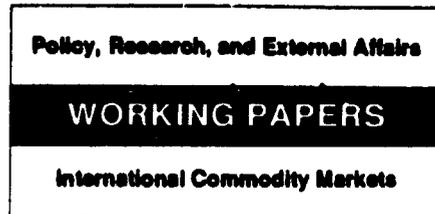


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Recent Developments in Marketing and Pricing Systems for Agricultural Export Commodities in Sub-Saharan Africa

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Privatization of marketing and the adoption of free-market pricing is easier under the *caisse* system than under the monopolistic marketing board system. A progressive export tax system, based on a market-determined price, can ease the transition from a fixed producer pricing system to a free-market pricing system.

This paper — a product of the International Commodity Markets Division, International Economics Department — is part of a larger effort in PRE to understand the impacts of various kinds of primary commodity marketing and pricing systems and how best to change to more efficient systems. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Dawn Gustafson, room S7-044, extension 33714 (69 pages with charts and tables).

Varangis, Akiyama, and Thigpen document the difficulties various countries in Sub-Saharan Africa have had with marketing and pricing systems, and show how these systems have been caused or exacerbated by government controls. They document the steps several countries have taken toward relaxing those controls and allowing more participation by private enterprise.

They draw some general conclusions about the kinds of changes in parastatal marketing organizations that most effectively improve their ability to market crops efficiently and cope with changes in world prices:

The path a country should take toward more private sector participation depends heavily on the form of marketing and pricing system that exists and the time needed to develop needed skills in the private sector.

Complete or increased privatization of marketing and adoption of free-market pricing is easier under the *caisse* system than the *marketing board* system. Under the *caisse* system, the private sector already handles domestic and export marketing — so the transition essentially

involves increasing competition in an existing private sector (step A).

Under the monopolistic marketing board system, countries should identify activities (such as processing) that can be performed immediately by the private sector and take steps to transfer those steps to the private sector (step B).

In countries with a marketing board system and a weak private sector, export and domestic marketing can initially be shared by the boards and the private sector, with boards acting as "buyers of last resort." Over time the boards should be treated as just another of the marketing agencies competing with the private sector (step C).

After taking steps B and C, marketing boards will be like *caisses* and in time can take step A.

If an immediate change from a fixed producer pricing system to a free-market pricing system is not feasible or is judged undesirable, a gradual transition can be made by implementing a progressive export tax system that is more progressive in the initial stages.

The PRE Working Paper Series disseminates the findings of work under way in the Bank's Policy, Research, and External Affairs Complex. An objective of the series is to get these findings out quickly, even if presentations are less than fully polished. The findings, interpretations, and conclusions in these papers do not necessarily represent official Bank policy.

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1. With the recent sharp declines in world market prices for several agricultural products, marketing and pricing systems in many Sub-Saharan African countries have been experiencing financial and other problems. Because of the over-riding importance of primary export commodities for many Sub-Saharan countries, inadequate performance of marketing and pricing systems can lead to large losses in the welfare of farmers, in export performance, in government revenues and in economic development.

2. In light of the problems experienced, several Sub-Saharan countries have recently taken important steps toward changing their commodity marketing and pricing systems, often with adjustment assistance from the World Bank. These steps range from complete abolition of governmental bodies and their replacement with private marketing and pricing organizations to sharply cutting staff and streamlining operations in government-controlled organizations. This paper describes recent events and identifies evolving trends in the marketing and pricing systems for major agricultural export commodities in Sub-Saharan Africa and evaluates their effectiveness. The first section classifies the predominant marketing and pricing structures for export commodities in Sub-Saharan Africa. It is followed by a review of the problems these systems have faced in recent years. The third section describes and analyzes recent developments in these systems. Section IV concludes.

ACKNOWLEDGEMENTS

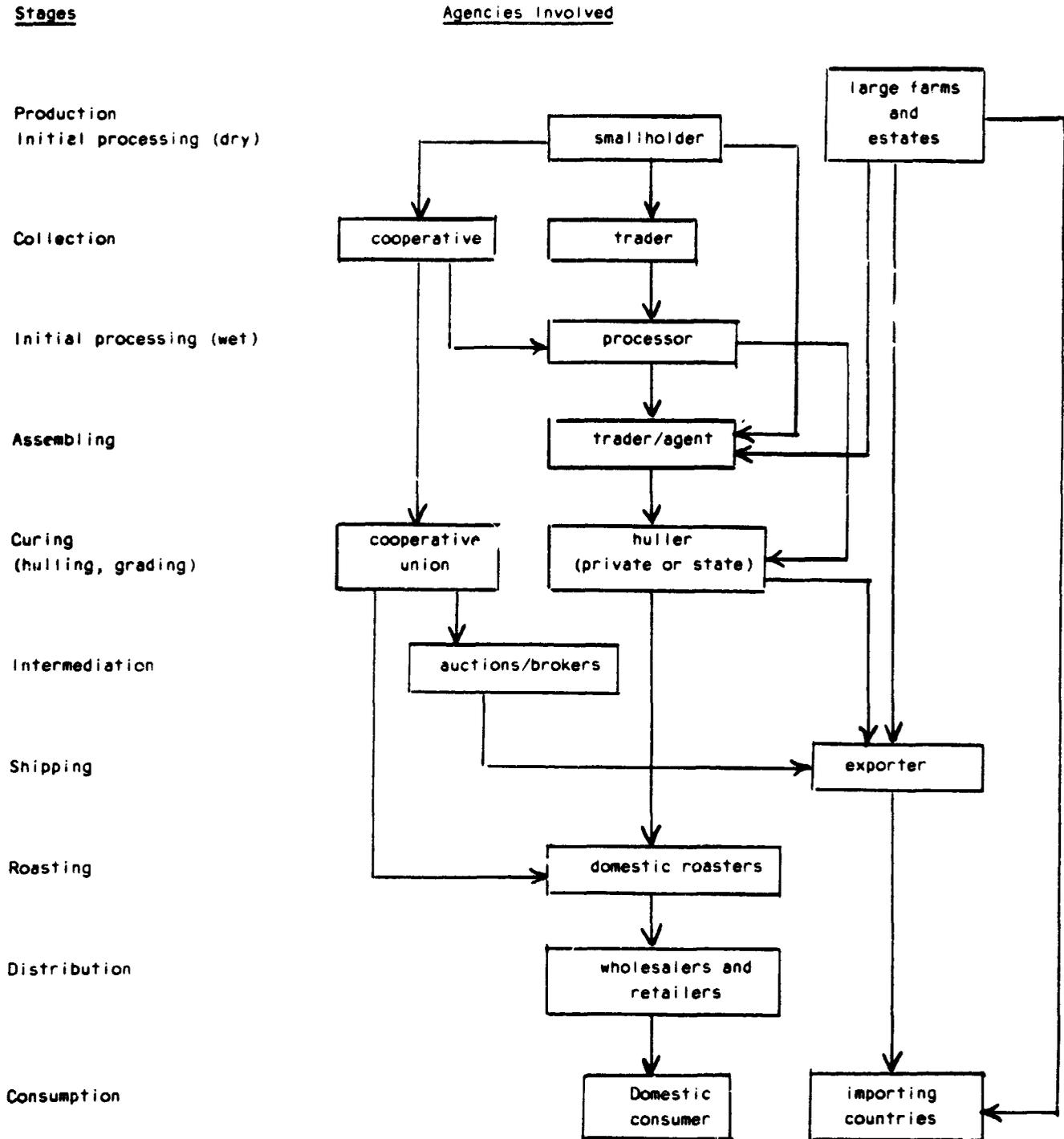
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I. STRUCTURE OF MARKETING AND PRICING SYSTEMS

3. Marketing and pricing systems for export crops are often developed in response to perceived political, economic and social problems. Some of these problems are: (a) the instability of world market prices for the export crops, resulting in fluctuations in export revenues and producers' incomes; (b) conflicts over the distribution of export sales revenues between exporters, intermediaries and producers; (c) conflicts over the distribution of production; and (d) the lack of marketing infrastructure. The existence of specific marketing systems can also result from historical causes such as: (a) the newly-independent countries of Africa wanting to acquire greater control over the marketing of their export crops; or (b) arrangements which reflect the philosophy of the ex-colonial powers, such as in the case of cocoa the creation of Caisses in francophone West Africa or Marketing Boards in anglophone East and West Africa. For instance, according to Lamb and Muller (1982) the formation of the Kenya Tea Development Authority (KTDA) in Kenya can be traced back to the philosophy of the British Colonial Development Corporation in the early 1950s. Bates (1981), also points out that the origins of the state marketing agencies lie in the colonial period.

4. To illustrate the organization and functions of a typical marketing system, a hypothetical marketing system for coffee is shown in Figure 1. As illustrated, a marketing system involves farmers, traders, processors, exporters and possibly other agents. The pricing system refers to how and by whom prices at each marketing stage are determined and how payments are made.

Figure 1: MARKETING SYSTEM IN A COFFEE-PRODUCING COUNTRY



Source: J. de Graaff "The Economics of Coffee", Pudoc Wageningen, 1986.

5. Tables 1-4 show, in concise form, the characteristics of marketing and pricing systems for coffee, cocoa, tea, tobacco and cotton 1/ in major Sub-Saharan exporters of these commodities. The degree of government involvement in the pricing and marketing of these export commodities varies considerably from one country to another and from one commodity to another. The systems are broadly classified into three categories; the marketing board system, the "caisse de stabilization" system and the free market system. While ultimately there is no difference between the caisse and the marketing board systems in terms of the control exerted by government, it is useful to distinguish between them because they can be very different in their efficiency and in the changes which may be needed to make them more effective.

6. A Marketing Board system is characterized by its monopoly in crop marketing, from the farmgate to exports, and a pricing system controlled by the government board. Producer prices are fixed by the marketing board. The physical handling of the crop through each stage of commercialization is performed by the marketing board, in which ownership is invested. In some marketing board systems a few strictly-controlled private agents are involved, usually handling a small part of the crop.

1/ These five commodities comprise over 70% of the total agricultural export revenues of Sub-Saharan countries during the period 1984-86.

TABLE 1a: A SYNOPSIS OF MARKETING SYSTEMS FOR COFFEE

Country	Exporter	Price received by the private exporter	Pricing to Intermediaries Between Farmgate and Exporter	Prices paid to Farmer	Do prices received by the farmer reflect quality differences?	Crop movement from farmgate to processors/exporters	Ownership of processing facilities	Grading and quality control	Method of obtaining exporters' rights
Madagascar (coffee) (pre 10/88)	Parastatals (80%), private exporters (20%) under the authorization of the govt. Selling by CAVAGI <u>a/</u>	Fixed <u>b/</u>	Fixed <u>b/</u>	Fixed <u>b/</u>	No	Private buyers and agents of processing/storage companies.	80% of exportable production processed through four public sector companies each having one quarter shares. 20% is handled by private companies. Coffee for domestic market is roasted by private companies.	Public and Private	There are four parastatals and CAVAGI allocates export shipments to each. Private exporters are also allocated a quota.
Madagascar (coffee; as of 10/88)	Private exporters and parastatals acting as private corporations.	f.o.b. price (existence of a "reference price" system.	linked to f.o.b.	linked to f.o.b.	Yes	Private buyers.	Parastatal (acting as private companies) and private sector.	Private	Quota allocation according to stocks and first come basis.
Burundi (coffee)	Burundi Coffee Company	n.a.	Fixed <u>c/</u>	Fixed <u>c/</u>	No	Private traders buy coffee from farmers who sell it in parchment form to OCIBU hulling factories. OCIBU has monopoly in buying parchment coffee. OCIBU sells green coffee to Burundi Coffee Company.	Washing stations and hulling factories owned by the government. Semi washed coffee processing (de-pulping) by farmers. Milling by government owned factories	OCIBU	Burundi Coffee Company has a virtual monopoly.
Zimbabwe (coffee)	Grains Mktg Board	n.a.	n.a.	Fixed	No	Grains Marketing Board	Government	Grains Mktg Board	Grains Mktg Board
Uganda (coffee)	Coffee Mktg Board	n.a.	Fixed	Fixed	No	Coops and private licensed traders collect coffee from the farmers and sell it to CPSU.	Primary processing: coops and private licensed traders. Final processing: by the CPSU	CPSU (Central Processing and Storing Unit) <u>d/</u>	Coffee Mktg Board

n.a. = not applicable

a/ CAVAGI is the stabilization fund, a Caisse equivalent.b/ "differentials" system operating like the "Bareme".c/ "echelle mobile" system operating like the "Bareme".d/ Operates under the Coffee Marketing Board.

