Commodities, Donors, Value-Chain Analysis and Upgrading*

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1. Introduction: the ‘commodity question’

Tropical agricultural commodities (henceforth agro-commodities) continue to play a major economic role in many developing countries, especially in least developed ones.\(^1\) On the other hand, measured in terms of share of global trade, ‘agricultural products’ fell from 35% in 1950 to 9% in 2001 (WTO 2002). The terms of trade of these products have also sharply declined – by roughly 66% over the 20th century as a whole, and by 10% alone in the century’s last decade (Thompson 2001). Efforts by developing country governments to promote forward integration into agro-processing have had only patchy success, particularly when compared to efforts to start new labour-intensive industries. Finally, over the last fifteen years, many of the classical instruments for public intervention in relation to agro-commodities – international commodity agreements, public marketing boards, national cooperative unions – have disappeared. Against this background, agro-commodities have occupied an increasingly residual role in development thinking and - more particularly - in the concerns of development agencies. Only in the context of apparently intractable ‘crises’, most recently in the case of coffee, has close attention recently been deflected back to them – and even in these cases there has been little evidence of serious re-engagement.

With the notable exception of risk management tools (see below), new focuses for development thinking and development agency intervention in the economic field have passed agro-commodities by. For example, where they have been concerned with agriculture at all, new generations of private sector development and trade capacity development interventions have concentrated heavily on so-called ‘high value-added’ foodstuffs – fresh vegetables, exotic fruits and table fish/shrimps. Such a focus can be regarded as an instance of the herd-like behaviour and ‘one size fits all’ thinking amongst development agencies evident across a wide range of fields.

This paper argues that donor interventions in the area of agro-commodities remain both feasible and of critical economic importance. However, for them to be worthwhile they must be anchored in attention to and understanding of a set of issues laying just below the surface of questions such as secularly declining prices and shares of world trade. These ostensibly second order, but actually critical, issues concern widening price spreads around declining prices, the changing internal composition of trade in a number of commodities, structural and normative (i.e., ‘taste’-related) developments in end-markets for them, as well as developments in the organisation of their international trade. Understanding these issues implies less traditional economic analysis and more the adoption of a political economy perspective, namely global value-chain (GVC) analysis.

This paper is divided into two roughly equal halves. The first provides a critical history of development thinking and development assistance interventions in relation to agro-commodities, from the 1960s through to ‘Private Sector Development’ (PSD) and Public-Private Partnership (PPP) initiatives since 2000. The second introduces the GVC approach, in general and in relation to

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\(^1\) Between 1992-97, nine developing countries were dependent for more than 10% of their export income on coffee Arabica, six on cotton, five on sugar, four each on cocoa and livestock, two each on coffee robusta, tea, bananas and copra and one each on vanilla, oilseeds, rice and jute. 34 of 42 Sub-Saharan African countries fell into one or more of these categories (Page & Hewitt 2001, 11-12).
agro-commodities in particular and then uses this approach to analyse some current forms of upgrading in relation to two leading agro-commodities, cotton and coffee. The paper concludes by raising a series of issues that PSD-type initiatives would benefit from addressing. The parts of paper on GVC analysis of coffee and cotton draw very heavily on research by colleagues working within the framework of a common programme\textsuperscript{2}, while its theoretical sections draw on joint work with Stefano Ponte.

2. Development thinking, development assistance and commodities

Development thinking and assistance in relation to agro-commodities has gone through three main phases in the past half-century. In the first, agro-commodity production was seen both as a critical object of long-term global economic stabilisation measures, as well as an obvious vehicle for the capitalist modernisation of developing countries. During the second phase, the economic importance of agro-commodities was downplayed - except as a source of export-led recovery in countries undergoing structural adjustment. Even in these cases though, the desirability of diversification out of agro-commodities was stressed. During the latest phase, narratives about diversification have become dominant. At the same time, the issue of price stabilisation has resurfaced, but now in relation to the role of new market-friendly instruments. Finally, PSD interventions of various kinds have become evident for the first time. Until this phase, there had been an implicit association in developing thinking between agro-commodities and developing country state institutions. In the 1960s and 1970s when the consensus considered that modernisation could be brought about only by the state, this led to a heavy concentration of development interventions on agro-commodities. Increasingly since the 1980s the private sector has been seen as the motor of modernisation, and economic attention has tended to shift to sectors which were never subject to state intervention (so-called ‘non-traditional exports’). It is hardly a coincidence then that recent attention to commodities has been mediated via a ‘post-Washington Consensus’ focus on PPPs.

2.1 The golden age of commodities

The 1960s and 1970s saw an unprecedented convergence of interests in promoting ‘healthy’ agro-commodity-based economies in developing countries. On the side of Northern countries political, geo-political and economic interests were all involved. Politically these reflected a wish to consolidate capitalism in the South, against the background of the Cold War. Geo-politically they reflected a wish to guarantee access to supplies of what were often at the time regarded as ‘strategic’ goods\textsuperscript{3}. Economically they reflected a desire to minimise the possible influence of commodity price rises on inflation levels, on short-term movements of capital, and thereby on economic cycles generally. The importance of the last of these concerns had been already underlined two decades earlier by Keynes (1942/1980), who proposed an ‘International Clearing Union’ aimed at financing buffer stocks of commodities. In relation to Southern countries,

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\textsuperscript{2} The programme, on ‘Globalisation and Economic Restructuring in Africa’, involved researchers from the Danish Institute for International Studies (formerly Centre for Development Research, Copenhagen), the Geography Department at Copenhagen University and the Economics Department at the Royal Danish Agricultural and Veterinary University. On coffee, the paper draws heavily on work within this programme by Stefano Ponte, while on cotton it draws heavily on work by Marianne Larsen.

\textsuperscript{3} Of course, this applied much more to minerals than to agro-commodities, since the latter’s supply was finite.
particularly those just emerging from colonialism, diffusion of smallholder-based agro-commodity production was seen as a cornerstone of rural and national development. It could provide, it was thought, an institutional framework and a revenue basis to establish a broadly-based social infrastructure and thereby a national identity - while at the same time creating a platform for resource-based industrialisation.

In this period, most donors invested heavily in projects and programmes aimed at diffusing agro-commodities, as well as at increasing their productivity via credit-based input supply and other measures. Credit recovery was seen as being most efficiently secured by granting buying monopolies to the national agencies responsible for crop diffusion, etc. Hence a rural development model based on parastatal- or top-down cooperative marketing organisations was institutionalised or, where introduced already in the colonial period, confirmed. The extent of donor involvement in this process is difficult to exaggerate. Despite a long-standing policy of not lending for project assistance to most agro-commodities, World Bank projects alone covered 2.2% of the global cultivated area for coffee and 8.4% of the global cultivated area for cocoa during the period 1961-90 (Schiff 1995). French projects covered most cocoa, coffee and cotton production in Francophone Africa.

Against this background it is hardly surprising that concerns raised by Prebisch (1950) and Singer (1950) about a long-term decline in the barter terms of trade of primary commodities relative to manufactures, as well as related arguments about accompanying tendencies toward commodity price instability⁴, commanded broad international attention. By the mid 1950s, despite the reservations of the IMF, they were also being used to legitimate concerted action to mitigate these trends. The first of these actions were in the GATT, in the shape of the adoption of Articles XXXVI and XXXVIII in 1954-55⁵, followed shortly by a resolution allowing for the convening of inter-governmental meetings on commodity trade. The first international commodity agreement (ICA), that for sugar, was launched in 1954, followed by ones for coffee (1962) and cocoa (1972). In 1976, agreement was reached in UNCTAD on a Common Fund for Commodities, whose main task was envisaged as the creation of a central financing facility for these and further ICAs⁶.

⁴ Prebisch (op. cit.) and Singer (op. cit.) argued that the decline in the relative prices of commodities was structural, since demand for commodities was inelastic while demand for manufactures was elastic. Price instability around a declining curve was induced via the interaction of inelastic demand with a supply position that was potentially highly variable due to accidents of nature, as well as to the tendency for price increases to generate not very easily reversible over-investment in producing countries.

⁵ These state, inter alia, that ‘There is a need to devise measures designed to stabilise and improve conditions of world markets in these products including in particular measures designed to attain stable, equitable and remunerative prices.’

⁶ In fact only one further ICA was established, that for natural rubber (1980).
Producing country oligopolies were one set of parties to the agreements, while consuming country governments were the other. Under the agreements, recommended or support prices were established and defended, either on the basis of setting producing country export quotas or via the financing of centrally-held buffer stocks. Figure I shows that price levels above the recommended price were achieved for a substantial majority of the lives of the coffee and rubber agreements, and for around half the life of the cocoa and sugar ones. According to Hermann, Burger & Smit (1993), at least one of the agreements (that for coffee) persistently raised prices by 24-30% over what otherwise would have been market-clearing levels.

Alongside the ICAs were two broadly complementary international initiatives: the IMF’s Compensatory Finance and Buffer Stock Financing Facilities and the EU’s STABEX scheme. Even though it did not accept the validity of the Prebisch-Singer thesis (Sapsford and Singer 1998), the IMF established a Compensatory Finance Facility in 1963 to provide non-conditional balance of payment support to member country governments experiencing sharp declines in commodity export earnings as a result of external shocks and a Buffer Stock Financing Facility in 1969 to support governments’ contributions to ICAs. Prior to mid-1980s both funds were drawn on extensively, despite their relatively high interest rates\(^7\) - although most borrowers were middle-income countries.

STABEX, which was also designed for non-conditional support to ACP countries experiencing commodity price-related balance of payments problems, dated from the first Lomé Convention. Unlike with the IMF facilities, loans were interest free under the first three Lomé Convention. A total of € 1.3 bn. was disbursed during this period (EU Commission 1997).

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\(^7\) Total drawings prior to 1999 from the Compensatory Finance Facility were SDR 8.4 bn. (US$ 11.7 bn.) and from the Buffer Stock Financing Facility SDR 0.56 bn. (US$ 0.78 bn.). The Compensatory Finance Facility was hardly drawn on after 1989 and the Buffer Stock Financing Facility was last used in 1984 (IMF 1999).
2.2 The 1980s and 1990s

The last twenty years of the 20th century saw a disengagement of donors from commodities, against a background where both the political and geo-political conditions underlying their ‘golden age’ disappeared. This was one factor amongst many underlying the collapse of the ICAs (apart from that for natural rubber), a process which then triggered a spectacular fall in commodity prices. This fall, combined with the rise of monetarist economic policies in the North, in turn undermined the main economic ground that Northern countries had for supporting stable commodity prices, namely the link between commodity price changes and inflation. The period was also one where, although intellectual recognition of the validity of the Prebisch-Singer thesis extended to the Bretton Woods institutions for the first time (cf. Sapsford & Singer op. cit.), new theoretical arguments emerged for why interventions to support commodity prices were inappropriate.

