

TNCs And Commodities In SSA: Problems, Prospects and Potentials

Introduction

1. TNCs are usually seen as dominating commodity production in the South, processing (usually in the North) and international marketing. They are also frequently perceived as diabolic ex machinae who exploit (in the colloquial or monopsonist not just the technical sense) and less frequently as deii ex machinae who cause export, tax revenues, a burgeoning national bourgeoisie and development to flow.
2. These summaries are all over-simplifications. There are very major differences from commodity to commodity and country to country as well as among production, pre-trade processing, further processing, pre-export auctions and subsequent trading. Equally the division of gains among producers, host states and TNCs varies widely as do TNC preferred ownership, profit source strategies - by product, geographic region and - apparently - TNC.
3. This paper includes a brief review of the production, processing, marketing picture in SSA followed by a summary of actual and potential gains and costs. It will also note the prospects and potentials of TNC involvement (including different groups of TNCs notably development agencies like the Commonwealth Development Corporation and international trading firms not basically linked to productions nor based primarily on commodity trade). The concluding section will review the potential uses of TNCs to African commodity sectors and states together with certain associated risks.

The Present Picture

4. Basic commodity production varies in ownership among hydrocarbons, hard rock minerals (and diamonds) and soft agricultural/forest/sea commodities. In hydrocarbons the dominant forms involve partnerships (de jure or via varied oil sharing formulas) between TNCs and state oil

enterprises with a high share of surplus accruing to the state via taxes, enterprise profit oil shares and/or dividends. 100% TNC subsidiary production is decreasingly common while the high cost and risk of locating, proving and bringing on stream has deterred state enterprises from acting on their own as well as making the private domestic sector role negligible.

5. Hard rock minerals (and diamonds) are, by a plurality, a joint venture sector (state enterprise TNC) but with significant state enterprise and private (usually but not always TNC subsidiary) sub-sectors. An late 1960s-1970s trend toward 100% public enterprise ownership seems to have turned in favour of joint ventures. In any case it was neither universal nor quite what it seemed. Many state corporations had such elaborate, wide ranging and unaccountable (or at least not held to account) management and marketing contracts as to make them disguised joint ventures whether intentionally or not. In extreme cases it appeared the TNC got a high, assured profit with upside potential and the state all the risk, all the capital cost (purchase and investment) and a problematic return on its investment. Many state mining companies have suffered from investment starvation (especially for proving and developing new reserves to assure their medium term future) and from limited procurement and marketing management expertise.

6. Smallholder and domestic (public or mixed) plantation production is dominant for agricultural commodities. Further the somewhat atavistic or historical foreign private holding - except in tea - are usually held by smaller, specialist firms which are not TNCs as usually understood. The two major exceptions (in some, not all, countries) are sugar and pineapple where TNC (or TNC led de jure or de facto joint ventures) are common and, on the whole, expanding. Domestic marketing is usually (but by no means always, e.g. Nigeria nationally and sugar as a product) within a national public sector marketing enterprise framework with varying degrees of (usually domestic) private participation in buying from producers, internal transport and storage. Formerly a major source of state revenue (via Marketing Board surpluses and export taxes), agricultural commodity exports now are often apparently bottomless drains on public sector revenue (e.g. Cote d'Ivoire), near breakeven (e.g. Tanzania, Kenya) or minor revenue sources (e.g. Somalia). But in a few

cases (notably Ghana and Uganda) absence of alternative taxable income flows has left them a key source of government revenue at the cost of leaving only 30 to 40% of export value at official exchange rates to the actual producers. Forestry, like mining, is mixed albeit with a larger private domestic and a lower true TNC share. Marketing boards are relatively rare and state conservation and reforestation policies are weak in most cases (but - e.g. Ghana - exceptions exist) while ability to hold producers accountable is even weaker. Fishing (for export markets) has not been a success area either for state corporations without TNC partners nor for pure TNC operations. Relatively successful cases are mostly state enterprise partnerships (whether formally *joint ventures* or not) with foreign state or TNC entities making managerial, equipment, storage and marketing - plus less often risk capital) inputs.

7. Differences by state strategy are currently less prominent than in the 1970s and diminishing. TNC, smaller foreign firm or domestic private enterprise involvement is generally welcomed at least selectively. The number of states which do not seek some local enterprise partner role is also diminishing although there is still a divergence on attitudes to TNC subsidiary production, especially in agriculture. TNC strategy seems to be generally in favour of some form of de jure or de facto joint ventures in hydrocarbons, hard rock minerals and probably fishing, but a gradual withdrawal (or at least no expansion) in production level role agricultural commodities with no clear trend in forestry. But strategies and attitudes vary by TNC. For example, Anglo-de Beers views domestic joint venture partners (as well as independent trade unions) as a significant goal while RTZ seems to see domestic partners (especially with any real say in production management or marketing) as undesirable and usually avoidable evils (a view similar to that it takes of trade unions).
8. Processing needs to be divided into that necessary (for transport cost or preservation reasons) before export and further processing. This is not a clearcut distinction for all products. For example, gas can be pressurised and shipped as is or converted into chemical form (notably ammonia and urea) before export while smelting (as well as concentration of ores) before export is usually highly cost efficient except for quite small production volumes (notably in tin ore) and cases in which initial

conversion is very energy intensive (e.g. bauxite and manganese ore). But for most it is - seed cotton is not exportable without ginning for transport cost reasons, tea leaves because they would spoil and sisal leaves for a mix of both reasons. Conversion to cloth, blended teas or sisal twine, however, is clearly an optional further stage.

9. TNCs when involved in production do carry out necessary processing. They sometimes also contract process smaller direct producer output. Rarely do they operate pure contract processing except as a by-product of present or past own output operations.
10. Their forward integration into further processing (e.g. refined vs raw sugar, copper wire vs refined copper, petroleum products vs crude oil) in African states is limited, usually less than their involvement in Northern processing, often primarily African market related and not usually perceived as a growth area. The reasons are probably not uniform. EEC or other quota forms (e.g. for raw sugar) and cascade tariffs may have historically conditioned patterns some TNCs would not defend strongly; but neither do they show much interest in seeking removal of such processing location distorting trade barriers. This may be allied to the lack of any sustained attempt by African states to interest TNCs in processing for export joint ventures. In most countries attitudes are positive but little strategic thinking or priority attention to policy implementation has been evident.
11. In a handful of cases further processing for African and other South primary exports has been located in other African states - notably the Edea (Cameroon) and Tema (Ghana) aluminium smelters. But these two cases both seem to turn on favourable power contracts and to be marked by severe reluctance to integrate vertically either backward (bauxite, alumina) or forward (aluminium sheets, circles or finished products for export even though these would appear to be economically viable in both countries. The petroleum refineries in non-oil producing states are not analogous both because few use African crude to any significant extent and because they are domestic market focussed. The notable reluctance of TNCs to build export oriented refineries appears to relate primarily to their own downstream capacity in the North and to the soggy nature of refined products markets outside integrated flows within enterprise

groups which has made such investment relatively financially unattractive at least since 1973.

12. TNC commodity based manufacturing does exist in Africa. In some industries - notably textiles in a few countries and free trade zone production in Mauritius - it does involve non-trivial extra African exports. In a slightly larger number of cases intra-African exports are relatively substantial relative to output. But these cases seem to bear little relationship to TNC global commodity strategy (or even to domestic basic commodity input availability). They are rather primarily an aspect of exporting manufacturing capacity to safety inside national or sub-regional tariff barriers when the alternative would be substantial export market losses. The Mauritius free trade zone is virtually unique because so is Mauritius supply of abundant, low unit labour cost, semi-skilled workers. It is clearly an aspect of "export platform" not commodity strategy.
13. State and domestic private further production/manufacturing is dominantly domestic or - less commonly - sub-regional market focussed. Some exceptions (e.g. plywood and veneer, cocoa intermediate products) exist but most have been hampered by limited international marketing expertise and - apparently - high unit production costs.
14. International marketing of African commodities - as of all commodity trade and, indeed, international trade more generally is TNC dominated. The proportion of African commodity exports sold directly to final processor or manufactures with no TNC intermediation is quite low (probably under 10%). However, there are significant differences in form (and, less clearly, degree) of TNC control and some exceptions to the general rule.
15. Direct transfers by TNC subsidiaries, affiliates or managed units to other TNC group enterprises are common in hydrocarbons, metals, a handful of agricultural products and fishing. In hydrocarbons direct monitoring of prices is both feasible and common elsewhere it is, in practice less so. Cases in which intra TNC group transfer prices appear to yield significantly less than the going transfer prices among independent groups include Zaire metals, Kenyan pineapple and - in the past -

Liberian rubber. But more generally international trade in most commodities is dominated by a small number of broking, factoring and trading houses none of which is African and most of which are TNC group (processing/manufacturing, general trading or commodity trading bases) members.