Note: For coffee marketing systems in Cote d'Ivoire and Cameroon see Table 1.

TABLE 1b: A SYNOPSIS OF MARKETING SYSTEMS FOR COFFEE

Country	Exporter	Price received by the private exporter	Pricing to Intermediaries Between Farmer and Exporter	Prices paid to Farmer	Do prices received by the farmer reflect quality differences?	Crop movement from farmer to processors/exporters	Ownership of processing facilities	Grading and quality control	Method of obtaining exporters' rights
Tanzania (coffee)	Licensed private exporters and TOB <u>a/</u>	f.o.b. price	Fixed	Fixed	Yes	Primary societies and coop unions.	De-pulping by farmers. Coffee washing stations owned by government.	Primary societies and TOB	Auctions
Ethiopia (coffee)	Licensed private sector (10%) EDC (90%) <u>b/</u>	f.o.b. price	Official price structure based on f.o.b. prices. This structure defines the prices at which the parastatal buys and forms a reference point for controlling prices in the private sector.	Linked to f.o.b. price	No (but price premiums paid to some origins of coffee, e.g. Harrar coffee)	Licensed private traders under strict govt regulations concerning their activities; also, coops buy from farmers and sell to parastatals within their regions or to terminal port. EDC also performs the role of licensed private traders.	Operated by cooperatives. Some owned by cooperatives others by the EDC, and some are private.	Private traders, cooperatives and EDC.	Auctions for private exporters. However, the overwhelming bulk of exports for the EDC.
Kenya (coffee)	Licensed private exporters.	f.o.b. price	No intermediaries.	Linked to f.o.b. price	Yes	KFCU processes and moves coffee on behalf of the coops, unions and estates. Ownership of coffee remains with the farmer until auctions.	Estates have their own factories. Smallholders' coffee is processed by 700 factories owned by the 150 coffee cooperatives. Milling by KFCU. <u>c/</u>	KFCU and Kenya Coffee Board (CKB)	Auctions handled by Kenya Coffee Auctions a subsidiary of CKB.
Rwanda (coffee)	OCIR-Cafe (87%) and ETIRU (13%) physically handle coffee exports. S-illing of coffee performed by OCIR-Cafe (20%), ETIRU (13%) and Drucafe (67%).	Fixed	Fixed	Fixed	No	Growers sell to coops and private licensed traders who sell to hulling factories.	Initial processing by farmers. Milling and bagging is performed by one private factory and two Rwandex factories.	Grading by Rwandex and ETIRU and storing by OCIR-Cafe. <u>d/</u> OCIR-Cafe oversees the operations of Drucafe and ETIRU. Drucafe and ETIRU work on behalf of the government.	OCIR-Cafe is govt controlled and ETIRU is private. Drucafe is mostly private.
Zaire	Private and OZACAF <u>e/</u>	Market price (existence of a "reference price" system).	Market Price	Market price (in the pre 1982-83 liberalization period producer prices were set by the government).	No (also in the pre 1982-83 system).	Farmer sells to assemblers who pass the coffee to suppliers. Suppliers then sell the coffee to exporters. Almost all the marketing network is in the private sector's hands with little govt involvement.	Private ownership (farmers, exporters and OZACAF).	OZACAF and OZAC <u>f/</u>	Licensing.

n.a. = not applicable

a/ Tanzania Coffee Marketing Board.

b/ Ethiopian Coffee Marketing Corporation.

c/ Kenya Planters Cooperative Union.

d/ OCIR-Cafe is a parastatal company under the Ministry of Agriculture and Livestock.

e/ Office Zairois du Cafe. In 1979, it replaced the Office National du Cafe, a government coffee marketing monopoly established in 1972.

f/ OZAC is a government agency with the broad mandate to control quality on all export commodities.

Note: For coffee marketing systems in Cote d'Ivoire and Cameroon see Table 1.

TABLE 2: A SYNOPSIS OF MARKETING SYSTEMS FOR COCOA

Country	Exporter	Price received by the private exporter	Pricing to Intermediaries Between Fairgate and Exporter	Prices paid to Farmer	Do prices received by the farmer reflect quality differences?	Crop movement from fairgate to processors/exporters	Ownership of processing facilities	Grading and quality control	Method of obtaining exporters' rights
Gambian ^{a/} (coffee and cocoa)	ONCB ^{b/}	n.a. ^{c/}	Fixed ^{c/}	Fixed ^{c/}	Yes	Coops on behalf of ONCB	Arabica Coffee: primary processing ^{d/} at farm level by producers. Further processing by UCCAO. ^{e/}	ONCB	ONCB
Gambian ^{f/} (coffee and cocoa)	Handled by private licensed exporters on behalf of the ONCB. ONCB legally retains ownership of the crop even if it is stored in the exporter's warehouse.	Fixed ^{c/}	Fixed ^{c/}	Fixed ^{c/}	Yes	Coops, private traders and agents of export companies.	Robusta Coffee: coops, and private processing plants owned by producers and traders.	Private buyers/processors	Licensing.
Cote d'Ivoire (coffee and cocoa)	Handled by private licensed exporters under the supervision of the caisse.	Fixed ^{c/}	Fixed ^{c/}	Fixed ^{c/}	No	Private traders, coops and agents of export companies.	Coops, private traders and producers. Hulling by 16 private factories.	Private traders and coops	Licensing.
Nigeria (as of 7/66)	Private exporters	f.o.b. price	linked to f.o.b. price	linked to f.o.b. price	yes	Private traders.	n.a.	Government and private sector	Licensing
Nigeria (pre 1966) (cocoa)	Nigeria Cocoa Board (NCB)	n.a.	n.a.	Fixed	Yes	Nigeria Cocoa Board. Farmers sell directly to NCB or to licensed buying agents who sell to NCB.	n.a.	Nigeria Cocoa Board	Nigeria Cocoa Board.
Ghana (cocoa)	Ghana Marketing Board	n.a.	n.a.	Fixed	Yes	Ghana Marketing Board	n.a.	Ghana Marketing Board	Ghana Marketing Board

n.a. = not applicable

^{a/} Anglophone region and arabicas.

^{b/} Office National de Commercialization des Produits de Base.

^{c/} "Barrow" system.

^{d/} Depulping, fermentation, cleaning and drying.

^{e/} Union Centrale des cooperatives Agricoles de l'Ouest.

^{f/} francophone region.

TABLE 3: A SYNOPSIS OF MARKETING SYSTEMS FOR TOBACCO AND TEA

Country	Exporter	Price Received By the Private Exporters	Pricing to Intermediaries Between Foreign and Exporter	Prices Paid to Farmer	Do Prices Received by the Farmer Reflect Quality Differences?	Crop Movement from Foreign to Processors/Exporters	Ownership of Processing Facilities	Grading & Quality Control	Method of Obtaining Exporters' Rights
Malawi									
Estates <u>a/</u>	private exporters	market price	linked to market price	linked to market price	Yes	Growers	Private	Growers	No restrictions
Small-holders <u>b/</u>	private exporters and ADMARC <u>c/</u>	market price	n.a.	fixed	Yes	ADMARC purchases tobacco from the smallholders and sells it at auction warehouses to buyers representing international companies.	Government	ADMARC	auctions and ADMARC
Kenya (tobacco)	BT <u>d/</u> (monopoly)	n.a.	n.a.	fixed	Yes	BAT	BAT	BAT	Monopoly granted.
Zimbabwe (tobacco)	private exporters	market price	linked to market price	linked to market price	Yes	private traders	private	private	auctions
Cameroon (tobacco)	private exporters	market price	fixed	fixed	Yes	cooperative unions buy tobacco from the farmers through the primary societies	TIRB <u>e/</u>	farmers and TIRB	private treaty
Tanzania (small-holders tea)	private exporters	market price	n.a.	fixed	No	TTA <u>f/</u>	TTA	TTA	private treaty, and London auction
Zambia (tobacco)	Parastatal	n.a.	n.a.	fixed	No	parastatal	government	parastatal	monopoly granted
Kenya (small holders tea)	private exporters	market price	n.a.	fixed, followed by a second payment	Yes (the second payment)	KIDA <u>g/</u>	KIDA (farmers can own shares of tea factories)	KIDA	auctions (in Mombasa and London) and private sales

a/ Fire-cured and sun-cured tobacco, cotton, rice, maize and groundnuts.

b/ Fire-cured tobacco, burley tobacco, sugar and tea.

c/ ADMARC is responsible for exporting the oriental tobacco.

d/ British American Tobacco Company.

e/ Tanzania Tobacco Processing and Marketing Board.

f/ Kenya Tea Development Authority.

g/ Tanzania Tea Authority.

n.a. = not applicable.

TABLE 4: A SYNOPSIS OF MARKETING SYSTEMS FOR COTTON

Country	Exporter	Price received by private exporter	Pricing to intermediaries between farm-gate and exporter	Prices paid to farmers	Do Prices received by farmers reflect quality differences	Crop movement from farm-gate to processor/exporter	Ownership of processing facilities	Grading & Quality Control	Method of obtaining exporters' right
Benin	Wholesalers and intermediaries.	World Market Price	SONAPRA <u>1/</u> monitors prices and sells to exporters.	Fixed	Yes	Four CARDERS <u>2/</u> and SONAPRA <u>1/</u>	CARDERS	SONAPRA	Purchasing cotton from SONAPRA.
Burkina Faso	Private export agents	World Market Price	Fixed <u>3/</u>	Fixed	Yes	SOFITEX <u>4/</u>	SOFITEX		License from Ministry of Commerce.
Cameroon	SODECOTON <u>5/</u>	n.a.	Fixed <u>3/</u>	Fixed	Yes	SODECOTON	SODECOTON	SODECOTON	SODECOTON
Chad	COTONCHAD <u>5/</u>	n.a.	Cotonchad moves and processes cotton, costs covered by export revenue.	Fixed but additional payments are possible if world prices permit.	Yes	COTONCHAD	COTONCHAD	COTONCHAD	COTONCHAD
Cote d'Ivoire	Private agents	World Market Price	Fixed <u>3/</u>	Fixed	Yes	CIOT <u>6/</u>	CIOT	CIOT	CAISTAB <u>7/</u>
Tanzania	Private purchasers at TOB <u>8/</u> tenders	n.a.	Fixed	Fixed	Yes	Co-operative unions (parastatals)	Cooperative unions	Primary Societies (seed-cotton TOB (lint))	Purchasing cotton from TOB
Zimbabwe	Cotton Marketing Board (OMB)	n.a.	OMB is only intermediary. Its costs are met by cotton sales proceeds.	Fixed	Yes	Cotton Marketing Board	Cotton Marketing Board	Cotton Marketing	OMB is designated exporter
Mali	SOMEX <u>9/</u>	n.a.	Since barene eliminated in 1983 actual marketing costs are reimbursed from export revenues.	Fixed	Yes	OMT <u>10/</u>	OMT	OMT	SOMEX is designated exporter

1/ Societe Nationale pour la Promotion Agricole.2/ Centre d'Action pour le Developpement Rural.3/ "Barene" system.4/ Societe Burkinabe des Fibres Textiles.5/ The parastatal cotton company.6/ Compagnie Ivoirienne pour le Developpement des Textiles.7/ Caisse de Stabilization.8/ Tanzania Cotton Marketing Board.9/ The state trading company.10/ Compagnie Malienne pour le Developpement des Textiles.

7. The Caisse de Stabilisation system is the same as the marketing board system in terms of the fixing of producer prices and legal ownership of the crop along the marketing chain. However, the physical handling of the commodities from the farmgate to export is carried out on the Caisse's behalf by private agents licensed by the Caisse. Renumeration for each marketing service performed by the private agents is fixed by the Caisse. Export activities are managed by private licensed exporters under a fixed reference export price and on terms and conditions approved by the Caisse.

