

DEPARTMENT FOR INTERNATIONAL DEVELOPMENT (DFID)

AFRICA

Understanding Beverage Production in Africa and Adopting Appropriate Policies for Poverty Reduction

CNTR 01 3413



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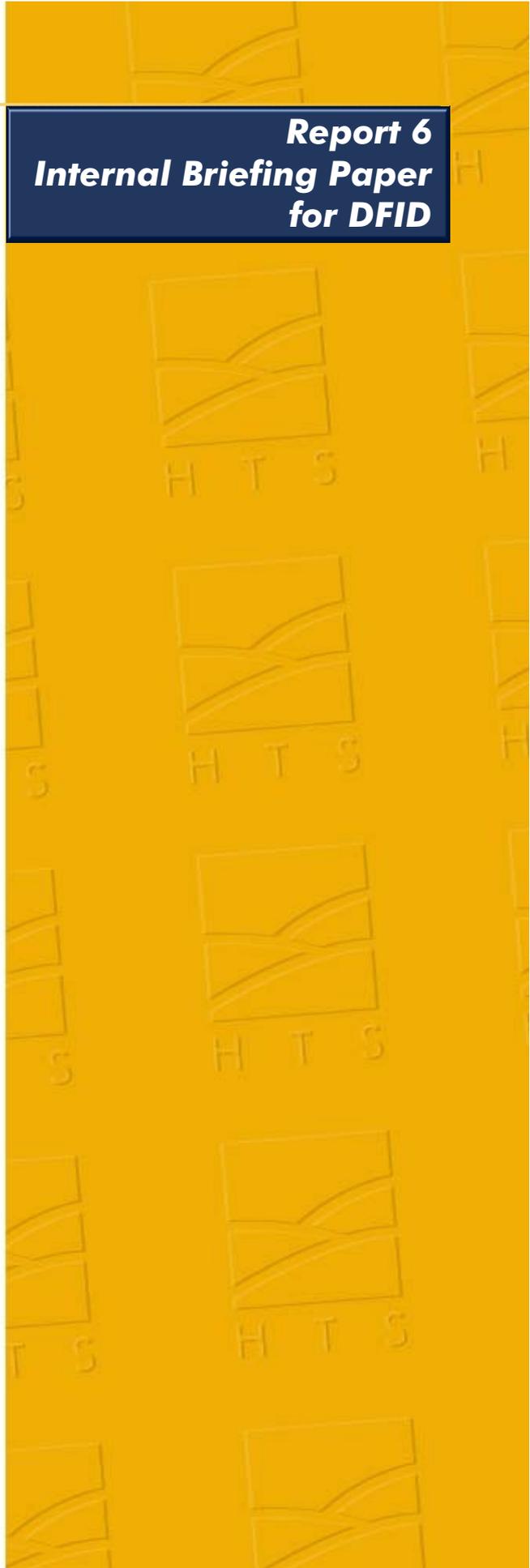


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Report 6
Internal Briefing Paper
for DFID



Internal Briefing Paper for DFID

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By HTS Development Ltd

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1 INTRODUCTION

This report forms part of a study carried out for DFID on Understanding Beverage Production in Africa and Adopting Appropriate Policies for Poverty Reduction. Within the objectives set out in the White Paper 'Eliminating World Poverty: Making Globalisation Work for the Poor', DFID is seeking to explore how it can help poor, commodity-dependent producers respond to the challenges they now face.

The three beverage crops coffee, tea and cocoa¹ are important exports for many African economies. A majority of the production comes from smallholders. Through declining and variable world prices, those smallholders are among those most directly exposed to the pressures of globalisation. For that reason, discussion of the international trade in beverages has been an important element in the wider debate about globalisation and its effect on poor people.

By the nature of the trade, this debate involves a very wide range of stakeholders: the people of poor producer countries such as Ethiopia, Uganda, Burundi and Côte D'Ivoire; international retail organisations such as Sainsbury's and Tesco; processors, manufacturers and traders such as Masterfoods, Nestlé and Tetleys Tea; and advocacy groups such as Oxfam and the Fairtrade Foundation. A number of associations bring different groups together, from manufacturers and retailers through the Biscuit, Cake, Chocolate and Confectionery Alliance, to the governments of producing and consuming countries, through the International Coffee Organisation (ICO) and others.

As a contribution to moving the debate forward, the study has involved three principal activities:

- The preparation of technical reports reviewing the current situation and prospects for African production of the three beverage crops.
- A one-day seminar held at the headquarters building of the ICO to seek views and ideas on how to reduce poverty amongst those dependent on the three crops.
- An email forum based on a web-site (www.africa-beverages.org.uk) presenting the reports and proceedings of the seminar to seek comments and further input from as wide as possible a community

It has become evident from the technical reports and the seminar that there are a number of separate strands to the debate and that there is significant disagreement on the way forward. There is a risk of different positions becoming entrenched, in some cases on the basis of an incomplete interpretation of what is happening. This separate report, which will be confidential to DFID at least initially, attempts to simplify and clarify some central issues to help ensure that this does not happen. In some areas, it is believed that it is possible to offer firm conclusions

¹ Strictly speaking cocoa is not a true beverage crop as most of it is used for confectionery, not for drinking.

but a minimum objective will be to identify what further information is needed to enable such a conclusion.

Overall, it is believed that this case study on coffee, tea and cocoa may prove an important step forward in the wider debate over globalisation and the international trade regime.

1.1 BITTER COFFEE

An Oxfam paper entitled Bitter Coffee of 16 May 2000 presents a powerful argument that the current slump in coffee prices is having a devastating effect on the livelihoods of millions of vulnerable farmers and labourers involved in coffee production while, at the same time, generating '*bumper profits for Nestlé and Starbucks*'. It is suggested that the crisis will directly affect efforts to meet the Millennium Development Goals. Bitter Coffee highlights many of the issues effectively and it is worth summarising, to emphasise the strength of feeling surrounding the international trade in beverage commodities.

Oxfam attributes the crisis to two principal factors: oversupply and the ability of transnational corporations to exploit that oversupply to make windfall profits. Following the collapse of the International Coffee Agreement in 1989, "*producer countries have engaged in a 'race-to-bottom' competition*".

A number of case studies are presented illustrating how the livelihoods of the very poor can depend on coffee, not only to buy basics such as food but also to support education and other important means to build an escape from poverty. In some areas the crisis is driving farmers to abandon the land. It is estimated that some 20 million households produce coffee with up to 700,000 in one very poor country, Ethiopia, where up to '*15 million people depend in part on the coffee economy.*'

To meet this crisis, Oxfam propose a challenging international initiative to stabilise coffee prices at above US\$1/lb:

- destruction of 15 million bags of coffee stocks at a cost of US\$250 million
- retention of 20% of world exports for three years
- a windfall tax on the large coffee roasters
- an international fund to share the cost of stock destruction and retention

Longer term reforms include:

- an end to policies favouring coffee production, eg the introduction of high-yielding trees
- strict labour and environmental standards
- credit, extension and information assistance to farmers including assistance with sustainable diversification

It suggested that the transnational corporations will find it in their own interest to '*help facilitate the development of a more equitable trading environment.*' At the same time, fair trade initiatives such as Café Direct should be encouraged.

1.2 THE ISSUES

The issues highlighted in Bitter Coffee and arising from the seminar and the technical reports that make up this study can be grouped under two headings. The first centres around the belief that falling prices mean that coffee, tea and cocoa producers face a policy choice between increasing and reducing production. Increased production will only raise incomes if demand can also be raised. Reduced production may raise prices by enough to increase incomes but ways will also need to be found to use the resources released, through diversification to other crops or out of farming altogether. Clearly, the policy proposed by Oxfam follows the second strategy.

The second set of issues, one which has become central to the wider debate on globalisation, centres round the observation that commodity producers' share of the final consumer price has fallen continuously for many years. For Oxfam and many others, this indicates that the international trade regime is, in some sense, unfair.

This report considers each set of issues separately under two headings: Fair or Unfair Trade? (Chapter 4) and Produce or Diversify? (Chapter 5). First, however, the next chapter looks at the three crops: their technical characteristics, which have a particularly important bearing on questions of Production and Diversification, and their importance to the poor of Africa. Chapter 3 then reviews wider patterns in global commodity trade and African beverage production. A key technical paper on market trends over the last three decades, which has provided a basis for much of the discussion of unfair trade, is reviewed. This sets the context which is crucial to a balanced judgement on the trade issue.

Finally, the report seeks to identify where DFID would be justified in taking a clear position on the issues and where further analysis is necessary. Policy recommendations that arise from these conclusions are then presented. (Chapter 6)

The next two sections of this introduction summarise the issues and some of the proposed actions that were put forward during the seminar and in the technical reports to resolve them.

1.3 KEY ISSUES: REFORMING THE VALUE CHAIN

A range of measures have been proposed to reform the value chain to reduce the perceived unfairness in the way the international trading system works.

1.3.1 Benefit Redistribution within the Value Chain

Many advocacy groups have campaigned over the prices paid to producers. As discussed in Chapter 5, it is difficult to prove how justified this is but there is a strong perception that those at the top end of the commodity value chain make large profits when those at the raw material end are often failing to even cover their costs: OXFAM points out that “as one Nestlé document put it at the end of 2000: ‘Trading profit increased by 15 per cent and margins improved, thanks to favourable commodity prices’” (OXFAM 2002, p163).

This leads to the suggestion that the international companies should be encouraged to invest some of their profits to the benefit of those lower in the value chain, especially the producers. The ‘Fairtrade’ alternative is to set up a parallel marketing chain through which consumers are encouraged to pay a higher price which is passed on to producers.

1.3.2 Codes of Practice and Corporate Social Responsibility

Concerns over the social and environmental impact of production have led to the development of shared codes of practice and corporate social responsibility for companies involved in the coffee, tea and cocoa trades. These codes typically concern terms and conditions of employment between the producer and his workforce. If all companies were to meet the same ethical standards, this could be a means of real progress but those standards must be appropriate. It has been suggested that some codes may work to the *disadvantage* of poor producers who do not have the resources to meet them. What is needed is for companies to have strict criteria for sourcing of goods, but also to assist producers, especially the very poor, to meet them.

Plantations and estates have been often the sole providers of services such as education, housing and health care for employees. The increased interest in corporate responsibility is reinforcing this and it may be appropriate to link these activities to wider programmes for health and education. Ways should be sought to ensure that the increasing number of tea, coffee and cocoa retailers and processors who seek to include social responsibility within their business thinking, do so effectively and in a manner that is linked to wider national policies. And it must not be forgotten that large numbers of smallholder producers fall outside the reach of formal codes that can be applied in the estate sector.

1.3.3 Strengthening Producer Representation

Poor producers have little bargaining power when dealing with their buyers and collective representation would allow them to bargain more effectively with input suppliers as well as with buyers. Collective groups also provide a channel for information to allow producers to make more informed decisions. Collective insurance against risk is another potential service. However, good governance within the representative body is essential to ensure that all member families and individuals have their say. A failure to achieve this has been a significant problem in a number of countries.

Collective action between governments at the international level may also have a part to play, through organisations, like the ICO and the International Cocoa Organisation (ICCO).

1.3.4 Reform of international trade and tariff agreements

Tariffs on the primary material, coffee and cocoa beans and bulk tea, are generally low in the major markets and there would seem little scope for improving producer prices through reform. Some important developing country markets for tea are an exception and lobbying to reduce them may help to improve the livelihoods of smallholders. However, these tariffs are important sources of revenue for the countries concerned and they may not be able to respond. Because EU tariffs are low, the ACP countries are unlikely to suffer from the loss of preferential access to the European market but VAT on coffee is high in some European countries and there might be some benefit to African producers from a reduction.