16. Domestic auctions are fairly common among larger SSA producers. The problem is averting bidder rings. In many cases domestic auction prices are well below Northern terminal market ones less insurance, freight and finance strongly suggesting rings. One means sometimes - e.g. Tanzania coffee - in reducing collusion and raising prices is for a large (in practice public sector) firm to arrange tentative direct sale to Northern manufacturers and to bid up the price to the level at which these generate positive but modest profits.
17. Direct participation on Northern commodity markets (and especially in futures markets) has a less than happy overall record. African sellers have tended not to be very expert market participants and both futures contract operations and direct sales have tended to involve high data collection and representation expense but to generate average proceeds lower than the average spot price on Northern terminal markets, e.g. notoriously the Tanzanian sisal and the Nigerian cocoa marketing bodies. There are exceptions - Tanzania's coffee and cotton boards in most years as well as Ghana's cocoa marketing body. Similarly the Zambian and Zimbabwean metal marketing companies which must make or authorise all metal export sales (as owner or agent have had some success in halting or curtailing intra TNC group low price transfers and, to a lesser extent, getting prices above the average on terminal markets.
18. The reasons for low SSA entry relate primarily to and personnel barriers to entry. The capital requirements being largely working capital backed by assets on the high seas or held in stock in the North are by no means negligible but are probably less severe for public (albeit not domestic private) than the knowledge/personnel barriers which have proven costly and time consuming to erode.

Gains and Costs Revisited

19. TNCs do provide capital, managerial and technical competence and export buyers. That - in general - is not at issue. However, sometimes new market development, e.g. for pyrethrum when export marketing and pre-export processing was dominated by a single TNC, the chance to use environmentalism to build new uses for a short half life insecticide harmless to warm-blooded animals was totally ignored and wasted. The same has tended to be true of developing South markets since these traditionally have been small and rapid sustained expansion requires purchasing (for use or resale) of comparable values of exports from the South importer. Further, some TNC led design and construction management has been strikingly technically and cost inefficient (e.g. sugar in the Sudan) as has some operating management (e.g. sisal in East Africa and horticulture in West).

20. The division of gains has varied widely apparently depending both on TNC strategy and on African ability to conceptualise goals and to bargain for them effectively. But, especially in marketing and in hydrocarbons, and including the profit element in management contracts and intra firm export and input transfer pricing, TNCs have probably done reasonably well on gaining significant net returns on capital employed albeit this judgement may not apply to - e.g. sugar, rubber and sisal among soft products nor since 1975 to hard rock minerals in general. However, the low profits or losses in these cases relate to negative surpluses at production level not to high surpluses to host governments. TNC traders have continued to make high returns relative to own assets employed as have hydrocarbon producers and TNCs serving as de facto managing partners via contractual agreements.

21. The real issues, however, probably relate more to gains made in Africa or accessible to sharing by Africans than to TNC/Africa gains now located and recorded in ways allowing sharing. TNC's have by and large tended to locate processing off continent reducing not just surplus but value added in and exports from SSA. Because processed product markets are less transparent than primary and because African exporters have less experience in these markets, the need for TNC services (whether as brokers/traders or as manufacturers concluding term contracts with

technical and quality control advice) in marketing is very substantial. This is especially true now that many manufacturing TNCs (a notable example is chocolate in the USA) think profit (or at any rate return on assets) optimisation over time implies disengagement from intermediate processing if assured independent supplies of adequate quality exist. Similarly cost effective entry into terminal futures markets and/or direct sale to manufacturers can be facilitated and learning losses reduced if carried out as a joint venture with an established trading house (TNC or other) with a relevant global information network. Per contra in mining and hydrocarbons the key use of a TNC is to mobilise external finance and, frequently, to do so in ways limiting country exposure in the event of failure.

22. Not all of these potential gains require substantial use of TNC equity. Many can be done via contractual arrangements or joint ventures with relatively small TNC risk capital stakes. The major exception is hydrocarbons for which high risk pre-proving expenses exceed development investment and cannot be born by poor countries without a substantial production base and enough potential production structures to spread risk. Even so significant TNC equity has uses in creating a stable relationship and in building external credibility (both to buyers and financiers). It is very expensive money (25% a year post tax cumulated from investment dates is probably the going rate, however this is split among dividends, contractual profits, transfer pricing and other gains) in the event of success but may (depending on contractual and transfer price gains) be relatively low cost until significant surpluses accrue or in the event of failure.

Attracting TNC Investment

23. If careful analysis of options suggests TNC capital (especially in marketing, processing, hard rock mining or hydrocarbons) is desirable, considerable problems surround mobilising it. TNCs want high rates of return (averaging out experience over a range of new investments), low political risk, remittability of profits, stability of arrangements and minimisation of profit risk. SSA states are doubtless able to prevent these conditions existing, only on political risk minimisation, reduction

of profit risk and stability enhancement is it evident that they can have much positive impact. However, in marginal cases those are not unimportant areas.

24. Tax structures and investment codes do not determine where TNCs invest. Sky high taxes and the absence of investment codes with clear payment after takeover (if any) and independent arbitral provisions do, however, help determine where they do not. Therefore, general tax and investment code legislation (and advice on them from experienced, independent export teams - e.g. those of the Commonwealth Secretariat's Technical Assistance Group) are worth having. But in the case of most substantial investments they create parameters within which negotiation on special conditions is easier not complete read-off answers.
25. Profit risk reduction turns on relationships likely to prove not conflict free but in which conflicts can be resolved without undue disruption of business during the resolution process and in which built-in conflicts of interest are minimised. By and large broad data provision accountability (including independent auditing acceptable to the host) helps achieve this - much as most TNCs still doubt it. A sensible SSA state should be more alarmed when a potential investor on data submitted has no realistic hope of high returns than when his profit or supply goals are clear and so are the ways he can realistically anticipate achieving them.
26. Stability of arrangements requires, inter alia, that future gains divisions will appear equitable to the host in cases of high and the TNC in cases of mediocre profits. Given unavoidable profit uncertainties at the time of investment this is a hard goal to achieve but failure to do so has made traditional concession and fixed rate regimes for TNC subsidiaries inherently unstable. Two main ways forward exist: a.) joint ventures which share unexpected gains and mediocre results but also may entail substantial host country enterprise risk investment in scarce foreign exchange and, b.) additional profits tax (or royalties where a host enterprise supplies raw materials to a TNC or JV processing one) which provide that when average post tax cumulative profit on equity from date of investment exceeds a given rate (usually 20 to 25%) then additional profits will, in addition to standard company tax, be subject to special taxes (e.g. one half of post tax profits in excess of the

negotiated base level). To date such agreements pioneered by Papua New Guinea and TAG in the early 1970s and in diamonds and hydrocarbons in the second half of the decade do appear to increase stability, host country receipts if profits are high and - probably - TNC willingness to invest.

What Is To Be Done?

27. TNC involvement is not from an SSA point of view an end in itself but a potential means to export, producer net income, fiscal returns and/or sectoral diversification gains. Within TNC involvement equity investment is one mode for structuring relationships. Both means and modes should be analysed as to likely gains and costs both absolutely and relative to other means and modes. The results of such analysis will vary from stage to stage (production, necessary processing, further processing, international marketing); among commodity groups (hydrocarbons, hard rock minerals and diamonds, agricultural and forestry fishing) and commodities; from country to country and over time. For example a TNC subsidiary rubber plantation is likely to involve high costs and low gains to both host and TNC (which is the reason this is a shrinking means/mode). A technical partner in processing and international marketing arrangement might be much more attractive to both sides. At the opposite extreme a large natural gas to ammonia/urea operation needs external (TNC or mini TNC) partners in marketing, production, technology and equity or it is unlikely ever to get off the ground still less to operate at capacity or yield acceptable rates of return. Because such a plant is perceived by external lenders as requiring hands-on TNC involvement to be a prudent risk their having a not absolutely insignificant (though not necessarily a majority) equity stake as well as long term operation/marketing contracts is sine quo non for raising external loan finance - especially on a non-recourse basis (i.e. covered by the project only not a government guarantee).

28. Analysis, negotiation, innovation are key words in making the most of good (and keeping out of poor) potential opportunities. For example, APT is a way to increase stability, development bodies like CDC are alternatives to traditional TNC'S in processing and general trading companies to commodity focussed TNC groups or units in respect to

international marketing. Especially if equity rates of return are unlikely to be high but specific quantifiable export, fiscal and other enterprise gains to the host country are likely to be large, contractual arrangements (tied to output, gross export revenue and/or surplus generation not to a cost plus of fixed fee formula) may be cheaper to the SSA host and more attractive (by limiting the investment base needed to generate surpluses) to the TNC than standard subsidiary or equity arrangements. This may be of particular relevance in marketing processed products to several large manufacturers or wholesalers who wish - if anything - to disengage from investment in processing but do wish to maximise reliability and quality suitability of supply sources.