8. In the Free Market system the producer price is determined by the world market price. There is no government involvement in either pricing or physical handling of the crop at any stage of the marketing chain. The use of the term free market does not imply a completely laissez-faire approach. The government may reserve the right to intervene if it perceives a need to coordinate actions of agents in the system. In practice, however, the government's involvement is limited to quality control, grading, taxation and general supervision.

9. Although most of the marketing systems can be classified under these three broad categories, an individual country's system may vary in certain details. For the sake of clarity, representative examples of each system will be described below. Variations of that system will also be discussed. Reference can be made to Tables 1 through 4 to see differences between countries for each of commodities. The countries chosen as representative of each system are Ghana (Marketing Board), Côte d'Ivoire (Caisse de Stabilisation) and Madagascar post-October 1988 (Free Market).

A. The Marketing Board System: Ghana Cocoa Marketing Board

10. The Ghana Cocoa Marketing Board (CMB) controls all stages of marketing, from purchases at the farmgate through exports or domestic sales. Sometimes the CMB authorizes the purchase of cocoa beans from farmers by agents or organizations operating under license and under CMB's close supervision. The remuneration of these agents is fixed by the CMB. The CMB sets prices, determines the terms and conditions of purchase and the dates of opening and closing of the cocoa season.

11. CMB purchases are conducted through primary societies (at village level) which are run by a produce buying clerk appointed by the regional office of the Produce Buying Division of CMB. All farmers are obliged to register with their local primary society. Farmers have some say in running these societies. The buying clerk buys cocoa from the farmers in accordance with terms and conditions set by the CMB and pays the farmers by check. Farmers cash the check at the local bank where they are registered. The buying clerk is required to provide weekly reports concerning details of purchases to the regional office of the Produce Buying Division.

12. Grading and quality control are the responsibility of the Produce Inspection Division of the CMB. Initial grading and bagging of cocoa beans takes place when they are purchased from the farmer. Upon arrival at CMB central up-country storage the beans are regraded. A final grading takes place upon arrival at the port. The markings on the bag identify the grower, the grade of the beans, the inspector who graded the beans and the primary

society which bought the cocoa from the farmer. Transportation is paid for by the CMB. The CMB has a monopoly on cocoa exports. Export sales are conducted through companies under the direct control and ownership of the CMB. These companies also market the cocoa products produced by the state-owned cocoa processing plants.

13. Primary societies are the major source of credit to cocoa farmers. These funds are channeled through district organizations controlled by the Product Buying Division of CMB. CMB is also an important direct source of finance for projects such as roads in cocoa growing areas.

14. Marketing Board systems very similar to the Ghana Cocoa Board are: Nigeria (cocoa) before July 1986, Cameroon (coffee and cocoa) in the anglophone area, Zimbabwe (coffee, cotton), Kenya (tobacco), Zambia (tobacco), Cameroon (cotton), Chad (cotton), and Mali (cotton).

15. There are several marketing systems which do not strictly fall into the marketing board system as described above. These systems have been classified here as marketing board systems as their fundamental characteristics are the same. These characteristics are the ownership of the crop by the board and the major role that the parastatal plays in fixing producer prices and in the physical handling of the crop. The difference between these systems and the marketing board system as represented by the Ghana Cocoa Board is the larger role of private agent(s). Two areas of private involvement can be identified: (i) collection/primary processing; and (ii) exporting. Systems where the private sector is involved in the

collection/pricing and processing are: Burundi (coffee, collection only) Uganda (coffee), Ethiopia (coffee), and Rwanda (coffee). Systems where the government parastatal controls all stages but allows private exporters to handle exports are: Tanzania (tea, tobacco and cotton), Benin (cotton), Burkina Faso (cotton), and Côte d'Ivoire (cotton). A third category is systems wherein the private sector is allowed to participate in both the crop collection/primary processing as well as in exporting. Systems falling under this category are: Tanzania (coffee), and Malawi (tea). In these two cases, exporters obtain the commodity for export through auctions. In Tanzania (tobacco) exporters purchase the commodity for export only from the marketing board by private treaty.

B. Caisse de Stabilisation: Côte d'Ivoire

16. In Côte d'Ivoire the Caisse de Stabilisation (CSSPPA) controls the marketing of cocoa and coffee primarily through two measures:

- (i) Specification at the beginning of each crop year of the payment system (bareme) 1/ which sets product prices and remuneration for marketing services at each step along the cocoa and coffee marketing chains from the producer to final sales (domestic and exports).

- (ii) The use of an export price reference system to stabilize the price received by exporters. If the world price is higher than the reference export price as set by the CSSPPA, the exporter makes a payment to the CSSPPA equal to the difference between the two prices. If the world price is lower, then the exporter is reimbursed by the CSSPPA for the difference. These payments are made from the financial reserves of the CSSPPA.

17. Exporters in Côte d'Ivoire employ traders (traitants) to buy coffee from the farmer. The traders provide additional services to the farmer such as credit and agricultural inputs. Importantly, there is competition among traders buying from farmers. Some farmers have formed cooperatives to sell their products directly to exporters or to large traders. However, cooperatives are at a disadvantage to the traders because they cannot provide credit and other services to the farmer. All traders are reimbursed by amounts fixed under the bareme by CSSPPA for the services they perform on its behalf. The amount of reimbursement includes a profit margin set by the

1/ The details of the bareme for Côte d'Ivoire cocoa for the period 1979/88 are presented in Table 5.

Table 5: CÔTE D'IVOIRE: ESTIMATED BALANCE OF CSSPPA AND GOVERNMENT FOR COCOA: 1979/80-1978/88

	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88
	----- (CF AF /KG) -----								
Producer Price	300,0	300,0	300,0	300,0	350,0	375,0	400,0	400,0	400,0
Local Collection (cherry)									
Storage and Handling Cost	15,4	17,0	19,2	20,9	23,2	24,1	25,1	25,1	25,0
Marketing, Processing									
Transportation & Storage Cost	30,6	33,0	37,0	40,8	44,5	44,7	51,2	51,7	53,1
Export Tax	50,6	50,6	50,6	50,6	80,5	80,5	80,5	100,5	100,5
Exporter's Profit	2,1	2,3	2,4	3,3	3,3	3,3	2,9	2,5	3,3
Port Handling Cost	2,3	2,7	2,7	3,3	3,3	3,3	3,5	3,8	3,5
F.O.B. Value	401,1	405,6	411,9	418,9	504,8	530,9	563,2	583,6	584,4
Freight & Insurance	44,0	49,0	51,0	51,0	58,1	66,8	76,0	73,7	73,7
C.I.F. Value	445,0	454,6	462,9	469,9	562,9	597,7	639,2	657,3	659,1
Costs Hors Bareme /a	35,0	35,0	3,50	35,0	39,9	42,7	33,3	33,3	32,3
Total Cost to CSSPPA	480,0	489,6	497,9	504,9	602,8	640,4	672,5	690,6	691,4
Actual C.I.F. Value	627,6	510,0	595,0	651,4	876,5	992,9	864,3	705,9	571,5 /b
Balance of CSSPPA	147,6	20,4	97,1	146,5	273,7	352,5	191,8	15,3	-119,9
Balance of Government	198,2	71,0	147,7	197,1	354,2	433,0	272,3	115,8	-19,4

/a The export tax has been raised from 23% of the "valeur mercuriale" for the crops 1980/81-1985/86 to 25,125% for the 1986/87 crop.

/b Estimated by International Commodity Markets Division.

Source: CSSPPA.

CSSPPA. The payments are in cash. Exporters are obliged to submit a weekly report of their purchases to CSSPPA.

18. Traders do not grade beans but pay uniform prices for all beans regardless of quality. Exporters clean, dry, grade and re-bag the beans. Even in that process, however, good and bad quality beans are mixed. Transportation is provided by the trader. The allowance for transportation cost is set by the bareme.

19. The majority of the arrangements for shipping and selling cocoa abroad are handled by private export firms. However, CSSPPA allocates a quota for each exporter and all transactions are supervised and approved by the CSSPPA. Storage costs are paid by the exporter. The exporter is reimbursed for storage costs through the bareme.

20. The main source of pre-export finance for the farmer is the trader. Large traders use their own funds while smaller traders obtain funds for this purpose through large exporters. The terms of the loan are negotiated by the farmer and the trader. The cocoa exporter relies on the central bank or other banks for pre-export finance.

21. Marketing systems that are similar to that of Côte d'Ivoire are Cameroon (coffee and cocoa in the francophone areas) and Madagascar (coffee) pre-October 1988. However, there are some differences. In Cameroon, but more so in Madagascar, the government has (or had) even greater involvement.

22. In Cameroon, buyers' activities are more controlled than in Côte d'Ivoire. The government controls the purchase of the crop not only through the fixed purchase price as in Côte d'Ivoire but also through (a) determination of the geographical area where each buyer is allowed to purchase beans; (b) fixing the day the purchase can take place; (c) verification of the quality of the crop purchased; and sometimes (d) through arranging for crop transportation. In contrast to Côte d'Ivoire, the government, through its parastatal (ONCPB), participates in grading of the crop. All overseas sales in Cameroon are made by the caisse, with exporters acting as its agents. In contrast, in Côte d'Ivoire private exporters are permitted to negotiate their overseas sales, subject to approval by the caisse.

23. In the pre-October 1988 coffee marketing system of Madagascar the government fixed the purchase price and the purchase arrangements between farmers and buyers were supervised by representatives of the group of villages (fokontany) and by the field agents of the Price Stabilization Funds (CAVAGI). On the export side, 80% of the trade volume was physically handled by parastatals and 20% by private enterprises. Export sales were arranged by CAVAGI. After CAVAGI had sold the coffee, it assigned one of the four parastatal companies (SOMACODIS, ROSO, COROL and SICE) to handle the export shipment.

C. Free Market: Nigeria Post-July 1986 (cocoa)

24. Nigeria's post-July 1986 system relies exclusively on the private sector. Farmers sell to private exporters directly or through

intermediaries. The producer price is determined by supply and demand conditions in the domestic market. Quality control and transportation is performed by the upcountry purchaser of the cocoa.

25. Other free market systems include the post-October 1988 coffee marketing system in Madagascar, Zaire (coffee), Zimbabwe (tobacco), Malawi (estate tobacco), and, in philosophy, Kenya (coffee and tea). The marketing systems of Madagascar, Zaire and Nigeria have changed considerably in the 1980s. A description of the changes is presented in Section III. Government involvement in coffee and tea marketing in Kenya has been kept to a minimum, with reliance on the free market. Annex II presents a detailed description of Kenya's marketing and pricing system for both coffee and tea.

II. PROBLEMS IN MARKETING AND PRICING EXPORT COMMODITIES
IN SUB-SAHARAN AFRICA

26. The marketing and pricing systems for agricultural commodities in Sub-Saharan Africa have attracted attention in recent years because of the poor performance of these exports in most of these countries. Real agricultural commodity export revenues of Sub-Saharan Africa fell sharply in the early to mid-1980s and have remained at about one-half that of the 1970s (see Chart 1).