<table>
<thead>
<tr>
<th></th>
<th>Average price, final 6 years of agreement</th>
<th>Average price, first 6 years after collapse</th>
<th>Average price, second 6 years after collapse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee (economic provisions ended 1988)</td>
<td>182.3</td>
<td>109.8</td>
<td>145.3</td>
</tr>
<tr>
<td>Cocoa (economic provisions ended 1989)</td>
<td>151.7</td>
<td>98.6</td>
<td>103.7</td>
</tr>
</tbody>
</table>

Source: GATT/WTO, various

The apparent success of the ICAs in pushing commodity prices higher became a growing source of tension between the two main sets of parties to the Agreements. Consuming countries never wholly accepted that they should be used to defend specific long-term floor prices, let alone push prices higher, and as the 80s unfolded the political reasons for their silence on this question disappeared. In addition there were fundamental problems in securing agreement between, or even the participation of, all major supplying countries. Critical issues here were how to deal with new players who had entered the world market in order to exploit the price improvements attained as a result of the Agreements, and side-selling outside them by producing countries that were signatories (Mshomba op. cit., Gilbert 1996, Bates 1997). According to Maizels (2000) total volumes of world commodity exports increased by 40% during the 1980s, despite a series of functioning export quota and buffer stock schemes. None of the agreements in question, apart from that for rubber8, was able to survive the end of the 1980s.

The 1980s also witnessed the emergence of new analytical narratives around commodities, focusing on possible negative effects of commodity price rises. One of these was the ‘Dutch disease’ thesis, (Corden & Neary 1982) which argued that booms in a single large tradable sector impose heavy adjustment costs on other tradable sectors. This happens because resources are withdrawn from other tradable sectors, not only to feed the sector which is booming, but also to support an induced growth of demand for non-tradables. Earnings brought in by the booming

8 The apparently outstanding success of the INRA for producing countries is somewhat misleading, however. INRA’s recommended price for natural rubber is not set oligopolistically but is linked to the open market price for synthetic rubber.
sector also induce a rise in real exchange rates, which in turn further worsens the competitiveness of other tradable sectors. A second narrative questioned the capacity of developing country governments to correctly manage commodity price increases, and linked their alleged consistent mismanagement - in the form of dissipation of increased revenues in unproductive public spending – to the inducement of cycles of world commodity price instability. The broader significance of this narrative laid in its recommendation that commodity price improvements were only likely to be managed properly in a context of trade and investment liberalisation, in other words structural adjustment.

The second of these narratives was enthusiastically embraced by the Bretton Woods institutions, as well as by the EU. In the cases of the IMF and the EU, the motives behind this embrace were also practical. Sharply falling commodity prices could lead to major resource drains from these institutions, through the Compensatory Finance Facility and STABEX, as a result both of increased eligibility for assistance and lower repayment rates. STABEX in particular threatened to distort EU lending generally. In 1990-91 the EU found itself committed to disburse € 1.38 bn. to eligible applicants, three times more than had been reserved for this purpose, with the consequence that it was able to pay out only 42% of the sum due to eligible applicants during the next three years. Even so, STABEX disbursements rose to 13% of all EU aid (EU Commission 1997, Page & Hewitt op. cit.) under Lomé IV. At the same time, repayment rates collapsed. The EU responded in the short-term by converting existing STABEX loans to grants, but at the same time both it and the IMF linked further access to adjustment-style conditionalities.

Donors nonetheless continued to directly support commodity production in developing countries in this period, albeit in the contexts of adjustment programmes where attention was also paid to diversification. According to Morgan and Sapsford (1994) the multilateral development banks committed as much as 5% of their total loans in the second half of the 1980s to diversification projects, mostly from coffee, cocoa, rubber and palm oil. In Africa, ‘good’ adjusters such as Ghana and later Zimbabwe, Tanzania and Uganda were major beneficiaries of direct support to commodity production (cf. Engberg-Pedersen et al 1996). In some cases, notably cocoa production in Ghana, support was so great that worries about possible ‘adding-up problems’ were voiced (e.g., Toye 1991).

The period concluded with renewed policy debate concerning commodity prices. On the one hand, a majority of the contributors to a special edition of World Development (Vol. 22, No. 11) favoured a revival of intergovernmental arrangements – if not in the form of a new generation of ICAs, then in that of a uniform export tax levied by producing countries (cf., for example Maizels 1994 and Schiff op. cit.)11. On the other, some World Bank economists advanced the notion of promoting market-based ‘price risk management’ (PRM) instruments in developing countries instead (Varangis & Larson 1996). Although efforts by some producing countries to revive export

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9 According to Collier et al (1998) STABEX transfers accounted for almost a quarter of total government revenue in Ethiopia and Uganda during some years of this period.

10 ‘Adding-up problems’ refer in this case to the impact of heavily-supported agricultural export market liberalisation for the terms of trade for primary commodities, when this occurs in several countries simultaneously.

11 The idea here seems to have been that such a tax would eliminate marginal producers and hence restrict global supply, pushing up prices.
quota-type arrangements have subsequently recurred, most notably in the case of coffee\textsuperscript{12}, given the contemporary political and ideological context it was fairly predictable that it would be PRM that gained more favourable attention in donor circles.

2.3 The present situation

Since the late 1990s, donor discussion in relation to commodities has focused on the subjects of diversification, PRM, and PSD/PPP support interventions in liberalised producer country markets. Revival of international commodity agreements has been not discussed at all, and compensatory finance has been fully integrated into (conditionality-based) general contingency financing in the case of the IMF, and eliminated completely in the case of EU’s STABEX.

2.3.1 Diversification

Discussion stressing the desirability of diversification away from primary commodities is not new. However, in recent years this stress has become more widespread and insistent,\textsuperscript{13} while moving steadily away from its original focus on forward integration into commodity processing. Today the main emphasis is upon diversification into ‘non-traditional’ and/or high-value agricultural and fishery exports. These range from medicinal herbs to dried fruits, but the most common emphasis tends to be on fresh vegetables, flowers, exotic fruits and fish/seafood (see for example FAO 2001, para. 165 and ILO 2000, para 8). Promoting diversification along these lines has become a leading practical concern of a number of donors, most notably USAID, the EU, and also – via the (WTO-ITC-UNCTAD-UNDP sponsored) JITAP and Integrated Framework Programmes – a variety of other bilaterals. While the main general benefits of diversification away from commodities in general are said to be reduced risk (for producers) and more stable export revenues (for countries), higher-value agricultural exports are also said to offer good prospects for long-term income growth by virtue of their relatively high income elasticities. Less frequently aired are the problems and difficulties associated with agro-export diversification, particularly for the many of the most commonly recommended products. The most obvious of these are described briefly below:

\textit{Agro-ecological conditions.} The constraints imposed on diversification by adverse agro-ecological conditions are most obvious in the case of cotton, which in many developing countries is grown mainly by smallholders in marginal areas as a sole cash crop. This has led to even leading figures in the World Bank concluding that recommendations to diversify out of cotton are frequently facile (cf. Cleaver 2002). Inversely, the extent to which it is practicable to cultivate some crops typically recommended as diversification options is also limited by agro-ecological conditions. Leguminous vegetables and flowers, for example, require more or less constant water availability.

\textsuperscript{12} The (Latin American) ‘Association of Coffee Producing Countries’ introduced a quota-based programme in 1999 but this had to be renegotiated only a few months after its inception as Brazil radically exceeded its quota. Later the programme was abandoned. In 2002 the International Coffee Organisation – the intergovernmental organisation which administered the former ICA on coffee – introduced a global programme aimed at taking very low quality coffee out of the international market. The results are not clear.

\textsuperscript{13} Encompassing movement out of tree crops in Africa for the first time, for example - as opposed to an initial focus on movement out of rice (Asia) and out of minerals.
The nature of existing, ‘spontaneous’ forms of agricultural diversification. At least as far as smallholders are concerned, existing patterns of diversification are typically underestimated. Indeed they are so entrenched as to also constitute a barrier to further diversification. Diversification into a variety (often a wide one) of food crops is an extremely well-established means for smallholder to hedge risk. By contrast, cash-generating output is very often less than half of total output, leaving little scope for adoption of new cash crops (Eicher & Baker 1992).14

High transaction costs and related entry barriers. High transactions costs (defined as costs of carrying out exchange) are perhaps the most important difficulty facing diversification into higher-value products however. As Delgado and Siamwalla (1997) point out, these arise mainly from the relatively high costs involved in storing and processing such goods, and from the relatively specialised inputs that they require. Costs of monitoring quality are also very high however, and rising sharply with the increasingly common requirement that producers conform to ‘good manufacturing practices’ such as HACCPs. Both because of the investment costs involved and the considerable economies of scale entailed in monitoring quality, these sectors are characterised by high and escalating entry barriers that exclude non-commercial farmers or fishers from participation (except where regulations are enforced that prevent this occurring – compare in this respect Dolan & Humphrey (2001) on East African horticulture with Gibbon (2001) on the Lake Victoria export fishery).

Potential future adding-up problems. A final issue, at least potentially, is that of ‘adding up’, i.e., the terms of trade implications for (e.g.) higher-value agro-exports when several countries increase exports simultaneously. Unit price trends into the UK and France for four groups of vegetables and fruits commonly grown in tropical countries can be used as a proxy for the current extent of this problem.15

Table II Average unit prices (current c.i.f., €/kg.) for vegetables and fruit into UK and France, 1991-2002

<table>
<thead>
<tr>
<th>Category</th>
<th>708</th>
<th>709</th>
<th>804</th>
<th>807</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UK</td>
<td>France</td>
<td>UK</td>
<td>France</td>
</tr>
<tr>
<td>1991-94</td>
<td>1.97</td>
<td>1.51</td>
<td>1.46</td>
<td>0.92</td>
</tr>
<tr>
<td>1995-98</td>
<td>2.12</td>
<td>1.51</td>
<td>1.60</td>
<td>0.96</td>
</tr>
<tr>
<td>1999-02</td>
<td>2.37</td>
<td>1.49</td>
<td>1.75</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Key: 708 = Leguminous vegetables, shelled or unshelled, fresh or chilled; 709 = Other vegetables, fresh or chilled (except potatoes, tomatoes, alliaceous vegetables, edible brassicas and lettuce); 804 = Dates, figs, pineapples, avocados, guavas, mangos and mangosteens, fresh or dried; 807 = Melons, watermelons and papayas, fresh
Source: Eurostat, Comext data base

14 This is a variant of classic Chayanovian arguments concerning the problems of increasing production of single cash crops within peasant systems (for an early application to Africa, see Boesen & Mohele, 1979).
15 The purpose of using data from both UK and France in Table II is not to generate a direct comparison of prices for the same categories of products between the two markets, but rather to examine historical trends in both. Direct comparison on price is problematic since the different versions of the same product groups are favoured in the two markets. For example, the majority of imports into France under category 708 have been bobby beans from North Africa, whereas the majority into the UK have been higher-value green beans from Kenya.
Even in a context when import levels were increasing fast each case (Eurostat, op. cit.)\textsuperscript{16}, prices can be seen to have roughly kept pace with inflation for only one category/country combination (708 into the UK). For three category/country combinations (all into France), they actually fell in current terms. These results are by no means as bad as those for agro-commodities, but they are hardly encouraging.

