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THE LIBERALIZATION OF FOOD MARKETING IN SUB-SAHARAN AFRICA

Pekka Seppälä

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UNU World Institute for Development Economics Research (UNU/WIDER)

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The Liberalization of Food Marketing in Sub-Saharan Africa

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UNU World Institute for Development Economics Research (UNU/WIDER)

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GLOSSARY OF ACRONYMS

ADMARC Agricultural Development and Marketing Corporation (Malawi)

ASAL Agricultural Sector Adjustment Loan

CAR Central African Republic

FAO Food and Agriculture Organization

GMB Grain Marketing Board (Zimbabwe)

IFPRI International Food Policy Research institute

IMF International Monetary Foundation

KGGCU Kenya Grain Growers Cooperative Union (Kenya)

NAMBOARD National Agricultural Marketing Board (Zambia)

NAPB National Agricultural Products Board (Tanzania)

NCPB National Cereals and Produce Board (Kenya)

NMC National Milling Corporation (Tanzania)

SAL Structural adjustment loan

SAP Structural adjustment programme

SSA Sub-Saharan Africa (excluding South Africa in statistics)

UN United Nations

SUMMARY

Liberalization of food marketings has been implemented as a part of structural adjustment programmes in Sub-Saharan Africa. In this study we assess the i) the aims of the reform policy, ii) the implementation of specific reform measures, iii) the politics of reform, and iv) the impacts of reform.

The study highlights the diversity in initial circumstances: during the end of 1970s, state-governed marketing boards and cooperatives marketed food crops in most countries but state intervention was generally limited to certain key crops and, on these crops, the level of intervention was further limited by actual policies on crop collection coverage. Pre-reform policies were directed by the aims of nation building and food security and, for this purpose, provided subsidies for both producers and consumers. These subsidies, together with the high costs of marketing operations, caused huge financial problems to governments.

Marketing reforms have been implemented at the levels of pricing policies, institutional set-up and macro-economic environment. Several governments embarked on liberalization policies with doubts but during recent years, even the most hesitant countries have also implemented reforms. In certain countries, the liberalization of key food crops touched a delicate political issue with complex vested interests. Behind the debate of cheap food for urban consumers existed a whole range of factors like the patrimonial linkages of marketing boards, regional politics, and the interests of large-scale millers and estate producers. In the economic liberalization debate, political issues are largely simplified and marketing boards are crudely evaluated in terms of economic efficiency.

The study compares countries which always relied on private food marketing to countries which liberalized food marketing in 1992 and those still retaining state interventions. The data shows that best growth rates for the production of key food crops are in the countries with more liberal food marketing regimes. However, differences within country groups are significant. Variations can partly be explained by the nature of key crops, with rice subjected to import competition while tubers and plantains are not affected by competition. Maize production in eastern and southern Africa has been the focus of a detailed case-study because of the complexity of its extreme politization.

Marketing reform has had relatively little impact on food production which is still growing slower than the population in Sub-Saharan Africa. Its major impact has been the diminished demands on fiscal balance. As liberalization releases government resources for other uses, these should be directed to measures to increase agricultural production: land reforms, input subsidies and the construction of feeder roads. Marketing, milling and consumer support of food crops should be targeted to the crops that are mainly consumed by the poor.

1. INTRODUCTION

Since the Berg report (World Bank 1981), establishing fair prices for African cultivators has been a central argument in the goal aiming at a structural change in the African economic policies. The argument makes sense: Africa is still overwhelmingly a rural continent and its well-being is largely dependent on the efforts of the cultivators. If farmers are rewarded for their hard work with fair prices and if they increase their production, national economies stand on firmer bases. ¹

The question is to determine how favourable producer prices can be reached. Reflecting the proposition that crop marketing arrangements have previously been handled by the state and that the system has been inefficient, the liberalization of crop marketing has been central in the advocated strategy. Private traders in comparison are expected to be more cost-efficient, more timely in their payments to the farmers and, because of competition between traders, and to offer higher prices than what monopsonistic state marketing agencies have paid the farmers. Starting from these premises, the liberalization of crop marketing has been proposed by the World Bank as one of the key elements in structural adjustment. The World Bank has consistently² encouraged the near-complete withdrawal of state agencies from the crop marketing scene and many African countries have also followed the proposed policy.