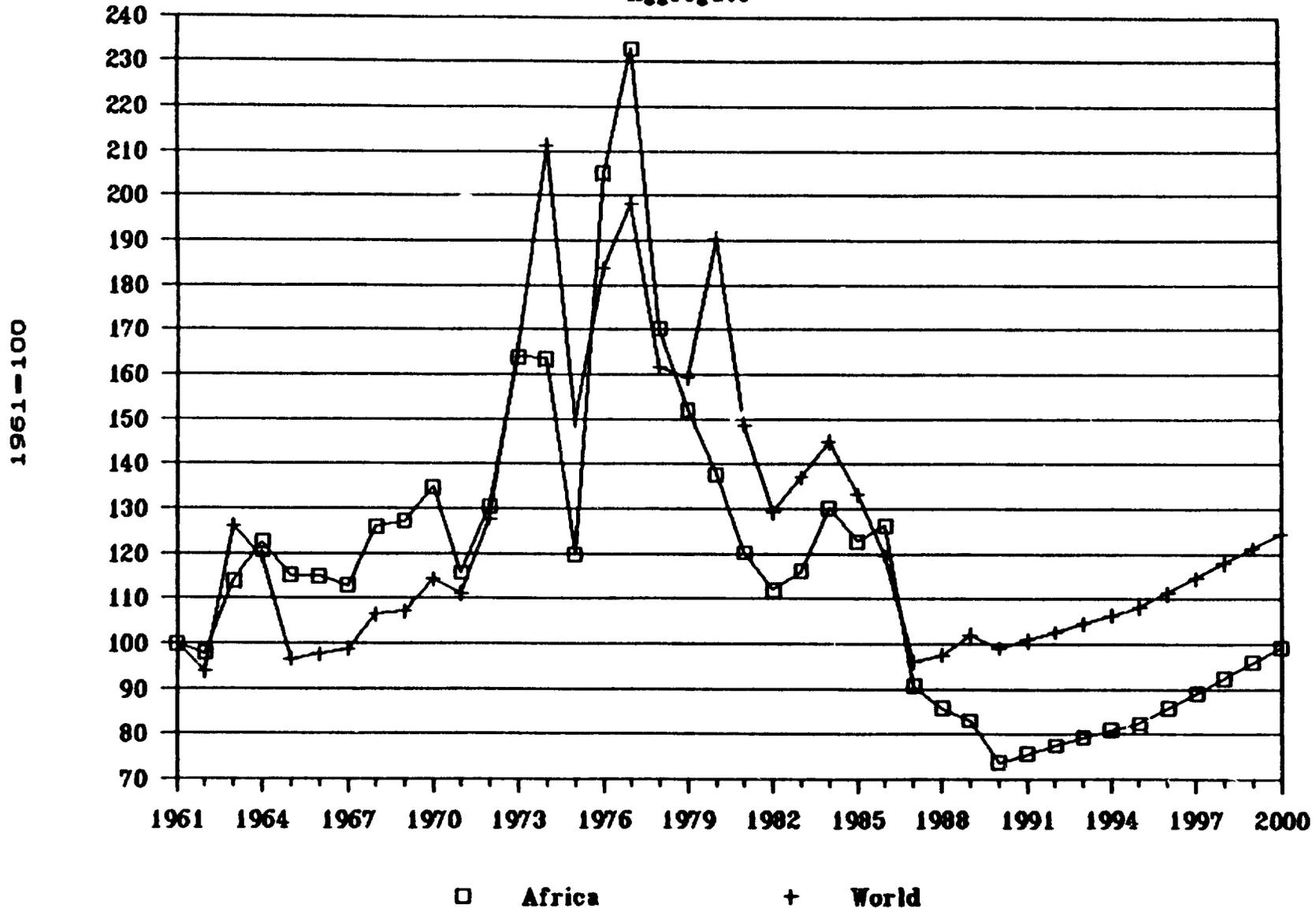
27. Another development in the agricultural export sector over the last three decades is that the region's reliance on a few commodities, coffee, cocoa and cotton, has increased. ^{1/} This increased dependence has meant that the export revenues of many Sub-Saharan countries have become more susceptible to fluctuations in world prices for these few commodities.

28. Mainly because of these developments, marketing and pricing systems for the major agricultural export crops have been severely tested with regard to their ability to adjust to the sudden market disruptions. This section presents a list of the problems which have arisen during recent years, and classifies them into three categories--those related directly to government involvement, and those related to the pricing and marketing systems themselves.

^{1/} See Akiyama and Larson (1989).

CHART 1: *Income terms of trade*

Aggregate



A. Problems Related to Government Policies and Actions

29. Problems arising in the marketing and pricing systems due to government policies and other actions can be classified into those related to the functions the government assigns to the marketing organizations and pricing systems and those related to macro-economic policies which impact on the marketing and pricing systems.

30. It is clear that the marketing organizations for specific commodities exist because these commodities are important in some ways to the countries and governments. Although it might be convenient and efficient in some respects to create these organizations, it should be borne in mind that the existence of such organizations can lead to important problems.

31. Because of the importance of these crops within the country, especially in terms of export and fiscal revenues, there tends to be important political interventions in managing the marketing organizations and forming policies affecting the sector. As a result there are cases where the marketing boards and the sector receive resources above the optimal level (i.e., they are subsidized) and in other cases they receive resources substantially below the optimal level, (i.e., they are heavily taxed). In both cases this leads to distorted and inefficient development of the country's agricultural sector and often results in neglect of other potentially exportable commodities. The fact remains that Sub-Sahara's

increased reliance on a few commodities 1/ implies failure of these countries to diversify their agricultural export commodities. This inability to develop other export-competitive activities may be as much related to the bias in infrastructure (such as transport, research and extension) towards existing crops as to overvalued exchange rates or other macro-economic distortions.

32. A weak private sector is frequently given as the raison d'etre for parastatal marketing organizations. But the existence of marketing boards with government-empowered monopolistic status impedes the development of the private sector.

33. The assignment of several objectives (social as well as economic) to marketing organizations lead to difficulties because in many cases the objectives conflict. The problem of conflicting objectives is a pervasive one with government entities.

34. Bates (1981) notes that in many Sub-Saharan countries where state marketing agencies exist, the government has diverted an increasing share of funds from the stabilization of agricultural prices and diversification of production to the capital investment fund of the national government. He cites the cases of Senegal in 1974 and Côte d'Ivoire in 1980. Bates' point can also be applied to the experiences of Ghana and Nigeria in cocoa during

1/ The combined share of coffee and cocoa in Sub-Saharan Africa's total agricultural export revenue increased from 31.7% in 1961-63 to 40.6% in 1971-73 and to 54.4% in 1984-86 (see Table 3 in Akiyama and Larson (1989)).

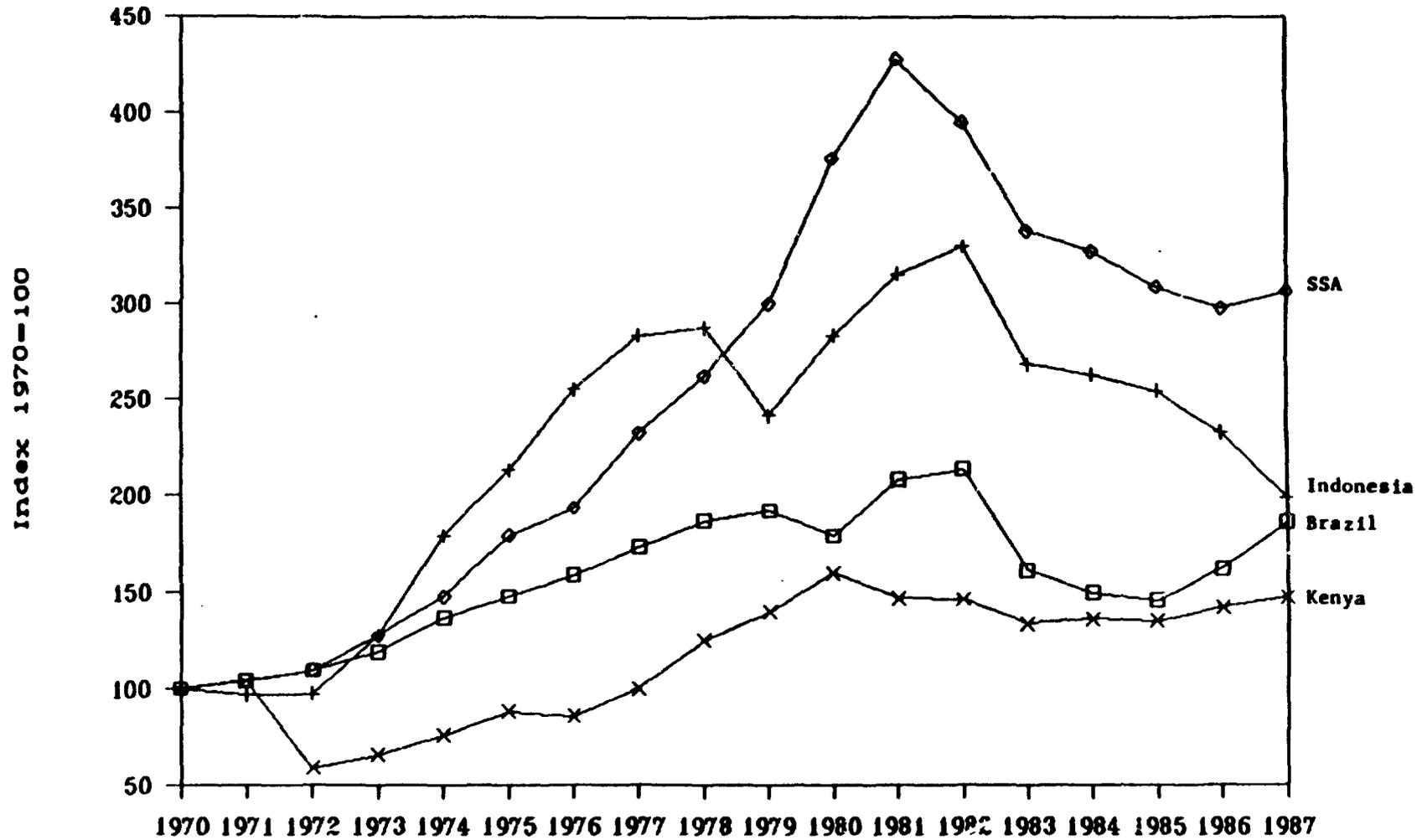
the 1970s and early 1980s. Commander (1989) also points out that one of the main factors in restraining growth in Sub-Saharan Africa is the use of price controls and production taxes as a method to redistribute income away from the sector.

35. Macroeconomic policies which affect the marketing and pricing system profoundly and which have been put under close scrutiny by policymakers recently are exchange rate and export tax policies. Although several Sub-Saharan countries have devalued their currencies in real terms in recent years, the weighted average of their currencies is still over-valued relative to those of other major agricultural commodity exporting countries (see Chart 2). ^{1/} Cleaver (1985) and Commander (1989) suggest that one of the major causes for the poor performance of agriculture exports in Sub-Saharan Africa is the poor price and exchange rate policies. Cleaver finds considerable variation between African countries in regard to these policies.

36. If a country wants to maintain its competitiveness at a time when world prices of its commodity export(s) are low, it basically has three policy options, i.e., reducing production costs, a real devaluation, and subsidizing (or reduce taxes on) production of the commodity. When the option of real devaluation aimed at increasing competitiveness of export crops is being considered, the magnitude of the devaluation needs to be evaluated by taking into account all the variables relevant to the commodity concerned. These variables include the productivity growth, exchange rates, inflation and export taxes of other countries which export that commodity and secular world

^{1/} For the case of the francophone countries their currencies have not been devalued since they are tied to the French Franc.

CHART 2: *Real Exchange Rates*



import demand trends as well as the global import price elasticity of demand. Preferably, a global model of the commodity which incorporates all of these variables should be used to evaluate the impact of real exchange rate changes on the country's production, export quantities and export revenues. 1/

37. Marketing and pricing systems almost invariably function poorly when exchange rates are over-valued and/or export taxes on commodities are unreasonably high. 2/ The end result is lowered production, contributing to financial losses and liquidity problems in the marketing organizations. Numerous examples exist of the deleterious effects of such policies on export crops in Sub-Saharan Africa, including Ghana's cocoa sector in the 1970s, Madagascar's coffee sector in recent years, Sudan's cotton sector during the late 1970s and early 1980s, Tanzania's cotton sector during the early 1980s, and Nigeria's cocoa and cotton sectors in the early 1980s.

B. Problems Related to the Pricing and Payment Systems

38. The sharp fall in most agricultural commodity prices in world markets in recent years and the significant depreciation of the US dollar against other major currencies resulted in a sharp reduction in export prices, especially in real local currency terms, in the second half of the 1980s.

1/ Such an approach has been taken recently by the Bank for several countries and for several commodities. They include coffee and cocoa for Côte d'Ivoire, coffee for Kenya and Ethiopia and palm oil and rubber for Indonesia.

2/ For example, see the case of Nigeria in Scherr (1989).

Under these circumstances, many countries which adopted a system of fixed producer prices have had to subsidize producers. This has led to financial difficulties in the budgets of these marketing organizations as well as of the national governments. Examples of such situations are cocoa in Côte d'Ivoire and Cameroon and coffee in Rwanda since 1986, most Sub-Saharan cotton-producing countries in 1986, and cocoa in Ghana and Nigeria in the early 1980s.