2.3.2 PRM

Following the interest awoken by Varangis and Larson’s paper (op. cit.), the World Bank launched in 1999 a (public-private) International Task Force on PRM. The latter’s initial focus was on how to assist producing countries – particularly LDCs – to use futures markets. Futures markets have existed since the early 20th century for most (but not all) agro-commodities.\textsuperscript{17} Historically they have been used mainly by international traders – and by some large producers where these also trade internationally on their own account – in order to hedge risk. Speculators too have always played a role in these markets, which has accentuated price movement within them but also assured their liquidity.\textsuperscript{18} Futures are legally binding contracts to buy (sell) specific volumes of specific commodities at a fixed price on a given day. To hedge his price risk over a season, a producer has to buy (or get to be issued) a contract that he will deliver X tons on day Y at price Z. If the price on day Y is Z-\(n\) then he has locked in a better price and can close the contract. If the price however is Z+\(n\) then he must sell his crop on the spot market for the better price and try to sell to someone else his contract to deliver at price Z. To do this he will forfeit a discount, which theoretically must be below \(n\), although it should be reasonably close to it. Besides the hedge itself the main advantage to the producer is that, instead of holding the product as stock until the selling date or having to buy from others when the other party chooses to close the contract, he sells his own physical crop as and when he pleases and otherwise simply makes paper transactions.

For reasons that have not been explicitly stated by proponents of this approach, since 1999 discussion of conventional futures contracts as the PRM instrument of choice has been displaced by discussion of put options, price insurance transactions and warehouse receipt-based finance – or rather, by a combination of these (cf. International Task Force website). A put option is a type of contract similar to a futures one, but in this case the seller – instead of having an obligation to close the contract on day Y - can close it at \textit{any time} prior to day Y. Opening such a put option contract entails payment of a premium by the seller to the buyer, over and above the cost of opening a conventional futures contract. Price insurance transactions involve a speculative dimension mainly for the insurer, who guarantees the insured party a floor price and charges a premium reflecting his calculation of the risk of spot market prices departing from this floor price. The extent of the security of the hedge offered is directly reflected in the level of the premium. Warehouse receipt credit is credit issued by a financial institution against the collateral

\textsuperscript{16} By between 50 and 100% in six category/country combinations described in Table II and by more than 100% in the remaining two.

\textsuperscript{17} See Cronon (1991) for an excellent discussion of the birth of these markets in the US.

\textsuperscript{18} A debate exists concerning the extent to which the rise since 1980 of new classes of speculators (e.g., hedge funds) has contributed to increased price volatility in commodity futures markets. Mitchell and Gilbert (1997) concluded from a fairly detailed empirical study that the main impact of hedge fund activity has been to accelerate price movements, rather than to lend prices greater volatility. This is because hedge fund investment strategy seems to be based mainly on a consideration of market ‘fundamentals’. Pressures toward greater volatility have arisen too, but apparently mainly from the adoption new types of (‘trend’ and ‘technical’-based) investment strategies by smaller speculators.
of a given magnitude of crop stored in a supervised warehouse, or in some circumstances against the promise of delivery of such a magnitude into such a warehouse.

In the current thinking of the International Task Force, developing country producers can engage in PRM through combining these three types of instrument, on the basis of inter-locking arrangements with international traders and local credit institutions. At the beginning of a season the international trader can buy or get issued a put option in a futures market, for a specific magnitude of crop at floor price Y. He can then insure this floor price for the producer-seller of this crop, by paying a premium on their behalf to an insurer. In such a case the trader will himself carry the majority of the risk concerning whether the producer-seller will repay the premium. The remainder of this risk can be borne by a local credit institution, against the producer-seller’s warehouse receipts (or promises equivalent to them). As far as is known, after four years of preparation, the International Task Force has been able to set up two schemes of this kind, on a pilot basis and covering a total of a few thousand coffee producers in Uganda and Tanzania (Rabobank 2003).

Limitations associated with the use of PRM in relation to developing country agro-commodities have been widely noted (e.g., Maizels 1994 and 2000, UNCTAD 1998, Page & Hewitt 2001, Murphy 2002), without this having dampened enthusiasm for them to any noticeable degree. They include the fact that not all agro-commodities have derivative financial markets or that, in some cases such as cotton where they do exist they comprise contracts only for one national variety of the product; that such markets only cater for price and not volume risk (the latter is arguably as great); that the maximum period they can cover price risk for is rather short (a maximum of two years); that they cannot be used to hedge commodity price premiums, as opposed to index prices; that the costs of using them (in terms of brokers’ fees, collateral when getting contracts issued, plus – where applicable – premiums for non-standard contracts such as put options) are high and in most cases subject to very considerable economies of scale; that users need to be in daily contact with financial markets in order to use them optimally; and that they require a high level of liquidity to do so (profits and losses are settled on a daily basis). These limitations point toward the conclusion that it is only likely to be very large-scale, volume-secure, credit-worthy and globally-oriented producers who will be able to make much use of such markets, in the absence of subsidies, technical assistance, donor-brokered financial intermediation or all three. Even players conforming to these characteristics will benefit from these markets mainly by price discovery and by reducing spot market losses, rather than by realising benefits from price increases. As for the behaviour of ‘real’ commodity markets themselves, these instruments are broadly neutral. Their role is to reduce the effects of price volatility for individual actors, rather than to reduce volatility in aggregate.

19 Only US cotton can be delivered against the New York futures contract. Some international traders have taken to hedging their non-US cottons by taking positions in the futures market, but this is a very imperfect hedge – and made more imperfect still by the US Farm Bill’s impact on the spread between the US price and the Cotlook A index.

20 In recent years, the actual length of available futures contracts has become much shorter than this, as spot have tended to replace forward contracts in the physical market in the wake of liberalisation. A representative of the commodity’s research group LMC International stated at the 1999 London Cocoa and Coffee Conference that the majority of coffee futures transactions were now in the first two or three positions (i.e., they represented futures of only 2-3 months’ duration). Most contracts for cotton are also concentrated in ‘nearby’ positions.

21 The same applies to the size of contracts. Brokers’ fees for contracts covering 500,000 lots are only marginally higher than those for contracts covering 100,000.
Presumably, it was considerations concerning entry barriers and economies of scale which led the World Bank in the direction of sold-on price insurance rather than first-hand futures trading when it came to smallholder producers. But whether even this model can be operationalised without subsidies both to international traders and credit institutions is unclear. Certainly, the transaction costs of such schemes will be high and there seems no incentive for international traders or credit institutions to assume them for third parties without a subsidy (especially given endemic problems of recovering credit from producers via crop sales, when markets have been liberalised). Moreover, the logical basis of price risk insurance for producers - or put options, which involve the same principle - is not obvious. In a Rabobank study (2002), carried out only a few months before this company became the executing agent for the World Bank’s pilot schemes, the notion of smallholder price insurance was discussed with outright derision:

‘Price risk insurance for producers is not an option. This...was done earlier by governments of some coffee producing countries, but in reality this was a subsidy when the price fell...one cannot insure a market price because one cannot guarantee a market price. No...mutual insurance can give such a guarantee without making the insurance premium equal to the insured deficit...’

2.3.3 PSD and PPP

Although donors’ recent support for PSD and PPP-type interventions in the agricultural sector generally have been directed mainly toward higher value-added products, such interventions have also increased notably for agro-commodities.

Schulpen and Gibbon (2002a), discussing bilateral donor PSD interventions, compare current social science diagnoses of the concrete problems faced by private sectors in developing regions (particularly Africa) with the content of donor programmes in this area. Contemporary academic literature on African business highlights the low technical and learning capabilities of the great mass of enterprises; the low level of linkages (vertical and horizontal) between them; and the tendency for more dynamic enterprises, and for enterprises generally in more dynamic sectors and sub-sectors, to replicate the ‘enclave’ organisational pattern characteristic of the colonial era – including internalised supply of primary commodity inputs. This suggests, they argue, that donors’ PSD interventions could most usefully focus at the institutional level, on enhancing access to capital, technology and management capacity through sector-based programmes. In addition, the promotion of vertical linkages between enterprises in the same sector with different resource endowments, through assistance to provide incentives and to develop credible regulatory frameworks, could ensure a complementary poverty alleviation focus. However, bilateral donors’ actual programmes have tended to be driven more by domestic supply considerations, focussing strongly – and sometimes exclusively - upon promoting links between individual enterprises (and business associations) in donor countries and others in partner countries, without any clear relation to the objectives of overcoming structural problems in recipients’ private sectors or of reducing poverty.

As for multilateral donors (i.e., the development banks), PSD lending mainly takes the form of concessionary equity finance for individual enterprises, who have applied directly to them and who are selected according to commercial criteria; otherwise their lending under this category is mainly conditionality-based adjustment lending to governments. ‘Supply-driven’ business-to-
business partnership programmes are not present (unless the EU is considered as a multilateral, rather than a bilateral, donor), but multilateral support still has problematic features (Schulpen & Gibbon 2002b). Until very recently, the ‘development’ – as opposed to business - outcomes of investments were not used as a criterion for direct lending by any of the development banks. Meanwhile, even internal evaluations by these banks have pointed out that their adjustment lending in support of PSD has been focused almost exclusively on privatisation and drafting, enacting specific legal reforms rather than building institutional capacity or devising wider regulatory frameworks, and that frameworks for understanding or formulating ‘pro-poor’ enterprise reform have been generally absent.

Donor PSD and PPP interventions directly bearing on agro-commodities, particularly by multilaterals, have been afflicted by similar problems. It is not intended here to revisit World Bank sector reform programmes, except to echo what now appears to be the consensus within the Bank’s own Rural Development Department – namely that, for all their many serious defects, export marketing monopolies offered solutions to problems of input credit recovery and quality control which most (?) private market systems do not appear to be able to provide. As for direct lending to private operators, whether by multilaterals or (on a smaller scale) by bilaterals, this appears in some sectors in some countries to have been associated with a considerable heightening of competition in national supply markets. While such competition tends to give producers a higher share of the export price, in contexts of weak post-reform institutional development it also leads to a scramble for the crop and a degradation of quality, which in turns leads to discounting of export prices.

At multilateral level the only exception to this lending pattern is the Common Fund for Commodities, although the resources that this commands are not great (its project finance contribution since 1989 has been only $178 mn. (CFC 2003)). Recently, this agency has concerned itself with financing non-physical infrastructure-based ‘market development’ projects in cotton, cocoa and cotton, presumably made necessary by post-adjustment market failure. Indeed such interventions account for the bulk of current CFC lending. Few if any details are available on the content of these projects, apart from that they are all directed at governments and implemented by UN agencies.