The escalation of tariffs from the primary product through intermediate products and to the final retail product is more of an issue because it discourages value added production in the country of origin. This is especially the case for cocoa, where more complex processing is required to bring the final confectionery product to the consumer. However, the lack of infrastructure and an effective enabling environment for modern industrial production in many producer countries may be a greater barrier to value added production than tariff escalation in consumer countries. A detailed review of the realistic potential for in-country secondary processing is needed and this should be linked to the analysis of tariff escalation.

1.4 KEY ISSUES: PRODUCTION AND DIVERSIFICATION

A range of issues arise from the central policy question of whether or not beverage crop producers should seek to increase their output or diversify into other sectors.

1.4.1 Production Controls

Continued falls in beverage prices, together with the volatility of those prices, have led some to recommend a return to the era of international agreements controlling world markets, through international export quotas, stock destruction and buffer stocks. Oxfam is not alone in this. However, as the end of that earlier era showed, consensus support for such systems is difficult to maintain, especially where there are winners and losers in the allocation of quotas. A return to quotas would also require the re-establishment of state marketing bodies, which most producing countries have abolished. Kaplinsky points out that an international agreement to restrict coffee supplies worked most effectively from 1963-1975 but that cartels have a habit of disintegrating in “good times as well as bad, as producers take the opportunity of high prices to evade quota limits or sell on the black market” (Kaplinsky 2001 p28). The system for coffee collapsed in 1989 and the current international agreement to restrain cocoa production has proved largely ineffectual. There is also the question of which body would set the quotas and

police them, although it may perhaps be assumed that the ICO and the ICCO would do this for coffee and cocoa respectively.

If regulatory approaches would not work, there would be potential in encouraging those currently seeking a livelihood from the production of these commodities to diversify into other activities. If alternative sustainable livelihood generating activities could be utilised by the poor there would be benefits to those who diversify, but also to those still reliant on the commodities for their livelihoods: fewer producers should mean better prices for those who still produce.

Once again the Oxfam paper is a prime example of those who believe that the only policies that should be supported are those which are neutral towards or reduce production. However, some of the beverage producing countries in Africa are among the poorest in the world and it may still be justifiable on equity grounds to support production, even at the risk of reducing world prices and harming other exporting countries. The welfare trade-off between different producer groups would be impossible to quantify so a decision on which countries should form an exception to the rule will be essentially political.

There are also important difficulties about the way production controls will work. The first of these is the fact that higher prices will not only raise farmer incomes. They will also encourage them to grow more. Unless production quotas are introduced as well, a policy of destroying stocks and retaining exports will only lead to increased oversupply and slow the rate at which producers diversify into other activities. It is debatable whether production quotas would be practical. Even if they were, the final outcome would be a subsidy and control regime similar to the EU's Common Agriculture Policy.

As will be discussed in section 4.3, there is convincing evidence that part of the problem lies in the fact that increases in commodity prices are passed on to consumers more fully than decreases. Depending on the elasticity of demand, higher prices will reduce sales and so reduce the benefit going to producers. There is also the risk that the intermediaries in the international trade will capture the larger share of the benefit.

1.4.2 Increase Demand

Clearly, raising demand will resolve the dilemma by allowing production to increase without causing oversupply. Various ways can be considered to achieve this, from better marketing to higher quality. However, with such a small percentage of the final price going to the producer, there is a fear that most of the gains from better marketing would go to the international companies. A better approach might be to encourage those companies to make the marketing effort themselves, although this is to assume that the very substantial sums they already spend on promoting their individual brands are less than the optimal amount needed to promote consumption overall. Alternatively, producers could be encouraged to sell their products *direct*

to consumers and appeal directly to new consumers. Here, the question is whether this would increase demand or merely result in cutting out at least some of the intermediaries.

1.4.3 Improve Quality

Improved quality is linked to increased demand. Better products will attract a higher premium and attract new consumers. Differentiation to sell into niche markets for organic and gourmet products may also increase overall consumption or at least increase the revenue generated from the existing volume of sales. This 'decommodification' of beverage products would be analogous to the example of fine wines, which attract substantial premia for quality, variety and origin. Ethical trade is in itself a form of differentiation, with consumers willing to pay a premium for the certainty that their purchase is safe and produced in an ethical and environmentally sound manner. However, even if higher prices are gained from this differentiation, this does not necessarily mean that incomes to producers will increase depending on how much of the added value accrues to others in the value chain. The investment needed to achieve a premium price is substantial. There would also be losers as well as winners; just as many traditional wine regions now struggle in the face of highly differentiated competition.

Quality and production controls can come together. Member countries of the International Coffee Organisation have agreed to implement a Quality Improvement Programme (QIP) that will involve countries only exporting coffee that meets minimum quality standards. Although overtly aimed at improving quality and stimulating demand, the main effect the programme will have on price is likely to be through an overall reduction in exports. As with all restrictive schemes, the distribution of benefits will depend on the relative impact of the minimum quality standards on the export levels of individual exporting countries. If the programme is implemented, the reduction in export supply is likely to be focussed on Latin American Arabica coffee to the benefit of some African countries, most notably Ethiopia. As with support to production, this might be justifiable but it would be a political rather than a technical decision.

As with production controls, there are practical questions about how the QIP will work. The largest consuming country, the USA, is not a member of the ICO and may not participate. It is likely that poor quality production is concentrated in certain countries; it may be the Robusta producers such as Vietnam will be most affected. They may not be willing or even able to withhold production and they may look for compensation from those producers who gain from improvements in prices for higher quality output.

1.4.4 Smallholder Production

Under some circumstances, smallholders produce higher quality products. Nevertheless, some question whether smallholder agricultural production can remain viable in the current global market. Small producers are seen as increasingly vulnerable when caught up in global value chains. At the same time, smallholders in many countries are diversifying their livelihoods and reducing their dependence on single crops or on farming as a whole. Any approach to

supporting production needs to take this into account and help smallholder producers develop their beverage production in ways that fit in with their other activities and, as the Oxfam case studies illustrate, in ways that contribute to their longer-term livelihood goals, in particular education. Increasingly, smallholders are linked into the global economy in several different ways at once, not just through their production of export crops, and any policy adopted must take this into account as well.

1.4.5 The Need for investment

African producers are still constrained by poor roads, unreliable electricity and the lack of telephones and other communications. This raises costs for all crops but especially for tea, which has to be processed in a factory on the day of picking. Relatively small investments in infrastructure would substantially increase the African producer's ability to compete even at low prices. However, more ambitious strategies, to raise quality and differentiate the product or even to win a greater share of processing currently carried out in the first world, may depend on substantial improvements in infrastructure. One approach might be to seek partnerships with private enterprises to improve the infrastructure, possibly tying in with Corporate Social Responsibility activities. It needs to be remembered that investment to make production more efficient will lead to increases in supply, leading back to the policy choice between production and diversification.

1.4.6 Support for Risk Limitation Strategies

Incomes from tea, coffee and cocoa are doubly volatile through the effect of climate and of fluctuating world prices. Furthermore, the abolition of most state marketing institutions has taken away their stabilisation capacity, although it was often ineffective. An International Initiative for Commodity Price Risk Management (CRM) is currently being led by the World Bank to find ways to offer farmers insurance against price risk. Pilot schemes are underway in E. and W. Africa.

In smallholder production, schemes that involve finance - credit, insurance and so on - face particular difficulties. Transactions costs are high. Where institutions are weak, there can be severe issues of moral hazard: default among creditors, unjustified insurance claims and so on. Governments can face strong pressures to weaken the discipline that is essential for sustainability.

When considering the outcome of the pilot schemes, key indicators will include not just the straightforward statistics on repayment but also the ratio of administrative and other costs to net income. It will also be important to find ways to measure farmers' real sustained demand for the insurance that is offered. Farmers have alternative ways to manage risk apart from insurance and that real demand can be less than expected. Low uptake only adds to the pressure from high transaction costs.

It is arguable other risks - disease and weather - may be at least as important as price fluctuations. However the transactions cost and moral hazard problems of these forms of insurance are even greater, because of the difficulty of measuring with certainty how severe the impact has been.

Research and development to reduce the incidence of disease, improve yields and improve resistance to drought will help to reduce the risk of crop failure or damage. Better communications and information services can also help growers to manage their risks more effectively. This will be particularly important if they do have the opportunity to take out insurance because they will need to decide for themselves whether or not the insurance is worth having.

1.4.7 Knowledge and Awareness

There is a wide arena for the promotion of knowledge about the beverage crops. Producers can be better informed of their options and market conditions so that they can demand better deals, produce their products more efficiently and find opportunities. Governments in producing countries can be helped to lobby transnational corporations on behalf of their producers and to monitor the way the corporations operate in-country. Better information will also help governments to ensure that national policies support poor producers. The major international traders can be helped to understand better the effect of their strategies and encouraged to work with their producers. Consumers can be educated as to the benefits of fairer trade, and encouraged to demand fairer trade from retailers and those making a profit from the value chain. If consumers demand change, retailers and their suppliers must respond.

Advocacy groups should be educated so that they can use accurate arguments when campaigning for reform. They could also be brought into the wider process as M&E agents ensuring Corporate Social Responsibility targets are met, or as agents to organise producer representation/ co-operative groups.

1.5 SUMMING UP

The preceding sections give a brief overview of the many ideas that have been suggested to try to improve the lot of African smallholders who grow coffee, tea or cocoa. Each has a different emphasis and at least implicitly each depends on a particular view about what is happening. The aim of this report is to try to establish an overall framework, based on a consistent understanding of the situation. That will then help to decide which of these numerous proposals might form part of a coherent strategy to address that situation.

2 THE BEVERAGE CROPS AND THEIR IMPORTANCE TO THE POOR OF AFRICA

Coffee, tea and cocoa are all perennial tree crops, with gestation periods between planting and first yield of some 2-4 years and productive lives of 25 years or more. They all require significant initial investments that are slow to yield a return. However, once the investment is made producers are likely to continue to harvest their crops even when prices are very low. The result is that all three suffer cycles of short booms in investment stimulated by high prices followed by increases in production and periods of oversupply and low prices until the next price shock – drought, disease, frost or political unrest – drives prices up and sets the cycle off again.

Cocoa, which requires warm, moist tropical conditions, is produced in a narrow band extending 10° north and south of the Equator. Coffee can tolerate greater variation but is damaged by frost and all but a small proportion is grown within the tropics. Tea can withstand frost and is produced over a much wider range, extending from South Africa and Argentina, through the Equator, to as far north as Turkey and Georgia.

For coffee, two species are of major world-wide economic importance: *Arabica* and *Robusta*. Most Robusta is produced in Africa and Asia, although Brazil is a very large supplier. Most Arabica comes from Central and South America. Robusta used to be the most important crop for Africa but Arabica has expanded and African revenue from each type is now roughly equal. Arabica requires average temperatures of 18-24° C, with contrasting wet and dry seasons tempered by altitude. Robusta grows best under warmer conditions with less seasonal variation in rainfall. Robusta is easier to cultivate, and produces a greater weight of coffee per hectare. However, its beans are generally considered to be of inferior quality and it trades at substantially lower prices than Arabica. Nevertheless, in recent years, Robusta production has been expanding more rapidly. In 2001/02, some 40 percent of world coffee production was Robusta.

The fresh green leaf plucked from tea bushes can be processed in various ways that lead to three distinct types of 'made' tea: black, green, and an intermediate type referred to as 'Oolong'. The main difference between them is the level of fermentation of the green leaf at the start of the manufacturing process. Black tea is fermented, Oolong partially fermented, and green unfermented. The three types sell in distinct markets. Black tea currently accounts for about three-quarters of world production, with green tea accounting for all but a small proportion of the remainder.