39. Singh et al (1985) noted that the problem of "getting the price right" is a major one when prices are administered. They go further to point out that when administered pricing systems go awry it is usually not because the objectives of the system are unclear, which could be the case, but because the quantitative effects of the system are "...inadequately understood and measured."

40. Under the Marketing Board and Caisse systems producer prices are usually held stable from one year to another, which is intended to protect farmers from wide fluctuations in world prices and ensure stable incomes. As shown for selected commodities in Table 6, real producer prices in countries where pricing systems are under the control of marketing boards or caisses are considerably more stable than where world prices are freely transmitted to the farmers. Although stable producer price systems may be desirable for risk-

**Table 6: COEFFICIENT OF VARIABILITY OF REAL PRODUCER PRICES
AND WORLD PRICES (expressed in domestic currency terms
and deflated by the CPI)**

	Real Producer Price	Real <u>/a</u> World Price	Ratio
			--%--
		<u>Cocoa</u>	
Côte d'Ivoire	6.11	82.44	7.4
Cameroon	2.93	70.22	4.2
Ghana	6.11	37.52	16.3
Nigeria	12.42	32.83	37.8
Brazil * <u>/b</u>	17.49	16.36	106.9
		<u>Coffee</u>	
Côte d'Ivoire	4.43	109.40	4.0
Cameroon	4.56	91.80	5.0
Ethiopia *	8.53	21.75	39.2
Kenya *	49.05	48.71	100.7
Tanzania	3.81	10.4	36.6
Madagascar	4.82	47.32	10.2
Rwanda	11.44	88.22	13.0
Zaire	7.30	26.73	27.3
Burundi	2.45	17.08	14.3
Uganda	11.88	36.66	32.4

/a World price multiplied by the domestic exchange rate and divided by the CPI.

/b Brazil is included to provide a comparison since other than the post-1986 Nigerian system no other cocoa marketing system in SSA freely transmits world price movements to producer prices.

* Producer prices linked to the world price.

Table 7: REAL PRODUCER PRICES AS PERCENTAGE OF WORLD PRICES (expressed in domestic currency terms and deflated by the CPI)

	<u>1968-1988</u>	<u>1970-1979</u>	<u>1980-1988</u>
	%	%	%
		<u>Coffee</u>	
Côte d'Ivoire	37,7	35,9	37,8
Cameroon	40,2	35,8	42,3
Madagascar	32,3	33,0	27,4
Kenya *	88,2	90,3	85,4
Ethiopia *	51,3	52,0	43,1
Rwanda	43,8	38,2	50,9
Burundi	42,5	39,8	46,8
Tanzania	64,0	63,0	56,3
Zaire	31,3	30,5	31,7
Uganda	34,5	27,1	37,8
		<u>Cocoa</u>	
Côte d'Ivoire	44,2	41,9	50,2
Cameroon	41	34,9	52,3
Ghana	45,3	38,5	62,9
Nigeria	52	45,9	81,6
Brazil * /a	76	71,1	84,4

/a Brazil is included to provide a comparison since other than the post-1986 Nigerian system no other cocoa marketing system in SSA freely transmits world price movements to producer prices.

* Producer prices linked to the world price.

averse farmers, 1/ governments might be forced to make drastic changes in producer prices if world prices of commodities fall sharply and remain at low levels for prolonged periods, as governments usually cannot subsidize farmers indefinitely. Such was the case in Côte d'Ivoire and Cameroon in 1989 when producer prices of coffee and cocoa were reduced by 50%. 2/

41. A rigidly-fixed producer price system has other important drawbacks-- e.g., the inability to transmit market signals to producers, which creates distorted price incentives among commodities. This is especially the case when producer prices are determined by political considerations. When producer prices are maintained at a fixed level while world prices decline for an extended period, the country is effectively encouraging production of a commodity whose relative world demand is declining. This transmits subsidies from the producing country to the importing countries' consumers. Moreover, when marketing organizations or governments subsidize a commodity, production and exports of other commodities are discriminated against. This discourages efficient diversification of production and exports. On the other hand, keeping producer prices fixed at levels well below world prices can prevent the industry from responding to world market opportunities which may be signalled by increases in world prices.

1/ According to Newbery and Stiglitz (1981), a reduction in price variation increases producers' welfare but this does not necessarily imply that production would be higher with more stable prices. In fact, they show that if producers were very risk averse, production would increase with unstable prices.

2/ A number of governments have shown reluctance to change from a fixed producer pricing system to a more flexible one, in spite of the problems the former system has been facing in recent years. Annex III discusses how such a transition could be made without too much disruption in light of the recent experience in some countries.

42. The Caisse system of fixing costs of services at almost every stage of marketing leads to guarantees of profits to the private agents involved and provides little incentive for them to become more efficient. Large monopoly rents may be made by private agents if new entrants into these activities are limited. However, this system may still be more efficient than the Marketing Board system which is wholly government-controlled, and where there may well be no incentives for increased efficiency in the various links of the marketing chain.

43. Problems with producer pricing and payments are not restricted to the Marketing Board and Caisse systems. Irregular and delayed payments to coffee producers have occurred in Kenya which basically has a free-market system. These administrative problems have had negative effects on production and quality.

C. Problems Related to the Marketing System

44. Problems common to Marketing Boards and Caisses arise principally because these organizations tend to become over-staffed bureaucracies which operate inefficiently and are unable to adjust readily to changes in domestic and international market developments. This has been a serious drawback in recent years when the location of expanding market opportunities, (e.g., East Asia) and types and qualities of commodities demanded have been changing rapidly. Sub-Saharan marketing organizations have mostly put emphasis on production, and they have very limited expertise in marketing their products in new markets and adjusting to new market needs. Marketing departments of

these organizations are usually ill-equipped and their staff are not trained adequately. As a result they lack the necessary information and experience to react to developments in the world commodity markets. 1/

45. Apart from forward sales, the use of financial instruments such as options and futures markets is extremely limited as a means of risk management by the Sub-Saharan Africa parastatals. The use of these market instruments has proven quite beneficial for other countries, such as coffee and cocoa exporters in Brazil and Costa Rica, as a means of hedging risks rather than for speculative purposes (the latter can prove financially disastrous). With new financial instruments becoming more widely used, it is not now only possible for marketing organizations to hedge risks, but also for them to obtain financing in a commodity-linked fashion. 2/

46. Large marketing boards have tended to lose accountability and often are run in a nonprofessional manner. Many of them lack the necessary technical staff to evacuate, transport, grade, process and export in an efficient manner. Almost all of these problems can be attributed to the fact

1/ Many marketing organizations in Sub-Saharan Africa lack fundamental tools like market monitoring services and modern communication facilities. For a number of parastatal market organizations the salaries paid are low and there are very few incentives for advancement. A notable exception in this area is Ethiopia's Coffee Marketing Corporation (ECMC) whose salary scale is higher than that applying to the government sector.

2/ A marketing board could borrow money with the rate of interest linked to the price of the commodities that it markets. There is developing an extensive literature on this subject; however, it is beyond the purpose of this paper to go into more details. For more information in this area see Priovolos (1987), Priovolos and Duncan (1989), Rolfo (1980), among others.

that neither Marketing Boards nor Caisses are profit-oriented organizations. Transportation problems are prevalent in countries such as Uganda, Tanzania, Ghana and Sudan. Processing is reportedly unsatisfactory for coffee in Ethiopia and Uganda and for cotton and tobacco in Tanzania. Inadequate supervision of grading has been reported in cocoa in Nigeria and in tobacco in Tanzania.

47. Marketing boards often are also responsible for deliveries of agricultural inputs to farmers. Untimely deliveries of inputs have been reported in Tanzania's coffee and tobacco sectors and Sudan's cotton sector.

48. Apart from the issue of quality, a country's export price for a crop is affected by the following factors: (a) timely delivery of the crop, (b) consistency in the quality of the product, and (c) availability of the crop in reasonable quantities. There are a number of cases where these factors have affected a country's position in the world market. Variations in quality of coffee delivered by Madagascar under the Caisse system and cocoa and coffee from Côte d'Ivoire have affected their position in the world market. Furthermore, the recent irregularities in cocoa shipments from Côte d'Ivoire, which was a result of the caisse's interventions in terms of export prices and quantities, have led cocoa bean processors in Europe and North American to switch towards other cocoas, particularly Malaysian cocoa, as a means of assuring themselves of a constant flow of cocoa beans.

III: RECENT DEVELOPMENTS IN MARKETING AND PRICING SYSTEMS

49. Prompted by the problems discussed in Section II, several Sub-Saharan African countries have undertaken or are examining changes of varying degrees in their marketing and pricing systems. There are five kinds of changes which have occurred or are proposed. They are: (a) abolition of the existing marketing system and complete privatization, (b) partial privatization, (c) changes in the pricing system, (d) streamlining the operations of the existing system, and (e) formation or strengthening of auction markets. Large real exchange rate devaluation should also be included because of its impact on the performance of the marketing system. Reduction in export taxes is also another change that affects the performance of marketing systems. However, for most Sub-Saharan marketing systems the explicit export taxation is rather small while the implicit export taxation (subsidization), via controlled prices, is the major issue and covered under category (c). Table 8 summarizes the recent developments.

50. (a) Abolition of the existing marketing system and complete privatization. The only countries that fall in this category are Madagascar and Nigeria. In the case of Madagascar the marketing board remained but was privatized and its monopoly powers revoked.

51. (b) Partial privatization. Under partial privatization, only some parts of the marketing network have been privatized, leaving the basic structure of the system virtually unchanged. More specifically, partial

Table 8: RECENT DEVELOPMENTS IN THE MARKETING SYSTEMS OF SSA

Commodities	Total Privatization of the Marketing Board	Partial Privatization	Changes in the Pricing System	Streamlining the Operations of the Existing System	Forming or Strengthening of Auction	Large Real Exchange Rate Devaluations
<u>Coffee and/or Cocoa</u>						
Madagascar	x		x			
Nigeria	x		x			x (1986)
Côte d'Ivoire		x (P)	x (P)	x		
Cameroon		x (P)	x (P)	x		
Ghana		x (P)				x (1983)
Burundi		x (P)	x (P)	x (P)	x (P)	
Uganda		x (P)		x		
Kenya			x (P)			
Ethiopia		x (P)			x (P)	
Tanzania		x (P)	x (P)		x (P)	x (1986)
Zaire		x	x			x (1984)
<u>Cotton</u>						
Mali		x	x	x		
Chad			x	x		

(P) = Proposed.

privatization includes the increasing participation of the private sector in domestic marketing and exporting and/or transferring ownership of processing facilities from the parastatals to the private sector. Cases that fall into this category are: Ghana (coffee), Burundi (coffee), Uganda (coffee), Ethiopia (coffee), Zaire (coffee), Mali (cotton) and Tanzania (cotton). Zaire and Mali are the only cases where the changes have been implemented; the others are under consideration.

52. (c) Changes in the pricing system. This category includes countries which have moved or propose to move from a fixed producer pricing system to a more flexible producer pricing system reflecting market conditions. These countries are Madagascar, Nigeria, Mali and Chad. For Burundi there is a proposal under consideration to move gradually to a more market-determined producer pricing system. This category also includes Kenya's improved, market-determined, pricing system.

53. (d) Streamlining the operations of the existing system. Streamlining includes operations aimed at cutting costs and increasing efficiency. Streamlining of operations has recently taken place in Côte d'Ivoire and Cameroon (mainly staff reductions for these two cases), Uganda, Mali and Chad.

54. (e) Forming or strengthening of auction systems. For several countries it has been proposed to form or enhance existing auction systems. Burundi (coffee), Ethiopia (coffee) and Tanzania (coffee) are the cases in point.

55. The remainder of this section presents in more detail the recent developments in the marketing systems mentioned above.

(i) Nigeria (Cocoa)

56. In Nigeria real cocoa producer prices declined due to the appreciation of the Naira in the wake of the 1970s oil boom. As a result, production declined from 250,000 tons in the early 1970s to about 100,000 tons in the mid-1980s. Beginning in 1985 the government of Nigeria adopted a number of measures to reverse the decline in production of cocoa, as well as other non-petroleum based products, in order to alleviate the balance of payments deficit caused by increased debt service and low oil prices. In October of 1985 Nigeria entered into discussion with the IMF to obtain a structural adjustment loan (SAL) for the agricultural sector. The most important measure was the adoption of a more appropriate exchange rate. Between 1973 and 1980 the Naira had appreciated against the US dollar by 80% in real terms. In 1986, the Naira depreciated by over 60% against the US dollar. Another measure taken for promotion of cocoa production was restructuring of the marketing system. The prevailing thought was that Nigeria's vibrant private sector could assume marketing responsibilities more efficiently than the Marketing Board.