During the 1980s and most of the 1990s, bilateral interventions bearing on agro-commodities mainly took the form of programmes to support multilateral efforts at privatisation. Opportunities for business-to-business twinning operations, which were otherwise the bread and butter of these programmes, were necessarily restricted given the highly divergent sectoral and product profiles of donor and recipient countries. But although bilateral PSD/PPP programmes (or individual interventions within broader programmes) with an agro-commodity firm-level focus have tended to be rare, when they have occurred they have sometimes departed in interesting ways from more typical bilateral PSD activities.

One such example is Danida’s Private Agricultural Sector Support programme in Tanzania (Danida 2003), aimed at supporting the growth of private commercial farming and agribusinesses, typically of a size and capability below that eligible (or equipped) to apply for
funding from the multilateral development banks.\textsuperscript{22} A second is a series of PPPs initiated in the last two years by GTZ, in the Nicaraguan cocoa and the Vietnamese and Peruvian coffee sectors (GTZ 2003a,b; Ackermann 2001). All three involve Northern private companies, but – rather than being in the form of tied aid - only in one case (cocoa) is a German-owned company (the chocolate manufacturer Ritter) involved. In this and the Vietnamese coffee project, a specific locality has been chosen where production quality is being upgraded with the direct involvement of Kraft Foods and Douwe Egberts, through specialised extension provision and development of new quality control procedures. The Peruvian project involves Jacobs Coffee in developing (though not itself implementing) new quality standards and instruments for a sector as a whole.

The three latter projects in some respects resemble corporate social responsibility-type initiatives adopted elsewhere by certain lead firms in the coffee sector, usually in collaboration with NGOs rather than donor agencies. Amongst these are a similar project to the Vietnam one described above, undertaken by Douwe Egberts in Uganda, and projects in Guatemala, Bolivia, Peru and Honduras by Ahold Coffee Company that include not only a focus on improved product quality but also labour conditions, social infrastructure and nature conservation (see Rabobank 2002 for further details). The largest such project seems to be one worth US$ 1.5 mn., currently undertaken by Procter & Gamble with the NGO Technoserve (Oxfam 2002, 47).

Interventions of this kind are unusual not only in their involvement of firms that are ‘chain drivers’ (see below), but also in that they imply a high level of supply-chain integration between lead firms and primary producers of a kind that is rather untypical for the nature of business relations generally in these sectors (see below). However, the extent to which they are seen by the firms themselves mainly as instruments for establishing direct relations with selected groups of suppliers, as opposed to public relations exercises, is open to doubt. Certainly the latter dimension is strongly present. Ackermann (op. cit.), describing Jacobs’ Peruvian project in the GTZ house journal Akzente Focus, writes:

‘...Fair Trade (initiatives do)...not offer – with only 1% of world trade volume – much commercial competition (but ) they do considerably tarnish the image of large traditional coffee importers and distributors like Jacobs who are vulnerable to being stigmatised as proponents of unfair trade structures...Partnerships with a major player in development cooperation such as GTZ could help them to solve this image (problem). Is it only a coincidence that, at Jacobs ...PPP concepts are developed in the PR department? Other departments are far less concerned with them...’

As for establishing direct relations with selected groups of suppliers, such projects may have a genuinely pilot status, although the regional origins concerned are not necessarily of serious commercial interest and the volumes involved are almost certainly not.

\textbf{2.4 Summing-up}

Donor thinking and activity in relation to commodities has followed broadly the pattern set by development aid generally over the last half century. For a long period, northern countries technically – and to some extent financially - underwrote the viability of agro-commodity

\textsuperscript{22} The programme mainly takes the form of assisting enterprises developing feasibility studies, providing credit guarantees in support of commercial borrowing, and some minor participatory loans.
economy. Then, over a much shorter period, they became disillusioned with this state of affairs and directly contributed to its collapse. This has given way in the most recent period to a more pragmatic and variegated approach, standing on three legs. Respectively, these point toward abandoning the ruins of commodity economy (diversification), mitigating risk for some of its most vulnerable actors (PRM) and directly drawing corporate actors into efforts to upgrade pockets of it (PSD/PPP). At first sight this bears resemblance to a coherent strategy – one which indeed seems more coherent than its predecessors. Further examination however reveals the first two of its legs as less promising propositions, and its third one as being undertaken for reasons that cast doubt on its generalisability in this form.

At the same time this third leg is, at least potentially, extremely interesting. This is because of the actors that it involves, and some of the issues that it deals with. The relevance of the latter is almost certainly a result of the presence of the actors in question. However, for this to be fully understood, and for proposals that are more genuinely generalisable to be generated, it is necessary to turn to value-chain analysis.

3. GVC analysis

GVC, or global commodity chain, analysis was developed originally as a way of describing the new generation of global manufacturing systems that emerged during the 1980s and early 1990s, linking the US and Asia in particular. Unlike manufacturing systems which had been established in the previous two decades, these were internationalised not on the basis of Northern FDI and intra-firm trade but rather on the basis of trade between independent Southern and Northern firms. Such FDI as they involved was of a South-South nature. Furthermore, Northern firms’ motives for entering them were no longer simply to access cheap labour, but also to attain a heightened degree of organisational flexibility through outsourcing. Managed inter-firm trade systems of this kind were especially common in labour-intensive sectors such as apparel, footwear and toys.

Gereffi (1994) described such value chains as having three key dimensions:

- a specific physical input-output structure and geography
- a ‘governance structure’, referring to what type of Northern company played the ‘driving’ or ‘lead’ role in their elaboration and management and also to how they performed this role. Gereffi here distinguished ‘buyer-’ and ‘producer-’ driven chains. In the former the lead firms were retailers or branded marketers, focussing on high profit functions like design and marketing while externalising low profit ones such as assembly to and internally-competing network of developing country suppliers. In the latter, lead firms were designer-manufacturers of capital goods such as aircraft and ships (although Gereffi also included autos and computers in this category in early discussions). These firms also outsourced some production, but to more tightly integrated and geographically proximate networks where high and low profit functions were less clearly demarcated.
- an ‘institutional framework’ or environment for subordinate firms to learn about markets, and possibly to acquire transfers of knowledge and technologies.

These formulations inspired researchers to carry out descriptive studies of a wide range of...
sectors, embracing a steadily increasing range of countries. At the same time, the framework’s conceptual content became more elaborate, especially in relation to the issues of governance and upgrading.

3.1 Governance

A key entry point to recent discussion on both these issues is papers by Sturgeon (2002) and Fold (2002) on developments within the global consumer electronics and cocoa-chocolate chains respectively. These chains exhibit characteristics that seem to set them apart from both ‘buyer-’ and ‘producer-’ driven types. In both cases, as recently as around 1990, lead firms had been manufacturer-marketers (branded electronics producers and branded chocolate manufacturers). During the 1990s however these companies focused increasingly on ‘demand management’-type functions, particularly final product design and branding, while outsourcing a growing range of intermediate manufacturing processes to first-tier suppliers. The latter invested heavily in improving their manufacturing competence, to the point where they could use a common base process to supply several lead firms with a variety of intermediate products. At the same time they globalised their presence, by setting up branch plants/mills in a range of countries and by integrating their businesses with component or raw material procurement. As a result, these chains saw the emergence of a new category of what Sturgeon (op. cit.) calls ‘global contract manufacturers’, who have captured a very significant part of the total income generated along these chains, and who in practice directly manage the day-to-day coordination of the value-chains concerned, on behalf of electronics and chocolate branders.

Acknowledgement of the expanded and strategic role of first-tier suppliers in these chains has provoked some working within a GVC framework (e.g., Humphrey & Schmitz 2001) to re-define chain governance generally, away from the somewhat un-nuanced notion of ‘driving’ and toward that of ‘parameter setting’. This refers to lead firms determining final prices, volumes, product specifications, quality standards and delivery modes – rather than directly dictating the shape of production networks themselves.

Together with Gereffi himself, Humphrey and Sturgeon (2004) have recently gone further, to construct a typology of (five) chain ‘governance forms’ independent of the ‘buyer-’ and ‘producer-’ driven categories. These range from market-based forms (found in chains that are not ‘driven’ by any agent) through so-called ‘relational’ forms, to ‘hierarchical’ ones. Whether chains are governed in one way rather than another depends not on who their lead agent is, but on the properties (such as levels of complexity and codification) of the information that has to be transmitted along them and on the capacities of the supplier base.

This framework represents a step forward in its capturing of the diversity of types of coordination that are found in value-chains. However, reflection on its application to specific chains suggests that, rather than being characterised by a single type of coordination, many (most?) are actually characterised by a combination of them – depending upon what link in the chain (lead agent/first tier supplier, first tier/second tier supplier, etc) is being focused upon. Hence the question of the overall patterns of coordination and functional division of labour remains – as does the need for broad, historical categories such as ‘buyer-’ driven which can relate these to the identity of lead agents. Meanwhile, the new approach also fails to address a further
critical question about governance, raised quite early in the debate (Raikes, Jensen & Ponte 2001). This is that of the relation of ‘internal’, chain specific aspects of governance to broader systems for governing economic relations – trade regulations, quality conventions and more specific public and private standards.

3.2 Upgrading

Discussion of upgrading first entered GVC analysis in the second half of the 1990s, in a form apparently shaped by the literature on ‘Post-Fordism’ as well as by Gereffi’s own research on the apparel chain. This discussion has had always something of a loose relation to the central concepts of GVC analysis, a problem that remains despite explicit efforts to develop closer links between the two (see below). The ‘Post-Fordism’ perspective postulated that the state-underwritten regulatory systems characteristic of the period 1940-70, which knitted together full employment, mass consumption and mass production, had become economically unsustainable. In the wake of their disintegration, markets experienced much greater differentiation, while the product cycles of higher-value goods shortened considerably (cf. Lipietz 1985, Piore & Sabel 1984). In this context, design as well as other forms of product differentiation, such as branding, became key competitiveness factors, while local inter-firm networking – founded on complex but flexible systems of sub-contracting – emerged as a key mechanism by which enterprises acquired knowledge about markets and access to a wider range of skills and technologies. Gereffi’s own work meanwhile traced how certain Hong Kong clothing manufacturers had used participation in global clothing chains to learn how to ‘move up the value-added ladder’, in the form of adding design and branding to their own products while sub-contracting out (part of) their manufacturing. Against this background, early GVC discussion of upgrading took on forms which were both normative (positing a single upgrading path from assembly, via ‘own equipment manufacture’ and ‘own design manufacture’ to ‘own brand manufacture’) and voluntaristic – in the sense that little or no attention was given either to obstacles to this path or to the role of national industrial policy.23

Subsequent GVC-related discussion of upgrading has evolved in two, somewhat distinct, directions. One has been to develop a wider vocabulary of upgrading possibilities and to try to make analytical connections between types of chain governance structure and the prevalence of specific upgrading possibilities. The other has been to take Sturgeon’s contribution (op. cit.) as a source of inspiration for identifying, on a chain-by-chain basis, the different concrete roles that seem to offer higher and more stable returns to actors below the level of lead agent – as well as to determine how those occupying them got there.