For cocoa, there is a less distinct segmentation of production and markets by type, although there is marked variation in quality. The world cocoa market distinguishes between two main qualities of cocoa beans: "fine" or "flavour" and "ordinary". The latter accounts for about 95 percent of world production and trade and for virtually the entire output of African producers.

2.1 CULTURAL METHODS, HARVESTING AND PRIMARY PROCESSING

Coffee and tea are normally grown in pure stands but cocoa is frequently interplanted with other crops including coconuts. Cocoa, and some coffee and tea are grown under shade trees. All three crops provide good ground cover, protecting the soil from erosion, and high rates of transpiration. Mature tea is even similar to indigenous forest in terms of its ability to protect the soil and its effect on local microclimates.

There is little use of machinery, even on estates, and production is labour intensive. For coffee and tea, harvesting comprises the main use of labour. Chemical sprays are used to control pests and diseases, although the incidence of application varies greatly between countries and between crops. The highest use is on Arabica coffee in Kenya, most of which is susceptible to coffee berry disease and leaf rust that is controlled with copper sprays.

Coffee and cocoa come from the fruit of the tree. In the case of tea, the leaf is the product. This means that harvesting is concentrated into distinct seasons for coffee and cocoa but continues through most of the year for tea.

Cocoa pods are cut from the tree by hand with a machete. In Africa, all coffee is picked by hand, either selectively during a number of rounds or through a single round during which the entire crop is stripped from the branch; although this reduces the quality of the crop. All African tea is plucked by hand. Each bush is typically plucked once every 5-10 days in every month, providing regular employment for smallholder families and estate labour. High quality tea requires the plucking of only the bud and the first two leaves below the bud but coarser plucking can be more profitable.

All three crops require substantial amounts of processing close to the farm. The green tea leaf must be processed on the same day that it is plucked. Coffee cherries and cocoa pods include a large amount of low-value material that must be removed before the berries can be sold. This adds to the employment that these crops generate in the producing areas.

To sum up, the technical characteristics of the three beverage crops offer important advantages:

- employment and incomes in rural areas
- as a close match for natural forest they are environmentally beneficial (including acting as a carbon sink)
- for unwashed coffee and cocoa, especially, the primary product is not perishable and so it is economic to transport it from remote areas

2.2 PROCESSING AND QUALITY

The potential to increase farmer incomes by helping them to improve their product is a key element in discussions. It is important, therefore, to understand the way processing affects quality. Annex 1 summarises the different processes involved.

Most coffee is exported as green beans for roasting in the country of consumption. Although Brazil, India and others produce and export soluble coffee, in Africa the Ivory Coast is the only significant exporter.

Other than for small amounts of soluble tea, black tea is retailed in the form in which it leaves the region of production. Worldwide, a significant amount of tea is exported in packaged form, ready for retail sale. However, virtually all African tea is exported in bulk and packaged in the importing countries.

The major cocoa producing countries grind a proportion of their beans domestically, but the majority is exported as unprocessed beans. Even where the beans are processed in-country, the product is exported in the form of butter, paste, powder and cake. Virtually no cocoa is exported from African producing countries as the final chocolate product.

The fact that some much of African production is exported unprocessed should, in principle, offer an important opportunity to add value by developing a local processing industry. In practice this may be blocked by tariff escalation in the consuming countries and also by poor infrastructure and other disincentives in the producing countries. This is discussed further below.

2.3 THE IMPORTANCE OF BEVERAGE CROPS TO THE POOR OF AFRICA

Table 1 shows African earnings from the export of coffee, tea and cocoa for selected years since 1970. Cocoa has been of major importance throughout the period, while tea has increased strongly and coffee's relative importance has declined. (It should be noted that the shares are sensitive to changes in relative world prices and fluctuate sharply from year to year.)

Overall, African earnings from the three crops have increased at an average of 2.7% per annum, in current dollars. Even for coffee, current dollar earnings have increased from some \$800 million to over \$1 billion. For Cocoa, which was just about equal to coffee in 1970, current dollar earnings have since doubled to over \$2 billion. The picture is less positive once changes in the terms of trade are taken into account and this is discussed in detail below.

TABLE 1: AFRICAN EARNINGS FROM THE EXPORT OF BEVERAGES

	1970	1980	1990	2000
Total (Billion US\$)	1.71	5.54	3.47	3.82
Coffee (%)	49.0	51.5	41.5	29.7
Tea (%)	5.1	5.3	11.5	15.4
Cocoa (%)	45.9	43.2	47.0	54.9

Derived from FAOSTAT data

To assess the importance of beverage crop production, three factors need to be considered:

- The relative contribution the industry makes to the national economy
- The number of people involved in the industry
- The potential contribution to poverty reduction

Three indicators have been reviewed to give some indication on these points: the proportion of national export earnings generated by beverage crops, the national population and GDP per capita. Given that, the crops go almost entirely for export and that they are grown almost entirely by smallholders, these are good preliminary indicators of the potential contribution to poverty reduction.

Annex 2 shows these indicators for the top 10 African producers of each crop, with the major non-African producers also shown for comparison. Table 2 shows the figures for those African countries for which the individual beverage crop contributes more than 2.5% of export earnings.

TABLE 2 THE CONTRIBUTION OF COFFEE, TEA & COCOA TO AFRICAN ECONOMIES (2000)

COCOA	Total Exports ^a (million \$)	Cocoa Exports ^b (million \$)	% of Total	Pop'n ^c (millions)	GDP/capita ^d (US\$)
Cameroon	1880	152	8.09	15	591
Cote D'Ivoire	3970	1029	25.93	16	585
Ghana	1670	454	27.24	19	273
Madagascar	260	15	6.08	16	242
Av. For Non-African Countries amongst the top 10	39240	110	0.62	77	1979

COFFEE	Total Exports (million \$)	Coffee Exports (million \$)	% of Total	Pop'n (millions)	GDP/capita (US\$)
Burundi	50	31	61.90	7	98
Cameroon	1880	78	4.17	15	592
Cote D'Ivoire	3970	258	6.49	16	586
Ethiopia	480	255	53.20	64	100
Kenya	1740	154	8.84	30	345
Rwanda	50	17	34.80	9	199
Sierra Leone	10	2	20.00	5	127
Tanzania.	660	72	10.91	34	266
Uganda	460	125	27.24	22	280
Av. For Non-African Countries amongst the top 10	44690	660	8.53	204	1949

TEA	Total Exports (million \$)	Tea Exports (million \$)	% of Total	Pop'n (millions)	GDP/capita (US\$)
Burundi	50	3	6.02	7	98
Kenya	1740	462	26.55	30	345
Malawi	360	60	16.75	10	170
Rwanda	50	21	41.08	9	199
Uganda	460	37	8.05	22	280
Av. For Non-African Countries amongst the top 10	115110	1655	1.77	350	6679

Sources: a = WTO Trade Stats, 2000, b = FAO Stats,

c = World Bank Development Indicator Database, d = Calculated from c

The conclusions are clear:

- All three crops are of major economic importance to a number of African countries. Coffee contributes more than a fifth of export earnings in five countries and tea and cocoa each contribute over a fifth in two countries.
- With the sole exception of S. Africa, all the African producers have GDP per capita substantially below all but the two poorest of the other producing nations: India and Vietnam. Even for those two countries, GDP per capita is higher than for the majority of African nations.
- Even for those who are not directly involved in production, the dependence on export earnings from coffee, tea and cocoa means that in some countries the livelihoods of almost everyone are indirectly affected. For example, if Cote d'Ivoire had no income from cocoa, the local prices of vital imports would be much higher than at present.
- Even the largest African producing countries are not only poorer than their competitors. They are also smaller and much more dependent on their beverage crop exports.

It has not been possible to obtain comprehensive data on the numbers of smallholders and levels of employment in the production and processing of coffee, tea and cocoa. It is, however, possible to gain a reasonable idea of from the volumes of production and standard average figures on yields and labour requirements. Table 3 shows the estimations for one major producing country for each crop and for Africa as a whole. The standard calculation is as follows:

National Production	-	2000 figures from Table 2
		<i>divided by</i>
Average Yield Per Ha	-	Processed, Smallholder production ²
		<i>multiplied by</i>
Labour Requirement	-	Including processing, mandays ³
		<i>divided by</i>
Standard Work Year	-	Say 240 days (= Full Time Job Equivalent)
		<i>multiplied by</i>
Dependents per Worker	-	Say family of 5
		<i>equals</i>

Number of Direct Dependents on Crop

The following table also shows the final figure as a percentage of the national population.

² Agricultural Compendium for Rural Development in the Tropics and SubTropics, Elsevier, 1981

³ *ibid*

TABLE 3 INDICATIVE ESTIMATES OF LIVELIHOODS DEPENDENT ON BEVERAGE CROPS

	Prod'n Ton - 2000	Average Yield	Labour Md/Ha	Jobs FT Equiv't	Direct Dependents	
					Number	% of Pop'n
<u>Cocoa</u>						
Cote d'Ivoire	1,396,000	1 Ton/Ha	78	454,000	2,300,000	14%
AFRICA	2,344,000			762,000	3.8 million	
<u>Coffee</u>						
Ethiopia	230,000	1 Ton/Ha	280	268,000	1,300,000	2%
AFRICA	1,092,000	3 Ton/Ha ⁴		425,000	2.1 million	
<u>Tea</u>						
Kenya	236,000	1 Ton/Ha	600	590,000	2,950,000	10%
AFRICA	411,000			1,028,000	5.1 million	

It is emphasised that these figures are purely indicative. The real statistics may differ significantly depending on the true average yields and labour requirements and they should not be quoted even as estimates of the real position. Some reports, quote much higher figures: Bitter Coffee's 15 million dependent on coffee in Ethiopia and the figure of 10 million workers in cocoa in W. Africa are examples. (See report No 4 in this study for the cocoa figure.) More detailed studies are required to establish reliable estimates.

Nevertheless, the above is believed to be sufficiently accurate to give policy makers a first idea of the orders of magnitude involved and to confirm that large numbers of African people are directly dependent on all three beverage crops. It is likely that the majority are not full-time employed in the one activity, which means that the number who are directly dependent on the crop for at least a part of their livelihood may be much higher. As they are predominantly smallholder producers, it is also likely that they are among the poorer sections of society; although it is suggested that some smallholder groups, for example tea growers in Kenya, are relatively favoured.

⁴ ie Average of Arabica and Robusta

3 WORLD PRODUCTION AND TRADE IN BEVERAGE CROPS

Worldwide, by far the largest shares of coffee, tea and cocoa are grown in developing countries. Among the major producers, the most economically developed are Mexico (coffee), Brazil (coffee and cocoa), Japan (green tea) and Turkey (black tea). For coffee and tea, the poorest producing countries are in Africa (Ethiopia and Malawi). While the four main West African cocoa producing countries are among the better off in Africa, they are still very poor compared to other major producers: Brazil and Indonesia.

Annex 2 shows the international production of coffee, tea and cocoa, analysed by producer country. For all three crops, world production is concentrated in a small number of countries. Brazil, Colombia and Vietnam produce half of the world's coffee, India and China account for half of the global output of tea, and the Ivory Coast alone grows 40 percent of the world's cocoa. The concentration of production is highest for cocoa. Just four countries account for over three-quarters of world output and eight countries for some 92 percent.

African producers dominate in cocoa. Four countries – Ivory Coast, Ghana, Nigeria and Cameroon – account for two-thirds of global output and, in 2000, some 68 percent of the world's cocoa was grown in Africa. For coffee and tea, Africa is less important, with 11% and 14% of world production respectively.

Thirty years ago, Africa dominated the production of Robusta coffee, but a decline in African production, coupled with major increases in Vietnam and Brazil, has reduced Africa's share of global Robusta production to only 23 percent. Even so, in 2001/02 Robusta still accounted for 59 percent of African coffee output. Due to the higher price of Arabica, the total values of African output of the two types of coffee are currently about the same.