57. In 1986 the Nigerian Cocoa Board (NCB) was abolished and the crop purchasing system was deregulated. 1/ The produce inspection and quality control procedures employed by NCB were abandoned and the licensing system for crop buyers was dissolved. Export trade licenses were also abolished. The new marketing system relies exclusively on private traders and exporters. At first, there was deterioration in the quality of the cocoa beans marketed since there were no provisions for grading and quality control after NCB was abolished. However, the main reason for quality deterioration was the existence of exchange rate controls which created a high premium for foreign exchange and led exporters to enter into the cocoa business in order to get access to hard currency which could be exchanged in the parallel market for huge profits. Domestic buyers purchased any type of cocoa, no matter the quality. As a result the overwhelming demand for cocoa increased cocoa producer prices ten-fold between 1986 and 1989. This distortion of the marketing system was removed largely as a result of the decision of the Central Bank of Nigeria (CBN) to liberalize foreign exchange and to squeeze liquidity in the banking system, making it difficult for buyers to obtain

1/ According to a recent article which appeared in the West Africa magazine (December 18-24, 1989) the Nigerian government's determination to privatize its parastatals gained more impetus after it was found that 32 out of the 35 parastatals owed a staggering US\$3.2 billion. It was determined that the parastatals have not been run with profit as a motive. Reasons attributed to the bad performance were: (a) the inadequate or non-provision of working capital at establishment; (b) wrong or inadequate capital base; (c) limited power of the parastatals to set prices for their products or services; (d) a mixture of social and commercial objectives in the operation of some or all the parastatals; (e) lack of corporate authority in hiring or firing personnel and the inability to pay market salaries for staff; and (f) lack of professionalism on the part of the management in running their operations efficiently. The government has formed committees which will oversee privatization or drastic reforms in the various parastatals.

credit for their purchases. On response to complaints from buyers and manufacturers in the European markets (in particular, in London) the government re-introduced a grading and quality control system. The government charges a fee for this service. However, a private sector alternative to government quality control has emerged. Societe Generale de Surveillance Holding S.A., a leading international firm in the area of inspection and evaluation, has been playing an increasingly active role in exporting Nigerian cocoa.

(ii) Madagascar (Coffee)

58. In Madagascar, the government realized that the marketing system was not generating the expected revenues due to inefficiencies in its operations. Because of the existence of the Caisse type of marketing system, there was private sector involvement in the marketing chain. In 1988, the government decided to hand over all marketing operations to the private sector but, at the same time, to build safeguards into the new system in order to protect export revenues, the repatriation of foreign exchange from export activities, and its export tax revenues.

59. The new coffee marketing system in operation since October 1988 relies on private agents and the free transmission of world prices to producers. There is a minimal degree of government involvement.

60. Under the new system farmers sell coffee to collectors (private) who sell the parchment coffee to either the exporters or to "conditioneurs stockeurs". The hulling of the coffee is performed by the exporters, the "conditioneurs stockeurs" or the farmers themselves. The farmer has also the option of hiring the services for hulling from the "conditionneur stockeur" for a fee, and subsequently selling the green coffee to an exporter. The four parastatals that were previously assigned to handle the bulk of exportable coffee now act as private exporting firms (although still government owned) competing with other private exporters. Initially, ICO export stamps (when the ICO export quota system was operative) were issued on a first-come basis with stock verification at the exporter's warehouse. In January 1989 the quota allocation system was changed. If the quota system is to be re-introduced, ICO export stamps will be allocated solely on the basis of stock level.

61. The pricing system is based on the world price, but in order to avoid underinvoicing of exports, a "reference price" for exports is established by the Commite Nacional de Cafe. 1/ This committee consists of all exporters including CAVAGI. 2/ This price is based on a formula using robusta coffee prices in London and Marseille and adjusting for freight and other costs. The "reference price" is subject to weekly revision. The exporter has to pay taxes on, and repatriate earnings from, coffee exporters based on the

1/ This system is similar to the "reintegro" system in Colombia.

2/ CAVAGI is the former stabilization fund for coffee, vanilla and cloves, a Caisse equivalent, which under the current system has become a trading company on behalf of the government, but acting more as a private entity.

"reference price". If the realization price is lower, the exporter covers the difference. If it is higher, the exporter can choose to keep the difference. Prices to intermediaries and farmers depend on domestic demand and supply for coffee. There are no controls on either the producer price or intermediary prices.

(iii) Zaire (Coffee)

62. In 1977, after a period of stagnation in agricultural production and revenues, the government of Zaire started a process of restructuring the agriculture sector. In 1979 the Office National du Cafe, the government marketing board for coffee set up in 1972, was replaced by the Office Zairois du Cafe (OZACAF), a government organization supervising the coffee sector. OZACAF's role in coffee marketing is that of a private dealer and buyer of last resort. Presently, most of the marketing network is in the private sector's hands. OZACAF acts mostly in the area of grading, quality control, and processing on behalf of smallholders. For its services in the areas of quality control and grading, OZACAF collects 4.5% of the export price. ^{1/} However, in the processing sector there is also the private sector alternative. Moreover, the private exporters' role in processing is increasing, replacing OZACAF because of its greater efficiency. OZACAF also exports coffee but does not have a monopoly over exports. Most of the coffee is exported through private traders. However, exporters need the approval of

^{1/} This fee is considered quite high since costs of OZACAF's operations could be covered with just 0.5% of the export price. A fee for similar services in Costa Rica is only 1% of the export price.

OZACAF before they complete an export transaction. When the ICO coffee export quota system was in operation, OZACAF handled the distribution of export stamps.

63. Despite the liberalization, the government frequently intervenes in the coffee trade through various rules and regulations. As a result, the system of rules and regulations is very complex; there is a total of 54 regulations governing activity between the farmgate and export. The World Bank has, as part of its loan conditionality, set a requirement to reduce the 54 procedures to 26 because of the disincentives they pose to efficient trade. However, even 26 regulations are still too much.

64. The producer pricing system has also been changed. Starting in 1982, the producer price for coffee has been market-determined, rather than set by the government. With the removal of price controls and the devaluation of the currency by 290%, (in real terms) in 1983, coffee producer prices increased rapidly--doubling in real terms between 1982 and 1987. The export pricing system is similar to the pricing system now in place in Madagascar. There is a reference price, called "valeur mercurial", which determines the price on which taxes and fees are paid and foreign exchange earnings are repatriated to the Central Bank. This reference price is the weekly average for arabica (or robusta) prices in New York and is set every week. 1/

1/ Zaire produces 88% robusta and 12% arabica.

(iv) Burundi (Coffee)

65. The government of Burundi, with technical assistance from the World Bank, is beginning a process of gradual privatization of the coffee marketing system. The government's motivation was similar to Madagascar's--an awareness of the inefficiencies that existed in the present marketing system. In the case of Burundi, however, there was no private sector to speak of and the government opted for a gradual privatization, in order to give some time for the private sector to evolve and eventually take over the marketing activities from the parastatals. The current coffee marketing board, OCIBU, will be phased out by December 1990 and will be replaced by the Office du Cafe, a regulatory body for the coffee sector.

66. The process of privatization includes the transfer of ownership of washing stations and hulling factories from the government sector to the private sector via an asset holding company called Service de Patrimoine (SDP). SDP's purpose is to keep an accounting record of the physical assets and liabilities of the washing stations and hulling factories. For the short term, SDP will rent these washing stations and hulling factories to the private sector for a fee which will be distributed to the governmental organizations which presently hold the assets. SDP also will sell off progressively the assets that it holds to the private sector and distribute the money from the liquidation to the owners of the assets within the governmental sector. For the hulling factories a company named SODECO has been created which rents the hulling factories from SDP and manages the hulling operations. It is planned that SODECO will eventually be privatized.

67. The proposed changes also include a parallel marketing facility to the government's which will be marketing an increasingly higher proportion of coffee. The use of auctions for export sales coffee has been suggested for this parallel marketing system. The operations of the private marketing facility will be under the supervision of the Office du Cafe.

(v) Ethiopia (Coffee) 1/

68. Over the last 15 years the private sector's participation in Ethiopia's domestic and export marketing sector has been shrinking--from 40% in the early 1980s to about 10% at present. But recently it has been proposed to expand the private sector's involvement because, (a) in some parts of the country where farmers are dispersed, the parastatal organization, Ethiopian Coffee Marketing Corporation (ECMC), was not efficient in purchasing and transporting coffee, (b) private exporters were considerably more effective in finding speciality coffee export markets, and (c) the existence of a private sector enabled the government to evaluate the efficiency of ECMC in marketing.

69. Under the proposal, more coffee will be allowed to be delivered to auction centers by private traders and then sold to private exporters. The proposal also includes privatization of a number of coffee processing facilities, reduction of export tax rates, and devaluation.

1/ In March 1990, the Ethiopian Government announced its intention to reduce considerably its controls over private sector participation. Given the importance of the coffee sector, it should be a major beneficiary of any reduction of intervention.

(vi) Uganda (Coffee)

70. In Uganda the recent fall of coffee prices motivated the government to streamline and cut costs of the Coffee Marketing Board (CMB). Priorities were given to increasing accountability and efficiency of the existing system and developing a system to monitor the physical and monetary flows associated with coffee. It was also found that the export sales strategy was done on an ad hoc basis without examination of alternative strategies. A lot of sales were of the form of barter and pre-financing agreements. The beneficiaries of barter sales usually did not reimburse CMB until very late. The government has rejected the option of selling all the exportable coffee through auctions to private exporters. However, it has expressed interest in private sector participation by means of auction in the export of specific qualities of coffees. The qualities of coffee mentioned in this regard are arabicas and some high-quality robustas. The prices obtained at auctions are believed to reflect better the quality premia for these coffees. The existing domestic pricing system does not distinguish between different qualities.

71. In February of 1990 the Government of Uganda announced that it intends to allow four cooperatives to export, in addition to CMB.

(vii) Ghana (Cocoa, Coffee) 1/

72. The emphasis on reforming the cocoa pricing system in Ghana has been due not only to the importance of cocoa in export revenues but also to the very high levels of implicit taxation embodied in the pre-1984 producer prices. The resulting low producer prices led to a decline in production from over 400,000 tons in the early 1970s to 159,000 tons by 1985. Under a structural adjustment credit of the World Bank, the government agreed to increase producer prices to a level corresponding approximately to 55% of the world price by the 1988/89 crop year. With a price increase of 5.5% in June 1989, cocoa producer prices in Ghana are now 60% of the world price--up from 30% in 1983/84. The increase in producer price relative to the world price has been partly met by squeezing COCOBOD's 2/ share of cocoa revenues. There is the intention to reorganize COCOBOD, and in particular its Service Division, which is responsible for input distribution and extension work. COCOBOD is planning to "gradually privatize" its input distribution activities and eliminate input subsidies. Privatization is also intended for cocoa marketing, by progressively allowing private agents to engage in crop purchasing and collecting activities. Collection and purchasing are currently the responsibility of the Produce Buying Corporation (PBC), a COCOBOD subsidiary. Within PBC, emphasis will be placed on improving its efficiency, starting with the closing of underutilized upcountry cocoa buying stations.

1/ For Ghana see also Commander (1989) Chapter 7.

2/ Ghanaian Cocoa Marketing Board.

73. With regard to coffee, COCOBOD is planning to set coffee producer prices closer to world market levels, by paying a minimum 65% of the FOB price. Also in the planning stage is for COCOBOD to relinquish its monopoly on coffee hulling, trading and exporting, again by allowing private sector entry.

(viii) Kenya (Coffee)

74. Payments to coffee growers in Kenya are expected to become more timely. As outlined in Annex II, payments to Kenyan coffee growers consist of an initial payment at the time of delivery to collection points and subsequent payments based on the price realized at auction and the yearly average auction price. Growers have complained that the time elapsed between the initial payment and subsequent payments was too long, sometimes as long as 18 months between the first and last payment. A World Bank project loan was given to increase the liquidity of the pricing system so that the amount of the initial payment could be increased and subsequent payments be more timely.