29. Specific potentially useful roles (like present patterns and their consonance with SSA interests) cannot, as noted, be generalised. However, certain guidelines or check points for screening may be useful:

a. Production is likely to need TNC investment only in hydrocarbons and hard rock minerals. Except for these cases most technology is either available "off the shelf" or not available from TNCs. Especially in SSA, TNC plantations are rarely good business for hosts and are often bad business for all parties. There may be room for specific startup and early year technical support on other new commodities but contractual arrangements - including with production oriented development financiers like CDC - should be explored as alternative to ones with standard TNCs or smaller foreign enterprises;

b. In processing most technology is available "off the shelf" and - again except for hydrocarbons and minerals - neither investment scale nor operating complexity normally require major long term TNC equity involvement nor even long term (versus initial period) management or technical contracts. But these commodities pose special marketing problems often needing TNC or other experienced seller contractual or marketing subsidiary joint venture arrangements. The alternatives of development financiers with experience, existing South enterprises (e.g. India in leather) and manufactures seeking to reduce commitments to in-house intermediate processing as contractual partners should be canvassed. A key factor - whatever TNC role seems appropriate - is getting cascade tariffs and quotas reduced or

eliminated. Partners should be chosen with a view to their capacity to further that result and their freedom from vested interests in obstructing or delaying it;

- c. in international marketing gaining broader access at acceptable unit cost levels and learning period expenses may well often indicate a quest for a suitable TNC joint venture as well as contractual partner. General trading companies with no vested interests in production or particular commodities and/or manufactures seeking new sources of supply (especially of intermediates) may often be better partners than old line commodity TNCs (or smaller foreign commodity group analogues). South-South trade, a significant potential growth area, may be a partial exception. To be large and sustainable such gains often need to be in the context of multi-product two-way trade expansion (not a commodity marketing TNCs forte). General trading firms (including South based ones) on technical/managerial contractual terms may still have value especially for smaller SSA economies with limited public or private sector trading expertise.
30. In surplus division the name of the game is not minimising TNC profits - unless of course their rapid, unnegotiated withdrawal is the objective. Rather it is to ensure that TNC gains are known and acceptable and that agreements on sharing "windfall" profits are set up in advance. The key requirements are accountability for disclosure on TNC quests or partners to hosts together with African capacity to analyse such data and to build up independent data sources (an area in which South-South exchange of information could be very valuable) together with profit sharing formulae (in joint ventures and in respect to long term contracts) and variants of APT.
31. TNCs do not and need not dominate African commodities. Room for manoeuvre exists and should be developed. Neither are they dei or diaboli ex machinae but instruments whose selective use, when cost effective should be part of all SSA states' commodity strategy and policy conceptualisation, articulation and implementation.

- R. H. Green
Maputo/Falmer
27-VI-89

COMMODITY PRODUCTION AND TRADE:

The Impact of Domestic Policies

OVERVIEW

1. Commodity production levels are determined by a complex set of factors, often in interaction. These may be grouped as the "Six Ins" (Paul Streeten's term): Incentives, Inputs, Innovation, Information, Infrastructure and Institutions. Prices enter mainly as incentives but are not the whole of it. The weight of professional opinion is that prices alone, without combination with the other factors, are not the most powerful factor, although they remain an essential part of a full policy based on the "Six Ins".

2. For each individual producer, his or her level of production will be determined primarily:

- a. by the price that he or she expects to receive relative to the cost of production;
- b. by the price of that particular commodity relative to the price of alternative goods or services that the producer could either sell or consume.

But note that "cost of production" in this context assumes the availability of inputs and of credit and access to land securely held or paid for at a reasonable rent; and "price received" assumes reasonably prompt payment and the availability of desired consumer goods for purchase.

3. Domestic policies have had - and continue to have - a major impact on cost/price ratios and the price receivable for any one commodity relative to other goods and services. But evaluation of the impact of domestic policies has often suffered from lack of clarity because:

- a. appropriate goals have not been specified (e.g. these should not be maximisation of quantity produced or even of gross export earnings but maximisation of revenues over costs with due regard - especially in agriculture - to optimising the income earning opportunities of the poorest producers);
- b. distortions have occurred in the use of public institutions and policy instruments (e.g. marketing boards that were founded to even out producer prices have been used to raise revenue for governments; low prices set by the state for domestically produced and consumed foodstuffs have turned the internal terms of trade against agricultural producers; a foreign exchange rate which overvalues the domestic currency penalises primary commodity exporters while creating rent-winning opportunities for political favourites and bureaucrats);
- c. an artificial dichotomy has often been posed between outward (export promoting) and inward (import substitution promoting) policies, when in practice the best policy must combine the selective promotion of those exports for which the country has (or can acquire) a comparative advantage with the promotion of selective, efficient import substitution.

4. Generalisations about long term movements in the terms of trade between primary commodities and manufactured goods have to be made with care, especially if there is a danger that the beginning of a period might represent a peak and the end of it a trough or vice versa. Nevertheless both analytical reasoning and the statistical evidence would appear to support the generalisation that revenues from the production of primary commodities have since the end of the Second World War fared poorly relative to revenues derived from the production of manufactures, apparently because:

- a. global demand for commodities has grown less rapidly than either global trade or global GDP (the income elasticity effect);
- b. unit prices of commodities have risen less than those of manufactures.

Nor does it appear, in most cases, that relative productivity gains in commodity production (where these have occurred) have adequately compensated primary commodity producers against the adverse impact of these trends.

5. There have been exceptions to these trends in some years and for some commodities over fairly extended periods. However, among major commodities only diamonds - the one commodity for which there has been an institutional structure which effectively coordinates production with sales - seems to have moved consistently against these trends. Individual producers have certainly been able to benefit by shifting from one commodity to another (e.g. from rubber to cocoa to palm oil and now - perhaps - back to rubber); but the above analysis suggests that globally - and for relatively large economies - the room for adapting the commodity mix in production in order to offset slow growth in export earnings (valued in terms of imports) is relatively narrow.

6. Among major commodities, grains and sugar have performed particularly badly - notably over the past decade and a half. Whatever the merits of reducing dependence on imports of staple foods, this implies that the use of domestic policy to promote exports of these crops does not promise much. That conclusion might not hold for a very low cost grain or sugar producer which had previously been an importer or negligible exporter, and might not hold if export subsidies (notably by EEC and the USA) were phased out, but for most countries today it is a valid generalisation.

7. The general quantity growth and price trends for commodities raises the question as to whether domestic policies should be used to improve the domestic prices of such commodities relative either to import substitutes or to other exports. To do so is to run the danger of distorting the message of global price signals. As the core of an export development strategy, the use of domestic policies to manage - indeed, to reverse - trend global market price signals may be to plan to specialise in losers. This argument should not however be used to prevent the correction of those price distortions which occur when an overvalued exchange rate artificially reduces the domestic currency receipts of home exporters and the domestic currency price payable by home importers. Nor does it justify the reduction of local production for domestic consumption by the setting of prices at below market-clearing levels.

8. The occasions when state intervention would appear to be justified in raising the domestic price of a commodity above the equivalent border price would appear to be these:

- a. when there is a strong domestic price bias against the commodity in question by comparison with international price ratios;

- b. when, as a result of declining export prices, domestic production is reduced leading to foreign exchange losses which cannot in the short term be made good by efficient export promotion or efficient import substitution (however such subsidisation of exports should be used with care and probably only for the short term);
- c. if a particular commodity does face relatively favourable global market demand and price trends, so that investment at higher levels than are likely to be forthcoming without intervention will occur (but again the government must have very convincing reasons for believing it can read future price trends better than the market).

These cases are not trivial. But they relate to general price reform (not the reform of commodity export pricing only) in the first case; to the rescue or rehabilitation of deteriorated existing commodity production sectors in the second; and to specific export opportunities in the third. They do not create a case for a general shielding of export commodity production from global price relativities.

9. Notwithstanding the unfavourable global trends and the harmful effects of international market conditions created by the actions of some OECD governments, notwithstanding even the 'fallacy of composition' argument, it is clear that commodity production and export will remain of great importance to many African countries. Some will continue to depend upon mineral exports as their primary source of foreign exchange. Export agriculture will continue to be a major source of income, employment, exports and government revenue. For SSA as a whole, export agriculture is equivalent to 7% of GDP; for Kenya, 17%; for Malawi, 18%; for Cote d'Ivoire, 34%. Some recovery of market share will be possible for some African producers, even if it is recognised that it may not be advantageous for all African exporters simultaneously to try to do so in the face of competition from outside Africa determined to protect its market share. But the basically pessimistic view of this paper about global trends for primary commodities (reinforced by the additional note on 'new materials') suggests that policy initiatives (apart from correcting past mistakes and current distortions) should aim at six main objectives:

- a. the development of new uses and new markets for established commodities;
- b. measures (which may need to include internally established export revenue stabilisation funds) that will mitigate the harmful effects of commodity price fluctuations;
- c. diversification of the commodity export mix, so that African countries become less dependent upon the price and upon the continuing demand for individual primary commodities;
- d. further processing of commodities within their country of origin and sub-regionally - as the internal economic structure of such countries matures and internal linkages develop, it should be possible for GDP to expand faster than export earnings;
- e. promotion of faster growth in the trade in primary commodities within the general context of South-South trade.
- f. identification and introduction of policies that will enhance the comparative advantage of small producers in certain types of primary production so that the poor may benefit directly and structural adjustment be accompanied by structural transformation.