Now marketing liberalization policy has reached a point where it is possible to take stock of its implementation and of its effects in Africa. We have a number of cases where liberalization has been the policy for several years enabling private marketing mechanisms to mature. We have also some cases where only partial liberalization has been implemented and some where private marketing has been the continuing prevailing pattern. Thus, there is good material for comparative analysis.

The scope of the analysis is limited to local *food* marketing, with export crops and non-food crops excluded. The focus of the paper is related to the major issue of food security. Although this focus is narrow, it can be defended on the grounds that the effect of marketing liberalization on food crops has been studied far less than its effect on cash crops. Here we argue that food marketing is not the prime object of marketing liberalization; it has been the marketing of export crops. The resultant effects in local food marketing have been far less systematically predicted and analysed. To put it strongly, for the funding agencies pushing for structural changes, the possible effects of liberalization policies on food production have been secondary to the possible expansion

¹ The analysis concentrates on the 1990s because only then did the structural adjustment programme (SAP) start to have effect even in late adjusters. The full time-frame for comparative purposes is 1980-94. The spatial frame is SSA. Although South Africa is included in the text, the aggregated statistical analysis (especially all with the inter-temporal scale) excludes the country because of its history and exceptional characteristics. The dominant role of South Africa in Southern Africa is an issue of special interest at the moment.

² Consistent market-oriented policy has been on the agenda since the early 1980s. Before that period, the World Bank supported to varying extent parastatals and state-governed cooperatives.

in export crop production and, consequently, food marketing policies have been planned less systematically. The result is far from satisfactory as far as food security and poverty are concerned. It can be seriously asked, whether full liberalization of food marketing is within the interest of a country as a whole, and the vulnerable groups in particular.

The politics and economics of food marketing for local consumption are different from those related to export crops. In the case of food marketing, governments need to consider the advantages of both consumers (primarily urban) and of producers (primarily rural), a situation which leaves less scope for own (state class) interests. In comparison, export crops are produced by primarily rural producers taxed only by state (class) interests. Another major difference is that food marketing, regardless of official policy, has always been largely handled by private channels. Thus, food marketing policies have only concerned a part of the total market for limited key crops. In contrast, government has often been able to control the marketing of major export crops.

The questions to be asked in this paper concern policy changes and their consequent reactions among farmers and traders. What is the extent of the implementation of marketing liberalization reforms? Do the new marketing arrangements differ significantly from the pre-adjustment parallel markets? What impact do the reforms have on food price level and food price stability? Has marketing liberalization put an end to food as the political carrot in Sub-Saharan Africa? How do the changes in policies appear in the practical environment of farmers and traders? What kind of additional measures are needed to make the changed institutional setting more efficient? All in all, we ask whether the liberalization of food marketing has served the objective that it was meant to serve.

The structure of the paper is as follows. Sections 2-4 provide background information necessary for the analysis of reform. In section 2 we highlight some key issues which determine agricultural production, especially food, in SSA. Section 3 depicts variations in the marketing arrangements for different food crops while section 4 analyses the logic of pre-reform public marketing arrangements. Together these sections provide a simple message: state-controlled marketing has been limited to specific crops and markets. It is a mistake to state that pre-reform food marketing was fully governed by state agencies.

Sections 5-9 analyse marketing reform from different angles. Section 5 analyses the rate of implementation of World Bank policies by the Sub-Saharan African countries. Section 6 presents the actors involved in marketing and shows how reform has changed their relative power positions. Section 7 is composed of an analysis of the impact of reform on production and prices of key crops. In the analysis, countries are grouped according to their adherence to reform and the results show that some benefits from private market arrangements seem to appear in aggregate level but that differences within country groups are large. Section 8 studies the impact of marketing reform on overall food production, relative prices and poverty. Here the results are tentative because the causality between a specific reform and selected indicators is shaped by many other intervening factors.

In order to provide depth to the analysis, a comparative case-study of five maize producing countries from eastern Africa is included in section 9. The marketing of maize has historically been the last bastion of state interventions in food marketing. The section analyses the political dimension of maize marketing and shows that interventionist policies have caused bifurcating economic effects. On the one hand, the policies have meant a well-farist subvention to peripheral producers and urban consumers. On the other, they have supported large-scale farmers, millers and well-positioned administrators. Both groups are losing from the reform while centrally located farmers and traders are the major beneficiaries.