(ix) Tanzania (coffee)

75. Efforts are underway in Tanzania to liberalize export marketing channels for coffee, cotton and cashew nuts. Farmer incentives are to be improved by linking producer prices more closely to world prices. Under the new system the marketing board will relinquish direct ownership. Also, it will not participate in the purchasing and selling of coffee, cotton and cashew nuts. Primary Cooperative Societies (PCS), estate farmers, and

farmers' associations, which at present have to sell their produce to the marketing board, will be able to sell their coffee directly through auction or tender.

76. In the existing coffee marketing system, farmers sell their coffee to the PCSs which channel it through the Regional Cooperative Unions (RCUs) to the Tanzania Coffee Marketing Board (TCMB). The Board sells the coffee at auction which the Board also operates. Farmers receive their first payment when they sell their coffee to the PCSs, an interim payment one year later, and the final payment 18 months later. TCMB also provides inputs to coffee growers through the PCS-RCU channels. This system often resulted in the delivery of the wrong inputs and the "cost-recovery" system, through which mandatory deductions were made from the prices received by the farmers, was costly to farmers.

77. Under the proposed marketing system, TCMB will continue to operate the auctions. Producers will send their coffee to the auction floor, under their own name, and receive the full price which their coffee fetches. TCMB will continue providing quality control and research and development to the coffee subsector, as well as representing Tanzania in the International Coffee Organization. TCMB could also provide shipping services for the cooperative unions in competition with private agents. Currently, TCMB through its Export Division, buys on its own behalf through the auctions around 30% of the coffee put up for auction (the rest is sold to private traders). The new marketing system has not resolved the future of the Export Division. It could be eliminated, or made into a separate entity. As a separate entity it could initially be a parastatal but eventually privatized. RCUs and PCSs will have

the option of buying coffee from farmers, retaining ownership and sending it to the auction floor under their own name and receive full payment directly.

(x) Côte d'Ivoire and Cameroon (Coffee, Cocoa)

78. In both Côte d'Ivoire and Cameroon, the prolonged fixing of producer prices for coffee and cocoa at levels not consistent with market prices 1/ led to huge debts for the caisses and to liquidity problems in the marketing chain. The situation was only relieved when there was a sharp reduction in producer prices in September of 1989. 2/ Not only were producer prices changed, the whole bareme was revised and fixed profit and commercialization margins were reduced. The operations of the caisses were also evaluated. The immediate result was a severe reduction of the caisses' work force. Other changes have been proposed.

79. More specifically, in Côte d'Ivoire's case the recent proposals include: (a) introduction of a quality premium for coffee; (b) reduction of domestic marketing costs for both coffee and cocoa and review of the coffee and cocoa marketing policies; (c) improvements in efficiency of the Caisse's operations by streamlining its activities, improving management, transferring commercial activities to the private or cooperative sector, and increasing its exposure to market forces.

1/ During the second quarter of 1989, when the FOB price for cocoa from Côte d'Ivoire was around US\$1,390/ton, the Ivorian cocoa farmer was receiving US\$1,216/ton and the total cost to the Caisse was around US\$2,100/ton.

2/ Côte d'Ivoire had already reduced the cocoa producer price for the mid-crop 1988/89 from CFA400/kg to CFA250/kg in early July 1989.

80. The government intends to maintain a fixed producer price. However, it is proposed that this fixed price be gradually transformed into a floor price and allow producers to benefit from the competition at prices above this level.

81. The Cameroon Government is considering abolition of the fixed pricing system, which will result in the elimination of the price stabilization fund, and also allow greater private sector participation in the marketing system. The government has abolished the licensing of buying agents for specific areas. A licensed buying agent can now purchase crops from anywhere in the country, as in the Ivorian system. Proposals for the government to auction licenses or allow free entry have not yet met with its approval.

(xi) Mali (Cotton)

82. Following the severe collapse of world cotton prices in 1986 and the financial losses sustained by the Cotton Corporation, the government of Mali made substantial changes in its cotton marketing and pricing system. The reform measures are aimed at improving incentives for greater efficiency and international competitiveness. Institutional reforms are directed toward the Compagnie Malienne pour le Developpement des Textiles (CMDT) which functions both as a cotton marketing agency and a comprehensive development agency. In the past CMDT performed its cotton extension, marketing, processing and exporting functions on behalf of the government within an annually approved budget. The reform program will limit government intervention by transferring all aspects of cotton lint production and marketing to CMDT. All of CMDT's

commercial activities, including cotton ginning, marketing and exporting, will be taken at its own risk and with the possibility of making profits. It will receive revenues from cotton exports. Profits made from these exports will be shared with the government through a profits tax and with cotton producers through a price premium. The cotton budget and cotton export tax will be eliminated. Details of the distribution mechanism are specified in the CMDT performance contract.

83. As a development institution, CMDT is responsible for most of the rural development services offered in the Mali Sud region. It will continue to perform rural development work on behalf of the government as an integrated part of the national investment program. These activities will be financed by the government.

84. The major pricing reform constitutes the transformation of the present guaranteed producer price for seed cotton into a "floor" price, which will be adjusted upward or downward in response to changing world prices for cotton.

(xii) Chad (Cotton)

85. Prompted by the sharp fall in world cotton prices in 1985 and 1986, the cotton marketing board in Chad undertook drastic reorganization and operational measures to ensure the viability of cotton growing and exporting. The measures affected, in the main, were the producer pricing system and the regional distribution of production. Details of the background

and changes are presented in Annex I on production and marketing of cotton in Francophone West Africa.

(xiii) Tanzania (Cotton)

86. The cotton marketing board in Tanzania will transfer the ownership of its ginneries to private companies in the four cotton-producing regions. The first private ginnery is expected to be operational by the end of 1990 and the others will follow later. Initially, ginning services will be provided to the farmer cooperatives for a fee. At a later stage, the possibility of the ginning companies purchasing seedcotton from the cooperatives for their own account will be explored.

IV. CONCLUDING REMARKS

87. Developments in the world commodity markets in the 1980s have confirmed how competitive and dynamic these markets can be. Important changes have been taking place in the technologies used in producing and marketing commodities and in the policies of countries producing them. World demand has also been changing rapidly in terms of tastes, quality preferences, and location of markets. As a result of these changes, 1/ prices of several agricultural commodities important to Sub-Saharan Africa, in terms of export revenues and employment, have experienced sharp falls. The subsequent declines in export revenues have led to burgeoning government deficits for many Sub-Saharan African governments and put enormous stress on their marketing and pricing systems. Because of the relatively buoyant world agricultural commodity markets in the 1960s and 1970s, and because of the vested interests which had built up over the years in maintaining these systems intact, there has been little interest in careful evaluation of these systems or in looking to the possibility of alternatives. This situation has changed with the recent fall in world prices and the loss of export markets.

88. An important feature of the marketing and pricing systems for agricultural export commodities in Sub-Saharan Africa is that they have been, until recently, completely or predominantly under government control;

1/ In addition to factors above, the suspension of the International Coffee Agreement in July 1989 caused world coffee prices to decline sharply.

therefore, the employees of marketing agencies essentially have the status of government employees. Because many activities undertaken by marketing agencies are of a commercial nature--exploring new markets, competing with products exported by other countries, etc.--the incentive system for their employees is not congruent with effectiveness in such commercial operations. In light of this, the first question to be asked in evaluating these organizations should be: Do they need to be, or is it desirable that they be, government controlled? Probably the second question should be: Can all or, at least, some parts of the activities of these organizations be privatized? As Shirley (1989) points out in respect of the privatization of parastatals "...the most important first step [should] be to clarify the basic objectives and operating principles of all state-owned enterprises". 1/

89. The survey of recent developments given in the paper show that several Sub-Saharan African governments, after evaluating their export marketing agencies, have taken or are taking steps to lessen government controls and to privatize at least parts of their operations. These steps include abolition of the marketing boards in Nigeria, complete or increased participation of the private sector in marketing of products in Madagascar (coffee), Zaire (coffee), and Ethiopia (coffee), and privatization of processing facilities in Zaire (coffee), Burundi (coffee) and Tanzania (cotton).

1/ See Shirley (1989) page 1.

90. Rigidly-fixed producer pricing systems have also come under scrutiny in several Sub-Saharan countries. For some countries, this was inevitable. Governments were no longer able to maintain fixed producer prices with government deficits increasing sharply, or because export tax rates were too high and discouraged production. Consequently, countries such as Nigeria (cocoa), Madagascar (coffee), Zaire (coffee), and Mali (cotton) have introduced producer pricing systems which are more flexible and which now reflect world prices to a greater degree.

91. In order to maintain the transparency of transacted prices, to enforce repatriation of foreign exchange and to impose relevant taxes on exported products after freeing producer and export prices, some new policy instruments have been, or are expected to be, introduced. These instruments include the "reference price" system in Madagascar (coffee) and auctions in Burundi (coffee) and Ethiopia (coffee). 1/ As for possible adverse effects from wide fluctuations in producers' prices, various financial instruments for risk management and progressive export tax systems can be used to keep producer prices relatively stable, instead of having rigidly-fixed producer price systems. From a market efficiency point of view, producer prices with some variability reflecting world prices is a much more desirable system than fixed prices as they then perform the important role of transmitting world market signals to producers.

1/ Although coffee auctions have been in existence in Ethiopia, they have been heavily controlled by the government until recently.

92. This is not to imply that governments do not have any role to play in agricultural export commodity sectors. They do have the important role of determining policies such as exchange rates and tax rates which impact on these sectors in critical ways. However, too often these policies are formed without adequate analysis of their impact on the sectors, although several practical and rather easy methods exist for doing so.

93. Recent developments in marketing and pricing systems suggest that transforming these systems from heavily government-controlled ones to ones with considerably less or no control is definitely possible and generates positive results. The experiences of the several countries described here suggest that the paths to be taken toward more private sector participation depend very much on the form of the marketing and pricing systems already in existence, and on the time needed for the necessary skills to develop in the private sector. However, some generalizations can be made including:

(a) Complete and/or increased privatization of the marketing system and adoption of free-market pricing is easier under the Caisse system than with the Marketing Board system. Under the Caisse system, there is already private sector handling of domestic and export marketing. Thus, the transition will essentially imply increased competition in the existing private sector.

(b) Under the monopolistic Marketing Board system, countries should identify activities, such as processing, that can be performed immediately by the private sector and steps can be taken to transfer these activities to the private sector.

- (c) In countries with the Marketing Board system and a weak private sector, export and domestic marketing can initially be shared by the boards and the private sector, with boards acting as "buyers of last resort". Over time the boards should be treated as just another one of the marketing agencies competing with the private sector. 1/
- (d) After taking steps (b) and (c) Marketing Boards will be like Caisses and in time will take step (a) above.
- (e) If an immediate change from a fixed producer pricing system to a free-market pricing system is not feasible or judged to be undesirable, gradual steps in the transition can be made by implementing a progressive export tax system with greater progressiveness at the initial stage.

1/ One form of "sharing" may be accomplished through adjusting shares of products to be sold at auctions. Initially, the marketing board will be guaranteed to handle a specific amount of the crop, say 70%, with the remainder going through an auction system; thus producing some competition into the system. As the interest in auctions increases and private entrepreneurship is fortified and becomes more experienced, the share of the crop that goes through the auction can be increased. In this process the marketing board will eventually become just another agent competing in the auction marketing and can eventually be privatized or abolished. The gradual process will help the marketing board adjust its size, become more efficient and assure a smooth transition.

ANNEX I: THE INTEGRATED COTTON PRODUCTION AND MARKETING
STRUCTURE IN FRANCOPHONE WEST AFRICA

94. The rapid reconstruction of the European textile industries following World War II sharply increased the world demand for cotton. The supply of mainly US cotton was insufficient to meet this demand. In response, several European countries, including Belgium, France, Portugal and the United Kingdom, heavily promoted cotton growing in Africa. Of those efforts, the cotton production and marketing structure introduced in Francophone West Africa has been the most durable and in its adapted form still prevails in several countries. 1/

95. In spite of the long period needed to establish cotton production in the Francophone countries south of the Sahara, its technical success in recent years has been impressive. This success is indicated by a comparison of cotton lint yields in those countries with yields in other major cotton-growing countries and the world since 1970 (Table A1).

