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Commodity Earnings Promotion by and for SSA

Where Should We Be Looking?

Discussion note prepared by

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Corrigendum

Para 17 (Page 6) line 2 - words 6/7 should read country to have
(insert to)

Para 30 (Page 10) line 10 - word 3 should read leading
(not lending)

_____ sentence omitted at end of para.

Domestic transport costs are another area in which initial examination suggests a study of potential for and ways to reduction should have priority.

Para 41 (Page 14) line 5 - word 1 should read certainly
(not certain)

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Summary

- i. Primary commodities are SSA's main exports. They are hardly the most promising lines for export growth either in market volume or price projection terms. But one cannot rewrite history and retrospectively change SSA's present export base.
- ii. Brute force volume expansion across the board could - given price elasticities of demands - reduce net forex earnings for SSA as a whole. So could random walk diversification into each other's main exports. Selective expansion and diversification can pay but for SSA as a whole is analogous to running up a down escalator.
- iii. Commodity agreements with some volume control can limit price swings around a trend. Commodity agreement purchase funds can limit massive sudden price falls forced by distress selling. They cannot reverse the 1976-86 trend to the lowest real prices in over 50 years for many commodities nor can they be expected with confidence to halt trend declines. Thus the probable 1988/89 activation of Window 1 of the Common Fund will be useful but not a panacea - especially for SSA.
- iv. But SSA has - except for a few countries such as Mauritius and perhaps Zimbabwe - very poor prospects for short term breakthroughs into manufactured exports based on low unit cost of labour or acquired technological capability. Thus something needs to be done to raise the net export earnings flowing from present commodity exports.
- v. A number of options (varying from commodity to commodity and country to country) exist:
 - a. New Products
 - b. New Uses and Markets
 - c. Cost Reducing Innovations
 - d. Marketing Participation
 - e. Pre-export processing and Manufacturing
 - f. Information Collection, Analysis and Use.

- vi. In each of these cases a series of conceptual and practical issues and a number of commodity cases in respect to which gains are likely to be attainable can be identified. The bulk of the paper is devoted to such an articulation.

- vii. The lists presented are not taxonomic. Nor are they at the stage for direct action - except to identify areas for more in-depth general and for detailed pre-feasibility studies. But they do offer a partial format and articulation for setting up a programme of studies for UNCTAD's Commodities Division with the support of UNDP.

- viii. These are not entirely new areas. They did appear - in fairly general terms - in the initial conceptualisations and formulations of the Integrated Programme for Commodities. They were - with the full support of many SSA governments - embodied in the Window 2 Common Fund articles. Funds have - tentatively - been pledged to Window 2. If the Common Fund comes into operation in 1988/89 its Window 2 should be a source of finance for operational projects or programmes flowing from the proposed programme of studies.

COMMODITY EARNINGS PROMOTION BY AND FOR SSA:

Where Should We Be Looking?

By Reginald Herbold Green
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To plan is to choose.
Choose to go forward.

- Mwalimu Julius Nyerere, Tanzania

We must look our mistakes squarely in the face.
Lest we fall into repeating them.

- Rui Baltasar Santos, Mozambique

I. Introduction: Where We Are and Ways Out

1. Since 1980 primary commodities (including petroleum) have not been the things in which to specialise. Both World Development Report and Trade and Development issues from 1981 through 1987 demonstrate that. They also show that as of 1987 there is every reason not to project substantial, sustained price recoveries for major primary products this side of the 1990s and little reason to assume 1990-95 will show much real price recovery. Despite sustained, if sluggish, OECD economy growth since 1982 many primary commodities are at their lowest real prices in 50 to 60 years and likely to remain bumping along the bottom, oscillating or in some cases - e.g. cocoa - plumbing new depths.
2. Advice to SSA economies to rebuild exports and reduce trade deficits by producing more of their present exports may be sound advice for specific countries - especially for those with rehabilitable capacity (e.g. Ghana,

Nigeria for cocoa; Uganda, Mozambique for tea). But at SSA level - and especially at Third World commodity exporter level - it is a recipe for reduced (not enhanced) export earnings. The price elasticities both of demand and of short term supply, are very much below unity and for SSA's major exports below the SSA share of global exports.

3. Diversifying at random into each others' exports, e.g. Ghana, Nigeria into palm oil, East African states into cocoa, Zimbabwe into coffee is slightly less problematic for the new (or returned) exporter, at least in the short run. But again it is an approach which runs foul of the fallacy of composition - all exporters (diversifiers) cannot gain at once. If all seek to maintain market shares, all - even probably those who do force up their shares - will lose because the real resource and opportunity costs (including infrastructure of expanded and/or new) commodity production are substantial. At the best it is running up a down escalator.
4. Cocoa illustrates this dilemma. The 1950s planting boom in Ghana more than doubled its output by the mid-1960s. Together with growth of exports elsewhere this broke the cocoa market. Rapid Cote d'Ivoire output expansion beginning in the 1960s had less impact because it largely replaced Ghana and Nigeria declines. However, the 1969-72 recovery of Ghanaian output parallel to the Ivoirian upsurge played a role in prolonging the 1962-1972 slump. Malaysia's massive 1980s expansion into cocoa with exports nearing 100,000 tonnes in 1987 and 200,000 by the early 1990s has already triggered a severe price fall likely to continue with Ghanaian (and perhaps Nigerian) export recovery plus Malaysian trees coming into bearing preventing regaining the oscillating but not declining real prices of 1974-1984 when cocoa exports rose only 1% a year.
5. Price stabilisation - if this means holding real unit export prices (nominal unit export prices divided by the import price list) - is unlikely to play a major role in improving the trend in commodity prices. No realistic amount of funding can maintain real prices if output growth is sharply in excess of the constant price consumption growth trend and price elasticities of demand are low. Precisely those conditions pertain in most commodity markets.

6. Restraining supply growth can maintain trend real price stability but cannot avert year to year oscillations. The 1974-84 cocoa market illustrates this. So - up to a point - does the International Coffee Agreement. Up to a point because the salvation of the ICA has not been export quotas alone but periodic sharp output falls (usually related to frost in Brazil) which have allowed running down producer country stocks so there was not an ever-rising overhang.
7. Price stabilisation around the trend price can be achieved - if the stabilising body can ascertain the trend (as the Tin Agreement did for several decades but notably failed to do in the two-year run up to its demise - a demise also related to the rapid expansion of new, non-quota controlled output). Such a stabilisation has uses. It reduces the risk of very sudden and large falls in prices and SSA export earnings. For example, it might have been useful in 1986 as some prices which collapsed then - e.g. cotton, palm oil, certain metals - have since recovered a substantial share of 1986 losses. It can also reduce the costs of distress selling at lows by producers who can no longer hold on to the benefit of financially stronger merchant buyers who can hold on 6 to 18 months for a price recovery. But neither of these quite real benefits can greatly affect the trend of real export earnings (earned import capacity) derived by SSA from primary commodity exports.
8. Therefore the probable 1988 activation of the Common Fund cannot by itself, even with more Commodity Agreements, stabilise the downward (or turn up the static) real price trend for primary products even though Window One can reduce damaging swings around whatever trend exists.
9. In these circumstances new approaches to augmenting SSA earnings from commodity exports are needed. This is not because given a free choice one would advise specialising exports in these products. Far from it - especially as most SSA economies are so weak they will lose out in price cutting 'wars' even if they are truly low cost producers (which is by no means clear in some cases, e.g. tea, palm oil, cocoa). Rather it flows from the fact that SSA's present level of other exports is - with a few exceptions like Mauritius, Zimbabwe and, to a degree, Senegal and the Ivory Coast - so low that even high percentage growth rates will take

until the end of the 1990s to become the backbone of export earnings. Further, the growth of protectionism in the North and the high cost of semi-skilled and skilled labour in SSA (because of low output per worker largely from lack of training and experience) will hinder rapid non-commodity export expansion in labour intensive lines such as clothing and cloth which were the initial entry points of the present NICs.