Domestic Instruments for Influencing Production

10. As a first principle it can be argued that, unless a special case can be made out, taxation should be approximately neutral as to source of income. Three caveats arise:

- a. if certain commodities face falling real global price trends a modestly higher rate of taxation could be justified to reinforce market signals to alter the mix of production;
- b. if commodity incomes are more unstable than incomes derived from other sources (and trend levels are predictable) then counter-cyclical taxation levels could be appropriate to avoid over-reaction to short term fluctuations. (But this implies that surpluses accumulated when prices are high will indeed be available for re-distribution to producers when prices are low.);
- c. if the price of a commodity significant to an economy's overall exports is so low that export earnings (and therefore the country's import capacity) are threatened, then lower than average taxation (or even negative taxation, i.e. subsidies) may be justified for a transitional period to hold up export levels while more efficient exports (and/or import substitutes) are built up.

11. In practice many African governments have taxed income from commodity exports more heavily than income from other sources whether by export taxes or by running up statutory marketing surpluses. There was - especially in SSA - a tendency for the disparity to become larger in the 1970s and early 1980s. Without doubt in several cases such taxation played a major role in bringing about stagnation or decline in output and exports, as well as encouraging smuggling.

12. A second policy instrument is devaluation. To the extent it is effective in real (not just nominal) terms, devaluation increases the relative price of those products which are tradeable relative to those which are not. In principle therefore it is less selective than commodity specific tax reductions (or subsidy increases) and should be neutral between commodities and other exports and among commodities. However, that neutrality assumes equal import-content. Because the import content in their production is generally low, agriculture commodities are likely to be favoured vis a vis other exports, and some commodities (e.g. tree crops) and some sub-modes of production (e.g. peasant) will be helped more than others.

13. Severely overvalued exchange rates (unless fully offset by export incentives, which is rare) clearly deter the growth of exports or even the maintenance of existing export levels. This results both from shifts in revenue/cost ratios and in prices relative to de facto non-tradeables (e.g. staple food in SSA in the 1970s and early 1980s). If a government does want to deter (or encourage) specific (commodity or other) exports, the use of targetted taxation (or subsidies) is much more efficient.

14. An undervalued exchange rate as an instrument to promote export is probably also inappropriate for most African countries although there is some evidence that Japan and S. Korea had 'undervalued' exchange rates for extended periods, to their advantage. Developing country real exchange rates generally have declined since 1970, although for SSA this decline may not have started until the early 1980s. For commodity producers it has been argued that this

was a prudent response to adverse terms of trade shifts. However, given low commodity price elasticities the argument - globally and for major exporters - is circular. If steady real exchange rate depreciation does increase the rate of growth of commodity exports, it may also reinforce the terms of trade decline it was intended to offset.

15. Deliberate reduction of domestic marketing cost is also a policy instrument. In some African countries marketing costs absorbed the largest share of export proceeds, taxation took the next largest share and growers received the smallest share. Not surprisingly such patterns led to rapid declines in output, and to smuggling. Marketing surpluses (public or private) amounting to more than a normal return on capital employed are treated in this paper as a form of de facto taxation.

16. In most of SSA, marketing costs (especially, but not exclusively, in single channel public sector systems) are clearly too high. The reasons vary - too many employees, too high transport costs (relative to efficient fleet operators or hirers), too high physical losses, too long delay in sales and collection of proceeds (increasing finance and storage costs), poor management, corruption. Which cost elements are too high and how they can be reduced are questions of fact varying widely from case to case. The desirability of acting to reduce inefficient resource use however is clearcut. The case for passing on the full gains to growers (especially if the marketing operation was previously subsidised) is less universal. If prevailing revenue/cost and relative domestic price ratios are high enough to result in an adequate growth of output of a commodity facing inelastic demand, then subsidy reductions and/or allocations to build up alternative exports may have a higher opportunity value.

17. Policies that promote a steady decrease in production costs (other than by subsidy) are desirable however, whether or not world relative prices are deteriorating. Research and development expenditures on many (not all) tropical agricultural commodities are consistently too low, and the example of the international crop research institutes in spreading overhead costs and in improving the access of smaller producers to cost-reducing knowledge could be followed more widely. The same holds for demand-increasing research and development, which either alters commodity characteristics to fit existing product needs (as has been done for natural rubber) or creates new uses (the most famous example being instant coffee).

18. Other instruments that should be considered fall under the heading of administrative reform. These may include:

- a. better land tenure, including redistribution, titling and reform of state farms;
- b. better input supply regulation, including abolition of subsidies which favour capital intensive agriculture;
- c. research and extension better suited to the needs of small farmers;
- d. improved infrastructure, especially roads;
- e. more support for parastatal reform and encouragement for efficient private sector marketing;.
- f. identification of potential rehabilitation projects (e.g. in mining) where new joint venture arrangements can be combined with debt reduction measures;
- g. debt for environmental protection schemes where the environmental protection aspects of a project will be supported by a foreign aid donor.

International Marketing and Pre-Export Processing

19. Additional net export revenues from international marketing and pre-exporting processing are potentially superior in quality to those that may be gained from increased production. Because they do not increase the volume of the commodity produced, they therefore do not have a negative effect on global prices. That said, significant barriers exist to the cost-efficient achievement of these methods of augmenting export revenues - especially in respect of international marketing.

20. Auctioning before export and direct use of international commodity exchanges as well as direct sales to major users are international marketing activities within the competence of the public sectors of most African countries. They are also within the competence of the private sectors of a number. Deeper entry into commodity trading requires global information networks, experienced personnel and a large number of established business contacts as well as substantial working capital. Larger, middle income commodity exporters (e.g. several in Latin America and South and Southeast Asia) have the capacity to enter or expand in this field. Underwriting the learning costs would encourage participation, but it is an area where large sums of money can be lost by inexperienced operators.

21. Enhanced South-South commodity trade is practicable if some means of ensuring balanced bilateral or small group trade expansion (or expansion with agreed limits to imbalances) can be designed, negotiated and operated. More attention deserves to be paid to potential in this direction. Given the lack of well-developed TNC channels, domestic enterprises should be able to capture most of the ensuing marketing business.

22. Pre-export processing adds to export value without depressing commodity prices. For some primary products it does offer efficient ways to expand domestic value added and export earnings. Examples include timber, sugar, cocoa, oil seed, iron ore, sisal, hides and perhaps coffee and tea. What products are promising and how far processing should go (e.g. cocoa butter, powder, paste, liquor and mass - the intermediates - are likely to be more suitable than finished chocolate products) are empirical questions the answers to which vary by commodity, by country and over time.

23. Which other domestic policy instruments are needed (e.g. research and design funding, direct capital injection, capital mobilisation, initial period taxes below average) will vary. In general too little attention is devoted to potential in this area at the applied level, especially in SSA.

24. Domestic policy should include strong efforts to reduce international (= foreign domestic) barriers, notably:

- a. cascade tariffs (could GATT be used for this?);
- b. arrangements such as EEC's Lome Sugar Protocol which specifies a less processed rather than an economically more efficient, more processed form (i.e. raw vs refined in this case). (Could this be attended to in the Lome IV negotiations?);

These may be more achievable targets now than a decade ago. Many TNCs are willing to contract out their initial processing operations and to use intermediates; some OECD processing sectors are not particularly economically significant nor self-evidently politically potent.

Liberalisation and Commodity Production and Prices

25. Economic stringency - especially import compression and high net external payments for capital - creates pressure to maximise short term export earnings. For an economy more than, say, 25% of whose exports are comprised of primary products, this is likely to mean pressure to raise the volume of commodity exports.

26. There are, however, countervailing forces. Export taxation may be a crucial revenue source, the capacity to subsidise exports may be limited, massive devaluation may be unable to alter domestic price relativities substantially, and investment capital to expand productive capacity may be scarce, to commodity producers in particular. Falling real global commodity prices, other things being equal, tend to reduce (or reverse) the rate of growth. Under the pressure of debt, adjustment and foreign exchange scarcities, many individual countries have tried to increase their own share of the market by expanding exports even in the face of falling prices, resulting in beggar-my-neighbour policies and overall immiseration.

27. 'Liberalisation' - especially when it is not in the context of an international package providing substantial debt service relief and new capital inflows - reinforces the tendencies of economic stringency to lead to efforts to boost short run exports. Further, by including devaluation in excess of what relative overall domestic price movements would justify it may offset (distort) the global market price signals deterring increase in output growth.