Humphrey and Schmitz (2002) take the first of these directions. In developing a general typology of upgrading they argue that movement to ‘own design’ and ‘own brand’ manufacture can be considered as a sub-type of a more general variety of upgrading which they call ‘functional’, i.e., adding new higher-value activities to existing ones, or dropping lower-value activities from existing portfolios. This opens up for considering as upgrading the provision by manufacturers of services such as product development, management of customer’s inventory and logistics. Two

23 Implicitly at least, some of this discussion cast doubt on whether any role remained for national industrial policy. Preconditions for upgrading appeared to be either internal to chains or local in character (clustering).
other varieties of upgrading that they identify are ‘product’ and ‘process’. The former refers to newer, improved, more valuable product varieties, while the latter refers to adoption of new technologies or new ways of organising production. In addition, they mention ‘inter-chain upgrading’, referring to the use of competences developed in one GVC to enter the chain for another product.

Difficulties with this classification include that of distinguishing product and process upgrading in specific instances (especially for agricultural products, where for example the introduction of organic processes generates a new category of product), and the status of ‘inter-chain upgrading’. The latter seems more properly regarded as a trajectory for upgrading rather than as another variety of it. In any event, the authors go on to discuss whether specific ‘governance forms’, as elaborated by Gereffi, Humphrey and Sturgeon (op. cit, see above) lend themselves more to one variety of upgrading than another (or to none). The conclusions they draw go little further than repeating the reasons they give for why lead firms adopt one governance form rather than another, however. Governance forms of a hierarchical or semi-hierarchical kind are said to offer possibilities for potentially rapid product and process upgrading, for example - but the explanation offered for why chains with such governance forms exist is in terms of situations where lead firms need to create a supplier base with the competences that they require from scratch.

In the absence of a more closely GVC-based theorisation of upgrading, a useful way forward may be through more detailed empirical analyses - on a chain-by-chain basis - that identify concrete roles which offer suppliers higher and more stable returns, as well as routes for arriving at them. One example of such an approach, though not in the field of agro-commodities, is found in Gibbon’s (2004) study of restructuring in the Mauritian apparel sector in the second half of the 1990s. An aim of this study was to test the broader applicability of Gereffi’s account of upgrading forms and paths in apparel, beyond their rather narrow Hong Kong-based point of reference. The study identified two distinct strategies followed by Mauritian-owned firms, in order to remain competitive in a context of rising local labour costs and falling margins. The main features of the first strategy closely resembled Gereffi’s Hong Kong story – companies upgraded functionally into own design (own collection) and in some cases own brand manufacture. The main feature of the second was to concentrate on manufacture alone, while opening satellite plants in neighbouring (and much cheaper) Madagascar. Firms’ objectives here were to produce a more basic range of products in very high volumes – while retaining capacity in Mauritius for shorter-lead time and higher-value work.

Interviews with company directors and analysis of (publicly-deposited) company accounts revealed that the former (‘Post-Fordist’ (?)) route was both costly and unsuccessful. Mauritian companies were simply too far from end-markets to set, or even closely follow, fashion trends. They were also too narrow in their range of managerial skills to wholesale or retail on their own account. Companies migrating to Madagascar also faced new costs, but until the involuntary contraction of production coinciding with the serious civil disorder of 2002, many appeared to have succeeded both in raising their margins and consolidating their customer base. In terms of the existing GVC vocabulary, this was on the basis of *downgrading* rather than upgrading part of their product range and part of their production process (as well as the skill base of part of their workforces). Such a route nonetheless enabled the enterprises concerned to offer a broader mix of
products with a wider range of price points and lead-times to a wider range of customers, including some who – on this basis – offered them a better range of contractual conditions (e.g., greater stability of demand) than they had enjoyed previously. With some justification this was even presented by the companies themselves as a type of functional upgrading, in the sense that it enabled them to ‘offer customers an improved service’.

There is no doubt that the second strategy was initiated primarily for cost reasons, not only in terms of access not only to lower waged workers, but also to longer production runs and thereby to greater economies of scale. Fortunately for the companies concerned it did not entail losing the advantages of cheaper costs by having to shift entirely into an unambiguously lower end-market segment. This was because its adoption occurred in a context where some of the EU high-street chains and French mail order companies that were the two main customer bases of the Mauritian industry had started to establish new, lower price range formats alongside their traditional mid-market ones, in order to cope with a rising wave of competition from discount stores.24

This example, like Sturgeon’s (op. cit.), shows the importance of detailed study of the dynamics of specific value-chains for understanding real-world patterns of upgrading. In the particular case described, this implies understanding changing patterns of Northern consumption, corporate restructuring and corporate strategy – patterns that are captured at best imperfectly by the notion of ‘Post-Fordism’. Understanding the nature of the apparel chain, including its governance structure(s), is also necessary, but by no means sufficient. Moreover, Gereffi’s initial characterisation of this governance structure, as ‘buyer’-driven, is actually much better at drawing attention to its operational outcomes (using market power to demand from suppliers new services and ever-lower real unit prices) than are categories such as ‘modular’, ‘relational’ or ‘captive’.

For the theorisation of upgrading within a GVC framework, this points in the direction of giving greater recognition to the importance of achieving greater economies of scale as a means of securing a stable and profitable supplier position in ‘buyer-driven’ contexts. In the view of this author, analysis along these lines is indeed the theoretical direction that the concept ‘buyer-drivenness’ logically points toward. Such an analysis, when completed, should generate a new vocabulary of upgrading terms. Until it does, rather than using terms such as ‘process’, ‘product’ and ‘functional’, it may be better to identify structures of rewards available to suppliers within specific chains on the one hand, and concrete roles releasing these rewards on the other.

3.3 GVCs for agro-commodities

While, at least in its present form, GVC analysis of upgrading opportunities entails detailed analyses of individual chains as well as broader trends in Northern economies relating to them, it is nonetheless useful to conclude this introduction to the subject with some observations concerning recent developments in agro-commodity chains generally. Complementing the historical approach to policy narratives on commodities in the first half of the paper, these will contrast the nature of these chains two decades ago and the position today.

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24 Another factor was that the leading UK designer George Davis, ‘who loved Mauritius’, shifted his services from the solidly mid-market UK chain Next to the supermarket Asda, which was launching a high-volume apparel range. Asda were concerned to build on his local supply base and reproduce it in a cheaper environment.
The early 1980s: In most tropical countries, two distinct agro-commodity production systems existed. The first – which was predominant for tea, bananas and sugar and also important for tobacco, rubber and palm oil – was plantation agriculture. The second, which was dominant for cocoa, coffee and cotton, was smallholder agriculture. Smallholder production even of these crops accounted for a majority of their exports only from the 1940s and 1950s, as a result of public intervention. It is this group of crops that will be the main focus of attention here, as developments in them have the most obvious implications for the poverty/well-being of rural populations.

As already noted, export of these crops was generally in the hands of public monopolies, who were also responsible for valorising production in the form of input credit and supply, extension services and provision of market infrastructure. Besides this, these public bodies - or related ones - managed two of the three public goods which allowed the international markets for these products to function efficiently. These comprised globally-recognised national quality standards and territorial reputations. All national quality standards had certain common attributes, including giving priority to easily apprehensible physical characteristics such as cleanliness, intactness and freedom from mould. Territorial reputations were based on information about local ecological conditions (altitude, climate, soil), standard cultivars, standard cultivation/harvesting practices (e.g., hand-picking or machine picking) and standard post-harvest practices (e.g., roller ginning or saw ginning). These reputations took as given that sorting, grading and description of the exported crop would occur consistently according to national standards – and thus that there would be rules and sanctions assuring conformity with them. Underwriting the reproduction of these collective goods, locally and globally, was a market-based pricing system which accorded a coherent set of premia and discounts to different grades and national reputations.

As also noted, the international markets for a number of tropical crops – particularly where there was a relatively small number of countries accounting for the majority of their production – were managed ones. However, except in relation to price, this made little difference to the functioning of the corresponding value-chains. The latter’s vertical coordination was in the hands of international trading companies, usually dating from the early part of the century and headquartered in the great European trading centres. These brokered the crop, or occasionally bought and sold it on an own account basis, through multiple and temporary private treaty contracts. Relations between exporters, traders and end-users were almost invariably arms’ length. Because of exporters’ institutionalised reputations and access to large volumes in reasonably predictable magnitudes, it was very common for sales by producers to be on a forward - and frequently also a tender - basis.

The picture today: Since producing country governments lost the ability to participate in the management of the international markets for coffee, cocoa and sugar, as well as much of their ability to participate in the shaping of their own domestic supply markets, there have been changes in virtually every dimension of the value chains for these crops. Market liberalisation has not been the only or even necessarily the main factor at work here though. An equally profound
development has occurred in the North, where end-user industrial concentration based on mergers and acquisitions has accelerated sharply. In coffee and cocoa, 4-5 branded processing companies jointly control 60-70% of world production. The leading cocoa processors are all integrated vertically into trading, where their joint market share is similar. Most coffee processors tend not to be integrated forward, but in this chain there has been a similar process of concentration amongst independent international traders. The GVC for cotton is much less concentrated at all its main links (production, consumption-spinning and trading) than those for most other agro-commodities but even here the 19 companies that traded more than 200,000 tons/year in 1995 saw their share of world trade increase from 35% in that year to 39% in 2000 (Larsen 2003). A third distinct development has been in processing technologies. Adjustments within these have allowed processors to gain greater (in the case of cocoa, very substantially greater) control over differentiation of the quality of the physical product, i.e., prior to the differentiation afforded by marketing,branding. Twenty years ago, the physical cocoa product was differentiable in quality terms mainly in its unprocessed state, with some further differentiation attained through blending. But today cocoa grinders have found ways to reproduce bean quality-type properties in the processing stage independently of blending, i.e., with much reduced dependence on the nature of the bean itself. Coffee roasters have always played a greater role in generating quality, especially for standard grades, on the basis of blending. Recently they also have been able to increase this role as a result of technical changes – in the sense of acquiring the capacity to mask the bitterness of lower-quality coffees (by steam cleaning), thereby widening and cheapening the range of bean types available to generate blends tasting very similar to existing ones.

Amongst the main results of these changes have been a redefinition of the historical roles of international traders; a trend toward the privatisation of quality standards; and a subsequent reshaping of world supply markets.

