (13%)
Natural gas		<i>Algeria</i> <sup>a</sup> (37%)	
Bauxite		<i>Guinea</i> (36%)	
Iron ore		<i>Mauritania</i> <sup>a</sup> (37%)	
Copper	<i>ZAMBIA</i> (52%)		
Cobalt			<i>Congo, Dem Rep</i> <sup>a</sup> (14%)
Gold		<i>Ghana</i> <sup>a</sup> (25%) <i>MALF</i> <sup>a</sup> (30%)	
Diamonds	<i>Congo, Dem Rep</i> <sup>a</sup> (71%) <i>BOTSWANA</i> (91%)	<i>CENTRAL AFRICAN REPUBLIC</i> <sup>a</sup> (30%) <i>Namibia</i> <sup>a</sup> (38%) <i>Sierra Leone</i> <sup>a</sup> (41%) <i>South Africa</i> (22%)	
Uranium	<i>NIGER</i> <sup>a</sup> (59%)		
Timber		<i>Cameroon</i> <sup>a</sup> (20%)	<i>Gabon</i> <sup>a</sup> (12%) <i>Ghana</i> <sup>a</sup> (13%)
Cotton		<i>BURKINA FASO</i> (41%) <i>CHAD</i> <sup>a</sup> (37%) <i>Benin</i> (34%) <i>MALF</i> <sup>a</sup> (34%)	<i>Togo</i> (17%) <i>CENTRAL AFRICAN REPUBLIC</i> <sup>a</sup> (12%) <i>Tanzania</i> <sup>a</sup> (11%)
Tobacco	<i>MALAWI</i> (59%)	<i>ZIMBABWE</i> (29%)	
Coffee	<i>BURUNDI</i> <sup>a</sup> (76%) <i>ETHIOPIA</i> (62%) <i>UGANDA</i> (83%)	<i>RWANDA</i> <sup>a</sup> (48%)	<i>Madagascar</i> <sup>a</sup> (15%) <i>Kenya</i> <sup>a</sup> (13%) <i>Tanzania</i> <sup>a</sup> (16%) <i>Congo, Dem Rep</i> <sup>a</sup> (11%) <i>CENTRAL AFRICAN REPUBLIC</i> <sup>a</sup> (11%)
Cocoa		<i>Sao Tome and Principe</i> <sup>a</sup> (48%) <i>Côte d'Ivoire</i> (28%) <i>Ghana</i> <sup>a</sup> (27%)	
Tea		<i>Kenya</i> <sup>a</sup> (24%) <i>RWANDA</i> <sup>a</sup> (21%)	<i>BURUNDI</i> <sup>a</sup> (12%)
Vanilla		<i>Comoros</i> (35%)	
Sugar	<i>Gambia</i> <sup>a</sup> (87%)	<i>Mauritius</i> (23%) <i>Djibouti</i> <sup>a</sup> (45%)	<i>SWAZILAND</i> <sup>a</sup> (18%)
Cashew nuts	<i>Guinea Bissau</i> (83%)		
Livestock	<i>Somalia</i> (55%)		<i>CHAD</i> <sup>a</sup> (18%) <i>MALF</i> <sup>a</sup> (18%) <i>Sudan</i> (14%) <i>NIGER</i> <sup>a</sup> (14%) <i>Namibia</i> <sup>a</sup> (12%) <i>Djibouti</i> <sup>a</sup> (17%)
Fish	<i>Seychelles</i> (59%)	<i>Mozambique</i> (32%) <i>Sao Tome and Principe</i> <sup>a</sup> (30%) <i>Madagascar</i> <sup>a</sup> (30%) <i>Senegal</i> (30%) <i>Sierra Leone</i> <sup>a</sup> (25%)	<i>Namibia</i> <sup>a</sup> (19%) <i>Cape Verde</i> (19%) <i>Gambia</i> <sup>a</sup> (15%) <i>Mauritania</i> <sup>a</sup> (14%) <i>Morocco</i> (11%)
Countries in Latin America			
Crude petroleum	<i>Venezuela</i> (53%)	<i>Colombia</i> <sup>a</sup> (24%) <i>Ecuador</i> <sup>a</sup> (31%)	
Copper		<i>Chile</i> <sup>a</sup> (26%)	<i>Peru</i> <sup>a</sup> (12%)
Cotton			<i>Paraguay</i> (12%)
Coffee		<i>El Salvador</i> (30%) <i>Honduras</i> (24%) <i>Nicaragua</i> <sup>a</sup> (22%)	<i>Colombia</i> <sup>a</sup> (15%)