10. Therefore, augmenting real import capacity by enhancing export value of primary products and doing so by some method other than brute expansion of present major commodity export volume or real price trend stabilisation is needed urgently. In fact this is not a new idea. It was a secondary theme from 1975 on in relation to the Common Fund. Even then it was an approach strongly backed by SSA states some of whom expressed more faith in its financing modality - Window Two of the Common Fund - than in Window One and traditional price stabilisation.
11. The main heads under which action may be promising for some commodities by some countries or groups of countries include:
 - a. New export products (diversification);
 - b. New uses and/or markets for existing exports;
 - c. Cost reducing innovations in primary product production;
 - d. Participation in and/or altering modalities of international marketing;
 - e. Pre-export processing and/or manufacturing of present (or new) primary exports;
 - f. Improving ability of commodity producing countries to acquire, analyse and act on information relevant to marketing (including timing and focusing of sales) and to forward production and investment planning/resource allocation.

12. It needs to be emphasized that not all lines of action are equally promising in respect to all commodities nor are different producing countries necessarily equally placed to take advantage of these lines in respect to the same commodity. Similarly the opportunity/need for policy and action coordination vary from product to product (e.g. higher for cocoa than for cashew nuts), line of action to line of action (e.g. higher for information collection and basic analysis than for processing), country by country (usually higher for smaller, poorer countries).
13. The following articulations of these lines of action do not purport to be complete lists of possibilities. They are an illustrative set of examples. Still less are they based on feasibility studies; they are a selected check list toward mounting pre-feasibility studies.
14. The compilation of a taxonomic list; the identification and carrying out of pre-feasibility studies and the rapid movement from them through feasibility and design stage to implementation should be a major priority for UNDP and UNCTAD over 1988-90. The Common Fund's Window Two can be envisaged to be one source - and a catalyst for other sources - of subsequent action programme and project finance.

II. New Products: Diversification Into What?

15. Diversification is once again fashionable as it was in the 1950s. Unfortunately inadequate attention is usually paid to the differences in gains/costs for the individual country, SSA countries as a group and commodity producers as a whole.
16. Clearly - if, e.g. - Ghana diversifies into palm oil and Malaysia into cocoa Ghana will gain on additional export earnings on palm oil and lose from the price depressing effects of Malaysia's cocoa exports pressing upon low trend demand growth at constant prices and low price elasticities of demand while Ghana's palm oil exports operate similarly on that market (with Malaysia the potential main loser).
17. It is true that if one takes total output of each commodity as fixed and

also holds each country's share of all commodity exports constant there is a case for each country to have several not one export. The case is based on relative stability. Both on global price and on production (often highly weather linked) sides some cross cancelling among commodities is likely. How much is variable and may not be high.

18. However, this is far from being a case for rapid expansion into new low price elasticity of demand, low trend constant price demand growth commodities while seeking to maintain market share in the old. The very successful - at least for Malaysia and until recently - Malaysian diversification into palm oil (where it is now leading exporter) and currently cocoa (where by 1990 it will be third or fourth exporter) led to 1986s vegetable oil market collapse and is a main factor in the ongoing fall in the price of cocoa.
19. The route of diversification into commodities to replace food or industrial imports (e.g. Ghana back into cotton, Tanzania into rubber, Rhodesia - as it then was - into coffee) may have a better case. If the diversifying country is highly import constrained, its additional production may well not (or not substantially) reduce effective global import demand. But the case is either an import substitution or an integrated industrial sector rather than an export expansion one. The overlap arises when - as in the case of Zimbabwe's irrigated, relatively high cost coffee - output overshoots domestic use and does spill over into export diversification.
20. The most desirable products into which to diversify are ones:
 - a. with a relatively high rate of growth of world demand at constant prices related to high income elasticity or learning effect (linked to new tastes or new technology);
 - b. a market large enough or old enough to be sure long term resource allocation is not being made to a fad market that may collapse speedily (e.g. a past dried banana and possibly the current green ginger 'boom');

- c. a market in which a relatively small share will add significantly to the diversifying country's export earnings;
 - d. some cost or marketing/market access (tax preference, easy/cheap transport, etc) advantages to the diversifier as opposed to other new products or expansion in existing ones.
21. Very few of SSAs present large exports meet these tests. However for a number of countries tropical ("exotic") fruits and vegetables and temperate ("out of season") vegetables and fruits may well do so. Flowers are a related product or product clusters. The prerequisites for successful exploitation of these commodities include:
- a. cost advantages (over competitors) in production demonstrated in serious costing studies;
 - b. reliable, rapid transport facilities with ancillary storage arrangements;
 - c. precisely identified (by country, buyer group, time of year and marketing structures) markets;
 - d. creation of appropriate infrastructural and entrepreneurial structures on the production side together with links to reliable overseas buyers with established links to distribution.
22. All of the above take time - and real resources. But for some countries eg Kenya, Zimbabwe they have allowed significant export expansion. More could follow - not all and not all for the same products. One key issue on "exotic" (new tropical) products is whether to seek volume at the cost of low prices (e.g. to seek to establish - say - mangoes as in the orange-apple-banana-pineapple league) or to seek a limited volume, high price slot (the current strategy of West African and Kenyan mango exporters but one which Indian, Brazilian and Puerto Rican exporters' apparent dash for growth may undermine).
23. Export issues aside, horticultural and orchard crops do have certain advantages over many other commodities. The value of output per hectare

and the labour input required per hectare are both high and the actual production (albeit not the collection and marketing) are suitable for middle and small farmers.

24. A different type of diversification arises when a new potential commodity export is "discovered" or "created". This is usually a mineral/hydrocarbon one. e.g. if a country discovers a sizeable natural gas field it usually faces four options: use for domestic power generation (replacing oil fired thermal power or reducing the expansion of hydro capacity); use for raw commodity (lng) exports; use for petrochemical processing/manufacture (almost certainly ammonia and/or urea) for domestic use and commodity based export expansion/diversification; non exploitation because of scale or viability constraints. Similarly a new ore processing technology invented elsewhere may turn a previously useless ore body into a figurative or literal gold mine (e.g. the Renco gold mine in Zimbabwe). On the demand side technology changes can increase demand. For specific commodities - e.g. cobalt and platinum in the past two decades it has had the effect of moving new deposits into viability and thereby diversifying exports.
25. The second kind of diversification is hard to study except in a country context. Two cases which may apply across a number of SSA economies are natural gas (especially natural gas fields in the absence of proven oil fields) and gold. In the case of natural gas there are problems as to tradeoff among uses as well as some potential for coordination/diversification of SSA uses since both the lng and ammonia/urea markets are such that a split in SSA export development between the two is likely to benefit new SSA exporters both jointly and severally. Gold economics have changed radically with gold price recovery, SSA devaluations and technological advances (especially in ore processing/refining). Thus many SSA ore deposits are targets for re-evaluation.