International traders’ roles: liberalisation of domestic and international supply markets and the growing power of end-users have obliged international traders to become directly involved in the export function in developing countries and also to provide more services to end-users. The former has become necessary in order to guarantee access to volume and (in some cases) designated qualities. The latter is an expression of the increased bargaining power now enjoyed by end-users. The most important and (financial) resource-intensive additional service that international traders are now commonly expected to offer is management of customers’ inventory, including ‘just-in-time’ delivery. This parallels changes in a wide range of manufacturing GVCs, for example apparel into the UK market (see Gibbon 2002). End-users’ externalisation of the working capital costs of holding inventory has in turn given rise to a new market in specialist finance for commodity stock management and to a re-definition of the division of labour between international traders and brokers in futures markets, as the former seek to recoup some of their new costs from agents along the chain who are dependent upon them.27

26 Amongst the largest emerging inventory financiers are Fimat (Société Générale) and Crédit Lyonnais.
27 In order to pay lower commissions, international traders who previously spread risk through different brokers in a series of futures markets have started to concentrate their businesses on single brokers, who are now instructed to perform brokerage functions across all derivatives markets. In addition, brokers are required to do deals that more precisely meet their clients’ specifications, to supply international traders with their own futures market trading screens,
Privatisation of quality standards: Traditional systems for classifying product quality on international markets still exist, but they have become somewhat residual as in many producing countries liberalisation has weakened or swept away the institutional mechanisms that underpinned them. This is most evident in the cocoa market where price differentials between territorial reputations have narrowed substantially, except in relation to the Ghana crop (where elements of a public export monopoly remain) and to ‘fine and flavoured’ cocoas from Ecuador. In this case, territorial reputation has been largely replaced by a single, simplified and much less demanding standard emanating from the major grinding companies. In the case of coffee there has been a bifurcation between the bulk market, in which crops are now sold only according to the most basic (botanical) varietal descriptions, and the ‘specialty’ market where traditional descriptions are mostly still used, but are supplemented in some cases by new standards such as organic, shade-grown, fair trade, region or estate of origin, etc. A novel feature of these standards is that they are process-based rather than referring mainly to the physical characteristics of the crop. As a result, they require methods of verification which are quite different from (and additional to) traditional ones. Normally what is entailed here is certification. Cotton provides a third, and again different, example of privatisation of standards. Today, a majority of the developed world’s cotton exports28 – and those of Brazil - are sold on the basis of so-called ‘High Volume Instrument’ (HVI) classification. This was developed in response to demands by spinners who had adopted automated processes. Automation made disruption of production due to breaking of fibre much more costly, and thus gave knowledge of the breaking strength of cotton much more commercial value. This encouraged the development of testing machinery that could be used by ginners to give much more detailed descriptions of the physical properties of lint than was previously possible. As a result, it has become also possible to introduce measurement for some properties that were not previously subject to classification. This appears to have made it easier for spinners to be more specific in their demands to ginners, while simultaneously permitting a higher level of inter-substitution between grades and national origins.

Reshaping of world supply markets: As a result of these developments, the structure of world supply markets has become generally simpler. In most cases markets are divided now between a bulk segment, traded anonymously on the basis of minimal description, and another segment where trade is organised according to traditional descriptions, superimposed to different degrees by private standards. Geographical concentration has taken place on a sliding scale across these segments. Markets for the bulk product have become significantly more concentrated. For example, leaving aside the non-bulk cocoas of Ghana and Ecuador, the market share for bulk cocoa of the world’s four leading suppliers29 increased from an average of 63.7% in 1986-89 to an average of 78.4% in 1996-99 (FAO 1989, 1999). Concentration, though to a lower degree, is also evident in markets and market segments where traditional descriptions still prevail. Only in respect of markets where private process-based standards have been introduced are trends to geographical concentration absent, although it is not clear for how long this will apply. Lying behind this process is not simply the erosion of traditional systems of differentiation, but also the

28 i.e., those of Israel, Australia and the US.
29 Côte d’Ivoire, Nigeria and Cameroon were in the top four in both periods. In 1996-99 Indonesia replaced Malaysia as the fourth country.
increased transaction costs that international traders face in liberalised export sectors, which they can minimise by focusing their sourcing on high-volume supply markets.

4. Upgrading opportunities for producers in the coffee and cotton GVCs

As argued earlier, a first step in understanding upgrading opportunities available to producers (and others) in particular GVCs is to spell out the reward structures of these chains, and the nature of the roles that currently trigger rewards. This exercise will be conducted in relation to coffee and cotton. A second step is to outline preconditions or mechanisms for achieving these roles. Ideally, this discussion should provide some idea of costs, in order that net as well as gross rewards could be indicated. Such data seems to be almost absent from the literature, however. Therefore, the main focus of the second part of the discussion will be on institutional aspects of the preconditions concerned.

Primarily for purposes of space, but also because of the qualitatively different kinds of consideration that it would entail, the coverage of the discussion is confined to upgrading opportunities within primary production itself. The latter is defined as production of physical crop, plus the initial processing that it is necessary to undertake in order to qualify crop for export. This is not to say that more advanced forms of processing such as roasting for coffee or spinning for cotton are intrinsically inaccessible for developing country or even LDC suppliers (this is very clearly not the case in relation to spinning). Rather, it would involve analysis of an entirely different dimension of the value chains concerned.

4.1 Reward systems for producers in the coffee value-chain

Over recent years, rewards have become skewed towards lead agents in more highly buyer-driven agro-commodity chains. But they have also become distributed between different groups of producers. Coffee seems to have witnessed the most radical change in the distribution of income between producers as a whole and other agents. Osorio (2002) states that in 1992, producing countries’ sales were worth US$10 bn. f.o.b., in relation to an end-market where global retail sales of coffee were worth US$ 30 bn. In 2002 the respective figures were around US$ 5.5 bn. and US$70 bn. Besides increasing buyer-power, this redistribution reflected market saturation (production during the period increased by 3.6%/year while demand improved by only 1.0-1.5% (Osorio op. cit.)), and new and highly successful forms of product differentiation by branders/marketers in the US and EU – the ‘latte revolution’.

Amongst producers themselves, rewards have been redistributed in two ways. The first has occurred within the bulk or ‘commercial’ market, mainly for robustas and hard arabicas. According to Rabobank (2002) here, in a manner that mirrors differentiation between national supply markets – a clear division has opened up between anonymous and non-anonymous sales. The latter emanate mainly from large or very large grower-exporters, mostly in large producing countries in Latin America, who are able to consistently supply high volumes, meet basic or above basic quality requirements, guarantee proper handling, provide efficient logistics up to the loading of a ship (and engage in direct marketing). These can achieve reference prices and obtain

medium- and longer-term purchasing commitments from traders. Because of their size and efficiency, their marketing costs are typically low. It is these producers who also typically can achieve very high yields (around 300% higher than under typical low input systems, according to a World Bank (2002) study), from high input, irrigated and mechanised farms in frost-free areas. By contrast, producers dealing with the anonymous market typically sell smaller volumes of somewhat inferior product through a series of intermediaries. Their production is typically lower-input, more weather-dependent and has lower productivity. The prices they receive are below reference levels.

The second area where rewards have been redistributed amongst producers themselves has been mainly within the mild Arabica market, towards producers of ‘specialty’ and gourmet coffees. In the US the latter market has been growing annually by around 30% since 1999 and today accounts for roughly 17% of imports by value and for 40% of retail sales (Ponte 2002). ‘Specialty’ coffee refers to all coffees to which are applied either top-end traditional quality parameters and/or new private parameters (see above). Because of the growing demand for this type of coffee, against a background where liberalisation has led to an across-the-board decline in supply of traditional quality attributes, the premia accessible in this market are considerable. Their scale is underwritten by the fact that most sales into this market are direct ones, to relatively small and specialised roasters lacking ‘big buyer’ bargaining power. Particularly high premia are commanded by coffees certified as conforming with the new private parameters. Ponte (op. cit.) cites average 2001-02 prices 100-120% above the reference price for shade-grown, organic and fair trade coffees. Besides high premia, this part of the market is also characterised by long-term contracts or understandings, in a few cases with multi-season prices.

Qualifying for both the non-anonymous commercial and specialty markets is quite costly. But, especially in the case of the first, some implicit or explicit subsidisation by (Latin American) producing country governments is evident. This includes support for land clearing and infrastructure, as well as high quality public research into improved tree varieties and pest control. To the extent that some producers supply both ‘commercial’ and specialty markets (see below), participation in the latter is subsidised in the same way. But most specialty market producers, if they are subsidised, only receive support from donors or NGOs to meet certification costs. What is not clear is the extent to which participation in the latter market would be possible without subsidies. In view of the considerable economies of scale involved in certification, quality monitoring and professional marketing, Ponte (op. cit.) has further questioned whether participation in such markets can be remunerative for groups of smallholders that are not part of much larger organisations.

4.2 Reward systems for producers in the cotton value chain

Because of the cotton value chain’s much less buyer-driven character, reward systems still primarily reflect the global supply/demand balance, adjusted for the balances for specific recognised cotton varieties – and subject to exogenous distortions such as producing country subsidies. According to Badiane et al (2002), the increase in US subsidies to an equivalent of US$0.24/lb as a result of the 2002 Farm Act led to the Cotlook A reference price standing at US$0.12/lb lower than it would otherwise have done.
Rather than evincing a tripartite division into anonymous bulk, non-anonymous bulk and specialty markets as in the case of coffee, the international cotton trade is organised in a single non-anonymous market bifurcated between ‘coarse’ and finer cottons. These are differentiated in relation to each other and internally according to globally recognised national origins and quality descriptions. ‘National origins’ are a summary of varietal characteristics, typical forms of harvesting and types of ginning (roller or saw), while quality still refers in large part to those physical properties of the crop that reflect husbandry practices, such as contamination levels. Global reference prices exist for finer cottons (the Cotlook A index, based on an average of the cheapest five quotes from a selection of 16 upland varieties) and for coarser ones (the B index, based on an average of the cheapest quotes for the 8 least expensive origins traded).

While more technologically-advanced spinners are demanding greater accuracy in the measurement of fibre properties (see above), international traders have generally declined to provide them (Larsen 2003). Spinners can gain access to lint whose properties are measured more accurately but they must normally do so by buying direct from ginners who have installed HVI Machinery. Even this provides them with only imperfect information, as there are frequent reliability problems with HVI readings, and some important varieties cannot be subject to HVI readings at all. Furthermore, HVIs are apparently not particularly good at picking up important forms of contamination such as the presence of polypropylene, originating from the use of sacking of this kind being used to transport seed cotton to buying-posts. Hence, the extent to which HVI readings are likely to replace the traditional grading system is doubtful. Indeed Larsen (op. cit.) argues that the main effect of spinners’ increasing insistence on accurate quality measurement is not wider or improved use of HVIs but a greater emphasis on the implicit reputational dimensions of national origins. There is thus no premium as such for HVI measurement.