28. The evidence on this last point is mixed. Outside SSA, liberalisation seems to have led to export drives focussed on manufactures or pre-export processing more than on expanding commodity exports. In SSA, dramatic export growth has been limited to a few countries and has to a large extent represented rehabilitation of existing capacity and/or the clawing back of previously smuggled exports. The extent to which raising real producer prices has played a role is unequal - very high in some cases and problematic in others. The role of increased resource transfers (leading to increased import capacity utilised in part to meet the import requirements of commodity production and of the infrastructure serving it) is generally significant; significantly positive where such transfers did increase and significantly negative where they decreased.

29. Trade liberalisation in the sense of freeing both domestic exports and foreign imports from quantitative restrictions, licensing and other regulations tends to favour the producers of primary commodities, with certain reservations. The liberalisation needs to be accompanied by a realistic exchange rate. If there is pent up demand for foreign exchange, measures may be needed to ensure that priority access is accorded to those who require inputs for domestic production. If some domestic industries are badly run down but capable of rehabilitation, interim protection from competing imports may be required. Indeed the sequencing of liberalisation measures may be extremely important, preferably in the context of a regime of restrictions and licensing progressively being replaced by a suitable structure of tariffs, possibly supplemented by some export taxes where this is an appropriate way of taxing the natural 'rent' advantages of some commodity exports.

30. In SSA, liberalisation has tended to be built on the presumption that commodity exports were the key to restoring external balance and that commodities were likely to enjoy moderately rapidly growing markets and

constant or improving terms of trade. All three assumptions can now be seen to be wrong for most commodities and most countries. Thus time has been lost and attention directed away from articulating country-specific, practicable and efficient export development and import substitution strategies, and from the task of implementing such strategies.

Summary

31. Domestic policies - especially taxation, management of the exchange rate and promotion of cost reductions in production and domestic marketing - can effect commodity production significantly. Given current elasticities of demand and present global price projections what the optimal extent and pattern of incentives to increase the production of commodities ought to be is itself unclear - but certainly it must vary by commodity and by country. However, policies which erode existing commodity export bases while putting nothing in their place are clearly unsound.

32. Greater pre-export processing, South-South trade and participation in international marketing can be furthered by domestic policy. For some products and countries they hold out prospects of significant increases in net export earnings without the depressive price effects of export expansion to OECD and CMEA markets.

Additional Note 1:

SUMMARY OF WORLD BANK'S REPRESENTATIVE 'POLICY PACKAGE'
FOR THE REVIVAL OF AGRICULTURAL COMMODITY PRODUCTION IN SSA

1. Free producer prices from state regulation allowing them to be determined by market forces.

Fix monopolised prices at long term world market levels.

Offset impact of over-valuation of exchange rate with export subsidies and/or import taxes.
2. Reduce export taxes.
3. Introduce appropriate land taxes (e.g. betterment levy); consumption tax and/or income tax to be increased.
4. Reduce farm input and service subsidies.
5. Eliminate consumer food subsidies.
6. Reduce the number of agricultural white elephants.
7. Government should use savings from above to improve national agricultural services (agricultural research, extension, animal health, forestry and environmental services).
8. Managed float of exchange rate.
9. Privatisation of agricultural marketing and processing.
10. Parastatal divestiture and restructuring.
11. Financial market development.
12. Cadastres, land titling, land reform, land documentation.
13. Soil conversion programmes through research, extension, public works.
14. Environmental protection (protected areas, alternative energy supply, forest replanting, reclamation of degraded land, control of dangerous chemicals).

(Adapted from K. Cleaver)

Additional Note 2:

ADVANCED MATERIALS AND AFRICAN COMMODITY POLICY

It is becoming urgent to integrate commodity policy with the radically changing scientific and technological circumstances of the 1990s. Attention needs to focus on the arrival of new inter-connected clusters of advanced materials which can be broadly classified as engineering plastics, advanced ceramics, composite and laminate systems, advanced metallic alloys and the new generation of high temperature superconducting materials. Primary exporters in Africa must recognise that the advent of advanced materials, the diffusion of microelectronics-based automation technologies and parallel organisational changes imply that the parameters for formulating commodity, trade and industrialisation strategies are altering fast.

Major discontinuities and rapid changes lie ahead which will necessitate going beyond a simple examination of the demand trends for a particular commodity.

At the heart of the revolution in materials science lies the recent ability of scientists to intervene at the molecular and atomic level and rearrange the microstructure of materials in order to attain the required properties of the designed material. We can now start with the desirable properties and performance characteristics in use and design and process the material as required.

Such scientific and engineering design advances imply a vastly accelerated rate in materials and product invention and innovation, rapid obsolescence of existing products and processes, and reduced life-cycle for new materials, necessitating a simultaneous global marketing push, in contrast to the product-cycle approach, in order to amortise high R & D costs.

Materials research and development now requires that material scientists become closely involved in the processing and fabrication stages of production. In fact, as materials science and engineering merge, the design and processing of a material will be integrated with the design and manufacturing process of the end user.

Currently advanced materials systems are mainly employed in high-technology sectors such as aerospace and defence, where performance overrides cost considerations. But given the vast research effort underway such materials are expected to make serious inroads into the markets for traditional natural commodities towards the end of the 1990s.

The diffusion of information technologies and of advanced materials technologies are likely to erode traditional sources of African natural comparative advantage in primary production and in some labour intensive activities. The domestic ability to absorb and apply the new technologies and incorporate materials with enhanced performance characteristics will influence the direction of industrial restructuring and consequently the region's place in the global division of labour and trade patterns.

Although the adverse impact of substitution and technical change is not a new phenomenon for industrial raw materials, the observed marked declines in intensity of use since the early 1970s signal the onset of irreversible structural forces acting on the demand side. Sectoral shifts in the product

composition of national output away from materials intensive sectors, and declining material use per unit of final output have combined to reduce intensity of use. This process is expected to accelerate in the 1990s as a wide range of natural fibres, sugar and metals such as aluminium, steel, and copper face far greater substitution from the advanced materials spawned by the materials revolution. It is expected that by 2000 the US market for polymers, including synthetic rubbers will be 26 per cent of the total materials markets as compared to 15 per cent in 1970. In contrast, the US metal market is expected to decline to 38 per cent of the total as compared to 50 per cent in 1970. Similar trends are expected in Europe and Japan.

It is therefore becoming necessary for primary producers in Africa to address the following questions:

What will be the competitive position of African producers of commodity metals given the need to employ advanced manufacturing techniques even at these early stages of production? Will there be increasingly stringent performance characteristics placed on materials throughout industry? Will designers in African countries need to choose advanced manufacturing technologies and to select higher performance materials, if only to compete in world markets? What will be the global marketing strategies of TNCs in the use of advanced materials and will Africa be included? Will the use of microelectronics-based manufacturing technologies in developing countries with its associated transfer of technology, increase the pressure for more generalised domestic use of new materials? Under what conditions ought African producers to remain in (or enter into) the processing of traditional raw materials and monolithic metals? What is the need and potential for gradually moving into higher value-added processing and fabrication? Should African economies be planning now to integrate their commodity sectors within an overall strategy to build up scientific and technological capacity to use, and in the long run to produce, specific advanced materials consistent with their natural endowments? Are there cumulative gains from early production and use of new materials, and will entry to these activities effectively be barred later on?

And one final question:

Should serious thought be given to the early creation of a Materials Research Centre for Africa? Apart from conducting pure scientific research and keeping in touch with developments in science and technology, the Centre could research into the defence of existing primary commodities of interest to Africa, in the production and use of new materials consistent with the needs and endowments of the region, and could assist the formulation of appropriate materials and industrialisation strategies for specific economies.

COMMODITY PRODUCTION AND TRADE:

The Impact of Domestic Policies

OVERVIEW

1. Commodity production levels are determined primarily by prices:
 - a. by price received versus cost of production
 - b. by commodity price relative to the price of alternative commodities or products the commodity producer could actually produce and sell.
2. In the case of some commodities (notably petroleum and natural gas) the financial costs of undertaking production may preclude it this option for some governments - especially for those of economically small, low income, heavily indebted countries. In Commodity marketing is influenced more by institutional factors or acquired comparative advantage. The barriers to entry relate to knowledge, personnel and contacts with access to working capital an important, but secondary, constraint.
3. Domestic policy can effect price/cost ratios and the price of a commodity (or commodities) relative to other prices at home. It can also have some impact on institutional factors affecting marketing, albeit more by worsening the position of external marketers than by improving (other than through subsidies) that of domestic ones.
4. Evaluation of the impact of domestic policies' on commodity production and marketing has often suffered from lack of clarity in two respects:
 - a. specifying the appropriate goals (which will not be maximisation of quantity exported or even of gross export earnings);
 - b. posing an artificial dichotomy between outward (export promoting) and inward (import substitution promoting) policies, when in practice the best policy is likely to involve selective export promotion and selective import substitution simultaneously.
5. Over the past forty years commodity prices have on a trend basis performed poorly relative to those of most manufactured goods in that:
 - a. globally commodity markets have grown less rapidly than either global trade or global GDP;
 - b. unit prices of commodities have risen less than those of manufactures.
6. There have been exceptions to these trends in some years and for some commodities over fairly extended periods. However, among major commodities only diamonds - the one commodity for which throughout the

period there has been an institutional structure which effectively co-ordinated product output - seems to have moved consistently against those trends. This must mean that globally - and for relatively large economies - the room for shifting commodity production on the commodity mix in order to offset slow growth in commodity export earnings (valued in terms of imports) is quite narrow.