III. New Uses And/Or Markets For Existing Exports

26. Some primary products could capture new uses if adequate research and promotion were carried out. For example sisal pulp is technically comparable to rag and high grade hardwood pulp i.e. is suitable for disposable garments, quality stationary, magazine paper. The technical snags of conversion seem to be almost solved; one or two small scale plants are in profitable operation using fairly simple technology. Sorting out issues of how to grow for this use (or a combined fibre and pulp sequence), optimal scale, transport is possible as - presumably - are trial runs by/promotion to users. But it is not being done and probably neither Kenya nor Tanzania nor Mozambique nor Malagasy has personnel and financial resources to do it.
27. For other primary products research on treatment (or breeding in new characteristics) is needed to limit damage from technology changes. In rubber Malaysia has pioneered in processing/mixing to produce a variety of uniform forms of natural rubber each with certain specified characteristics. Without this, market loss to synthetics would have been much larger. To the extent problems of staple length or strength or uniformity have cost (are costing, will cost) cotton market share as a textile raw material, similar potential for applied research in micro biology or middle technology hybrid breeding and in processing probably exists and should be identifiable by exploring missing, desirable properties and potentials of specific breeding and processing technologies.
28. Cooperation among developing countries could help open broader markets for some primary exports. Most cotton is used in developing countries and they - as a group - are large importers (as well as large exporters). With trade preferences (sometimes even without) - especially plus less Northern subsidies on cotton exports as proposed by Cairns Group - substantial markets now held by North cotton could be captured and with South-South trade which accelerated growth these markets should expand. The same principle applies to South grain exporters though here the problem of heavy North subsidies needs to be faced as they are more pervasive and more massive than for cotton.

IV. Cost Reducing Innovations: Overall and Import Content

29. Given probable price trends many primary products - not only but also not least in SSA - will only remain viable if massive subsidies (or devaluations) are used to hold up real grower prices against the world price trend. Whatever the short run need to sustain/raise export earnings from these resources subsidizing long run losers and pushing domestic real prices up (or holding them up) against declining real world market prices is doubtful economic logic. One possible escape is via production cost reductions and especially production cost reductions in respect to import content which would increase net export earnings at any give price and volume.
30. One branch of the import saving route lies in efficient import substitution. Light engineering (especially for items like tanks, vats, pipes), maintenance and heavy, low value inputs have substantial natural protection. There should be substantial efficient import substitution potential especially but not only in mining and in construction inputs. This has the related benefit that it would increase linkages and lay a sound light engineering and capital goods base for further, more general development. Zimbabwe's experience in this regard has been positive as was Zambia's until forex and copper price constraints sent these sectors into reverse leading both to higher cost imported inputs and to higher down times and growing deterioration of the mines (all unit cost increasing). Therefore, selective import substitution of commodity inputs deserves studies on a commodity by commodity, input cluster by input cluster basis. Domestic transport costs are another area in which initial examination suggests a study of potential for and ways to reduction should have priority.
31. General cost reducing increases often relate to plant breeding and/or agricultural techniques (or in mining to analogous ore treatment and ore extraction technology shifts). New copper mines tend to be open cast with ore processing attuned to lower grades and - especially when using low grade ore - to have lower unit cost than existing SSA ones. SSA has - at least partly but not fully - adopted hybrid, high yield, short (low picking cost) oil palms. But even in oil palms it has been left behind at the next round. Malaysian plant breeding/cloning has produced oil palms whose yields are so much higher that SSA is now a higher cost

producer even with much lower daily earnings levels. A similar position appears to apply in respect to cocoa. If SSA does not have, or have access to, research on cost reduction comparable to LA and SEA it will be pushed into being a high cost producer of its own basic exports e.g. vegetable oils, coffee, cocoa, tea, copper which would compound problems of export level declines and inadequate net producer incomes.

32. Again a quick survey commodity by commodity could identify:
- a. known, applied (outside SSA or only rarely in SSA) cost reducing innovations;
 - b. potential (and by what research routes) for additional breakthroughs.

On that basis a hard priority research programme for particular commodities could be identified.

V. Marketing

33. Marketing poses a number of opportunities - varying by country as well as by commodity - and an equal number of requirements for research leading in many cases to technical assistance. The form of markets to use; ways of breaking de facto oligopsonist buying rings; creating real exporter enterprise participation (public, private, joint venture); locating new markets (i.e. new destinations); capitalising on/promoting expanded use when exogenous favourable events occur;
34. A number of issues as to how to sell have arisen, been debated and led to diverse action and very unequal results. Some producing country auctions - e.g. tobacco in Zimbabwe, cotton in Tanzania - seem to have resulted in a higher share of terminal market prices going to producing countries. Others - at least at times - appear to have had the reverse effect (perhaps because of buyer rings). Examples include coffee in Tanzania and tea in Kenya in 1960s, early 1970s. Still others have (perhaps because of too high reserve prices or other managerial problems) been unable to clear the crop - e.g. cotton in Sudan on several occasions over past two decades. Selling via Northern terminal market auctions also has

a mixed record (both for spot and forward sales) e.g. cocoa by Ghana Cocoaboard has had marked successes in late 1950s/early 1960s and in 1986 (world price fell/Ghana average receipts rose) but severe losses were incurred in the middle 1970s. In sisal forward selling on London market by Tanzania Sisal Authority has resulted in huge losses on repeated occasions (versus spot sales).

35. An intermediate form is contracts tied to terminal market prices e.g. copper standard form contract. At the other end are negotiated sales between sellers of varying degrees of oligopoly power (i.e. producer, export house, single channel) and sellers varying as to oligopsony power (e.g. users, trading firms, state monopoly buyers in respect to cashew sales to India). The results again vary widely apparently relating to knowledge balance, ability to hold out/hold off, degree of oligopoly - competition - oligopsony and bargaining tactics, e.g. tobacco and cashew results for Tanzania vary widely and apparently erratically from year to year (contrasted to final market prices for tobacco and cashew kernels).
36. Studies are needed for major commodities on the structures of global marketing and their implications for local auctions, spot and/or forward sales on terminal markets, terminal market tied contracts and directly negotiated contracts. The main elements influencing results for different commodities, countries and time periods should be identifiable and - probably - lead to a set of policy guidelines for improving the share of final commodity value turning up at Fob level.
37. Producer country intervention in markets to break price rings/increase competition has on occasion been effective. In coffee the setting up of an arms length subsidiary of the Tanzania Coffee Board to identify user buyers and then bid at the Arusha coffee auction had dramatic effects. A narrow ring was broken, prices seem to have been raised 10 to 20%; the 'dummy' company became the third largest exporter and regularly makes profits on its merchanting; two to three smaller private Tanzanian firms entered the export merchanting business and made a go of it. But not all such experiences have worked - it is believed several other coffee cases have resulted in heavy losses to the 'dummy' merchanting companies. A study of experiences (not just in coffee) should show how this type of artificial competition creation can be operated to ensure net gains

(higher auction price plus - or minus - merchanting company profit or loss) and what levels of gains are likely to be attainable for what crops under what circumstances.

38. For at least some commodities, new markets in developing countries including those in Africa are practicable as already noted above in respect to diversification. For example continentally Africa is a cotton exporter but a substantial number of countries - in both North Africa and SSA - are importers. African cotton imports do not come from SSA - indeed the dominant source appears to be the USA. In most cases they need to import more as textile output is below both capacity and effective demand - expansion depends on two way trade expansion. Cotton is not unique: sugar, tea, cocoa, coffee, oilseeds/vegetable oil are other examples. These markets have historically been served from the North while the exporters buying in Africa looked to the North not to the rest of Africa. Present communications, markets, corporate and transport patterns are likely to continue these cross flows. This suggests in intra-African commodity trade there is both the need and the chance (absence of entrenched competition) for African commercial enterprises (public or private). Specific commodity and market studies should be able to identify concrete cases and opportunities for such trade diversification and expansion.
39. A related market development cluster turns on acting on exogenous favourable developments. Two cases - the first largely missed to date - illustrate. Pyrethrum is a well established natural insecticide input for household, dairying, horticultural and truck farming uses. It has tended to lose market share to synthetic chemicals because pyrethrum has a very short effective life and is fairly mild (especially it is innocuous to all warm blooded animals). But these weaknesses should have been used as marketing strengths with the rise of environmental concerns from the late 1960s. Pyrethrum breaks down fast with no residue - highly desirable in its core uses. Unfortunately in the late 1960s a single, traditional firm handled the bulk of world extract production and marketing. It did not see the possibilities. Despite the erosion of its share there has been no promotion, no location of partners able to develop/promote mixed pyrethrum/synthetic biodegradable, no residue insecticides. The opportunity remains open. Shea nut trade has moved

from local vegetable oil input to an input into high quality Northern soft/skin friendly soaps and cosmetic preparations. The Cocoboard in Ghana has responded and has improved procurement access and prices. The issue here is what further opportunities exist - if any. Presumably shea nuts and pyrethrum are not unique and a review of main commodities to identify further opportunities would be appropriate.