Africa produces only black tea. This is grown at altitude in eastern, central and southern Africa. In 2000, Africa produced some 14 percent of the global output of all tea and about 19 percent of black tea. Kenya dominates African production, with over half of the continent's total output. Malawi, the second most important producer, accounts for a further 11 percent.

3.1 TRENDS IN AFRICAN PRODUCTION

Annex 2 shows the production of coffee, tea and cocoa in Africa and the world for selected years since 1970 and up to 2000. The table contains data for those African countries that have accounted for at least 5 percent of the continent's output of the crop at some point during the past 30 years.

Over the three decades reviewed, world production of all three crops has followed a similar trend, with increases of 92% for Coffee, 123% for cocoa and 132% for tea. However, the analysis shows revealing differences in the way Africa has performed, both with respect to absolute output and to Africa's share of world production. Some African countries have done much better than others.

For coffee, total African production has been almost static at around 1.2 million tons. As world production has nearly doubled, from 3.8 million to 7.3 million tons between 1970 and 2000, Africa's share has fallen from 33% to 16%. Of the nine significant African producers, production has increased in three - Ivory Coast, Ethiopia and Kenya - and been more or less static in three more - Cameroon, Madagascar and Tanzania. The last three have seen significant declines - Uganda, D.R. Congo and Angola. In the case of Angola, which was the second largest African producer in 1970, the decline has been catastrophic. It is not coincidental that the three producers that did worst have also experienced the greatest political instability, although Uganda has also been affected by disease in recent years. The three countries that have done the worst were predominantly producers of Robusta. African Arabica production has expanded since 1970, but less rapidly than in the rest of the world.

By contrast with coffee, African tea production has more than tripled since 1970 compared with an increase of approximately 120 percent elsewhere in the world. This has increased the continent's share from 9% to 14%. Here too the pattern between countries has varied widely. By far the largest contribution has come from the establishment of tea smallholdings in Kenya under the Kenya Tea Development Authority (KTDA). Zimbabwe, Malawi and Tanzania have also grown. In Uganda, a collapse in the 1970s was not fully reversed until the late 1990s while Mozambique and D.R. Congo have both seen severe declines. Once again the effect of political instability is clear.

West Africa dominated world cocoa production in 1970, when Africa had 73% of world output. Other producers won a greater share during the 1970s and 1980s, but Africa's dominance has largely been recovered since, with 68% in 2000. African cocoa production has more than doubled over the past thirty years. The Ivory Coast has been the main source of growth. In 1970 it accounted for 16% of African production, but an almost eightfold growth in output has seen it overtake Ghana and Nigeria to a position where it now has some 60% of all African production. The output of Ghana and Nigeria fell sharply between 1970 and 1980, but the production of both countries is now marginally greater than in 1970. Cameroon remains below its 1970 level. Although less marked than for coffee and tea, political factors may be part of the reason why Ghana, Nigeria and Cameroon did not keep up with the Ivory Coast.

3.2 DOMESTIC CONSUMPTION AND PROSPECTS FOR GROWTH

With demand in developed countries likely to grow slowly, if at all, perhaps the greatest hope for all three crops is that income increases in developing and least developed countries will lead to rapid increases in consumption in those countries. In the longer term, it is to be hoped that growing incomes in African countries will lead to rapidly increasing domestic demand and improved prospects for producers. Brazil, where domestic consumption rose from 8 million bags in 1990/91 to 13.5 million in 2000/01, is the model for this and it is encouraging to realise

how recently this rapid expansion occurred. Nevertheless, African countries are still some way away from such a take-off.

Roughly, a quarter of global coffee production is consumed in producing countries, about half of it in Brazil. Most of the rest is in middle income countries such as Indonesia, Colombia and Mexico. The exception is Ethiopia where, despite great poverty, about 45 percent of national coffee output is consumed locally: equivalent to 1.5 percent of world coffee consumption and 6 percent of total consumption in producing countries.

Both India and China consume the majority of their tea output domestically. An estimated 57 percent of world tea production is consumed in the country in which it is produced. Within Africa, South Africa consumes all but a small proportion of its production, while Kenyans drink about 15 percent of their national output. In global terms, consumption in African producing countries is relatively small, amounting to less than one tenth of Indian consumption and to little more than 1 percent of world output.

With the exception of Brazil, almost all cocoa is exported, mostly in the form of unprocessed beans.

Due to the low level of domestic consumption, Africa has a larger share of world exports of all three crops than it has of world production. The difference is most marked for tea, for which Africa accounts for some 30 percent of world exports, roughly double its share of world production.

3.3 THE MAJOR MARKETS FOR BEVERAGE CROPS

Coffee and cocoa are exported mainly to developed countries. In 2000, the European Union accounted for 43% of world coffee consumption, with Germany, France and Italy consuming the greatest quantities. The United States is the largest national market, accounting for some 21%.

Although the final chocolate product is distributed more widely, the initial process of grinding cocoa beans is dominated by the United States and the Netherlands, which each ground approximately 440,000 tonnes in 1999/2000 with a further 600,000 tonnes ground in the rest of the western Europe. These grindings utilised about half of world production of beans. Cocoa products produced from beans ground in West African producing countries also go mainly to Europe. For both coffee and cocoa, the direction of world trade is very clearly from lower to higher income countries.

For tea, the pattern is different. A large proportion is exported to low and middle-income developing countries and to Russia, other CIS states and Eastern Europe. Although the UK and the Russian Federation are the two largest national markets, other important markets include the Middle East and N. Africa, Pakistan and the USA. Overall, the large proportion of tea

exports that goes to low and middle income countries, coupled with the fact that the majority of tea is consumed in the country of production, means that most tea is consumed in relatively poor countries.

In section 3.4 below, it is shown that the world price of tea has fallen less than that for most other commodities. This, together with the fact that tea is the only one of the three beverage crops that is widely consumed in lower income countries, serves to underline the point made earlier, that the mass markets of the DCs and LDCs may offer the greatest potential for the future.

3.4 WORLD PRICE TRENDS

In real terms, coffee, tea and cocoa prices have been falling since the early 1950s. Figure 1 shows the course of annual price indicators for coffee, tea and cocoa relative to an index of the prices of manufactured goods exported to developing countries. The index shows changes in the import purchasing capacity of a given quantity of exports of each commodity (hereafter referred to as the change in 'real price'). The base of the index is the 1950-53 period of relatively stable commodity prices prior to the Korea War boom.

It will be seen that the price of each commodity has fluctuated about a downward trend, with much greater instability in the annual prices of coffee and cocoa than of tea. The downward trends have resulted in the real prices of each of the commodities being less than half their 1950-53 average in every year since 1987. As Table 4 shows, over the past ten years, the real prices of all three commodities have averaged little more than one-third those of 1950-53. Real tea and cocoa prices were marginally higher between 1997 and 2001 than during the prior five years, but coffee prices were marginally lower, dragged down by their exceptionally low value in 2001.

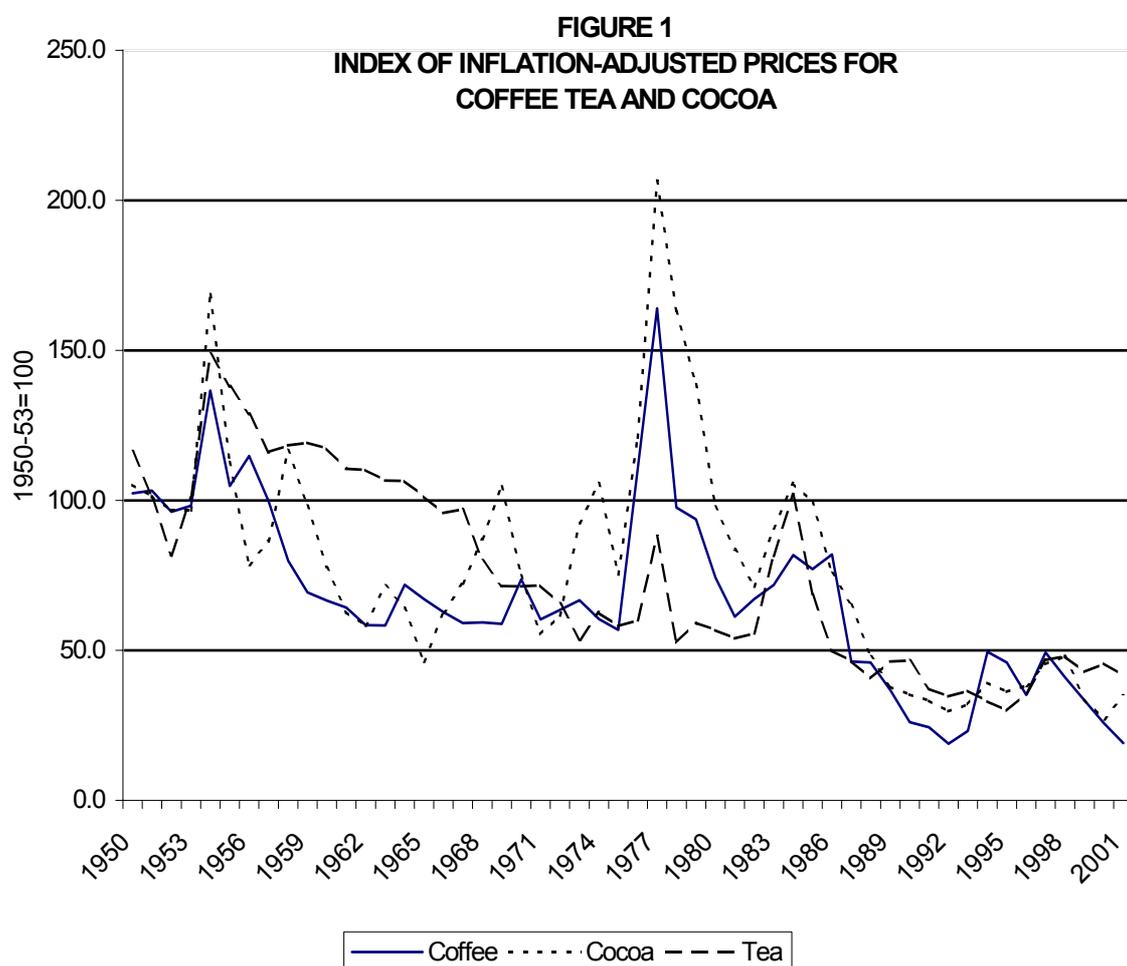


TABLE 4: REAL WORLD PRICES OF BEVERAGES RELATIVE TO 1950-53

	COFFEE	TEA	COCOA
1992-2001	34.1	39.5	36.4
1997-2001	33.7	45.0	37.8
2001	19.1	41.7	34.8

Sources: FAO Commodities Division, ICO, ICCO, ITC, World Bank, UNCTAD

It is important to note that real prices have been falling for almost all commodities, not just for beverages. Table 5 shows indices of the relative movement of various commodity groups between 1970 and 2000 and between 1990 and 2000, allowing an analysis of how the beverage crops have done relative to other commodities..

TABLE 5 RELATIVE MOVEMENTS OF REAL COMMODITY PRICES

Commodity Group	Index 1970 - 2000	Index 1990 - 2000
All Non-Energy Commodities	57.1	89.2
Agricultural Commodities	55.1	90.0
Beverages	44.7	90.7
Coffee Arabica	48.2	100.0
Coffee Robusta	28.8	79.3
Cocoa	38.6	73.4
Tea	64.7	93.6
Fats & Oils	43.1	98.8
Grains	49.0	81.6
Other Food	69.5	79.8
Timber	100.5	113.9
Non Food Agricultural	56.7	80.0
Fertiliser	100.3	108.6
Petroleum	670.4	126.7

Source: Adapted from World Bank, Global Economic Prospects & the Developing Countries 2002

Over the longer term, coffee and cocoa prices do seem to have fallen faster than average but tea has done quite a bit better than average, although tea did as badly or worse than the other two crops between 1950 and 1980. In the decade to 2000, there was a sharp separation between Arabica coffee and tea, which more or less held their real price, and Robusta coffee and cocoa which continued to fall. (For cocoa, at least, there are indications that prices are now recovering.)