Besides those based on national origin and grades, the main premia still attach to form of sale (forward, tender) and timing of sale, which is mainly in relation to the first new crops appearing on the international market in a given season. There is also a premium implicit in making sales direct to spinners, whether HVI-measured or not. Besides being dependent on supply/demand balances, the spread of premia between different national origins and grades is subject to change on the basis of shifts in the reputation of national origins. In Anglophone Africa the premium commanded by Tanzanian cotton over the Cotlook A price, which it earned traditionally on the basis of providing roller ginned upland cotton of average quality has fallen from an average of 10.6% during 1984-94 to 8.8% during 1995-2002 as a result of persistent complaints about contamination. At the same time, a sharply declining proportion of the Tanzanian crop is being traded in Northern European markets under its traditional description, and hence the premium just described today applies to only a small fraction of the total crop. Zambian cotton, on the other hand, which was discounted against the Cotlook A until 2000 on contamination grounds, now trades without a discount since traders and spinners consider this problem to have been resolved.

Oversupplied commodity markets are historically (and logically) associated with a widening of spreads between grades and origins. While oversupply has persisted since the mid-1990s, market

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31 Including the main Francophone African varieties – an origin which nonetheless commands a global market share of 15-20% and a premium over the Cotlook A level.
liberalisation in developing countries has seen a degree of polarisation in national reputations, depending on how well liberalisation has been managed in respect of reproducing traditional quality attributes. There has been also a detectable fall in traders’ interest in producing countries where the liberalisation process has led to a highly fragmented supply market. In any event, having stood at 2% of the A index in the mid-1990s, the spread between the A and B indexes has gradually widened to 10%, while the premium commanded by extra-fine cottons has increased from 70% over the A index to 100%. Forward sales have become less common, and are today limited to markets where there is a high level of internal concentration, giving greater certainty to promises about volume. There is virtually no distinct market for ‘specialty’ cottons, in the sense that this is defined in the coffee trade.

4.3 Upgrading preconditions and mechanisms

The left-hand column of Table III below lists the roles generating higher and more stable rewards to developing country coffee and cotton producers, while the middle column summarises the rewards attaching to them. In the light of the earlier critical discussion of Humphrey and Schmitz’s (2002)
Table III: Roles, rewards and preconditions for upgrading, coffee and cotton.

<table>
<thead>
<tr>
<th>Coffee</th>
<th></th>
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<tbody>
<tr>
<td>Role /opportunity</td>
<td>Reward</td>
<td>Precondition /mechanism</td>
</tr>
<tr>
<td>High volumes, consistent satisfaction of basic quality parameters, proper handling, efficient logistics (‘commercial’ robustas and hard arabicas)</td>
<td>Spot sales at reference price</td>
<td>Large-scale farming with high-input and mechanised production systems OR large-scale smallholder organisations promoting higher efficiency and productivity and with professional marketing capacity. Underwritten by state-based public goods provision</td>
</tr>
<tr>
<td>Lower but consistent volumes of ‘single origin’, ‘organic’, ‘shade-grown’ or ‘fair trade’ coffee</td>
<td>Premia 100-120% above reference price</td>
<td>Estate production (large or small) OR medium/large smallholder organisation with improved efficiency, new/systematised agricultural practices, comprehensive and consistent quality monitoring, certification and professional marketing capacity. Normally underwritten by privately provided public goods</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cotton</th>
<th></th>
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<tbody>
<tr>
<td>Role /opportunity</td>
<td>Reward</td>
<td>Precondition /mechanism</td>
</tr>
<tr>
<td>Improvements in fibre properties (shift toward finer cottons), consistent satisfaction of quality parameters, high volumes, rapid time-to-market</td>
<td>Fibre quality premium 10-100% above Cotlook A</td>
<td>Large contract-farming/smallholder outgrower schemes providing input credit and quality control, promoting production incentives /growth and with professional marketing capacity. Underwritten by or internalising public research and extension (particularly into improved varieties) and by sectoral horizontal coordination, to ensure maintenance of national reputation</td>
</tr>
<tr>
<td>(roller ginning)</td>
<td>Forward sales</td>
<td></td>
</tr>
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<td></td>
<td>Sales direct to ginners</td>
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</tr>
<tr>
<td></td>
<td>Time-to-market premium</td>
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<tr>
<td></td>
<td>(ginning type premium)</td>
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</tbody>
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classification of forms of upgrading, no attempt has been made to categorise the roles identified in terms of the predominance of ‘product’, ‘process’ or ‘functional’ attributes. In reality, the roles concerned represent bundles of these attributes.

The right-hand column of the Table lists preconditions or mechanisms for attaining these rewards, as identified in recent field research on the sectors concerned. It should be noted that, in many cases, meeting these preconditions does not necessarily entail adopting completely new technologies (except ICT-based record keeping and communication, where these are absent) or making huge physical investments. Except in relation to working capital requirements, institution-building can partly or wholly substitute for high capital investments.

Five types of organisation are described in the right-hand column. The first is a modern version of plantation agriculture/large-scale commercial coffee farming. It is this type of enterprise, in areas like the Cerrado plains of Brazil, which has successfully polarised the global bulk/commercial’ coffee market. Here single irrigated farms of 2,000-2,500 ha. and 7-8 mn. trees can supply, on the basis of yields of 480kg./ha., as much as 0.6 mn. tons/year. Interestingly, a number of these farms are also involved in the much lower volume specialty market, for which they employ ‘traditional’ methods such as hand-picking and sun-drying (cf. Holland Coffee 2003). However, for such coffees retail volumes and production methods offer much lower economies of scale, and smaller estates and other forms of organisation can be competitive. Like larger estates, smaller ones can provide assurance of consistent volumes and quality and offer buyers low sourcing costs.

The third type of organisation is a large or very large, modern version of a smallholder coffee cooperative. The most successful example of such an organisation is FNC, the Columbian national coffee growers’ federation, which claims 0.5 mn. members who cultivate an average of 2 ha. FNC operates an extension service with over 800 field staff as well as its own agricultural colleges and a research and development centre. It provides its members with a price stabilisation scheme and has diversified downstream into freeze-drying\(^\text{32}\) and own-label sales. FNC attributes its success to its systematic commercialisation and its exposure to competition - both from other cooperatives and from private traders (cf. Café de Columbia 2003). On the other hand, where such organisations in Africa have been able to survive the transition from top-down (and only marginally commercialised) buying monopolies, they have tended to retreat to the role of subsidised ‘buyer of last resort’. This means that they are unable to consistently offer volume or quality in the ways necessary to attain the rewards indicated.

Smaller cooperatives have an active role in some segments of the specialty coffee market however, even in Africa. This is particularly the case for fair trade coffee; organic coffee, by contrast is often a large farmer crop. The central problems that such smaller organisations face relate to their size-related high unit costs. Although cooperatives involved in fair trade typically receive technical support from ‘Fair Trade Guarantee Organisations’ (FTGOs) like Max Havelaar, they have to meet not only commercial criteria but also political ones such as transparency, popular participation and democratic distribution of returns, as well as environmental and

\(^{32}\) A state-of-the-art method for producing instant coffee.
labour conditions. This means in practice that only those receiving assistance over and above what FTGOs normally provide are likely to succeed in the medium-term. How sustainable this success will be over a longer period, even if the fair trade market grows from its current level of around 1% (by volume), is open to question.

The fifth type of organisation is large-scale contract farming or outgrower schemes. While present traditionally in crops such as tea and sugar, this has emerged too in a number of Anglophone and Lusophone African cotton systems subsequent to market liberalisation. As in the cases of tea and sugar, most of the companies concerned are not only foreign-owned but also major international traders, integrating backwards into production to secure capacity utilisation for associated ginning investments. So far the only substantial African-owned cotton outgrower is the Zimbabwean former cotton parastatal Cottco. This company operates a group- (and track record-) based input credit scheme covering around 80,000 of the country’s 250,000 cotton smallholders, with a claimed recovery rate in excess of 95%. The scheme is linked explicitly to public and in-house extension services, in order to maximise monitoring of the use of inputs and to promote their integration with good husbandry. Zimbabwe has maintained a rigorous seed cotton grading system via collaboration between Cottco and its only serious competitor in the domestic supply market, Cargill. Since 1998 Cottco has built further on its success, by vertical integration upstream (into input manufacture) and downstream (into cotton spinning) in Zimbabwe itself, and by horizontal integration into a cotton concession in Mozambique.

Because of the vulnerability of smallholder-based outgrower schemes to free riding, and because of the ongoing strategic importance of national reputations in the global cotton market, organisations like Cottco can only function successfully in a context of effective sectoral coordination (see above). At the same time, in order for smallholders’ production incentives to be maintained, sectoral coordination has to be combined with competition. Recent research sponsored by DfID (Poulton et al 2004) has confirmed and refined this proposition, on the basis of comparing the performance of six reformed cotton sectors in Anglophone and Lusophone Africa in respect of aggregate production levels, yields, producer price levels and prices commanded in international markets. Distinguishing between three types of liberalised cotton system – geographical monopolies (Ghana, Mozambique), systems with numerous small players (Tanzania, Uganda) and duopolies where a handful of large players compete with each other (Zimbabwe, Zambia) – the research shows that the last of these systems generates the most positive outcomes. This is because it promotes sufficient price competition to stimulate production growth, while minimising the scope for free-riding traders without a major stake in the system to undermine the crop’s national reputation by buying sub-standard quality cotton, re-circulating mixed or contaminated seed, etc.33

These findings stand in interesting contrast to the main conclusions of Rabobank’s (2002) recent study of upgrading options for producers in the global coffee chain. Rabobank proposes that developing countries seeking to emulate Brazil’s leadership of the non-anonymous commercial market should create sector-wide PPPs with a single major roaster. Leaving on one side the issue

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33 Despite being saw ginned and of a fairly standard upland variety, Zimbabwean cotton has consistently commanded a premium of around 10% over the A index since the 1980s.
of roaster’s historical preference for acting through international traders in supply markets, it is worth considering the experience of geographical cotton monopolies in Ghana and Mozambique reported by Poulton et al in this connection. The latter suggests that lack of competition leads to buyers dropping prices, and to problems of sales-based input credit recovery as smallholders respond to low prices by diverting inputs to other uses. Furthermore, it leads to sectors becoming less competitive internationally, since monopoly buyers can achieve good margins simply by virtue of their monopoly buying position, without reference to improving quality.

5. Conclusion: Issues and proposals for donor PSD/PPP interventions

On the basis of these observations, it can be argued that new generations of PSD/PPP interventions in relation to commodities would benefit from taking into account the following five issues.