40. A more general issue is the potential for direct African economy participation in the international marketing segment of the commercial chain. The case for doing so is to increase the share of terminal market prices going to the African economies. Whether this share goes to marketing enterprise surpluses or to producers (or for that matter taxes) is secondary. Similarly the issues of location (acting from the African country using electronic communication or utilising offices in Northern terminal market countries), form (merchanting, broking, etc), ownership (private, public, joint venture) are contextual, specific and secondary. In general African primary commodity exporting economies do not participate very much in marketing beyond selling domestically at auction or by contract. As noted above, some export companies (both private and public) have grown up in the context of auctions but these are the exception rather than the rule. Other small scale exporters do exist but usually they sell Fob to North importers for whom they serve as de facto collection and forwarding agents.
41. Two more substantial bodies of exceptions exist. Some marketing bodies maintain an overseas presence for information collection and dealing. The experience is mixed the Ghana Cocoaboard (as noted above) did very well and the Tanzania Sisal Authority very badly. Thus while the latter certainly injected a producing country into the international marketing chain it did so at the price of lower Fob sisal prices and, therefore, national share in the final price than could have been received by producing estates dealing with merchants or through foreign agents in East Africa (as the Kenya estates did). It would be desirable to identify what characteristics (of a commodity market structure and of a producing country marketer) are likely to lead to a successful outcome of an entry into international marketing. Whether these vary from agricultural commodity to commodity is not a priori clear - the presence of related products and processed forms (e.g. oilseeds and vegetable

oils) or of a myriad of sub-products and grades (tropical timber, hides and skins) are, at the least, likely to affect the appropriate enterprise operating strategy as well as increasing the complexity of its knowledge requirements.

42. The secondary category consists of mineral export marketing corporations. Base metals (plus ferrochrome and asbestos for Zimbabwe and cobalt for Zambia) are handled by single channel agency marketing firms. In general these are not merchants but agents working for a fee. They are designed more to avert transfer pricing and its relatives than to integrate forward into international marketing as such. By their nature, however, they do undertake the latter. Both appear to be successful - i.e. they have apparently raised average Fob value of covered exports and themselves earned profits. Their methods of operation apparently range from normal broking via terminal markets through contract sales to vetting transactions actually set up by the producing companies. Mineral marketing probably is an area in which more general use of such companies (or compulsory use of domestic private export brokers if these had adequate experience, finance and independence of buyers/sellers) would be practicable and value adding. A study of the Zambia and Zimbabwe cases and any others which are identified should throw light on this question.
43. The last group of companies are those linked to and operated to maintain surveillance over the prices paid by the world's most successful (to its operators and to producers) commodity agreement - the Central Selling Organisation of De Beers for gem diamonds. The longest established is Tanzania's with a London base and a fully Tanzanian valuation staff to cross-check grading (and therefore prices paid). Whether the diamond market - a durable cartel run by a commercial enterprise, an oligopolistic differentiated monopoly selling system and over 2000 grades - is so special that no general principles applicable elsewhere can be identified is unclear. A preliminary study of African diamond producer participation in the marketing process might help answer that question.

VI. Processing And Manufacturing: Value Added and Industrial Value

44. Processing and manufacturing has been seen both as a means to increase export value without the depressive effect of quantity increases and as a growth pole or sector around which to build an industrialisation strategy. Logically these two goals are separate although in practice a primary export based industry may in fact serve both (or neither).
45. This is an area in which there are no common answers across commodities nor probably across countries (independent of the commodity composition of their exports). Some commodities are virtually unprocessable beyond a first stage (e.g. uranium ore to uranium oxide) for technological as well as cost and scale reasons. For very small outputs (e.g. tin ore and oilseeds) shipping in semi-unprocessed form (e.g. concentrate and cotton seed) may be enforced by diseconomies of scale for small processing units. More generally value added in certain stages may be small and highly capital and energy intensive (e.g. certain stages in the copper chain). At manufacturing level somewhat different considerations apply. Quality control and preservation - as well as export shipping - may be expensive and erratic enough to render production in African producing countries unviable beyond domestic or (perhaps) regional markets, e.g. chocolate (albeit probably not cocoa and certainly not cocoa powder, butter, oil and mass). If style and quality control are critical, special barriers to entry exist - especially if style changes rapidly. Textiles, garments and shoes illustrate the quality control problem (which is soluble) and some lines of each style one (which requires non-African input, rapid communication and flexibility in production to resolve). When bulky associated inputs must be imported (e.g. milk for chocolate) and especially when the African raw material is - in value terms - a relatively small proportion of the final product (e.g. most tin using manufactured goods and most copper manufactures other than wire, cable and table/houseware) the viability of commodity production site located manufacturing is weakened or destroyed. Similar problems arise if the manufactured form is weight or volume gaining (e.g. furniture, albeit probably not furniture parts and assemblies) because this increases shipping cost.

46. This list of limitations is not to be read as a counsel to do nothing (let alone that there is nothing to be done) but as an underlining of the need for case by case study and for identification of those processing stages and manufactured products offering the largest and most readily achievable gains in the short and medium run. Opportunities do exist and in general they have been understressed in both export and domestic market oriented industrial strategies. Africa does not - and for the foreseeable future most African countries will not - have advantages in either skill levels above or labour costs per unit of production below many other Third World or Northern sites. There are exceptions. Mauritius has relatively productive semi skilled labour and few alternative employment prospects, a situation to some extent shared by Tunisia. For them labour input only imported materials/exported products may be a necessary and a practicable component in development strategy. Zimbabwe and Egypt also are relatively well placed in possessing productive semi skilled labour forces but have a wider array of relevant domestic inputs so need not center industrial exports solely (or even primarily) on combining local labour with imported materials. Clearly training, education and experience can increase productivity (reduce real labour cost per unit of output consistent with stable or rising real wages) but few African countries can expect a breakthrough on this front before 2000. Thus the one clear advantage they may have for export oriented processing or manufacturing is their primary commodity base.
47. Three exogenous factors inhibit use of that advantage. Formal tariff discrimination against processed and manufactured forms is often high. Established North processors and manufactures do use their established positions to limit access either on their own or with governmental assistance. Adequate data to guide articulation of commodity sector industrialisation are in short supply.
48. Studies on tariff escalation (nil on primary form, intermediate on processed, high on final product) do exist. So do ones showing that the GATT process of tariff reduction has, if anything, tended to heighten the escalation problem. For African purposes what is needed is a tabulation commodity by commodity and form by form of tariff (and quota) barriers in major export markets. This should be useful to the African, and G 77, groups in the current GATT round as it would pinpoint targets for

achievement in bargaining.