Sugar		<i>Cuba</i> (36%) <i>Belize</i> <sup>a</sup> (29%)	
Bananas		<i>Ecuador</i> <sup>a</sup> (21%) <i>Panama</i> <sup>a</sup> (23%)	<i>Belize</i> <sup>a</sup> (16%) <i>Costa Rica</i> (13%)
Livestock			<i>Uruguay</i> (18%) <i>Nicaragua</i> <sup>a</sup> (10%)

	>50% of export earnings	20–49% of export earnings	10–19% of export earnings
Fish		French Guiana (31%) Panama <sup>a</sup> (25%) Ecuador <sup>a</sup> (20%)	Peru <sup>a</sup> (16%) <u>Nicaragua</u> <sup>a</sup> (15%) Belize <sup>a</sup> (14%) Chile <sup>a</sup> (11%)
Rice			<u>Guyana</u> <sup>a</sup> (16%) Suriname (10%)
Bauxite			<u>Guyana</u> <sup>a</sup> (16%)
Sugar	<b>St Kitts and Nevis</b> (52%)	<u>Guyana</u> <sup>a</sup> (25%)	Guatemala (10%)
Gold		<u>Guyana</u> <sup>a</sup> (24%)	Peru <sup>a</sup> (13%)
Countries in the Caribbean			
Crude petroleum			<b>Trinidad and Tobago</b> (14%)
Coffee			<i>Haiti</i> (11%)
Sugar			Dominican Republic (14%) <b>Barbados</b> (11%)
Bananas	<b>St Lucia</b> (55%)	<b>St Vincent and Grenadines</b> <sup>a</sup> (42%) <b>Dominica</b> (32%)	<b>Grenada</b> (11%)
Rice			<b>St Vincent and the Grenadines</b> <sup>a</sup> (13%)
Countries in Asia			
Crude petroleum	Iran (82%) Kuwait (62%) Oman (76%) Qatar <sup>a</sup> (53%) Saudi Arabia (71%) Syria (60%) <u>Yemen</u> (91%) United Arab Emirates (61%)	Brunei Darussalam <sup>a</sup> (36%) <b>Bahrain</b> (20%) Azerbaijan (44%) Kazakhstan (31%) <u>Vietnam</u> (22%)	Indonesia (10%)
Cotton		Uzbekistan (36%)	TAJIKISTAN (17%) Turkmenistan <sup>a</sup> (15%)
Natural Gas		Qatar <sup>a</sup> (26%) Turkmenistan <sup>a</sup> (34%) Brunei Darussalam <sup>a</sup> (48%)	
Timber		<u>Myanmar</u> <sup>a</sup> (30%)	
Fish			<u>Myanmar</u> <sup>a</sup> (14%)
Tea			<b>Sri Lanka</b> (13%)
Countries in the Pacific			
Crude petroleum		<b>Papua New Guinea</b> (25%)	
Timber	<i>Solomon Islands</i> <sup>a</sup> (67%)		
Sugar		<b>Fiji</b> (27%)	
Coconut Oil			<i>Samoa</i> <sup>a</sup> (13%)
Vanilla			<b>Tonga</b> <sup>a</sup> (11%)
Copra		<i>Kiribati</i> <sup>a</sup> (35%) <i>Vanuatu</i> (42%)	<i>Samoa</i> <sup>a</sup> (11%)
Fish		<i>Kiribati</i> <sup>a</sup> (46%) <i>Tuvalu</i> (42%) <i>Samoa</i> <sup>a</sup> (42%) <b>Tonga</b> <sup>a</sup> (20%)	<i>Solomon Islands</i> <sup>a</sup> (15%)
<sup>a</sup> Country dependent on more than one commodity			
Typeface		Meaning	
<b>Bold</b>		Island	
CAPITALS		Land-locked	
<i>Italics</i>		Least Developed	
<u>Underline</u>		HIPC	

Source: Adapted from Page and Hewitt (2001) and updated using UNCTAD (2003c).