The World Bank review from which the above figures are drawn emphasises the fact that the steady fall in real agricultural commodity prices, ie of agricultural prices relative to manufactures, reflects the way Total Factor Productivity has risen more rapidly in agriculture than industry: by 2.3% compared to 1.1%. Although agricultural TFP has risen fastest in the developed countries, the difference between agriculture and manufacturing is greatest in low-income developing countries: 1.4% for agriculture against only 0.2% in industry. As is discussed below, this is a critical factor that must be taken into account when considering how best to promote incomes in the poorest countries.

Future price prospects for the three crops are rather different. Demand for coffee is under particular pressure. Per capita consumption is falling in both the USA and Europe, which account for 90% of international demand, while demand for soft drinks has more than doubled since 1970. It is concluded that coffee producers should expect slow or even stagnant growth in

demand. Slow growth is also forecast for tea, with the particular risk of disruption in the major middle eastern and central Asian markets. Prospects are better for cocoa, with demand growing particularly rapidly in E. Europe and the FSU⁵. It is as well to emphasise, however, that commodity price forecasts are frequently found to be well off the mark and it can be a mistake to tie policies and plans too closely to those forecasts.

⁵ Global Economic Prospects & the Developing Countries, World Bank, 2002

4 FAIR OR UNFAIR TRADE?

Since the 1950s, long-term declines in commodity prices have raised the concern that countries dependent on primary product exports are vulnerable to worsening terms of trade. A more recent concern is that this decline reflects an international trading system which is biased against developing country producers, a concern that is now at the centre of the intense debate over globalisation and the WTO process.

The discussion has to do with the way the benefits of the international trade in coffee, tea and cocoa are distributed between the different actors in the Value Chain which links the third-world farmer to the first-world consumer. To structure this discussion, the complex systems of production and marketing that bring African tea, coffee and cocoa to the consumer can be summarised in three key links:

- Between the farmer and his employees
- Between the farmer and those in the national marketing chain that take the produce to the point of export
- Between the point of export and retail sale to the consumer

Although the details for each link are rather different, the underlying issue is the same: how benefits are distributed between those involved.

4.1 CONDITIONS OF EMPLOYMENT IN BEVERAGE PRODUCTION

The majority of African beverages are grown by smallholders, who supplement their own family labour with hired workers at peak seasons. Terms and conditions are informal, largely set by local custom and practice, and it is difficult to assess how fair or otherwise they are. Policing attempts to improve conditions is also difficult. Nevertheless, there are strong concerns, especially over the use of child labour in cocoa production.

On larger estates, most typical of tea, it is more practical to ask employers to comply with an agreed code and the international tea trade is actively promoting this through its Tea Sourcing Partnership. Some in the trade may even be asking smallholders to comply with codes of practice on employment and sustainable management.

In the end, however, low prices make it hard for even the best employer to be generous and there is a difficult balance to be struck between improving employment conditions and setting standards which discourage employment and lead to the transfer of production to larger, more capital intensive concerns, or even to other countries. It has even been suggested that *'the application of codes through supply chains is having a negative impact on poverty'*. (See Report No 3 in this study)

4.2 THE NATIONAL MARKETING CHAIN

For much of the 1960s and 1970s, beverage crop markets in many producing countries were controlled by the state. In principle, the state marketing organisations were to ensure quality, to assist the producers to gain the best price and to control stocks and sales so as to protect farmers from fluctuating prices. It was also widely felt that private sector traders were likely to exploit the producers. In the event, the objectives were rarely met and many marketing boards became little more than mechanisms for raising taxes from export commodities. Others fell into bankruptcy through attempts to maintain producer prices combined with mismanagement.

There seems to be broad agreement that deregulation and market liberalisation in the 1980s and 1990s has succeeded in passing a greater share of the export price to farmers. There remain four concerns:

- That intermediaries are still in a position to exploit the producer in various ways. It is notable, for example, that Indonesia producers get a much larger share of the export price than in many other countries.
- That quality has declined after the abolition of the marketing organisations, although there is some debate about whether buyers have sufficient interest to pay the cost of improving quality standards. This is particularly so since new technologies mean that processors can now adjust their process to compensate for poor quality, even to the extent of using more Robusta coffee instead of Arabica. Wider use of bulk transport, where quality is sacrificed to economy is also a factor.
- That farmers have lost protection against price fluctuations and are more vulnerable as a consequence. An International Task Force on Commodity Risk Management in Developing Countries is looking at ways to provide smallholder farmers with new ways to protect themselves against price changes through some form of insurance.
- Most importantly of all, that the greater share of the benefits of market liberalisation in producer countries has gone to consumers in the first world through lower retail prices rather than to the producer through higher farmgate prices. In part, it is suggested, this is because market deregulation means that the producers can no longer negotiate with the world trade as a national bloc.

Broadly, it would seem that there may still be work to do improving the way the less-regulated markets work. This is likely to mean a combination of investments in improved infrastructure, the development of better institutions, eg contract law and market regulations, effective dissemination of market information and support to organisations that represent the producer.

The last point in the list above, concerning the share of benefits going to consumers, leads to a more detailed discussion of the next link in the value chain, between the national market and the international trade that brings the produce to the final consumer. This is an issue that lies at the centre of the globalisation debate.

4.3 INTERNATIONAL TRADE

A seminal work in the discussion of international commodity trade was published in 1998 under the title “Unfair Trade? The Increasing Gap between World and Domestic Prices in Commodity Markets during the Past 25 Years” (Morriset, 1998) This presented a detailed analysis of trends between 1975 and 1993, seeking to understand why the steady decline in world market prices for commodities was not reflected in a similar decline in the price to the first world consumer. For the example of coffee, Morriset pointed out that “*the price of coffee declined 18 percent on world markets but increased 240% for consumers in the United States.*”

Morriset’s analysis demonstrated the following:

- That the spreads between world and consumer-country wholesale prices and the spreads between consumer-country wholesale and consumer-country retail prices have both increased over time.
- That this is because consumer prices have responded asymmetrically to movements in world prices: decreases in the world price have been transmitted much less completely than increases.
- That this pattern is general across all of six widely varied commodities: beef, crude oil, coffee, rice, sugar and wheat.
- That the pattern is general across all the countries studied: Canada, France, Germany, Italy, Japan and the USA. Differing national policies, in particular differing national trade regimes, do not make any obvious difference.

Although it has been largely ignored in the subsequent debate, the question mark in Morriset’s title ‘Unfair Trade?’ indicates that there are a number of explanations for what is happening and that it is not a foregone conclusion that it is caused by unfair trade, however unfairness is defined. It is striking that petroleum, where the primary producers have amply demonstrated their market power, is affected as well as the agricultural commodities. Morriset himself says that his article should be viewed ‘*as a starting point for future research*’, although he does also indicate that the large international trading companies and the role of intermediaries should be a focus of that research.

The HTS study has not identified any work done to follow up Morriset’s starting point. If nothing significant has been done to deepen his analysis and explain the patterns he identifies, that is unfortunate because the trends he highlights have certainly been taken up by organisations which believe the world trade regime to be unfair and which advocate radical change in that regime. (See for example, World Vision Topic Sheet on Trade, October 2000 and Report No 3 in this study by Traidcraft)

To anticipate the more detailed work that is required, it is possible to consider what explanations there might be for the way consumer prices for commodities have outstripped producer prices and to consider which of those possible explanations would constitute Unfair Trade. Morriset suggests three alternatives: *'trade restrictions in the main consumer markets, rising processing costs that act as bottlenecks in the trade of commodities and differentiated changes in productivity across the stages of processing'*. The fact that the pattern of increasing spreads is similar across the different countries, each with a different trade regime, indicates that the first of these is less likely.

Perhaps the simplest explanation of all would be that much of the increase in the margin between the world price and the consumer price is explained by improvements in the quality of the product that the consumer is offered. Morriset's data is drawn from annual statistics at the national level and it is quite probable that such aggregate statistics conceal significant improvements in the quality of processing and packaging, marketing and other support to the product⁶. In particular, the fact that the spread between the wholesale and retail price has increased may reflect the substantial improvements in consumer convenience which are offered by the modern supermarket retailers.

It is tempting to suggest that an increasing first world share in the final price is the inevitable consequence of the fact that first world incomes have grown more rapidly. As real wages, rents and taxes in first world go up faster than in the third world, is the first world share of the final retail cost not bound to increase? In fact, however, this would only be true if productivity in the commodity marketing sector did not keep up with the increases in incomes: Morriset's 'bottleneck' in other words. It is also worth remembering that first world farmers seem to be facing very similar pressures. It would be revealing to analyse whether the European dairy farmer's share of the final retail price, excluding subsidy, is any greater than the African coffee farmer's.

Morriset's statistical analysis does show some support for the idea that productivity in marketing and distribution is a bottleneck. On the other hand, there is considerable evidence that productivity has increased in these sectors. This leads to the last possibility, which is that productivity differences at different stages in the value chain are driven not so much by the underlying costs but rather by different levels of competition. In domestic wholesale and retail markets, competitive pressure to reduce costs is not as strong as it is in the international commodity markets.

This in turn leads to the role of the major international intermediaries. It is striking that international trade in many major commodities is dominated by a small group of trading and processing companies. For petroleum, it is the oil majors, for cereals, just five companies

⁶ It has been suggested that inflation indices in the industrialised countries have been biased upwards by a failure to account for this kind of underlying improvement in standards and specifications.

control world trade, and for cocoa and coffee, there has been a steady process of consolidation in recent years. However, the structure of this domination varies between the commodities. For petroleum, the major companies dominate all stages of the value chain from production through to distribution and final sale. For the agricultural commodities, it is less common to find widespread vertical integration. The major traders do not, typically have a strong presence in either production or retail. Again, it is striking that the pattern of ever-increasing spreads between world prices and consumer prices is the same, regardless of the structure of world trade as well as the nature of the product.

4.4 DEMAND AND MARKET POWER

Since the 1950s, it been recognised that the income and price elasticities of demand for each of the beverages are relatively low: that demand will not increase very much for a given increase in consumer incomes or a given reduction in the commodity price. Morriset's analysis suggests that *'the final demand for these products could not have increased because the declines in world commodity prices were not transmitted to consumer prices'*. In effect, he is saying that the low elasticity of demand for commodities is only at the level of international trade. Final consumer demand for those commodities is quite elastic with respect to price but it has been blocked by the way international trade works; with the result that *'Over the past 25 years, the increasing spreads have certainly cost several billion dollars every year to countries producing and exporting commodities by restraining the expansion of the final demand for these products'*.

When put in this way, this is a very strong statement and it is important to stress that it depends on the one central assumption that final consumer demand is price elastic; that if final prices had been lower, then consumption would have increased by enough to ensure that total revenues would be greater. This is not proven and it is important to review the alternative assumption, that final demand is quite inelastic. Declining per capita consumption of coffee in its largest single market - the USA - is an indicator that this cannot be discounted as a possibility for at least one commodity⁷.

Most econometric studies do show low elasticity; studies of the world markets for coffee, tea and cocoa undertaken over the past two decades have shown demand to be highly price inelastic in the main importing countries. Estimates vary from country to country but they are consistently low, typically about -0.2 .⁸ In its coffee forecasting model, the FAO is currently using price elasticities of demand that range from from -0.2 to -0.26 in exporting and importing countries, other than the FSU, for which it assumes demand is mildly price elastic (-1.25).