49. For Africa "the twelve" (EEC) are a special case. With few exceptions tariff escalation and - at present - formal quotas against processed or manufactured forms are rare. But they are not non-existent - especially in the form of the Byzantine rules for determining origin which can rule out - e.g. - ACP tinned fruit if the tinplate come from Japan even if the fruit, the other inputs and the plant are unambiguously ACP. Further access is not secure - under derogation clauses EEC can impose quotas unilaterally (after consultation but without the need for agreement). These exceptions and risks matter. They do limit trade directly and even more by raising doubts as to the viability of processing and manufacturing directed to the EEC market. That market - in terms of size, location and composition of demand - is the main one for African commodity based exports. A study (jointly with the ACP Secretariat) should identify which processed and manufactured products are now restricted and which ones are widely perceived to face quota or other access barriers if exports rise rapidly. It could identify specific changes to the rules of origin and to derogation clauses which would reduce limitations on access now and risks of unilateral future restrictions on access which the ACP states could seek to negotiate with the EEC.
50. Private restraint of trade usually involves symbiosis among importers - wholesalers - domestic producers. It can limit access to markets for competitive African exporters. For example in the case of sisal, Eurocord (a de facto, unregistered cartel of importing/wholesaling/producing firms) manages an unofficial but effective quota system in most (not all) EEC national markets to limit (not wholly prevent) sisal twine imports from Africa in order to maintain the viability of their European production units. Information on such restraints is almost totally anecdotal or fragmentary. Both African and North states have been unaware of, reluctant to push complaints and/or slow to invoke even existing competition legislation to counter them. A systematic study of for which processed/manufactured commodities in which markets such constraints exist; how severe they are now; what increase in severity would arise if processing/manufacture before export expanded; what can be done is needed (logically of interest to GATT and/or ITO).

51. What can be done need not be limited to producer state complaints and receiving state response. In some cases that may be the least practicable route. If there are markets without such restraints promotion can be targetted on them. If significant North markets are outside the grove in whose interest it is to restrict imports (e.g. agricultural co-op Federations and some large agricultural input supply firms in respect to sisal twine in EEC) direct selling links can be established with them. If present North producers could better redeploy their production to Africa (which is - e.g. - probably the case for sisal twine) joint ventures or foreign direct investment plants may ease market access consistent with African producer economy net export and value added gains.
52. As noted above, semi-taxonomic surveys of products by product potential are needed for major African export commodities. From them promising products can be identified for more detailed studies which would, in turn, form a basis from which particular countries could identify cases justifying sub-sectoral and/or plant feasibility studies.
53. Although commodity based processing or manufacturing for export minimises the impact of low productivity and high real unit labour costs (especially at combined wage and salary levels) it does not eliminate them or the need for parallel action to erode these comparative disadvantages. Identification of ways to increase productivity (and adequacy of supply) of semi skilled labour, artisans (especially in preventive and routine maintenance) and middle managers are needed for the commodities/products the taxonomic survey identifies as promising. This is a field related to less targetted past and ongoing ILO work.
54. A number of specific possibilities can be identified and can serve to identify some of the practical problems which arise in capitalising on them. Cocoa processing to cocoa butter, powder and paste can yield substantial net value added. There is a significant trade in these products (North-North even more than Africa-North). For African producers access to the EEC market has no present barriers. At least some chocolate and chocolate product manufacturers appear to view this end of their business as low profit and to be willing to phase it out if

and as they can be assured of dependable intermediate input supplies. The Cote d'Ivoire and Cameroon processing industries appear to be profitable.

55. But a relatively small (even if by no means negligible) proportion of African cocoa is processed before export and the share is not growing rapidly. In Ghana a combination of less than optimally designed plant, deferred maintenance, low capacity utilisation and unsuccessful marketing appears to cause a net export revenue loss as well as a net profit deficit. In none of the three countries does phased development toward 100% pre-export processing appear to have been studied seriously, let alone adopted. This would appear to be a set of products deserving detailed study of potential, of problems and of how to overcome them.
56. Cocoa (the powdered beverage form) poses different problems centred on marketing. Almost certainly promotion of African brands would be expensive and probably ineffectual for a decade or two after substantial production began (although Indian and Sri Lankan experience with tea might be worth studying). Therefore either links with major sellers (e.g. chain stores) to manufacture under their brand name or joint ventures with present substantial (but not necessarily leading) cocoa manufacturers are likely to be a necessary part of strategy for viable development of this product.
57. Processed, blended, packeted tea is intermediate between cocoa intermediates and beverage cocoa as to commercialisation. Substantial home market oriented production of quality as well as utility tea exists in several Eastern and Southern African countries. Some have broken through into extra-regional exports but usually in specialty or peripheral channels. As with beverage cocoa, major breakthroughs would appear to depend on arrangements creating an incentive for a firm with existing market access and brand acceptance to purchase the African product.
58. Instant coffee is in some respects rather like processed tea. However, doubts exist on how generally it is an efficient export manufacturing line. For West African robusta it appears to be. For East African arabica (unless the 'reject' grades - cherry buni and tex - can be the

basic input) it is probably a net export revenue loser. The reason is simple - high grade coffee fetches a higher price as beans and most instant coffee is made from low price beans. To produce standard instant coffee from high quality arabica (or even on occasion robusta) is a money and export value losing game as Tanzania has found to its cost. Only a link to an established firm in the limited (but growing) premium quality/price instant coffee niche could redress that and it would involve technically complex, unforgiving of minor errors freeze drying and granulation plant with high output/capital and employment capital ratios. Therefore, while worth exploration, it is probably not an attractive short term prospect.

59. Sugar tends to enter international trade from Africa in "raw" (actually semi-manufactured) not refined form. This is economically irrational in terms of resource use. The cost of refining as the final stage in an integrated cane to refined process is much lower than the cost of producing raw and then separately refining it in another plant. Two factors - both historic - explain this pattern. Refined sugar requires more care in transport than raw because the latter will be reprocessed in any case so that partial caking or staining is of limited importance. As there is global long distance trade in refined sugar this barrier is almost certainly technically and financially surmountable. The real barrier is that the vested interests of the uneconomic Northern cane refiners have been built into the key EEC and USA preferential access allocations. Whether literally specifying raw sugar, designating refiners as importers or failing to provide for any commercial channels for South refined sugar exports they provide massive protection to North refiners (who in general admit they could not compete with unrestricted South refined sugar imports).

60. Cigarettes (and pipe tobacco) on purely economic (cost and value added) criteria are probably rational manufacturing lines for major tobacco producing countries who can combine relatively large home markets with substantial potential export volume to justify large scale plants and associated production of packaging materials (and perhaps filters). It may be that Zimbabwe is the only African producer which meets that test with Malawi, Kenya and Tanzania borderline and Uganda a future possibility once the tobacco industry is rehabilitated.

61. But the economic logic is at this stage irrelevant to actual possibilities. Cigarettes are sold by brand in a global marketing system dominated by a few companies - a system examined in detail in UNCTAD's path-breaking study. These companies own, are partners in, sell technology to and/or license use of internationally known brand names to all or virtually all African cigarette companies. They de facto ban exports (except to small adjacent markets, e.g. the Comores for Tanzania) by the African companies and sales by them to firms which subsequently export. In the North they also dominate distribution channels and access to state tobacco monopolies/sales regulatory bodies where these exist.

62. Frontal assaults on the cigarette oligopoly are impracticable. Three routes to gain access need exploration first as to potential and second as to practicality. The first is to forbid export restrictions (de facto or de jure) on domestic plants and/or trading companies to whom they sell. This could open up not insignificant markets in West Asia (e.g. for Zimbabwe). The second is to explore production for CMEA markets - a line India has pursued successfully. The third is to locate secondary established marketers in the North (e.g. chain stores with own brands) to whom to sell. The last seem to hold only 1 to 5% of the market in major North economies, but relative to potential African exports that is by no means as insignificant as it appears at first glance.

63. Textiles and garments, taken together are historically a major entry point into global manufacturing exports for many developing countries (albeit not necessarily for cotton producers). The problems posed by the gross violation of the GATT principles and terms incongruously put under GATT auspices in the Multifibre Arrangements governing South-North and East-West, but not Northwest-Northwest or North-South, trade in textiles and garments are well studied and will not be rehearsed here. However, as small new entrants and because of CAP/EEC Convention provisions the MFA should not be seen as an absolute (perhaps in most cases not even a major short run) barrier to initial export build-up by SSA states. (Algeria, Morocco and Tunisia - which are cotton importers - and Egypt face somewhat different access constraints for textiles and garments from SSA cotton producers seeking to build up significant textile and/or garment exports.)