7. Among major commodities, grains and sugar have performed particularly badly - notably over the past decade and a half. Whatever the merits of reducing dependence on imports of staple foods, this implies that the use of domestic policy to promote exports of these crops does not promise much. That conclusion might not hold for a very low cost grain or sugar producer which had previously been an importer or negligible exporter, and might not hold if export subsidies (notably by EEC and the USA) were phased out, but for most countries today it is a valid generalisation.
8. The general quantity growth, and price trends for commodities raise questions as to why domestic policies should be used to improve their domestic prices relative either to import substitutes or other exports. To do so is to run the danger of distorting the message of global price signals. As the core of an export development strategy, the use of domestic policies to manage - indeed, to reverse - trend global market price signals may be to plan to specialise in losers.
9. There can, however, be specific cases in which such intervention is desirable:
 - a. when there is a strong domestic price bias against the commodity in question by comparison with international price ratios;
 - b. when an important established export is being produced at a cost near or above the export price as a result of which output and export fall leading to foreign exchange losses which cannot be made good by efficient export promotion or efficient import substitution in the short term;
 - c. if a particular commodity does face relatively favourable global market demand and price trends so that investment at higher levels than are likely to be forthcoming without intervention appears to be justified.

These cases are not trivial. But they relate to general price reform (not the reform of commodity export pricing only) in the first case; to the rehabilitation of deteriorated existing commodity production sectors in the second; and to specific export opportunities in the third. They do not create a case for a general shielding of export commodity production from global price relativities.

10. This argument is related to, but separate from, the "fallacy of composition" argument. That argument in its simple form states that if price elasticities are less than one over the relevant time period, gross

proceeds of all producers together will be decreased if they collectively increase output. Several caveats apply:

- a. for a single producer whose share in production is small, expansion will pay, at least in terms of increasing the gross proceeds;
 - b. gross proceeds are an inadequate measure of gains - net (of import content) export proceeds and domestic surplus levels would appear to be better measures and would normally yield more conservative conclusions as to the circumstances under which output expansion was desirable;
 - c. because of the risks of substitution (and especially of concentrating research on substitute development and the possibilities of recycling) to plan for trend output growth less rapid than global income elasticity times global GDP growth is probably imprudent.
11. Even with these caveats, it is clear that sweeping advice to sustain or to increase market share in present major export commodities does not make sense to any producer if all should act on it. For example, had Sub-Saharan Africa maintained its market share for its main exports in the 1970s it would have earned less foreign exchange than it did if other producers had raised production at the same rates they actually achieved. Only if it is assumed that total output levels would have been identical (other producers' lower output levels offsetting SSA's higher ones, tonne for tonne) it is possible to make sense of the World Bank's calculations that SSA's external debt (with the same import levels) could have been only half as high as it is had export market share been held.

Domestic Instruments For Influencing Production

12. One major domestic instrument which affects commodity production and its growth (or decline) is total de jure and de facto taxation of such production, both absolutely and relative to that of incomes derived from other sources. As a first principle it can be argued that, unless a special case can be made out, taxation should be approximately neutral as to source of income. Three caveats arise:
- a. if certain commodities face falling real global price trends a modestly higher rate of taxation could be justified to reinforce market signals to alter the mix of production;
 - b. if commodity incomes are more unstable than incomes derived from other sources (and trend levels are predictable) then counter-cyclical taxation levels could be appropriate to avoid over-reaction to short term fluctuations. (But this implies that surpluses accumulated when prices are high will indeed be available for re-distribution to producers when prices are low.);
 - c. if the price of a commodity significant to an economy's overall exports is so low that export earnings (and therefore the country's import capacity is threatened, then lower than average taxation (or even negative taxation, i.e. subsidies) may be justified for a

transitional period to hold up export levels while more efficient exports (and/or import substitutes) are built up.

13. In practice many African governments have taxed income from commodity exports more heavily than income from other sources whether by export taxes or by running up statutory marketing surpluses. There was - especially in SSA - a tendency for the disparity to become larger in the 1970s and early 1980s. Without doubt in several cases such taxation played a major role in bringing about stagnation or decline in output and exports, as well as encouraging smuggling.
14. A second policy instrument is devaluation. To the extent it is effective in real (not just nominal) terms, devaluation increases the relative price of those products which are tradeable relative to those which are not. In principle therefore it is less selective than commodity specific tax reductions (or subsidy increases) and should be neutral between commodities and other exports and among commodities. However, that neutrality assumes equal import-content. Because the import content in their production is generally low, agriculture commodities are likely to be favoured vis a vis other exports, and some commodities (e.g. tree crops) and some sub-modes of production (e.g. peasant) will be helped more than others.
15. Severely overvalued exchange rates (unless fully offset by export incentives, which is rare) clearly deter the growth or exports or even the maintenance of existing export levels. This results both from shifts in revenue/cost ratios and in prices relative to de facto non-tradeables (e.g. staple food in SSA in the 1970s and early 1980s). If a government does decide to deter the growth of exports generally, there are unquestionably better ways to achieve that than by overvaluation of the domestic currency; and if it wants to deter (or encourage) specific (commodity or other) exports, the use of targetted taxation or subsidies is again much more efficient,
16. An undervalued exchange rate as an instrument to promote export is probably also inappropriate. Developing country real exchange rates generally have declined since 1970, although for SSA this decline did not start until the early 1980s. For commodity producers it has been argued that this was a prudent response to adverse terms of trade shifts. However, given low commodity price elasticities the argument - globally and for major exporters - is circular. If steady real exchange rate depreciation does increase the rate of growth of commodity exports, it will also reinforce the terms of trade decline it was intended to offset.
17. Deliberate reduction of domestic marketing cost is also a policy instrument. In some African countries marketing costs absorbed the largest share of export proceeds, taxation took the next largest share and growers received the smallest share. Not surprisingly such patterns led to rapid declines in output, and to smuggling. Marketing surpluses (public or private) amounting to more than a normal return on capital employed are treated in this paper as a form of de facto taxation. Attention is therefore directed to policies affecting actual marketing costs.

18. In most of SSA, marketing costs (especially, but not exclusively in single channel public sector systems) are clearly too high. The reasons vary - too many employees, too high transport costs (relative to efficient fleet operators or hirers), too high physical losses, too long delay in sales and collection of proceeds (increasing finance and storage costs), poor management corruption. Which cost elements are too high and how they can be reduced (including by institutional changes) are questions of fact varying widely from case to case. The desirability of acting to reduce inefficient resource use however is clearcut. The case for passing on the full gains to growers (especially if the marketing operation was previously subsidised) is less universal. If prevailing revenue/cost and relative domestic price ratios are high enough to result in an adequate growth of output of a commodity facing inelastic demand, then subsidy reductions and/or allocations to build up alternative exports may have a higher opportunity value.
19. Policies that promote a steady decrease in production costs (other than by subsidy) are desirable however, whether or not world relative prices are deteriorating. Research and development expenditures on many (not all) tropical agricultural commodities are consistently too low, and the example of the international crop research institutes in spreading overhead costs and in improving the access of smaller producers to cost-reducing knowledge could be followed more widely.

The same holds for demand-increasing research and development, which either alters commodity characteristics to fit existing product needs (as has been done for natural rubber) or creates new uses (the most famous example being instant coffee).

International Marketing and Pre-Export Processing

20. Additional net export revenues from international marketing and pre-exporting processing are superior in quality usually to those that may be gained from increased production. Because they do not increase the volume of the commodity produced, they therefore do not have a negative effect on global prices. That said, significant barriers exist to the cost-efficient achievement of these methods of augmenting export revenues - especially in respect of international marketing.
21. Auctioning before export and direct use of international commodity exchanges as well as direct sales to major users are international marketing activities within the competence of the public sectors of most African countries. They are also within the competence of the private sectors of a number. Where these activities are not already practised or where they clearly result in selling at lower than average world prices (quality held constant), action is appropriate.
22. Deeper entry into commodity trading requires global information networks, experienced personnel and a large number of established business contacts as well as substantial working capital. Larger, middle income commodity exporters (e.g. several in Latin America and South and Southeast Asia) have the capacity to enter or expand in this field. The promotion of public enterprises or support to underwrite the start-up and learning

costs for private sector enterprises would encourage such deepening of trade participation.