1. While GVC analysis suggests the strategic importance of involving international corporations in PSD in developing countries, more specific analysis of agro-commodity chains points to a need for these to be linked to much larger-scale local entities than has been the case up to now, if benefits are to be broad and sustainable. Rebuilding local-level economies of scale is becoming a strategic issue in the wake of increasing buyer-drivenness on a global plane on the one hand, and the fragmentation that has frequently followed market liberalisation on the other. Furthermore, where the local entities with which links might be established are fully commercialised and professionalized cooperatives, or are outgrower scheme-based – as they should be if PSD interventions are to be socially and economically inclusive (see below) – then interventions would benefit from simultaneously addressing issues of industrial organisation in these sectors as a whole. The central question in this connection is that of assuring forms of sector-wide industrial organisation that can provide a balance between producer incentives on the one hand, and the enhancement of public goods such as national quality reputations on the other. Coherently addressing this question implies, as one precondition, an enhanced degree of in-country donor coordination.

2. Analysis of the chains for coffee and cotton indicates that the recent emphasis on encouraging production for niche markets in the PSD literature has been probably excessive. In the cotton-to-spinning chain there are no niche markets in the conventional sense of the word, while the chaos left behind by market liberalisation in the developing world has created apparently sustainable opportunities for large-scale producers who can conform to or resurrect ‘traditional’ quality parameters. Niche markets certainly exist in coffee but entry barriers to them are high and, because of this, smaller-scale production does not command an intrinsic competitive advantage in them. In any event, it is possible that the current steep rise in demand for specialty coffee in the North will flatten out, unless the ‘latte revolution’ is deepened in ways similar to those evident in the wine market between 1980 and 2000. Here there was a transition from a once burgeoning ‘wine
bar’ culture to a broadly-based appreciation of the special properties of specific grapes/regions of origins, and a reorientation of the market in this direction and away from brands. As Ponte (op. cit.) points out, donors might usefully consider taking this challenge on board.

3. While support to large, fully commercialised and professionalized cooperatives and large outgrower schemes offer possibilities for giving PSD/PPP interventions a more socio-economically inclusive character than is normally the case, it should be recognised that both types of institution embody dynamics of differentiation and therefore internal marginalisation. The highly-praised Cottco input credit scheme in Zimbabwe, for example, has been shown to squeeze out smaller farmers over time (Larsen 2002). If donors wish to ensure the maximisation of the potentially inclusive benefits of such schemes, such as removing constraints to credit, raising smallholder incomes, disseminating more efficient cropping technologies and market information, etc., then they need to incorporate provision for incentives which mitigate the differentiation dynamic in their assistance.

4. In order to be effective, agro-commodity PSD/PPP interventions of the types described imply a need not only for donor coordination within producing countries but for wider coordination too, in relation to choice of partner countries. In a context of saturated markets it seems probable that some donors’ traditional partner countries have too low levels of production or too irretrievably fragmented domestic supply markets (or both) to remain in the game, with or without interventions. Interventions in such countries would certainly yield higher returns elsewhere. Rehabilitating the coffee/cotton sectors of all current LDC suppliers, for example, would significantly increase market saturation, push down prices and place buyers in an even more powerful position than today.

5. For such ‘sustainability’-related reasons and others, at least one of the lessons drawn by Schulpen and Gibbon (2002a,b) concerning donor PSD/PPP interventions in general is applicable also in this field. Strong attention needs to be paid to international as well as national interventions. International interventions could include support for more marginal countries to withdraw altogether from the production of certain tropical export crops, in order to bring supply and demand closer and to provide a more viable basis for a continuation of production in remaining countries. But they should not be confined to this. Other major international issues include action in relation to some of recent northern-derived entry barriers, principally the new generation of standards for specialty markets, and the cotton subsidies of developed countries which force otherwise competitive developing country producers off the market.

It is now possible to return to the group of preconditions/mechanisms for developing country actors to upgrade in the GVCs for coffee and cotton listed in Table III, and to ask more concretely how donors might best contribute to their realisation. In each case, both producing country and international interventions will be sketched. While the interventions suggested are designed on the basis of specific analyses of the chains concerned, this does not exclude their possible relevance to other chains not discussed in this paper.
‘Commercial’ coffee: For obvious reasons, it is proposed here that the national-level interventions undertaken here be aimed at promoting large-scale, efficient and productive smallholder organisations rather than large-scale farming. Also for reasons that should not require too much justification, a correlation between efficiency and full commercialisation can be assumed. However, recent experiences with commercialisation of smallholder cooperative organisations in many African countries suggests that, even under these circumstances, governments are unable to resist using them for general social and political objectives (such as buying crop that private buyers cannot or will not buy). Thus, for such organisations to function in genuinely commercial ways it is necessary for their ownership to be at least partially privatised. Ideally, such privatisation should involve a large local private player that has a track record of responsible behaviour with respect to issues like crop quality control, input credit, and actions to improve output (e.g., involvement with research or action to disseminate good farming practices or new crop varieties). Donors could encourage and provide technical assistance for the execution of such partial privatisations, although there are no strong reasons why they should finance them (and even some why they probably should not). On the other hand, they could make their successful completion a precondition of access to other kinds of support. These might take the form of

- soft loans for input credit, financing of crop purchase and rehabilitation of processing or transport equipment;
- provision or rehabilitation, together with the producing country government, of supportive infrastructure - particularly of rural roads
- technical assistance for international marketing and for development of research and extension interventions

In order to ensure that full commercialisation is not associated with promoting greater social and economic differentiation amongst producers, the terms on which such assistance is provided could be linked to the nature of the coverage of or entry conditions to, for example, the input credit schemes financed via soft loans. For example, loans used to finance more restrictive schemes could command a higher level of interest than those which were unrestrictive.

As noted earlier, for such interventions to help local actors to command rewards which are sustainable in the longer-term, they must be accompanied by actions at the international level and in particular by ones aimed at addressing global market saturation. Donors could usefully consider convening an international conference via e.g., the International Coffee Organisation, with the aim of discussing the setting-up of a global fund to compensate countries for withdrawing from the coffee market on a once-and-for-all basis. At the least, the conference could establish donor agreement on which countries assistance of the kind outlined above should be directed to, and (by default) were not eligible for this form of assistance. The criteria applied here could include likely future role in the world coffee market (degree of centrality/marginality), importance of coffee in the national economy, and national income level.

Cotton: The national-level actions described above in the case of commercial coffee are also relevant in the case of cotton. For cotton however volume and national reputation, rather than

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34 In terms of unduly favouring one local private player over others.
volume and basic quality is key to triggering rewards. This entails that the actions described should be accompanied by others aimed at supporting sectoral coordination and, where this is necessary in order to improve the prospects for sectoral coordination, rationalisation. Interventions of this kind could take the form of technical assistance to set up national coordinative mechanisms, with a minimum aim of properly enforcing ‘traditional’ national grading systems. They could be usefully based on borrowing best practices from systems such as those of Zimbabwe and Zambia. However, the example of unsuccessful recent attempts in Tanzania to replicate such experiences makes clear that effective coordination is almost impossible where there are a large number of players, including many who are undercapitalised and who have little long-term commitment to the sector’s success. In such cases donors should consider supporting sectoral rationalisation programmes, where smaller players are encouraged by compensation to withdraw in favour of other activities. Such a programme would entail donors contributing to a rationalisation fund.

The international cotton market operates in a rather different way to the international coffee market, with a more intermittent pattern of global supply and lower ability on the part of buyers to take advantage of situations of over-supply. A critical factor is that the world’s largest exporter is a developed country granting high subsidies to its national producers. Action at the international level in this case should therefore be directed at pressuring the US (and the EU, although its own subsidies have little impact on international prices despite the fact that they are worth more to national producers) than the US’s to eliminate these subsidies, via WTO and other fora.

*Specialty coffee:* Again, the national-level interventions undertaken here should be aimed at promoting large-scale, efficient and productive smallholder organisations rather than estate production. On the other hand, support to private outgrower schemes or contract farming should also be considered, since the unit resource requirements for participation in this trade are much higher than in the case of commercial coffee, and some countries may only be able to enter this important market through such schemes. Support for these forms of organisations again could take the forms described above in relation to commercial coffee, but should also encompass technical assistance for certification.

More generally in this case, donors should consider contracting major global first-tier suppliers to provide ‘supplier development’ assistance (if these suppliers could be persuaded that this would be worthwhile). But rather than the latter being provided directly to individual firms it would be useful if it could be one of the services provided to these firms through national organisations covering all producers in the sub-sector. Alongside offering such assistance, a central role for the latter organisations could be support to sub-sector wide certification and marketing initiatives - with the contracted first-tier suppliers as partners. Wherever possible, at least two such partners should be involved (to avoid the sub-sector’s dependence upon a single Northern actor). Donors can provide technical assistance for the formation of such organisations.

International action by donors in relation to specialty coffee is also important, although again it is desirable that it take a rather different form compared to those recommended in relation to commercial coffee (since the specialty market is not at present over-subscribed) and to cotton.
(since production subsidies are not an issue). Two main focuses could be identified here. The more important of these is in relation to quality standards. As noted earlier, standards in this market are almost all private; are subject to proliferation; and are mostly in the form of highly demanding process requirements. A clear need meriting donor attention is that of simplification and rationalisation of standards in this area. Donors could pose the question to standard setters (especially Northern ones) of the objectives their standards seek to accomplish, and then encourage standard setters to think of how such objectives could be met in less demanding ways than the methods currently typically used to meet them. They could simultaneously encourage research designed to find less costly and more user-friendly ‘equivalents’ of these methods. At the same time they could encourage the consolidation of proprietary standards (and accompanying supplier certification), so that producers could use satisfaction of the same standard to access several different clients.

A second area of international action could be of a ‘market-deepening’ kind, aimed at stimulating demand for specialty coffee products in the North, especially in Europe where the market is somewhat less developed than in the US. Such actions could include support to coffee competitions, with winners being provided with support for marketing, and support to training of journalists as ‘coffee correspondents’, who would be able to educate public taste in specialty coffee.
6. References


Eurostat, Comext data base


FAO (2001) *The role of agriculture in the development of LDCs and their integration into the world economy* (Rome)

*Financial Times* (London), various


GATT (various) *International Trade Statistics* (Geneva)


GTZ (2003a) Ecological cocoa growing in Nicaragua Project description at www.gtz.de/ppp/english/praxisreport/

GTZ (2003b) Improvement of coffee quality and sustainability of coffee production in Vietnam Project description, at www.gtz.de/vietnam/ppp/ppp_coffee_eng.htm


Murphy, S. (2002) Managing the invisible hand: markets, farmers and international trade. Institute for Agriculture & Trade Policy (Minneapolis)


Prebisch, R (1950) The economic development of Latin America and its principal problem (Santiago: UNECLA)


Sapsford, D. & Singer, H. ‘The IMF, the World Banbk and commodity prices: a case of shifting sands?’ World Development 26 (9) 1653-60


Schulpen, L & Gibbon, P. (2002b) WIDER Working Paper


World Bank (2002) Study on coffee reported in *Agriculture Technical Notes*, No. 30, June, Rural Development Department