64. Textiles and garments are very broad categories. There is an urgent need to identify which sub-categories are most promising. Study after study has shown that cotton grey unbleached is not promising. It is homogenous and sold wholly on price. Therefore, established Asian producers can certainly undercut African. But this standard answer to SSA cotton producers asking what they should manufacture for export is inherently incomplete. It fails to address (presumably because information is not as readily available off the shelf for other products as it is for grey unbleached) what products might be viable.
65. For textiles preliminary revealed viability results suggest semi-processed forms (e.g. yarn) with very high commodity value share and substantial weight saving and specialty dyed fabrics of African design or style (e.g. khanga, kitenge, West African wax prints) and at the narrow end of the market tie/die. In these products design matters, African provenance (if quality is good) can be a positive selling point; cut-throat price competition is less ubiquitous and severe. Identifying commercial channels is necessary because it is not a homogenous mass market. The probable ones are: broad range textile importers, wholesalers, retail chains on the one hand and specialty traders perhaps (especially those oriented to the black North American and Caribbean markets) on the other. For countries with very limited export experience, advice on and technical assistance in ways and means of identifying, contacting, contracting, price negotiating with, quality control for and assuring dependable supply flows to these markets is likely to be a necessary ingredient for success. Up to \$50 million or metres 20 million, serious access barriers are not self-evidently likely and that level - while not huge - would represent substantial export diversification for, e.g. Tanzania, Uganda, the Sudan, Mali, Burkina, Niger, Cameroon or even Zimbabwe.
66. Garments are in some respects similar to textiles in respect to the need to identify specific lines or market niches. These are unlikely to include - e.g. - plain or simply printed T Shirts. Whether utility lines like blue jeans are viable is unclear. At one period the Cote d'Ivoire did appear on the threshold of a breakthrough. That period is now past. The reasons should be studied. The foreign firms producing there have tended to stress quality control problems. Some outside analysts have

suggested shifting of production back to European plants had little to do with the underlying viability of Ivoirien production. A study to determine which factor (or the two in what combination) led to the decline could be useful. Quality control is a different problem from identifying a producer, partner or buyer whose conflicts of interest (with own group production at home) are low. Specialty garments (from specialty fabrics) may be promising. Oddly present successes - e.g. in Swaziland and Zimbabwe - seem to be in the high price, low volume, fashion end of this market where style and quality (but not - within limits - price) are crucial and competitive. The conditions facilitating their success need to be identified more clearly. But so do the issues related to the viability of more standard, higher volume lines, e.g. shirts or frocks made from khanga, kitenge or kente style prints.

67. A special problem relates to the trend toward use of artificial (rayon) and synthetic (nylon, acrylic) fibres or mixes of these with cotton. These fibres are not produced in SSA - albeit Swaziland does produce the basic wood pulp input for rayon. Nor except for rayon (itself losing ground) are they likely to be. Whether blend production for export would be viable probably varies sharply from case to case. Similarly in the North there seems to have been some stabilisation or revival of pure cotton cloth's use in shirts and summer frocks because of its greater comfort and porosity when temperatures and humidity levels are high. Saleability and net export gains are both necessary conditions - how they interact requires further examination.
68. Leather should replace hides and skins in African export statistics. In this case the intermediate form - "wet blue" - is apparently usually cost inefficient compared either to raw hides and skins or the tanned leather form. India has gained substantially from a total cessation of raw exports and their conversion to leather and leather products (backed up by a hides and skins export ban). Over the medium term Africa should seek to follow the same path.
69. However, certain very real problems need to be faced before and during such a transition. General quality levels need tightening and to the extent possible homogenisation. This, perhaps oddly, requires more individual attention to raw hides and skins which (universally, not only

in Africa) vary in ways requiring different treatment during tanning to produce uniformly acceptable results. Supply to some tanneries (e.g. Tanzania and Somalia) has been erratic and low even when - on the face of it - adequate production of hides and skins was taking place. In part this relates to overvalued exchange rates and the relative portability of hides and skins which interacted to make them a significant item in smuggling. But in some cases it may also relate to weak procurement systems since the raw hide and skin market is usually characterised by large numbers of traders and by fragmentation.

70. Limited - but real - success in establishing leather products exports has been made by a number of African countries, e.g. Morocco, Zimbabwe. These appear to be largely specialty market oriented, e.g. safari shoes, belts, handbags, poufs and cushions albeit Zimbabwe has some standard shoe exports. Standard shoe (and shoe part), luggage-handbag-purse, belt and accessory markets are much larger than specialty and are not - in general - characterised by sudden massive style shifts. Therefore, the conditions for successful entry into them by potential large exporters - e.g. Nigeria, Botswana, perhaps Somalia, Tanzania, Cameroon and the landlocked Sahelian states - deserve study. Style and quality control are key and probably interact with establishing links to major North buyers who can provide inputs into both. The experience of Brazil and India is worth study to identify possible pitfalls and potentials. It is also worth exploring the possibility of TCDC and export credit financed South-South machinery trade in this area and in tanning from India and/or Brazil to Africa. At least in the case of India, complementary interests may outweigh competitive because continued African hides and skins exports have, apparently, depressed the leather market to India's disadvantage.
71. Wood products have three stages: sawn timber (versus logs), plywood and veneer, finished products or components (e.g. furniture and parts, tea chests). Certain considerations vary by stage. One which is common to most products and probably more significant for wood (and oilseed) products than for most others is use of by-products and rejects. For example, the difference between viability and unviability of a sawmill can - in Finland, apparently often does - depend on whether sawdust and trimmings are used for generating power and/or turned into particle board

or thrown away. In plywood and veneer the domestic market (or absence thereof) for off-sizes and slight off-grades can be crucial. To a lesser extent the same considerations apply to textiles, garments, leather and shoes. 10% slightly imperfect (non-exportable but serviceable) output is often acceptable if, and only if, it can be sold on the domestic market at a reasonable price.

72. Sawn timber adds value for utility wood. It also reduces bulk and weight which is a transport cost advantage and can be self-powering and/or local building material generating (sawdust and off-cuts). Why it is a relatively low proportion of export volume relative to logs in most SSA producers is unclear. For high value timbers with specialty uses and the need to avoid waste of wood, simple sawing is likely to prove uneconomic.
73. Plywood and veneer were rising export industries in several West and East African countries in the 1960s and early 1970s. They have lost ground in most cases since then. One reason has been overvalued exchange rates and another inadequate foreign exchange licenses for maintenance and production imports leading to quality as well as quantity falls. On the face of it the underlying economic viability - if the wood produced is suitable for this purpose - remains.
74. Tea chests and furniture raise market access, volume and weight increase and - at least for furniture - style problems. Utility products like tea chests sell on price - given acceptable uniform quality and reliable delivery. Many - including tea chests - can be shipped in knocked down (pre-assembly) form to avoid transport cost raising volume increases. With relatively few significant buyers, however, a set of bulk, multi-year contracts may be needed. Furniture probably requires foreign inputs as to style and marketing - and perhaps to be shipped unassembled. Given solutions to those barriers, African production should be competitive.
75. Vegetable oil and - at manufactured stage - margarine and ghee are value adding, weight saving processes within African technical capabilities. In the past quality control has been a major problem even at the single expressed let alone triple refined stage. However, in the cases of palm oil (necessarily as palm fruit is highly perishable and expressing very

bulk and weight saving) and groundnut oil, there are significant exports. This seems less true of cottonseed oil (perhaps because many cotton exporters are also vegetable oil deficit countries). Given shipping, packaging and branding considerations, bulk exports (whether at raw, refined or hydrogenated stage) may be more practicable than final user packaging of exports.