23. Enhanced South-South commodity trade is practicable if some means of ensuring balanced bilateral or small group trade expansion (or expansion with agreed limits to imbalances) can be designed, negotiated and operated. More attention deserves to be paid to potential in this direction. Given the need for domestic state involvement and the lack of well-developed TNC channels, domestic (private or public) enterprises should be able to capture most of the ensuing marketing business.
24. Pre-export processing adds to export value without depressing commodity prices. For some - not all - primary products it does offer efficient ways to expand domestic value added and export earnings. Examples include timber, sugar, cocoa, oil seed, iron ore, sisal, hides and perhaps coffee and tea. What products are promising and how far it should go (e.g. cocoa butter, powder, paste, liquor and mass - the intermediates - are likely to be more suitable than finished chocolate products) are empirical questions the answers to which vary by commodity, by country and over time.
25. What domestic policy instruments are needed, e.g. research and design funding, direct capital injection, capital mobilisation, initial period taxes below average - will vary. However, in general far too little attention is devoted to potential in this area at the applied level, especially in SSA.
26. Domestic policy does need to include seeking to reduce international (= foreign domestic) barriers, notably:
 - a. cascade tariffs (could GATT be used for this?);
 - b. arrangements such as EEC's Lome Sugar Protocol which specifies a less processed rather than an economically more efficient, more processed form (i.e. raw vs refined in this case). (Could this be attended to in the Lome IV negotiations?);

These may be more achievable targets now than a decade ago. Many TNCs are willing to contract out their initial processing operations and to use intermediates, and many - not all - OECD processing sectors are not particularly economically significant nor self-evidently politically potent.

Liberalisation and Commodity Production and Prices

27. Economic stringency - especially undesired import compression and high net external payments for capital - creates pressure to maximise short term export earnings. For an economy more than, say, 25% of whose exports are comprised of primary products, this is likely to mean pressure to raise the volume of commodity exports.
28. There are, however, countervailing forces. Export taxation may be a crucial revenue source, the capacity to subsidise exports may be limited,

massive devaluation may be unable to alter domestic price relativities substantially, and investment capital to expand productive capacity may be scarce, either generally or to commodity producers in particular. Falling real global commodity prices, other things being equal, tend to reduce (or reverse) the rate of growth of production, as almost any elementary economic text tells us). Therefore, overall, the past decade has not been one of particularly high commodity output or export growth - au contraire.

29. 'Liberalisation' - especially when it is not in the context of an international package providing substantial debt service relief and new capital inflows - reinforces the tendencies of economic stringency to lead to efforts to boost short run exports. Further, by including devaluation in excess of what relative overall domestic price movements would justify it may offset (distort) the global market price signals deterring increase in output growth.
30. The evidence on this last point is mixed. Outside SSA, liberalisation seems to have led to export drives focussed on manufactures or pre-export processing more than on expanding commodity exports. In SSA, dramatic export growth has been limited to a few countries and has to a large extent represented rehabilitation of existing capacity and/or the clawing back of previously smuggled exports. The extent to which raising real producer prices has played a role is unequal - very high in some cases and problematic in others. The role of increased resource transfers (leading to increased import capacity utilised in part to meet the import requirements of commodity production and of the infrastructure serving it) is generally significant; significantly positive that is where such transfers did increase and significantly negative where they decreased.
31. In SSA, liberalisation has tended to be built on the presumption that commodity exports were the key to restoring external balance and that commodities were likely to enjoy moderately rapidly growing markets and constant or improving terms of trade. All three assumptions can now be seen to be wrong for most commodities and most countries. Thus time has been lost and attention directed away from articulating country-specific, practicable and efficient export development and import substitution strategies and from the task of implementing such strategies.

Summary

32. Domestic policies - especially taxation, management of the exchange rate and promotion of cost reductions in production and domestic marketing - can effect commodity production significantly. Given current elasticities of demand and present global price projections what the optimal extent and pattern of incentives to increase the production of commodities ought to be is itself unclear - but certainly is must vary by commodity and by country. However, policies which erode existing commodity export bases while putting nothing in their place are clearly unsound.

33. Greater pre-export processing, South-South trade and participation in international marketing can be furthered by domestic policy. For some products and countries they hold out prospects of significant increases in net export earnings without the depressive price effects of export expansion to OECD and CMEA markets.

COMMODITY PRODUCTION AND TRADE:

The Impact of Domestic Policies

OVERVIEW

1. Commodity production levels are determined primarily by prices:
 - a. by price versus cost of production
 - b. by commodity price relative to the price of alternative commodities or products the commodity producer could actually produce and sell.
2. Commodity marketing is influenced more by institutional factors or acquired comparative advantage. In the case of some, but not all, commodities (notably petroleum and natural gas) the financial requirements of entering into production may preclude it - especially for an economically small, low income, heavily indebted country. In commodity marketing the barriers relate to knowledge, personnel and contacts with access to working capital an important, but secondary, constraint.
3. Domestic policy can effect price/cost ratios and the price of a commodity (or commodities) relative to other prices at home. It can also have some impact on institutional factors affecting marketing, albeit more by worsening the position of external marketers than by improving (other than through subsidies) that of domestic ones.
4. Evaluation of domestic policies' impact on commodity production and marketing has often suffered from lack of clarity in two respects:
 - a. specifying the appropriate goals (which can hardly be maximisation of quantity exported or even of gross export earnings);
 - b. posing an artificial dichotomy between outward (export promoting) and inward (import substitution promoting) policies when in practice certain relatively successful - at least in trade balance terms - economies such as Brazil and the Republic of Korea practice both

selective export promotion and selective import substitution supporting policies.

5. Over the past forty-odd years commodity prices have on a trend basis performed poorly relative to those of most (not all) manufactured goods in the senses that:
 - a. globally commodity markets have grown less rapidly than either global trade or global GDP;
 - b. unit prices of commodities have risen less than those of manufactures.
6. There have been exceptions to these trends in some years and for some commodities over fairly extended periods. However, among major commodities only diamonds - the one commodity with an effective producer price and output coordination institutional structure throughout the period - seems to have been an exception to both for the period as a whole. This means that globally - and for relatively large economies - the room for shifting commodity production commodity mixes to offset stagnation or slow growth in commodity export earnings valued in terms of imports is quite narrow.
7. Among major commodities grains and sugar have performed particularly badly - notably over the past decade and a half. This implies that, whatever the rather different merits of reducing dependence on imports of staple foods, they are not a particularly promising area for using domestic policy to promote exports. That conclusion might not hold for a very low cost grain or sugar producer which had previously been an importer or negligible exporter and might not hold if export subsidies (notably by EEC and the USA) were phased out, but for most countries today it is a valid generalisation.
8. The general quantity growth and price trends for commodities raise questions as to why domestic policies should be used to improve their domestic prices relative either to import substitutes or other exports. To do so is to distort or manage global market price signals which can on occasion be defended even on a long term basis but does need specific

justification. If seen as the core of an export development strategy such a use to domestic policies to manage - indeed to reverse - trend global market price signals is apparently to plan to specialise in losers.

9. There may be specific cases in which such intervention is desirable:
 - a. when there is a strong domestic price bias against the commodity in question compared to international ratios;
 - b. when an important export is being produced near or below cost leading to output and export (or at any rate non-smuggled output and export) falls which cannot be made good by efficient export promotion or efficient import substitution;
 - c. if the commodity in question does face relatively favourable global market quantity demanded growth and price trends to justify investment at higher levels than are likely to be forthcoming without intervention.

These cases are not trivial. But they appear to relate to general (not commodity export only) price reform in the first case; to rehabilitation of deteriorated existing commodity production sectors in the second and to specific opportunities in the third. They do not appear to create a case for general shielding of export commodity production from global price relativities.

10. This argument is related to, but separate from, the "fallacy of composition" one. That argument in its simple form shows that if price elasticities are less than one over the relevant period gross proceeds of all producers will be decreased if they increase output. Several caveats apply:
 - a. for a single producer whose share in production is less than the elasticity, at least at gross proceeds level expansion will pay;
 - b. gross proceeds are an inadequate measure of gains - net (of import content) export proceeds and domestic surplus levels would appear

better and would normally yield more conservative conclusions as to the circumstances under which output expansion was desirable;

- c. because of the risks of substitution (and especially of concentrating research on substitute or recycling development) trend output growth less rapid than global income elasticity times global GDP growth is probably usually imprudent.

11. Even with these caveats it is clear that sweeping advice to sustain or to increase market share in present major export commodities does not make sense to any producer if all act on it. For example, had Sub-Saharan Africa maintained its market share for its main exports in the 1970s it would have earned less if other producers had raised production at the same rates they actually achieved. Only if it is assumed that total output levels would have been identical (other producers' lower output levels offsetting SSA's higher ones tonne for tonne) do the World Bank's calculations that SSA's external debt could (with constant import levels) have been half as high had export market share been held make sense.