However, this is not necessarily inconsistent with Morriset's implicit position that retail demand is elastic and that low world market elasticities reflect the blocking effect of the trade regime. Unfortunately there are few studies that distinguish elasticities at different points in the chain

⁷ See Global Economic Prospects & the Developing Countries 2002, IBRD, 2001

between producer and consumer, still fewer that take account of different qualities and different sets of retail products. While some estimates of price elasticities of demand refer to retail demand, others use a 'world price' and others do not define the price variable used.

For coffee, Maizels, Bacon and Mavrotas (*Commodity Supply Management by Producing Countries: A Case Study of the Tropical Beverage Crops*, 1997) do use a model that links retail prices, the ICO indicator price and producer prices. Their estimated price elasticities of demand refer to long-term retail demand. They range from 0 in France to -0.29 (Japan), with -0.10 (USA), -0.13 (Italy), -0.18 (Germany) and -0.27 (UK). There have been few studies for tea but Maizels et al also show retail demand for tea to be price inelastic in all the producing and importing countries for which they make estimates.

For cocoa, retail prices are difficult to measure due to the fact that most cocoa is used together with sugar and other products in the manufacture of a diverse range of confectionery items. Maizels et al would appear to estimate the price elasticity of demand of Ghana cocoa beans in the London market, i.e. at a point some distance from the retail price. At this level, their estimates show the short and long-run price elasticity of demand for cocoa to be low for all countries, with a range from -0.07 (short-run, Germany) to -0.68 (long-run, Spain).

On balance, the evidence would seem to indicate that retail demand is not price elastic. Possible hypotheses that would fit Morriset's evidence with a low elasticity for final consumer demand include:

- That the increase in the spread between the world price and the retail price is attributable to increases in quality, in packaging, in processing, in marketing and in consumer convenience and that, in the face of inelastic final demand, consumption would have been even lower without this extra expenditure on marketing and distribution.
- That inelastic final demand has acted as a ratchet, allowing large price increases when supply is short but discouraging price reductions when supplies increase again. (It is possible to see ways in which first world labour and capital markets would reinforce this ratchet. High prices in years of short supply would lead to higher profits once supply picks up but those profits are then 'taxed' away by workers, shareholders and even governments in first world. This process moves costs up to a higher level from which they do not fall back in leaner times. The process may also be the driver behind the steady consolidation amongst the major intermediaries.)

The high degree of concentration in the international commodity trades mean that the possibility of monopolistic behaviour must be considered. As a matter of standard economic analysis, monopoly power is greatest when demand is elastic but not very elastic. If retail demand is not

⁸ A negative elasticity indicates, as expected that as price goes up, demand goes down. An elasticity smaller than - 1.0 is inelastic. Larger than -1.0 is elastic.

elastic, that would indicate that monopoly rents are not being extracted. However, the matter becomes more complex in the case of major trading intermediaries who have market power in two directions at once: against the consumer and also against their suppliers. It is possible to consider a position where a monopolist intermediary, or a cartel of such intermediaries, has a double incentive to restrict trade: lower sales would mean getting a higher price from the consumer and paying a lower one to the producer. To assess who bears the costs of this behaviour would be a matter of calculating elasticities of both supply and demand.

It is important to stress that monopolistic behaviour need not involve aggressive attempts to manipulate the market. Equally, perhaps even more likely, is the situation where the monopolist merely fails to invest in expanding the market because it will not pay it to do so. A shareholder company would even be in breach of its primary obligation to deliver profits, if it expanded its marketing efforts or reduced prices to raise sales unprofitably.

The point of this section is to suggest that it is a technical matter whether or not concentration and monopoly are factors behind the pattern of world commodity trade; one that depends on complex interactions between a number of different factors. This study has not found an authoritative analysis to give an answer either way and an effort to gather the data needed to address this question effectively would seem a priority. It is at least suggestive that published graphs of Nestlé's profitability show that coffee is not only the company's greatest source of revenue. It would also seem to be the most profitable by a considerable margin⁹.

4.5 WHAT CONSTITUTES UNFAIR TRADE?

Three different concepts of unfair trade are implicit:

- That there are 'fair' or 'ethical' standards for employment in beverage production
- That there is an absolute 'fair price' for the producer. The Fairtrade definition is a price that 'covers the costs of sustainable production and living'.
- That the world trade system keeps the margin between producer and retail price too high and hence total demand too low.

The three are not consistent, and none of them is necessarily consistent with a wider objective which might be:

'that the maximum number of poor farmers and farm workers gain the maximum benefit from their coffee, tea and cocoa production.'

A first, practical difficulty concerns the estimation of a 'fair' price. Clearly, the price that covers the '*costs of sustainable production and living*' will vary widely from country to country, even from place to place within a country. It can be argued that this is unimportant and that a price

such as Oxfam's US\$1 per pound is hardly generous; but there would be wide ranging implications if that price led to incomes from coffee that were much higher than what the poor people of a particular country can earn from other crops or in other sectors. The likely result would either be excess profits to some farmers and traders or a rapid expansion in coffee production.

Fairtrade products are sold at a premium in retail markets. This means that it does nothing to reduce any form of monopoly power that is keeping the consumer-producer price spread higher than it should be. If the Morriset analysis is correct, then truly fair trade would involve buying at the world market price and undercutting current retail prices to raise demand and reduce the share going to first world intermediaries. As things stand, the fair trade approach and the introduction of social codes may even raise first world costs, to the extent that it will be personnel from the first world who monitor the various procedures and codes.

A more positive view would be that Fairtrade is a marketing tool that differentiates the product and helps to raise demand. If final consumer demand is price inelastic, then this might be a useful way of increasing returns to producers. However, since the Fairtrade price is only available to some producers, it introduces an extra dimension of unfairness, between those who have access to it and those who do not. In this sense it represents a form of product differentiation allowing some producers to gain more from the market than others.

Current Fairtrade arrangements can be seen as a voluntary tax paid by those first world consumers and possibly some intermediaries who wish to help developing country producers. Here the benefit is better seen, not in terms of correcting unfair market prices but in the simpler distributional sense of transferring income from the wealthy to the poor. While laudable, it is questionable whether this can become a general tool for helping a large number of poor producers. It would require a correspondingly large number of consumers to volunteer for the tax.

This brief review of possible issues around Fairtrade is not intended to question the concept but rather to suggest the need to analyse it more rigorously to determine what are the objectives and how current approaches will contribute to them. As it stands it is not clear how Fairtrade in coffee, tea and cocoa can make a major contribution to poverty reduction.

⁹ See graph on p 51 of The Economist, 31 August 2002

5 PRODUCE OR DIVERSIFY?

The preceding chapter has reviewed the evidence that producer incomes from coffee, tea and cocoa are lower than they should be because the international trading system somehow extracts too great a margin between the producer price and the consumer price. If consumer demand is price elastic, then the result is that demand is lower than it otherwise would be and that producers receive correspondingly less. Even if consumer demand is not elastic, the producers may still be entitled to a larger share of the final price.

The major alternative to this position is that consumer demand is not elastic, that the international trade is, at least on average, efficient and equitable and that low producer prices simply reflect oversupply. This leads to pessimistic analyses of steady declines in the purchasing power of African beverage exports and, at the extreme, a process of 'immiserising growth' whereby ever greater efforts to increase productivity merely lead to continued oversupply and declining incomes. Report No 1 of this study, for example, presents evidence that the import purchasing power of African coffee exports in 2000 were little more than a third of what they were in 1970: 71% for the Arabicas group of countries and only 25% for Robusta.

It is these statistics that lead to the conclusion that no effort at all should be made to promote production. It will only lead to lower producer incomes. Where there is a gain to producers in one country, it will only come at the expense of those elsewhere, although there might be a case for supporting African producers on the grounds that they are poorer than others. The better strategy would be to assist African beverage producers to diversify out of coffee, tea and cocoa, either into other forms of agriculture or to employment outside agriculture altogether. Partly for this reason, countries that have succeeded in expanding production rapidly, notably Vietnam with Robusta coffee, have been strongly criticised for a development that would otherwise seem to have made a substantial contribution to poverty reduction in a very poor country.

These are radical policy recommendations and it is therefore necessary to review this analysis in detail. A number of observations can be made.

- There are wide variations between crops and countries. Coffee has undoubtedly done poorly but some Arabica producers, notably Kenya, have almost kept up with the non-African coffee countries. The purchasing power of Kenya Arabica coffee exports in 2000 was 83% of that in 1970. For Ethiopia it was 65%. For Ivory Coast Robusta it was 34%. On the other hand, for both Ivory Coast cocoa and Kenyan tea, it was over 300%.¹⁰ More generally, there are two main issues, productivity and area expansion.

¹⁰ Calculated from the index of production in Table 4 and the real commodity price indices shown in Annex 2.

- With the exception of cocoa, African producers have a small share of the world market and it would take very large increases in their production for it to have a significant effect on the price. If Ethiopia were to double its production, it would only add 3% to world supplies. Even if the price did fall, such an increase would still be likely to raise the country's export earnings by 25%. Provided that such an expansion was not the result of subsidy and that it was profitable for farmers, this would make a very significant contribution to poverty reduction.
- To suggest that African countries should not be encouraged to compete as vigorously as possible in the world markets for coffee, tea and cocoa should logically lead to the same policy for all other commodities. As described in Chapter 3, most of these face very similar world market conditions. If there is a 'produce or diversify' decision to be made, then it concerns agriculture as a whole and not just the beverage crops.
- Unless there is a strong world consensus on reducing production, which seems unlikely, the major non-African producers of beverages, principally in the developing and middle-income countries, will continue to seek productivity gains and increased sales. Not to support African producers in a sector in which they have comparative advantage will merely make it harder for them to meet this competition.

There are two more fundamental issues. The first concerns productivity and Africa's comparative advantage in beverage production and the second the question of production expansion through new plantings.

5.1 PRODUCTIVITY AND COMPARATIVE ADVANTAGE

Neither the real price nor the purchasing power of total exports is a complete indicator of the profitability and comparative advantage of beverage production. As was pointed out in Chapter 3, an underlying reason for the continued decline in real agricultural commodity prices is relatively rapid growth in Total Factor Productivity in agriculture. In other words, more efficient production leads to lower costs and higher profits, even when prices are lower. Whether or not a particular country and indeed all countries are doing better or worse from their production therefore depends on three factors, not just on the change in price but on:

- The change in Total Factor Productivity
- The Change in Output
- The Change in Price

On the figure cited in Chapter 3, of 1.4% annual growth in agricultural TFP in LDCs, productivity in 2000 was 52% higher than in 1970. While it is beyond the scope of this study to analyse this in detail, it is worth pointing out that at this rate of productivity improvement, Kenyan producers of Arabica may have had higher net incomes in 2000, even though the real value of coffee

exports fell by 17%. Ivory Coast producers of Robusta may still have been worse off but even here there is the possibility that TFP in the production of the higher yielding Robusta has advanced more rapidly. For the same reason, the benefits to Kenyan tea and Ivory Coast cocoa producers may have been even greater than 300%. As elsewhere in this study, the central point is that a conclusion cannot be drawn from *a priori* reasoning or from a simple review of price trends. Only careful analysis of reliable and comprehensive data on specific situations can give an answer.

It is probable that African countries have a comparative advantage in beverage crop production, especially so when it is remembered that comparative advantage does not depend on other technical advantages such as higher yields, but solely on the fact that beverage production is the best of the options available to African farmers. The technical nature of the crops described in Chapter 2 would certainly seem to suit them to the circumstances of many African countries but in the end, comparative advantage is an empirical matter that needs to be checked. For the moment, it seems most probable that the continent's poor performance is the result of political difficulties, weak institutions and other external factors and that a basic comparative advantage in beverage production remains.