76. Margarine production for export in the tropics is feasible and can - apparently - be economically viable vide Malaysia. Why only domestic (or occasionally domestic plus regional) market plants exist in SSA is unclear. Further study may be needed to ascertain whether export oriented production would be viable and, if so, using which vegetable oils.
77. Ghee (clarified butter) does have an international market and is produced in Africa, but not for export. Together with dried skim milk (for the domestic market) it might make dairying in areas far from major markets viable, e.g. in Tanzania's Morogoro and Lake Zone Regions and in Somalia's Central Rangelands. Market and market channel identification is needed as, on the face of it, the main attractive markets lie in West Africa.
78. For vegetable oils, use of by-products - hulls and oil cake - is usually crucial to viability. In principle this should not be hard - oil cake is a standard animal feed supplement with potential local fattening and actual global livestock feed markets. Hulls and similar dry waste can be used to produce heat or power.
79. Packaged fruits and vegetables (including processed forms such as jam or ketchup) tend to have particularly high net to gross additional export ratios. In general their agricultural inputs could not be grown on the same scale without the export market provided by packaging. A possible spin-off gain might be possible from using sound but slightly imperfect or too near full ripeness to transport portions of direct export horticultural production (e.g. green beans, tomatoes, mangoes, citrus). However, they often face supply side-problems except in peak seasons, e.g. in East Africa oranges are available almost year round but only during a two to three month peak season are prices low enough for them to

be a viable base for tinned juice production. One possible solution is dedicated production - e.g. of pineapples - albeit for a highly seasonal crop shortage at low seasons can be averted only at the expense of gluts at high (when domestic sale of the surplus will be neither easy nor lucrative). Another is flexibility built into the plant to allow seasonal shifts in output to match the cycle of peak harvest periods - e.g. tomato paste or tomatoes, citrus segments or juice, palm soup, garden eggs, okra in West African forest or coastal zones. In such cycles not all products need to be exportable if adequate domestic markets exist.

80. What products? Which markets? How purchased? One consideration is whether an adequate combined domestic and export market exists together with a dependably adequate basic input supply. While theoretically obvious, Africa is littered with semi-operational or silent plants for which the answer to one question at least was (and should have been foreseen to be) no. Markets can be broad - e.g. tinned tomatoes and paste, citrus and pineapple segments and juices, fruit jams - or specialty - e.g. okra, garden eggs, mango products, palm soup. The questions are whether enough accessible market size at a price adequate to ensure viability exists and whether access can in fact be secured and sustained. While the standard markets targetted are Western Europe and North America, for some products substantial potential may exist in the CMEA countries, Japan and West Asia.
81. Packaging questions are crucial because packaging can account for a high share of costs and is frequently import intensive. Glass might be optimal on these grounds but has to date been ruled out (except for jams) on fragility grounds. This may need re-examination - substantial intercontinental and international (North-North and East-West) trade in glass packaged foods does exist. Paper probably is too fragile for intercontinental shipping. Tinning (canning) remains standard but, whether in aluminium or tinfoil, does have a high import content and - especially when local tin production is high cost as is frequently true in Africa - may also pare away at competitiveness and/or force very low payments to food producers.

82. Meat products are somewhat similar to fruits and vegetables but diverge in significant ways. For high or middle quality meat with access to high price markets (e.g. Botswana, Swaziland and Zimbabwe EEC quota beef), tinning would be a negative value added process. Meat packing to the individual cuts (as opposed to whole carcass or quarter) stage is likely to add value and save freight (indeed to make air freight viable). Meat packing is an industry in which by-product use is essential. Tinning of off-cuts, tanning of hides and skins, glue production from hooves and bones, meat extract extraction from odds and ends, conversion of fat to cooking products and industrial tallow (e.g. for soap), processing of blood, offal and bones (for culinary, animal feed or fertiliser use) are examples. In at least some cases the problems of African plants may relate to failure to valorize these by-products systematically.
83. Meat tinning (for domestic and/or export sale) may be viable under three circumstances. First, for off-cuts from export or domestic meat packing. Second, in isolated areas from which transport of live cattle and/or carcasses - cuts is either impractical or unviable. Third, for seasonal gluts and or animals not fit for international transport in live beast exporting countries. Zimbabwe, Botswana and - on independence - Namibia exemplify the first case. Some of the Sahelian landlocked states may fit into the second (although this is not at all self-evident). Somalia and perhaps the Sudan exemplify the third.
84. The standard tinned meat product which is relatively easy to produce to export standards and to market to holders of established brands is corned beef. However, globally this is a stagnant or declining market. Only if Latin American and Australasian meat exporters move upmarket (into fresh cuts and/or different tinned products) is there likely to be much space for new entrants. Further, it is - by definition - not a market for goats or sheep. Mince, hamburgers and meatballs are other relatively standard products with some significant trade volume and - probably - fairly easy access to marketers and better growth prospects than corned beef. Beyond that, research on the market, demand, imported input requirement, difficulty of quality controlled production and access to established marketers is needed.

85. Fish is analagous to meat - at least at processing or manufacturing level. Trade-offs exist between filleted and tinned products (at least for some types of fish). By-products - including fish meal and fish oil - are important to viability both to ensure useability of a range of species and to salvage some value from fish too bruised or stale for processing toward human consumption. (While fishmeal centred industries do exist, their viability in Africa is open to serious doubt at present fishmeal/fertiliser prices.) As there still is a residual dried fish trade (in meat it is vestigial except for small volume specialty products such as biltong) studies of volume and potential might be useful, e.g. for dried shark to the West and East Asian areas, a product of potential interest to several Indian Ocean coastal states - e.g. Somalia, which has seen the collapse of past markets for an artisanal industry in this product.
86. Iron and steel (plus associated by-products, e.g. titanium and/or vanadium in some iron ores, sulphur from some coals) are a potential export product for a handful of African states. The necessary conditions are probably reasonably high quality iron ore deposits relatively close to limestone and cheap fuel (coal or natural gas) sources plus a domestic demand for products produced by the mill of over 250,000 tonnes. Algeria and Egypt pass that basic test as does Nigeria. Zimbabwe would pass it if the mill production mix were realigned and Tanzania may meet it subject to doubts as to ore and coal quality. The main SSA iron ore exporters appear to lack cheap fuel sources, adequate domestic markets or both.
87. The reasons for these estimates is the overcrowded nature of the world steel market. Low cost - or high export subsidy - producers outside the industrial economies (e.g. Brazil, South Korea, Zimbabwe, Algeria, South Africa) have been able to capture markets but in the absence of low costs the export (or enterprise) subsidy cost are very heavy.
88. These considerations suggest that careful attention must be paid to construction and operating cost minimisation (which implies concentration of units and - especially for plants under 1 million tonnes - use of current, not classic, technology). The Nigerian plant's export potential seems, as it is presently constituted, to be prejudiced by these factors.

Similarly product mix needs far more careful planning than it has usually received. There has been a tendency to concentrate on those bar, rod and strip products for which the world market is most glutted. Similarly, wide gaps in the mix - e.g. in flat steels - limit the domestic interface which is crucial to covering overhead costs and, thereby, allowing incremental cost pricing of exports without needing a subsidy.