Conclusions are given in section 10. The section summarizes marketing reforms which have been implemented and points out that results vary from case to case. Actual outcome is shaped by changing consumer preferences, global market and import potentials, and local supply constraints. It is noted that the private marketing system cannot emerge without support but requires additional, clearly-targeted interventions which are limited in scale. Meanwhile, major reforms need to be conducted in agricultural policies to ensure more equal land distribution and ecologically sensitive agricultural modernization.

2. AGRICULTURAL PRODUCTION IN THE SUB-SAHARAN AFRICA

Structural adjustment policies have been geared towards increasing agricultural production and exports in those sectors where Sub-Saharan Africa has a comparative advantage. In several countries, agricultural products play a key role in the economy. Agriculture generates some 42 per cent of gross domestic product in low-income countries and 27 per cent in middle-income countries. The export of cash crops is a significant source of income as they account for over 60 per cent of export income in more than half of the countries (Abdulai and Delgado 1995:1). But the importance of agriculture is not limited to these facts. In addition to direct value, agriculture generates a significant proportion of government income and is also a major provider of raw material for industrial processing as well as for the service sector.

The major determinant for change in African agriculture is the weather. Over past decades, the importance of rain has increased because population congestion has forced cultivators to take into use more and more marginal farming areas, where weather fluctuations are more erratic than in high-potential agricultural regions. The second important variable in African agriculture is labour input. African smallholders have usually responded to crowding and harsh weather with increased labour input. Often, this means shorter fallow periods, causing a potential decline in soil fertility. In comparison, technological advancement has induced relatively smaller changes in production capacity.

Structural adjustment addresses the agricultural sector in many ways. Policy changes to agricultural *marketing* have been fundamental. Changes have been geared to getting prices 'right' through flexible exchange rates, competitive liberalized crop marketing, reduction of tariff and non-tariff barriers, and reduction of agricultural taxation and

subsidies. At the same time, fiscally constrained governments have been ill-equipped to give support for agricultural *production* in terms of infrastructure maintenance, market stabilization and farmer services (input supply, extension, etc.). It is widely agreed that the changes in pricing policy are inadequate and that more traditional 'developmental' efforts are needed to sustain agricultural growth (cf. Cornia and Helleiner 1994). There is already substantial evidence to indicate that the pricist policy orientation, when implemented in singular fashion without adequate support measures, tends to be detrimental to the rural poor in general and especially to the smallholders who live in the hinterlands or who depend on moderately priced input supplies. Without repeating the full debate, it suffices to point out that production rates for some cash crops have increased while the increase in food production has remained below population growth and far below the need for self-sufficiency in SSA. At the same time food import has increased considerably (Table 1; see also Annex 1.)

From the strictly pricist perspective, poor performance in food production is not a cause for alarm in itself. From that perspective, it can be argued that adjustment policies have been geared to give exportable crops priority and that food import can be used to fill the deficit in local food production. The critical question in this argumentation is whether the peripheral/poor farmers can sell their products at decent prices and whether poor consumers can afford to buy food in the restructured economy.

TABLE 1
FOOD PRODUCTION IN SUB-SAHARAN AFRICA
(AVERAGE ANNUAL PERCENTAGE GROWTH RATES; EXCLUDING SOUTH AFRICA)

	1975-84	1985-89	1990-MR (*)
Total food production	0.8	3.6	0.7
Per capita food production	- 2.1	0.7	-2.2
Volume of cereal imports	10.7	- 1.7	9.3

Source: World Bank 1996: 225-233. Note: (*) data series ends in 1993.

Contemporary changes in African agricultural production include two issues which have wider repercussions on agricultural marketing. The first concerns the role of smallholders vis-à-vis estate agriculture. It has been argued for long that agricultural productivity per hectare is higher among the smallholders because of high labour input. However, due to structural adjustment policies, smallholder agriculture is becoming increasingly marginalized from agricultural services and inputs while productivity increases continue to be reaped by local estate sectors and by all farm types in competitive non-African medium-income countries. Thus, the green revolution in Africa, with some exceptions, is confined to large farms whereas in South-Asia it covers all farm types (Mosley 1994:271; cf. Eicher 1992:93-97). This argument has far reaching consequences. One question is whether the influx of imported cereals and the cereals from local estate farms can hurt the politically delicate rural-urban connection and can erode the critical role assigned to local smallholder producers in the decades of nation building – feeding the populations in African cities.