96. The cotton production and marketing structures of the Francophone countries in West Africa were developed with a similar pattern of integrated input supply, extension services, research support and marketing arrangements. Initially, cotton producers were assured of receiving

1/ Cotton producing Francophone Africa countries include Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Mali, Niger, Senegal and Togo.

Table A1: COTTON YIELDS IN FRANCOPHONE AFRICA AND COMPARISONS WITH OTHER PRODUCTS

Crop Year	Burkina		Cameroon	Chad	Côte d'Ivoire	Mali	Nigeria	Togo
	Benin	Faso						
(Yield: kg/ha)								
1970/71	349	105	139	113	326	302	108	299
1971/72	289	141	160	130	386	325	94	279
1972/73	399	171	191	141	377	315	136	234
1973/74	325	147	171	159	374	272	96	269
1974/75	244	184	218	195	400	334	156	318
1975/76	246	226	210	211	399	423	167	277
1976/77	145	255	283	169	474	424	229	314
1977/78	109	202	290	160	470	425	114	249
1978/79	144	311	403	185	437	422	129	319
1979/80	131	350	542	176	471	393	124	293
1980/81	87	304	499	188	442	418	121	315
1981/82	152	332	487	195	451	482	96	360
1982/83	174	399	495	275	553	580	96	117
1983/84	174	390	451	340	429	521	71	341
1984/85	313	430	492	247	605	453	72	501
1985/86	324	484	516	262	538	450	46	483
1986/87	479	574	517	252	585	524	99	602
1987/88	335	530	426	300	691	473	85	472

	Egypt	India	Pakistan	Sudan	Tanzania	Turkey	Zimbabwe	World
1970/71	744	132	311	483	269	759	321	378
1971/72	795	165	362	484	231	760	482	389
1972/73	788	153	336	412	271	714	590	403
1973/74	729	158	243	481	238	756	499	419
1974/75	717	174	300	453	261	716	568	416
1975/76	676	159	267	276	112	717	636	393
1976/77	756	154	224	393	165	819	523	403
1977/78	667	172	300	433	126	739	569	421
1978/79	878	173	244	333	132	728	564	396
1979/80	963	175	368	277	135	778	533	414
1980/81	1011	176	341	253	195	743	504	441
1981/82	1006	186	343	433	113	746	404	470
1982/83	1031	194	364	484	119	822	435	471
1983/84	991	171	214	510	125	850	492	461
1984/85	965	232	451	492	150	781	469	565
1985/86	959	240	522	430	126	785	374	544
1986/87	895	222	527	431	123	885	329	508
1987/88	856	203	585	492	123	897	350	533

Source: United States Department of Agriculture

production inputs, credit, technical advice and local marketing services from the Compagnie Francaise pour le Developpement des Fibres Textiles (CFDT). Local research, including the development of technical packages of recommended practices and varieties adapted to prevailing conditions, was provided by the Institute de Recherches du Coton et des Textiles Exotiques (IRCT). This system proved very effective in promoting cotton production as a cash crop among subsistence farmers, and raw cotton exports became an important source of foreign exchange earnings within the region. With the increasing importance of cotton to the economic welfare of several countries, the cotton marketing structures have undergone considerable adjustment in recent years. As African nationals acquired skills in operating the systems, local parastatal organizations acquired partial interest in the cotton research and marketing organizations. Concurrently, the number of expatriate advisors involved in the operation of the production and marketing complex was reduced.

97. Several weaknesses in this system were exposed during the severe and sustained decline in cotton prices in 1985 and 1986. They included the downward inflexibility of cotton producer prices, inadequate accounting and financial controls, the tendency of governments to assign the cotton organizations special development projects that they were poorly qualified to carry out, loss of operating efficiency due to over-staffing, and inadequate attention to the international competitiveness of national production systems.

98. The financial deficits encountered by the cotton sub-sectors during the mid-1980s have been addressed by adjustments of varying intensity. Perhaps the most drastic measures to restore the financial and economic

viability of the cotton sub-sector were taken in Chad. Producer prices of seedcotton in Chad were initially frozen at CFAF 100/kg and later decreased to CFAF 90/kg with future payments being linked to the world market price for lint. Input subsidies were removed over a two-year period. Cotton production was continued only in the most efficient growing areas. The concentration of production facilitated the closing of six of the 12 ginneries formerly operated; non-essential or non-performing assets were sold (two aircrafts, 80 trucks, 69 cars); the number of cotton-buying centers was reduced; and the cotton company's staff was reduced by one-half. Cotton production in Chad has recovered strongly under the adjustment program and the subsector now appears to be operating on a sounder financial basis.

ANNEX II: THE KENYA COFFEE AND TEA MARKETING AND PRICING SYSTEMS

99. In Kenya the Marketing and pricing system is, philosophically, that of a free market. Despite the existence of marketing boards for both coffee and tea 1/, government's involvement is kept to a minimum. In the case of tea, TBK sets the general policies, conducts R & D, and chooses new areas for production expansion. The organization that implements the policies for the smallholders' tea sector is the Kenya Tea Development Authority (KTDA). 2/ KTDA's policy has been to avoid insulating either itself or the growers from market influences. 3/ The purpose of KTDA from its inception was to: (a) be an essentially commercial enterprise; (b) finance its capital investment by borrowing from sources other than the government; and (c) acquire specific responsibilities from the Ministry of Agriculture related to commercial operations. Government policy has been to maintain the autonomy of KTDA as the managing body of the smallholder tea program. The payment to farmers consists of a flat payment based on the weight of product delivered and a second, annually-variable payment based on the net earnings achieved when tea is sold in the world market. For both coffee and tea, a two-tier payment system is employed to pay higher prices for higher quality products. The first payments, which are lower than the expected average f.o.b. price for the

1/ Tea Board of Kenya (TBK) for tea and Coffee Board of Kenya (CBK).

2/ The estate tea growing sector operates totally under free market conditions.

3/ For more information on KTDA see Lamb G., and L. Muller, (1982).

crop year, are paid at the time of the farmer's delivery to collection points. Tea or coffee delivered is forwarded to auction centers with clear markings identifying which processing stations produced them. When a crop year is over, CBK and KTDA calculate how much should be paid as second payments. Since CBK and KTDA keep records of the qualities of and prices fetched by individual processing stations, they can make second payments which reflect prices paid for specific qualities at the auctions. 1/ There is a small export tax on tea.

100. In the case of coffee the Kenyan Planters Cooperative Union (KPCU) processes and moves coffee on behalf of the farmers coops, unions and estates. Ownership of coffee remains with the farmer until the auctions, with KPCU receiving a fee for its services. After the coffee is hulled, bagged and graded by KPCU, CBK performs liquoring tests. The bags of coffee are subsequently stored until they are auctioned on behalf of the farmers by Kenya Coffee Auction Ltd., a firm of brokers which is a subsidiary of CBK. At the auction, CBK's liquoring test results are available to the auctioneer only. Buyers can perform their own liquoring test to determine their bids. In this way the quality control system is double checked. If there is a discrepancy between the bids and the auctioneers' price, new liquoring tests are performed by CBK to reassess the coffee quality. Participating buyers at these auctions are private licensed dealers who are solely responsible for export sales. The price received by the farmer is linked to the world market price. The farmer

1/ Second payments are paid at the processing factory level, however, so there are no payment differentials among farmers at the same processing station.

receives a first payment which is followed by subsequent payments depending on the quality of his coffee and the average price realized at the auctions during the year. The farmers' cooperatives, unions, KPCU and CBK all perform services on behalf of the farmer for a fee and at no stage along the marketing chain do they own the crop. The taxation of the coffee sector is small in comparison with that in most other coffee-exporting countries, and comparable to that of tea.

ANNEX III: MEANS OF TRANSITION FROM FIXED TO FLEXIBLE
PRODUCER PRICING SYSTEMS

101. As discussed in Section III, the fixed producer pricing system in a number of Sub-Saharan African countries suffered serious financial problems in recent years. In the last few years, several Sub-Saharan African countries, including Nigeria, Madagascar and Zaire, have changed from a fixed producer pricing system to a more market-determined system. However, many other Sub-Saharan African countries are reluctant to implement such changes.

102. The reasons for their reluctance usually include;

- (a) fluctuating producer prices are detrimental to the healthy development of the sector concerned,
- (b) farmers are likely to be paid less than "fair" prices, especially those in poorly accessible regions,
- (c) private exporters would not repatriate the "right" amount of foreign exchange to the Central Bank and,
- (d) the government would lose control of important sectors.

103. Newberry and Stiglitz ^{1/} argue that there are many cases where stable producer prices might not be beneficial for the sector and the farmers involved. This would be the case if supply and price are negatively correlated. Then stabilizing prices destabilize income. Even if they are beneficial, because of financial pressures it is doubtful if governments can maintain stable producer prices in face of widely fluctuating world commodity prices.

104. One way to share the risk of variable world prices between producers and government is to implement a progressive ad-valorem export tax system. By varying the progressiveness of the tax schedule, situations ranging from a fixed producer pricing system on the one hand (max: 100% progressiveness, where 100% of the price above a certain level is taxed and complete compensation is given to producers below a certain price level) to a free market pricing system (zero progressiveness can be simulated). Markusen (1984) has found that export taxes yield a higher social welfare than Marketing Board policies.

105. Ethiopia employs a progressive tax system for coffee which has achieved relatively stable producer prices. A caveat is that under such a system, below certain low levels of world prices, it becomes a free market system if subsidies, i.e., negative taxes, are to be avoided.

106. For taxation and foreign exchange repatriation purposes, it may be necessary to establish "reference" export prices if exports are not

^{1/} See Newberry and Stiglitz (1981).

exclusively handled by a parastatal organization. This can be achieved by monitoring price quotations in major consuming markets. For instance, the Colombian Coffee Federation uses the "Other Milds" coffee price in the New York future market as its reference price, and in Madagascar the Comite National de Cafe monitors coffee prices in Europe. These agencies estimate f.o.b. prices after deducting appropriate transportation and insurance costs from c.i.f. prices. The estimated f.o.b. prices may not be actual prices received by private exporters. However, this system encourages private exporters to obtain the highest prices possible to increase their profits.

107. From the estimated f.o.b. prices, taxes, domestic transport costs, processing and export preparation fees can be deducted to arrive at minimum producer prices. This is how the guaranteed price (for coffee above a certain quality) paid to coffee producers by the Colombian Coffee Federation is calculated.

108. Theoretically, if there is competition among private buyers in the domestic market, the probability of farmers receiving prices considerably lower than the market price would be low. However, the existence of parastatals, especially at the beginning of privatization and the free market pricing stage, might be helpful in enforcing minimum producer prices. In Madagascar, Colombia 1/ and Mexico, parastatal purchasing organizations co-exist and compete with private buyers in the domestic markets.

1/ The National Coffee Federation of Colombia is not a parastatal but performs as one.

109. Another way to determine f.o.b. and producer prices is to organize auction markets. Auction markets for coffee exist in Kenya, Ethiopia, Tanzania and Zimbabwe (coffee and tobacco) and for tea in Kenya and Malawi. A coffee auction market is being considered in Burundi. Determining prices at well-run auction markets has the advantage that prices reflect market conditions and are transparently determined.

110. An auction system is not appropriate for marketing all commodities, however. For example, in the case of cotton, a durable commodity with generally agreed quality characteristics, widely available arbitration facilities, and modern communication facilities, the advantage of broad participation in the price forming process is better assured by an international tender than by a local auction. An examination in 1989 of the possibility of changing the marketing of Tanzanian cotton to an auction system concluded that the likely reduction in market participation made such a change impractical. Tanzania continues to market its cotton internationally by a tender system. 1/

111. The question of farmers in poorly accessible regions receiving lower prices was considered when INMECAFE, a coffee marketing parastatal in Mexico was planning to withdraw from domestic marketing activities. INMECAFE has recently been organizing small farmers in these regions into co-operatives aimed at strengthening their bargaining position with private traders.

1/ Note that auctions for cotton did exist in Tanzania and Sudan in the 1960s but subsequently were abolished.

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