89. Two possible additional viability situations relate to: iron ore deposits with valuable, low extraction cost secondary products (e.g. if the vanadium in Tanzania's Liganga iron ore can be extracted economically, vanadium revenue could be almost as high as steel value); modern coastal resmelting mills with low cost access to scrap (presumptively from ship-breaking given the high cost and low reliability of domestic scrap supplies and the ready availability and low cost of scrap ships). These special situations would require very careful studies and assessment of robustness in the face of negative variations from estimates, as it is historically notable how over-optimistic these often are. A more general study - including overall and product by product world market projections by region - is also needed to provide broad guidelines for detailed forward planning by actual or potential major, standard producers/exporters including those hoping to target a significant proportion of exports on African regional or sub-regional markets.
90. The foregoing set of examples is by no means taxonomic. It does seek to identify a number of product clusters with probable significant export potential based on present commodity exports or new commodity production targetted to or made possible by pre-export processing and manufacturing. In addition a number of particular problems are illustrated by reference to products in respect of which they are likely to be critical.
91. However, a commodity export upgrading strategy based on pre-export processing and manufacturing cannot reasonably be viewed in isolation from other industrial sub-sectors. This is not an appropriate place to discuss overall industrial strategy, but some key interactions may usefully be noted.
92. First, many commodity based industries - not least iron and steel and textiles and garments - have substantial domestic markets. Thus the

distinction between export promotion and import substitution is in a majority of cases somewhat unreal.

93. For some industries domestic sales of by-products (e.g. sawmills) or, of certain items in a product mix (e.g. in a multi-product tinning plant) or of serviceable but not export grade products (e.g. garments, textiles) will be crucial to ensuring overall economic viability. Further, it is a general policy globally among manufactures engaged in exporting and in selling to the domestic market to charge higher prices in the latter to cover most or all overheads (fixed costs) to allow marginal cost export pricing.
94. The interaction between processed/manufactured products exporting and linked domestic production beyond the main primary products is multi-directional. In the first place production of certain intermediate goods may be important for reducing costs. For example, packaging material (cartons, chests and boxes, bags and sacks, tins and jars) tend to be a major input and one whose import in finished form is frequently prohibitively expensive. Even production with high import content (probably inevitable for tins though less so for other packaging) may reduce costs significantly. Further, some materials (e.g. cardboard from re-cycled paper or agricultural waste, sisal or kenaf for bags and sacks and glass) can be produced domestically.
95. Certain processed/manufactured exports have substantial secondary commodity inputs. Examples include sugar (processed fruits), salt (most processed foods), vegetable oil (meat and fish products), tomato sauce (fish products), soft wood (for pulp-paper-packaging materials). In many cases these commodities would not be export competitive by themselves, but may well be lower cost than imports thus increasing the overall competitiveness as well as domestic content of the processed/manufactured imports.
96. A number of the inputs into processed/manufactured commodity export industries are also inputs into domestic market oriented manufacturing. National strategies need to look at potential for expansion of - e.g. packaging, light engineering, spare parts - production to serve and to reduce costs in both the basically export and dominantly domestic market

branches of the manufacturing sector.

VII. Information Collection, Analysis And Access

97. Lack of information is a general and generalised complaint of African primary product exporters at government, enterprise and intellectual/analytical levels. The complaints are indeed justified and meeting them should form part of any comprehensive agenda for bolstering commodity export proceeds of African states. However, to devise even a draft agenda for action it is necessary to categorise types of information needed and modalities for generating and using it.
98. One set of information needed relates to general commodity (and commodity based product) contexts and prospects. This is information usefully collected in a single programme of studies with economies of scale and interaction. While the earlier data is available the better, once compiled the data is likely to remain valid for several years especially if backed up by annual updating in respect to significant contextual and prospect changes.
99. Such information is useful as strategic dialogue and formulation inputs and identifying areas for more detailed study. It cannot provide an adequate basis for specific investment decisions.
100. From the first set of information it is likely to be possible to zero in on specific commodities and commodity based products. In some cases these will need to be country specific either formally or because a commodity or product is of interest to one or two countries only. These studies need to be up to pre-feasibility level as to aspects of production, processing, marketing, etc. They do require more and more up-to-date commercial information and there is greater need for speed in preparing and for using or updating them rapidly. Because of country specificity there is a need for identified potential user countries to be able to relate directly to consultants (whether outside, UN system or mixed teams) and preferably to appoint one or more qualified citizens to the consultancy teams. The latter point is more of general applicability. Seconding African state personnel to all aspects of

information collection and information system development is a potentially crucial way of building up national data procurement and analysis capacity. National - or grouped national - capacities are presumably the long-run aim even though the short term information supply augmentation will require technical assistance and/or consultancy input.

101. A related second stage set of studies - e.g. linkage industries, labour productivity enhancement - may need to be national. Some general points can be identified at the first round of studies but beyond that it is doubtful that cross-country studies will usually be important.
102. A quite different third set of information is up to date market data and analysis, particularly - but not only - for major commodities. For some commodities - especially those with dominant terminal markets - such general sources as Reuters Commodity Service go a long way toward providing basic data for own analysis and some independent and commercial expert analysis. In others commodity agreements do have at least rudimentary market information systems for members. However, neither source is available and/or adequate for many commodities. For example, the basic data source on cocoa is Gill and Duffus (a cocoa broker and merchant) and sisal/hard fibres is Wigglesworth (a hard fibre broker, merchant and - at least indirectly - producer). Such sources are hardly likely to be available to African governments or enterprises (or for that matter other firms engaged in the markets) as soon as to their own authors. No imputation of fraud or misconduct is made - simply that the situation is not in the interest of African producing countries. In cases where there is no terminal market (e.g. cashew nuts, the terminal market is for kernels) very little data is available promptly on representative transactions even though experience with other products (e.g. fertiliser) demonstrate it can be generated and distributed promptly.
103. These types of information need to be collected by commercial not bureaucratic type organisations and should be channelled direct (e.g. by telex) to users not via governmental agencies. Bureaucratic (government, UN agency, academic institution) data collection and analysis has its uses. Like an elephant it can knock down the undergrowth, cover the ground and move rapidly in straight lines with occasional changes of

course. For strategic, record and basic analysis input data the bureaucratic approach has much to be said for it - if the elephant avoids going to sleep on the trail. But commercial data requirements are for rapid pieces of information from a variety of sources. This requires a different type of organisation to collect, on the animal analogy a hummingbird.

104. How to identify and hire, construct and finance and/or build into African marketing enterprises (marketing boards, auctions and/or export marketing companies) commercial data procurement and analysis expertise is a crucial as well as a difficult question. Presumably answers will vary for different products. Some experience (perhaps especially in relation to Asian and Mediterranean rather than African economies) does exist but does not appear to have been collected or analysed systematically. This might be an appropriate area for an ITO/UNCTAD study.

VIII. Reflection

105. Commodities - preferably increasingly in pre-export processed and manufactured form - will be central to the success or failure of attempts to restore African (and most African countries) earned import capacity from exports. Trying to do so by brute force through raising volume of present main exports and/or by random diversification into other standard commodities faces distinct limitations given commodity market prospects to 1995. Changing the trend (at best stagnant) via ICAs and Window 1 of the Common Fund seems likely to be of only limited feasibility though reducing fluctuations around the trend and avoiding distress selling at lows causing an unchecked free fall in price are more feasible objectives.
106. Therefore, the other (Window 2) elements of the original Integrated Programme for Commodities deserve re-consideration. Among them are new product development; locating and targetting new markets and/or uses; achieving cost reducing technical changes; increasing African participation in marketing systems; developing pre-export processing and/or manufacturing of present (and/or new) commodity exports; improving African access to and ability to use information. None of these is

likely to provide either universally applicable possibilities or any panaceas. All seem likely to offer significant gains for some commodities from some economies.

107. If an approach along these lines is adopted, the first steps are likely to be dominated by information collection and analysis leading to specific pre-feasibility studied projects in each of the six broad topic areas identified. This is an appropriate area for UNDP-UNCTAD-Like Minded Government financed technical assistance (including seconded African personnel when possible). For ongoing operational projects and programmes an appropriate source would seem to be Window 2 of the Common Fund which seems likely to become operational over 1988/89. Indeed without a programme of preliminary and pre-feasibility studies there is a real danger that Window 2 would remain unused or dissipated on projects which in retrospect were seen to be of less than optimal priority.
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