Another issue is whether the rural areas also are developing into regions where the poor are facing chronic food deficit because of low purchasing power. If so, we should not focus the market analysis on urban consumers only, but need to include rural consumers and rural staple crops as well. Recent rural household expenditure studies reveal that food purchases are the dominant cash expenditure item in several countries. Although part of the purchases can be explained as seasonal selling by net producers (who may buy different crop or even the same crop at a higher price during the pre-harvest months), this does not explain the problem. A critical issue in this context is development of the land tenure system. If entitlements to food provisioning are replaced by *de facto* private land ownership, the pauperization of landless people increases the number of net consumers.

Finally it is necessary to point out that urban consumers increasingly use easily-processed crops like wheat and rice. Thus urbanization and changing consumption patterns affect the relative demand for various crops. Locally produced grains such as maize, millet and sorghum are being replaced by wheat and rice, especially in West Africa (Salih 1995:22-30). This shift in consumption patterns has repercussions on the competitiveness of local cereal production and marketing. By contrast, the share of noncereals in consumption, mainly root crops like cassava and yams, has remained constant from the 1960s and is unlikely to change dramatically in the near future. This reflects the competitiveness of non-cereals and their suitability for the nutrient-poor land resources(v. Braun and Paulino 1990:517).

3. FOOD CROPS AND THE EXTENT OF MARKET LIBERALIZATION

The general view of marketing arrangements before adjustment policies was that agricultural marketing of export crops was dominated by governmental agencies. These agencies were either crop-specific or area-based parastatals or cooperative unions but in all cases, state intervention was fundamental. While this holds true for major export crops, it is far less true for food crops. Instead, the extent of governmental intervention in food marketing has always been limited.

In terms of official policy, governments tried to control food marketing in several Sub-Saharan countries. Their efforts were not effective because governments were often unable to provide prices equal or higher than market prices. Consequently, parallel markets emerged. Although parallel markets were officially given negative attributes (reflecting its quasi-legal status) by government officers, their existence was often tacitly tolerated simply because they functioned well and supplemented the official marketing channels.

The effect of marketing liberalization is still smaller if we look at the entire food provision chain, instead of just the marketed food. Reginald Green (1989:38) has estimated that some 75 per cent of domestic food production is subsistence cultivation consumed by the producers. Of the remaining 25 per cent, at least half is related to crops and animals which are not subjected to official prices. Thus the pre-adjustment price regulation has officially affected some 12 per cent of food production. Out of this 12 per

cent, about five per cent has been marketed through parallel markets. Thus, a residual figure of seven per cent has entered the official marketing channels. Thus calculated, it would appear that liberalization of food marketing has only marginal effect. Two reservations about this conclusion need to be added, however. First, in the long run the indirect effect of market liberalization is much wider because liberalization affects relative prices among food crops, and the prices of food crops relative to cash crops. Thus it is possible that market liberalization decreases the farmer's reliance on subsistence cultivation and changes his orientation towards increased sales of high-priced food crops or exportable crops. Second, the calculation undermines the overall importance of official marketing channels because these also handled food imports which are important for urban food provisioning.

The picture of the regulation of food marketing before adjustment becomes clearer when we distinguish between political and non-political crops. Some food crops tend to have a special political role in agricultural policy because the supply of moderately priced food for 'political classes' (which usually refer to urban dwellers) is a paramount issue in the national economic policy. For this reason, urban staple food crops are called political crops. Since price controls in the pre-adjustment period were targeted on political crops, liberalization measures are most directly felt in their marketing. Interestingly, politicians have just as good reasons to keep prices of political crops low and steady after the adjustment as they had before, regardless of the official policy line on crop market liberalization. At the same time, it should be noted that there are several other, non-political food crops with only limited or no price interventions which have been produced and marketed without any major fuss in the rural setting. Thus, official policies on food production and marketing, whether before or after the structural adjustment period, tend to have limited impact on non-political food crops.