Domestic Instruments For Influencing Production

12. One major domestic instrument which affects commodity production and especially its growth (or decline) is total de jure and de facto taxation of commodity production absolutely and relative to that of incomes derived from other sources. As a first principle it can be argued that, unless a special case can be made out, taxation should be approximately neutral as to source of income. Three caveats arise:
 - a. if commodities face falling real global price trends a modestly higher rate of taxation would be justified to reinforce market signals to alter the mix of production;
 - b. if commodity incomes are more unstable than incomes derived from other sources (and trend levels are predictable) then counter-cyclical taxation levels would be appropriate to avoid over-reaction to short term fluctuations;

- c. if the price of a commodity significant to an economy's overall exports is so low that absolute price/cost ratios and/or relative (domestic) prices so unfavourable as to threaten radical export (import capacity) falls, then lower than average taxation (including negative taxation, i.e. subsidies) is justified for a transitional period to hold up export levels while more efficient exports (and/or import substitutes) are built up.
13. In practice many commodity exporters have taxed income from commodity exports more heavily than from other sources whether by export taxes or/and by statutory marketing surpluses. There was - especially in SSA - a tendency for the disparity to become larger in the 1970s and early 1980s. Without doubt in several cases such taxation did play a major role in output/export stagnation, decline or smuggling.
14. A second instrument is devaluation. To the extent it is effective in real, not just nominal, terms devaluation increases the relative price of those products which are in practice tradeable relative to those which are not. In principle therefore it is less selective than commodity specific tax reductions (subsidy increases) and should be neutral between commodities and other exports and among commodities. However, that neutrality assumes equal import content so that commodities are likely to be favoured vis a vis other exports and some commodities (e.g. tree crops) or sub-modes of production (e.g. peasant) more helped than others.
15. Clearly severely overvalued exchange rates (unless fully offset by export incentives, which is rare) deter the growth or even maintenance of existing export levels. This results both from shifts in revenue/cost ratios and in prices relative to de facto non-tradeables (e.g. staple food in SSA in the 1970s and early 1980s). If a country wishes to deter growth of exports in general there are better ways to do it than overvaluation and if it wishes to deter (or encourage) specific (commodity or other) exports taxation/subsidy policy is a much more targetted and efficient instrument.
16. Undervaluation as an export promoting policy is less than clearly appropriate. On the whole developing country real exchange rates have declined since 1970 (since the early 1980s for SSA which previously was

an exception). At least for commodity producers it has been argued that this is a prudent response to adverse terms of trade shifts. However, given low commodity price elasticities the argument - globally and for major exporters - is circular. If steady real exchange rate depreciation does increase the rate of growth of commodity exports, it will reinforce the terms of trade decline it was intended to offset.

17. Domestic marketing cost reduction is a policy instrument. In extreme cases in SSA marketing costs took the largest share of export proceeds, taxation the next and grower prices the lowest. Not surprisingly such patterns when long continued led to rapid output erosion (or smuggling). For purposes of this paper marketing surpluses (public or private) beyond a normal return on capital employed are treated as a form of de facto taxation. Attention is therefore to actual marketing costs.
18. Especially in SSA marketing costs (especially, but not only and not always, in single channel public sector systems) are clearly too high. The reasons vary - too many employees, too high transport costs (relative to efficient fleet operators or hirers), too high physical losses, too long delay in sales and collection of proceeds (increasing finance and storage costs), corruption. Which cost elements are too high and how they can be reduced (including by institutional changes) are questions of fact varying widely from case to case. The desirability of acting to reduce inefficient resource use is clearcut. That for passing on the full gains to growers (especially if the marketing operation was previously subsidised) is less universal. If revenue/cost and relative domestic price ratios are high enough to result in an adequate (however defined) growth of output of a commodity facing inelastic demand then subsidy reductions and/or allocation to building up alternative exports may have a higher opportunity value.
19. Production cost decreases (other than by subsidy) are desirable however the gains are best allocated and whether world relative prices are deteriorating creating a price/cost squeeze or not. Certainly research and development expenditure on many (not all) tropical agricultural commodities is too low and more (if possibly using analogues to the international crop research institutes to spread overhead costs and to improve access of smaller producers to cost reducing knowledge) is

desirable. The same holds for demand increasing research and development either altering commodity characteristics to fit existing product needs (as has been done in the case of natural rubber) or creating new uses (the most famous being instant coffee).

International Marketing and Pre-Export Processing

20. Additional net export revenues from international marketing and pre-exporting processing are superior in quality in most cases to those from increased production. They do not increase the volume of the commodity produced and therefore do not have a negative effect on global prices. That said, significant barriers to cost efficient achievement of these export revenue increases exist - especially for international marketing.
21. Auctioning before export and direct use of international commodity exchanges as well as direct sales to major users are international marketing activities within the competence of the public sectors of most and the private sectors of a number. Where they are not already practised or clearly result in selling at lower than average world prices (quality held constant) action is appropriate.
22. Deeper entry into commodity trading requires global information networks, experienced personnel and a large number of established business contacts as well as substantial working capital. Larger, middle income commodity exporters (e.g. several in Latin America and South and Southeast Asia) have the capacity to enter or expand in this field. Whether by public commercial enterprises or start-up/learning cost support to private such economies should encourage such deepening of trade participation.
23. Enhanced South-South commodity trade is practicable if some means to ensuring bilateral or small group balanced (or with agreed imbalance limits) trade expansion can be designed, negotiated and operated. More attention should be paid to potential in this direction. Given the need for domestic state involvement and the lack of well-developed TNC channels, domestic (private or public) enterprises should be able to capture most of the marketing business.

24. Pre-export processing adds to export value without depressing commodity prices. For some - not all - primary products it does offer efficient ways to expand domestic value added and export earnings. Examples include timber, sugar, cocoa, oil seed, iron ore, sisal, hides and perhaps coffee and tea. What products are promising and how far it should go (e.g. cocoa butter, powder, paste, liquor and mass - the intermediates - are likely to be more suitable than finished chocolate products) are empirical questions the answers to which vary by commodity, by country and over time.
25. What domestic policy instruments are needed, e.g, research and design funding, direct capital injection, capital mobilisation, initial period taxes below average - will vary. However, in general far too little attention is devoted to potential in this area at the applied level, especially in SSA.
26. Domestic policy does need to include seeking to reduce international (foreign domestic) barriers, notably:
- a. cascade tariffs (via GATT?);
 - b. arrangements such as EEC's Lome Sugar Protocol which specify a less processed rather than an economically more efficient more processed form (i.e. raw vs refined in this case - via Lome IV negotiations).

These may be more achievable targets now than a decade ago. Many TNCs are willing or eager to contract their initial processing operations and to use intermediates and many - not all - OECD processing sectors are not particularly economically significant nor self-evidently politically potent.

Liberalisation and Commodity Production and Prices

27. Economic stringency - especially undesired import compression and high net external payments for capital (e.g. interest) capital payments (on current and capital account together) - creates pressure to maximise short term export earnings. In the case of an economy whose exports are

over - say - 25% from primary products, this is likely to mean pressure to raise the volume of commodity exports.

28. There are, however, countervailing forces. Export taxation may be a crucial revenue source, subsidies for exports may be limited and massive devaluation unable to alter domestic price relativities substantially (either because there are obstacles to implementing the devaluation or because subsequent price movements cancel it), investment capital to expand productive capacity may be scarce either generally or to commodity producers in particular. Even more basic, falling real global commodity prices, other things being equal, tend to reduce (or reverse) the rate of growth of production (as almost any elementary economic text, whatever its school of thought, tells us). Therefore, overall the past decade has not been one of particularly high commodity output or export growth - au contraire.
29. Liberalisation - especially when it is not in the context of an international package providing substantial debt service relief and new capital inflows - reinforces the tendencies of economic stringency to lead to efforts to boost short run exports. Further, by including devaluation in excess of what relative overall domestic price movements would justify it may offset (distort) the global market price signals deterring increase in output growth.
30. The evidence on this score is mixed. Outside SSA, liberalisation seems to have led to export drives focussed on manufactures or pre-export processing more than on expanding commodity exports. In SSA the dramatic export growth has been limited to a few countries and has to a large extent represented rehabilitation of existing capacity and/or clawing back smuggled exports. The extent to which raising real producer prices has played a role is unequal - very high in some cases and problematic in others. The role of increased resource transfers leading to increased import capacity utilised in part to meet the import requirements of commodity production and of the infrastructure serving it is generally significant; significantly positive that is where such transfers did increase and significantly negative where they fell.

31. In SSA liberalisation has tended to be built on the presumption that commodity exports were the key to restoring external balance and that commodities were likely to enjoy moderately rapidly growing markets and constant or improving terms of trade. All three assumptions can now be seen to be wrong for most commodities and countries. Thus valuable time has been lost and attention directed away from articulating country specific practicable efficient export development and import substitution strategies and beginning to implement them.

Summary

32. Domestic policies - especially taxation, exchange rate and promotion of production and domestic marketing cost reduction - can effect commodity production significantly. What the optimal degree of incentives to increased production is given elasticities of demand and present global price projections are is unclear and varies by commodity and by country. However, policies which erode existing commodity export bases while putting nothing in their place are clearly unsound.
33. Greater pre-export processing, South-South trade and international marketing participation in international marketing can be furthered by domestic policy. For some products and countries they hold out prospects of significant net export earnings increases without the depressive price effects of export expansion to OECD and CMEA markets.