For that reason, these crops may have the greatest potential to help countries that are trying to recover from civil strife. To take one example, it is difficult to accept a policy that would prevent DFID from helping Angola to rebuild its Robusta coffee industry. It used to be Africa's third biggest producer and it remains likely that it retains the comparative advantage that made it so.

5.2 PLANTING AND REPLANTING

At it's simplest, production can be increased by raising yields or by expanding the area planted. Much of the expansion of world beverage crop production has come from increases in area. The obvious recent example is the rapid development of robusta coffee production in Vietnam. As already pointed out this has been heavily criticised. Those who believe that production must be limited to hold prices up, say this expansion should not have been encouraged and there are wider concerns about the environmental and social impact of converting forest land to coffee production.

On the other side of the coin, there are also significant areas that have gone out of production in Angola and elsewhere for political and other reasons. It would be particularly interesting to see an analysis of the way changes in the areas under coffee worldwide are related to changes in production but that is outside the scope of this study.

In effect, the policy question of whether or not to limit production of coffee, tea and cocoa in order to protect producer incomes concerns two questions. Taking coffee as the example, the first question is whether the productivity of the land and labour resources that are currently being used to produce the crop should be increased? The second question is whether more

land and labour should be dedicated to coffee? Clearly, in Vietnam the rapid expansion came from putting more land under coffee and diverting labour to do so.

From the discussion in the preceding section it seems clear that the answer to the first question is straightforward. Provided that it can be done profitably and without subsidy, every effort is justified to raise the productivity of the resources currently being used to grow coffee. This may result in higher production. Alternatively, it may mean that some resources can be released from coffee to support diversification into other activities.

Replanting coffee land with new, better varieties is one way to raise productivity. Provided the replanting can be done at the right time, ie at a time of low prices, it has the double advantage of raising productivity for the long-term while taking land out of production in the short term. One important recommendation, therefore, is that ways should be found to encourage producers to manage their replanting in a counter-cyclical way, when prices are low rather than when they are high.

The question of increasing the area under coffee is considerably more complex. To take a simple point first, controls on area are a much better way to maintain agricultural incomes than price support and taking stocks off the market. This is something the EU has found with its Common Agricultural Policy. Therefore, if there is a case for limiting the production of coffee, then the best way to do so would be to limit the area under production. Apart from anything else, there is a much better chance of managing an area based system. For example, a minimal arrangement might be that no new land should be brought into production without international agreement.

None of this means, however, that such area restrictions are justified. It is still possible that the best opportunity available to African farmers is to expand their area of coffee and that they should be helped to do so. Provided that the opportunity cost of the land is low enough, which is likely to be the case in a number of African countries, this may provide the best way available to raise their incomes. The increase in production may drive the price down for current producers but there may still be a net welfare gain. Unless markets are distorted, theory would indicate that there will be.

Once again, the most important conclusion is that careful analysis relating to specific situations will be the only way to decide the correct policy. Nevertheless, an indicative ranking can perhaps show where support to coffee producers will almost certainly be justified and where the analysis will need to be more detailed. Starting with support that will almost always be justified and ending with changes that need most careful study case-by-case, the list would be:

- improvements to productivity on existing trees
- replanting existing areas

- re establishing coffee on land that has gone out of production
- converting land under other crops to coffee
- clearing virgin forest for coffee

The last point may be of most relevance for cocoa, where prices are now picking up sharply and some have suggested that the supplies of suitable land are running out. This is likely to result in significant pressure on the relatively small remaining areas of virgin forest in the W. African producing countries.

This highlights the point that raising productivity on existing areas has a double benefit; it raises production but it should also ease the pressure to expand into new areas.

5.3 CONCLUSION

To sum up this Chapter, it does not seem either useful or necessary for DFID to seek to establish an overriding policy in favour of production versus diversification. This will need to be considered at the national level and taking account of straightforward technical questions: Do some regions of the country have a comparative advantage in the crop concerned and are there practical ways to increase productivity such that incomes improve and poverty is reduced? There seems every likelihood that DFID will be able to identify a number of cases where the answer will be Yes.

Ultimately, the decision rests, as it should, with the farmers themselves and there is ample evidence that they are already taking it. Rural livelihoods have become more diverse in recent years and it is not impossible that at least some regions are seeing a virtuous cycle developing where improvements in productivity allow farmers to maintain their income from beverage crops at lower cost and so release resources for other enterprises. To promote such a virtuous cycle should form a key part of DFID's efforts.

In other words, there is no policy choice between production and diversification. For most, the best policy will be to 'produce and diversify'.

6 CONCLUSIONS AND POLICY RECOMMENDATIONS

Much of the preceding has perhaps raised more questions than it has answered. This does not, however, mean that useful conclusions cannot be drawn. Indeed one general conclusion is that practical policy steps need not, indeed should not, be held up while the debate continues.

6.1 THE IMPORTANCE OF BEVERAGE PRODUCTION

It is clear that the three crops - coffee, tea and cocoa - are of very considerable importance to a large number poor African families involved in growing, processing and trading the crops. The crops are of considerable economic importance and contribute more than 15% of export earnings to ten countries in Africa. It is more than 20% for 9 of them and more than 40% for three. The average GDP per capita of the 191 million people who live in these countries is just \$238. For two countries it is less than \$100 and for 6 it is less than \$200. There is little question that a programme that succeeds in improving livelihoods for the beverage producers of these countries will make a major contribution to poverty reduction and the Millenium Development Targets.

6.2 PRODUCE OR DIVERSIFY?

A key conclusion of this report is that this is a false choice. The aim should always be to raise productivity. This may result in farmers producing more but it is equally possible that it will enable them to maintain their current level of production with less resources, thus enabling them to diversify. A strategy to 'produce and diversify' is the most appropriate.

Added to which, world market pressures on beverage crop producers are not necessarily as negative as is widely suggested. Prices have fallen but those countries that have succeeded in raising productivity and output, including some African countries, are still likely to have made gains in net income. Even if the greater share of benefits goes to consumers, it is still the correct strategy for the farmer to continue to seek gains from beverage production unless, or until better options become available. For the moment, it is probable that coffee, tea and cocoa will continue to be the best option for many African countries, especially the poorer producers in those countries, for some time to come. Even if the ultimate goal is to diversify away from the beverage crops, improvements in productivity will support that not detract from it.

Whether or not to support expansion of the area under coffee, tea or cocoa is a more difficult decision. Even here there is no justification for an absolute ban on new areas. However, proposed programmes of expansion, especially those supported with donor funds, must be examined very carefully to ensure that the opportunity cost of the land is low enough to justify its conversion to a beverage crop, that there is a genuine comparative advantage in such production and that there are no major environmental or social costs.

A clearer conclusion concerns replanting. Helping farmers to replant will improve productivity. If ways can be found to encourage them to do this when the price is low, it will also help to raise prices again by taking land out of production until the new trees start to bear. Programmes to support such counter-cyclical replanting will contribute to smoothing the overall price cycle.

6.3 FAIR OR UNFAIR TRADE?

It remains to be proven that the international trade in commodities is unfair, still less where that unfairness lies. This need not, however, be a barrier to policy. There is a simpler and more important conclusion: that the upper levels of the value chain - processing, marketing and retail - are vitally important to the interests of the beverage producers. It must be a correct strategic decision that they should take a close interest in how these upper levels work. Producers can consider action at three levels:

- to achieve a better understanding of how the market is developing so as to plan production to best effect
- to counter the market power of the major international buyers and negotiate prices from a stronger position
- to seek to 'upgrade' their position in the value chain by taking over a greater share of processing and marketing activities

This is true whether or not the international trading system is biased against producers. If it is and the intermediaries' monopoly power is holding retail prices up, then the producers' most effective answer will be to compete with the monopolist to drive prices down and expand demand. If the international trade is fair, then the high proportion of value and profit earned in that trade would indicate high costs. This should be an opportunity for the producing nations to exploit their lower cost base to win a larger share of the trade. However, this will depend on ensuring appropriate infrastructure and the enabling environment needed for efficient processing and marketing.

6.4 A STRATEGY FOR PRODUCERS

DFID policy must form part of and support the producing nations' wider strategy to maximise the contribution beverage crop production makes to poverty reduction. Based on the discussion set out above, an outline strategy can be proposed that would have two strands:

- for farmers and the national trade to improve productivity and make the most of their comparative advantage in beverage crop production
- for producers, primarily at the national level, to play a more effective part in international trade, from negotiation all the way through to greater direct involvement in processing and marketing.

This does not mean that producers should be discouraged from diversification where it meets their needs. On the contrary, it means that improving productivity in beverage production should be part of their wider strategy to make the most of all their opportunities. For some this may mean concentrating on beverage production because that generates the greatest contribution to livelihoods. For others, it may mean using increased productivity in beverage production to release resources for other enterprises. The decision which of these is best for them can only be made by the individual producer.

Clearly, none of this would justify attempts to subsidise beverage production.

6.5 AN INTERNATIONAL STRATEGY

Many advocates of action to control production and address issues of fair trade either explicitly or implicitly indicate the need for an international strategy, most clearly in Oxfam's call for an international initiative. To some extent, the framework for such an initiative exists through the ICO, ICCO, and others. Alternatively, an international strategy might be managed by one of the UN agencies.

There is an impression that the current debate is dominated by a dialogue between two groups of first world actors: advocacy groups and the transnational corporations they are seeking to influence. Both are responding at least in part to their perceptions of what first world consumers see as important. The views and interests of the producers themselves are more difficult to discern.

The preceding analysis indicates the need for care in forming any programme of international action and DFID may have an important part to play in influencing its development. There is a danger of establishing expensive programmes before it is clearly established that they are needed, still less that they will have the intended effect.

6.6 RECOMMENDATIONS

It is recommended that DFID should decide to support as large a programme to assist poor African beverage producers to improve their livelihoods as is consistent with the department's priorities and other commitments. This study has not reviewed other sectors for comparison but we would suggest that there are few other sectors in Africa where so many poor people have a chance to benefit. Perhaps more surprisingly, we also believe that there may be few other sectors with better potential for significant poverty reductions.

Such a programme would seek to act on three levels: the producer, the country and internationally. The following sections set out brief outline of the objectives and actions proposed at each level.

6.6.1 Producing Regions

The objective would be:

To seek ways to support real productivity improvements in targeted beverage production.

Actions under the programme would fall in three stages:

- 1 To identify up to three regions where beverage production is a major contributor to the livelihoods of the poor and where the poor have a clear comparative advantage. Priorities might include regions of Ethiopia, Angola, Burundi, Rwanda, Sierra Leone and Uganda for coffee and Malawi and Rwanda for tea. As cocoa has a stronger market position and cocoa producing countries are relatively better off, it may be appropriate to give them lower priority. The highest priority should be given to those regions where a recovery in production will support a wider recovery from civil war.
- 2 To work with producers to strengthen their representation and their ability to work through existing or newly established organisations.
- 3 To work with producers and government to identify what investments - in infrastructure, in institutions, in research etc - will make the greatest contribution to raising productivity and to define a programme to make those investments.
- 4 To help government to coordinate the support to the programme with a range of partners: IFIs and other donors, transnational corporations and international and national NGOs.

6.6.2 The National Industry

The objective of working with the national industry of producers, traders and processors would be:

To support a process of 'upgrading' to help the national beverage industry increase its involvement in the international trade.

Actions under the programme would include:

- 1 To Identify up to three producer countries where there is the potential to increase the industry's capacity to negotiate with the international trade and the potential to expand downstream processing and marketing. The potential for downstream processing is greatest for cocoa and priority might go to Ghana, which is most dependent on the crop and, at the same time, poorer than the other leading W. African producers. Among

coffee and tea producing countries, it may be that only Cote d'Ivoire and Kenya have the infrastructure and enabling environment for downstream processing, with Tanzania and Uganda as possibilities. For the coffee producers, in particular, the emphasis is more likely to be on developing a capacity to negotiate successfully with the international trade and on marketing.