The distinction between political and non-political crops is not based on economic criteria. Political distinction needs to be kept separate from economic distinction between non-tradeables (only domestically sold crops) and tradeables. Tradeables can be further divided into imported crops only (pure importables) and those which are either domestically produced or imported (competitive crops). The pre-adjustment marketing controls were directed to key crops, tradeables or non-tradeables alike. In practice, bulky non-tradeable root crops were seldom subjected to pre-adjustment marketing control.

An interesting variant of the effects of marketing liberalization is the possibility that a crop can change status to an exportable crop. For example, beans have become a cash crop in Kenya through the development of modern storage, packaging and transport equipment. Another example is the export of cassava as animal feed from Tanzania to Europe. As these examples show, the tradeability of crops varies over time.³ Also the substitutability of crops increases when the time perspective is lengthened.

³ See Kyle and Swinnen (1994) on the analysis of tradedness in Zaire. Mundlak et al. (1990) have estimated that the degree of tradedness fluctuated between 50 and 85 per cent in agricultural sector in Argentina.

4. STATE INTERVENTION IN FOOD MARKETING BEFORE STRUCTURAL ADJUSTMENT

The 1980s witnessed strong criticism against state interventions in pre-adjustment marketing arrangements. Public sector marketing agencies were said to be inefficient, corrupt and inflexible. Instead of an attempt at reform (once again since several interventions had been made), structural adjustment programmes proposed reducing the legal and financial position of public marketing agencies and opening crop marketing for competition. In practice this meant that parallel market operators became official traders, enabling them to trade with all food crops.

Before we analyse liberalization policies, it is worth assessing whether the criticisim of the pre-adjustment policies is justified. In the following we first look at the politics of state intervention. We then review the economics of marketing in the pre-adjustment period and finally, analyse the role of parallel markets.

4.1 The political aims of the state interventions

A major political factor behind the growth of marketing boards was the perceived necessity to provide food for urban consumers at low, steady prices. The food security consideration was a central political issue already in the colonial period (although the issue was repeatedly side-swept to make room for the needs of the settlers or consumers in the imperial country). Independent governments took up the responsibility to increase food security by strengthening the relevant organizational structures. Marketing boards were obligated to serve customers as well as the farmers. Thus, food marketing organizations became instrumental in balancing the needs of the growing urban populations against the needs of the farmers.

Another reason for interventions which stems from political culture can also be outlined. The newly independent governments needed interventionist policies to penetrate rural areas and to enforce their own importance. Food marketing was one task which was seen to need an 'orderly' solution. The first crop-marketing arrangements were typically cooperative networks based on fairly decentralized structures. Largely because of political reasons, these were soon replaced by increasingly centralized organizational structures. Governments centralized the new administrative structure to minimize regional differentiation, internal political frictions and the emergence of independent power positions. Donors fully supported the proposed state-wide organizational structures. Thus, politico-administrative issues were crucial in the formation of centralized interventions in food marketing (Arhin et al. 1985).

The major drawback of marketing boards and cooperatives was their bureaucratic organization which lacked administrative capacity, transparency and provided ample opportunities for rent-seeking activities. Marketing boards and cooperatives were able to generate funds for their operations and expand their own structures, thus growing into sizeable interest groups with political links to governments. At a certain stage, marketing boards and cooperatives became alienated from their primary task of

providing cheap services to the farmers. This historical development could hardly have taken place without the support of the central government and the donors.

The third political aim of state intervention – Africanization of food trade – was seldom acknowledged although it was evident. In several countries, Asian or Lebanese traders had achieved dominance which created adverse feelings amongst African leaders: a central enclave of society was controlled by 'non-indigenous' people whose commitment to the nation building was doubtful. Marketing boards were the proper medium to replace the non-indigenous element from the food trade.

4.2 The economics of the state interventions

The primary motivation for the marketing reform of food crops has been high budgetary costs of setting producer prices and subventing consumer prices. The reform was expected to create an efficient marketing system to achieve the same objective at a lower cost.