- 2 To support the development of representative producer and trade organisations capable of representing the industry effectively and coordinating services to the industry. While recognising the need for effective partnerships with the international traders, processors and retailers, DFID would need to recognise the potential conflict of interest that is inherent in their position and work to ensure that the primary partnership is with the producers. To an extent, the same applies to international NGOs.
- 3 To work with those associations and producers, government and the national trade, to develop a strategy for representing the national industry more effectively in negotiations and promoting the national product in international markets. To work with government on ways to improve infrastructure and the enabling environment for downstream processing.
- 4 To work in international discussions to lobby against tariff escalation and to help governments to do the same.
- 5 To help government to coordinate support to the programme with a range of partners: IFIs and other donors, transnational corporations and international and national NGOs.

6.6.3 International Fora

DFID's objective in international discussions would be:

To engage fully in the international debate and to influence actions taken at the international level to the benefit of the poorer producer.

To achieve this, DFID would:

- 1 Support work to reach a sound consensus on the extent to which production controls are appropriate or feasible and efforts to bring the different stakeholders together, from the transnational corporations to advocacy groups.
- 2 In particular, help the poor producers of Africa and elsewhere to have a much greater say in these international discussions.

- 3 Fund research to fully understand the reasons behind the continued divergence between the retail price for beverages and the producer price for the primary commodity (the Morriset effect).
- 4 Promote the interests of producers and producer country traders and processors through tariff reform and by facilitating access to new markets.
- 5 Support the dissemination of accurate data and sound analysis, first to producers and then to other stakeholders.
- 6 To help international organisations such as the ICO and ICCO to strengthen the support they provide to producers and take the lead in some of the preceding activities. Possibilities include expanding their research work, helping them to disseminate the market information they collect more widely and increasing their capacity to promote informed discussion. Finding ways for them to communicate more directly with poorer producers might be a priority.

6.7 CONCLUSION

The programme outlined above is significantly less radical than some of the proposals that have been made during the current period of poor producer prices for coffee, tea and cocoa. However, it is believed that it is justified by the evidence, that it is practical and that it offers a sustainable way forward. Above all, it will offer the widest possible impact and ensure that DFID's national partners, in particular the producers, will have the greatest say in what happens.

Annexes

Annex 1

Processing Requirements

INTRODUCTION

This note is to summarise the different processes involved in bringing the three beverage crops from the farm to the consumer. The nature of these processes has an important effect on the employment and income potential each offers to the people of the producing countries and also on the way the value chain that brings the product to the consumer works.

COFFEE

The fresh coffee cherries picked from the tree can be either wet or dry-processed. Wet processing leads to higher quality coffee but is more costly than dry processing. Almost all of East and Central Africa's Arabica coffee is wet processed, while the majority of Ethiopian Arabica and virtually all Robusta is dry-processed.

The wet process involves the mechanical removal of the outer skin and pulp that surrounds the coffee bean. After this the bean is washed, fermented and re-washed before it is sun-dried to become 'parchment' coffee. The whole process takes a minimum of seven days. It is carried out in the growing areas, either on the smallholdings using hand operated equipment or in small 'factories'. Parchment coffee is milled to remove the parchment skin from the bean. Parchment mills are typically large and located in commercial centres at some distance from the growing areas.

For dry-processing, the fresh cherry is sun-dried first and then hulled in a mill, removing the outer skin, flesh and parchment in a single process. Dried cherry mills are typically medium scale and located in or near producing areas.

For both wet and dry-processed coffee, the final output is the green coffee beans which are cleaned, graded and packed either into bags or directly into containers.

In world trade, coffee is categorised into Arabica and Robusta and by whether it is washed or unwashed. Within each of these categories, individual assignments are classified using sets of grades and standards that specify the minimum permissible moisture content and take account of bean size, defects in terms of broken, misshaped, discoloured and tainted beans, and the amount of foreign matter. The cup taste of roasted coffee is also evaluated for Arabicas and for some Robustas.

TEA

Africa only produces black tea. This is manufactured in large-scale factories located on estates or in areas of smallholder production. The factories have to be in the producing area because the leaf must be manufactured into the finished product within 24 hours of plucking. In Kenya, smallholder leaf is collected daily from farmers at the roadside in specially designed lorries.

At the factory, the leaf is first withered in troughs to reduce its moisture content. It is then damaged mechanically to allow air to enter the leaf causing it to ferment. In Kenya, this is done through cutting, tearing and curling the leaf. This 'CTC' procedure leads to smaller particles of tea than those produced by the main alternative, the 'orthodox' method that predominates in Sri Lanka and in some other Asian countries. Tea is left to ferment in controlled conditions for 1-2 hours and then 'fired' in hot air to stop the fermentation. It is then sorted and passed through sieves. This results in a set of main and secondary grades of different leaf sizes. These are bagged into aluminium foil lined paper sacks, which are palletised, shrink-wrapped and made ready for transportation in a container.

The quality of consignments of tea are assessed on the basis of the colour, shape and size of the leaf and on the liquor that it produces. A consignment may be tasted four or five times between the factory and the end user.

COCOA

Cocoa pods are opened within 10 days of harvesting and the beans and the pulp is removed by hand. The beans go through a 2-7 day fermentation process which raises the temperature, dissolves the pulp and leads to complex chemical changes within the bean. These cause the chocolate flavour and colour to develop.

On smallholdings, beans are fermented in heaps enclosed in banana leaves. The heaps are normally mixed on the second or third day to accelerate fermentation. On plantations, the process is normally carried out in large wooden boxes that hold 1-2 tons. Once fermentation is complete, the beans are sun-dried.

Cocoa beans are much more homogeneous than green coffee or made tea. Quality is assessed by cutting the beans lengthways and counting the number that are mouldy, slaty, insect damaged, germinated or flat. The number of beans per 100 grams is also used to gauge quality, although there is no internationally accepted bean size classification.

DOWNSTREAM PROCESSING

Coffee and cocoa can be stocked for several years without a marked impact on quality. As a result, stocks are held speculatively in both producing and consuming countries. Tea deteriorates from the moment that it is manufactured, with the result that producer and traders seek to hold pipeline working stocks only.

Coffee is retailed as whole roasted beans, ground roasted beans and soluble powder or granules. Soluble coffee accounts for about 20 percent of world consumption. Most roasting is undertaken in the country of consumption, but there is some trade in roasted beans and ground coffee between coffee importing countries, especially in Western Europe.

Soluble coffee is made from roasted beans, from which a liquid essence is extracted and freeze or vacuum dried into granules or powder. About three-quarters of soluble coffee is manufactured in importing countries and about one quarter in producing countries. Brazil currently exports soluble coffee equivalent to over two million bags of green coffee. India, Colombia, Mexico and Ecuador are also major soluble exporters. The only significant African exporter is the Ivory Coast, which accounts for about 3.5 percent of the soluble coffee exported by coffee producing countries (although it has recently been reported that Nestlé hopes to double the capacity of its plant in Côte d'Ivoire).

Cocoa processing is more complex. The beans are cleaned, roasted and then winnowed to remove the shells from the beans to leave cocoa 'nibs'. These nibs then undergo a process of alkalisation with potassium carbonate to develop the flavour and colour. They are then milled, 'ground' in the term used in the trade, into cocoa liquor. This is pressed to extract cocoa butter, leaving a solid mass of cocoa presscake. The butter is used in the manufacture of chocolate, while the presscake is made into cocoa powder. To make chocolate, cocoa butter is added to cocoa liquid with other ingredients, such as milk and sugar, depending on the type of chocolate being made. The mixture then goes through a series of rolling and kneading processes that affect its texture and flavour, before being heated, cooled and reheated to prevent discolouration. Finally it is moulded or used for enrobing fillings to make the final product for packaging and distribution.

Annex 2: African and World Production of coffee, tea and cocoa

Annex 1: Processing Requirements

Annex 2

AFRICAN AND WORLD PRODUCTION OF COFFEE, TEA AND COCOA

Jan-Dec	1970	1980	1990	1995	1999	2000	Jan-Dec	1970	1980	1990	1995	1999	2000
	('000 tons)							(Index 1970=100)					
COFFEE							COFFEE						
WORLD	3,850	4,829	6,063	5,522	6,515	7,395	WORLD	100	125	157	143	169	192
NON-AFRICA	2,555	3,668	4,809	4,393	5,423	6,211	NON-AFRICA	100	144	188	172	212	243
AFRICA	1,295	1,161	1,254	1,129	1,092	1,184	AFRICA	100	90	97	87	84	91
Ivory Coast	280	250	286	195	143	336	Ivory Coast	100	89	102	70	51	120
Ethiopia	170	187	204	230	217	230	Ethiopia	100	110	120	135	128	135
Uganda	202	135	129	181	252	143	Uganda	100	67	64	90	125	71
Kenya	58	91	104	95	71	100	Kenya	100	157	178	164	122	172
Cameroon	93	112	101	74	98	86	Cameroon	100	121	109	80	105	93
Madagascar	67	80	85	68	65	64	Madagascar	100	120	128	102	98	96
D.R. Congo	70	89	102	85	49	42	D.R. Congo	100	128	146	122	70	61
Tanzania	46	48	53	44	47	48	Tanzania	100	104	116	94	101	104
Angola	204	43	5	3	3	4	Angola	100	21	2	2	2	2
Others	106	126	185	154	147	129	Others	100	118	174	145	138	122
TEA							TEA						
WORLD	1,287	1,894	2,526	2,618	3,078	2,984	WORLD	100	147	196	203	239	232
NON-AFRICA	1,165	1,693	2,201	2,249	2,669	2,574	NON-AFRICA	100	145	189	193	229	221
AFRICA	121	200	325	369	409	411	AFRICA	100	165	268	304	337	338
Kenya	41	90	197	245	249	236	Kenya	100	219	480	595	605	575
Malawi	19	30	39	34	48	45	Malawi	100	160	208	182	257	238
Uganda	18	2	7	13	25	29	Uganda	100	8	37	70	136	161
Tanzania	8	16	18	24	25	24	Tanzania	100	193	213	286	294	278
Zimbabwe	4	10	17	15	19	22	Zimbabwe	100	245	431	380	470	558
Mozambique	17	20	4	1	2	10	Mozambique	100	115	24	6	9	62
D.R. Congo	7	6	3	3	2	2	D.R. Congo	100	84	43	47	30	26
Others	7	27	40	34	40	43	Others	100	409	600	513	602	638
COCOA							COCOA						
WORLD	1,543	1,666	2,532	2,991	3,163	3,443	WORLD	100	108	164	194	205	223
NON-AFRICA	423	640	1,010	1,081	1,064	1,098	NON-AFRICA	100	152	239	256	252	260
AFRICA	1,121	1,026	1,522	1,910	2,100	2,344	AFRICA	100	92	136	170	187	209
Ivory Coast	179	417	808	1,120	1,306	1,396	Ivory Coast	100	233	451	625	729	779
Ghana	406	277	293	404	398	437	Ghana	100	68	72	99	98	108
Nigeria	305	153	244	203	225	338	Nigeria	100	50	80	67	74	111
Cameroon	134	117	115	134	116	123	Cameroon	100	88	86	100	87	92
Others	97	61	62	49	55	51	Others	100	63	64	51	57	53
AFRICA AS A % OF WORLD													
COFFEE	33.64	24.05	20.68	20.45	16.76	16.01		100	71	61	61	50	48
TEA	9.43	10.58	12.86	14.11	13.29	13.76		100	112	136	150	141	146
COCOA	72.62	61.56	60.10	63.86	66.38	68.10		100	85	83	88	91	94

Source: FAOSTAT.