Before adjustment, producer price subventions were often inadequate and producer prices were far below parallel market prices. Governmental marketing organizations were accused of inefficiency, cost-plus pricing and other ills which generated low producer prices. However, there are at least four 'external' factors which partly explain the difference between official and parallel market producer prices. First, these agencies have been used to reduce risks to farmers by maintaining floor prices, and by providing secure access to marketing. Second, they have been utilized by governments for regional politics through pan-territorial prices. Third, the agencies have been used as instruments to provide agricultural inputs, infrastructure and rural services. Fourth, the agencies are occasionally forced to sell crop to consumers at below the procurement price. I look at these in turns.

The primary function of maintaining secure floor prices is crucial for the farmers. Guaranteed floor price makes a difference in circumstances where free market price may occasionally fluctuate more 50 per cent below the average price, a situation which is not exceptional in Africa. When government politically guarantees the floor price, it effectively transfers a part of the market risk to the marketing board. On the other hand, guaranteed floor price has often been below the parallel market price and, in these cases, producers have used official marketing channels as a last resort.

The second task of maintaining pan-territorial prices is a heavily political issue. Most Sub-Saharan countries became independent in the early 1960s and they immediately embarked on the road of nation-building. Pan-territorial price is one simple way to emphasize the unity of a country. In practice, pan-territorial (floor) price is a very expensive solution in countries which have large areas and undeveloped infrastructure.

⁴ There are two other reasons which apply mainly for the export crops. First, agricultural production has always been an important source of government revenue. Public marketing agencies have been used effectively as a medium of taxation. Second, public marketing agencies have had food security as a major (non-commercial) agenda and this has meant the collection of sizeable reserves.

Third, the major difference between governmental parastatals/cooperatives before adjustment and private traders after adjustment is the scope of their activities. Governmental parastatals/cooperatives were often delegated with functions like input provisioning, extension work and road construction. Even though these obligations were important from the perspective of national economy, they reduced the accounts of marketing agencies to negative figures. When government agencies and private traders are compared in terms of efficiency, one should first take into consideration the additional tasks governments delegated to their rural arms. These could be substantial and thus seriously hamper the implementation of the primary task of marketing.

Fourth, public marketing agencies were often requested to provide food for consumers at subsidized prices. These subsidies were partly motivated by the interests of special groups as those in disaster areas or vocal urban consumers, and partly by national interests such as the fight against wage-inflation. But whatever the motivation, subsidized prices caused the finances of the marketing agency to become distorted.

At least these four non-commercial functions were reflected in low producer prices and had a detrimental effect on the efficiency of public marketing agencies in the pre-adjustment period. With food marketing privatized, these non-commercial gains are either reduced in scope or lost. Thus it is anticipated that there will be i) no floor prices or guaranteed buyers, ii) increased territorial specialization and differentiation, iii) less rural services, and iv) less food aid and political food concessions.

It is difficult to assess the relative importance of the different factors in the formation of producer prices. Parallel market price is an inadequate indicator because parallel market did not provide non-commercial functions. During the pre-adjustment period, several African governments operated with the strong belief that a centralized marketing system is economically feasible because of the economies of scale. Large marketing boards were expected to utilize superior, modern transport and storage methods. Recent assessments show that once the non-commercial functions are included in calculations, state-governed marketing agencies were not as inefficient as the Berg report stated (cf. Platteau 1995). Instead of straightforward urban bias, one could speak of state bias and central government could to be blamed for many instances of inefficiency Gibbon *et al.* (1993:15-6, referring to Lele and Christiansen 1989) report that:

the main problem of parastatals have been usually externally created by the nature of state-marketing board financial relations. In particular, marketing boards tended to be undercapitalized in relation to state demands that they carry of the costs of building up surplus stocks, bad credit and (in the case of grain marketing boards) often the distribution costs of food aid. In Francophone West Africa marketing boards are also expected to provide various non-agricultural services (including road construction). This would have forced many marketing boards into heavy borrowing even without the various costs of the political overheads that they re expected to cover (e.g. loose control over expenditure).

One more issue needs to be added to the economic equation of marketing parastatals, namely their performance in terms of reliability. Although parastatals promised to collect all crops, they were often delayed, or simply could not fund all purchases or cover all areas. Simultaneously, their mere existence decreased the reliability of alternative trading channels. Thus, parallel markets were conditioned by the official marketing circuits.

4.3 Parallel markets

The role of the parallel marketing systems was important in the pre-adjustment period. Food provisioning for the African sections of colonial cities was provided by rural-urban linkages and petty traders from nearby areas. When state controls on food marketing were imposed, these channels continued to exist as self-provisioning and parallel markets (Guyer ed. 1987). Parallel markets were not just a residual system but a complementary marketing network with many linkages to the official marketing system. Temu (1975:141-44, cited by Bryceson 1993:94) offers a useful classification of black market operations in an official monopoly situation controlled by government cooperative. Defining three degrees of black market, Temu describes the first as a situation where prices are below the cooperative buying price as a result of the failure of the cooperative to purchase the crop from the farmers. The second degree is a situation where traders operate within the wide margin of the cooperative buying and selling price. The third degree is a situation where black market prices to farmers and consumers were above the cooperative selling price because of supply shortage.

Pre-adjustment policies towards parallel market traders were based on ideological confrontation in official rhetoric but on a tacit acceptance of the parallel system (where it functioned well) in practice. According to Pottier (1986), government employees in Zambia even informally encouraged farmers to rely on parallel marketing channels.

The flexibility of the parallel market, especially in border areas, was a headache for government officers responsible for official food collection and marketing. An increase in official price could generate a proportionally large supply response to the marketing agency. This did not necessarily imply that the production level had increased but merely that more food was rechannelled from parallel to official market. Since double standards in marketing compounded the probability of erroneous production forecasts, it was very difficult for marketing boards to reserve money and transport for food collection.⁵

To sum up, food marketing before adjustment was composed of several channels from producers to consumers. These could be depicted as separate filière where each filière channels specific crops through a set of intermediaries to a specific group of customers (cf. Bernstein 1996). While state intervention had a direct influence on only some crops and mediating institutions, the existence of interventions conditioned the terms of

⁵ Same applies to the effects of changes in production. Raikes (1988:26) gives a hypothetical but realistic example where a 10 per cent decrease in production can induce an 80 per cent decrease in officially marketed produce, given that a constant amount of production is used for self-provisioning and that parallel markets can provide a fair price.

operation for most of the other filières. Parallel market is a shorthand description for a variety of filière some of whom depended on state intervention while some worked independently.

5. THE IMPLEMENTATION OF FOOD MARKETING REFORM OF THE STRUCTURAL ADJUSTMENT PROGRAMMES

In this section we study the conditionalities of the structural adjustment programmes which are focused directly on crop marketing reform and indirectly on crop prices. The question is to determine the extent that African governments have implemented these conditionalities. In section 7 we look at the effects of the reform on production levels and prices.

5.1 World Bank policies on food marketing

World Bank policies on food marketing are outlined in a series of policy papers (World Bank 1981; 1989; 1994).⁶ It is noticeable that the World Bank has maintained a distinction between marketing policies for export crops and food crops in its policy papers. The Berg report argues that while an 'indigenous trading system' should be the keystone of a future marketing system, totality with a variety of agents should be encouraged:

Cooperatives can take on many activities in this area and the state role in marketing would remain substantial even after considerable liberalization. Governments could improve market functioning, easing market access by both traders and farmers throughout greater emphasis on rural road development and maintenance, by providing better information on crop size and prices, via radio and otherwise, and by gradually introducing uniform weights and measures, a task that governments have neglected. State grain agencies would also continue to have other major functions: they could manage grain imports; they might buy and sell in the open market for special purposes (e.g. localized production crisis); they might operate buffer stocks for seasonal price stabilization; they could do grain storage extension work, especially for new grains (e.g., maize in parts of West Africa); they could constitute and operate a reserve stock of cereals as a first line defence in case of drought or other food emergencies; and they could provide for the needs of collective consuming units, such as the army (World Bank 1981:65-6).

In the policy paper Sub-Saharan Africa, from Crisis to Sustainable Growth (World Bank 1989), emphasis was placed on free price regimes. Still, governments were allowed to set minimum floor prices for food crops. The latest policy advice in Adjustment in Africa: Reforms, Results and Road Ahead (World Bank 1994) is rather

⁶ The implemented policies have been subjected to several evaluations. Cf. Harvey (1988); Commander (1989); Duncan and Howell (1992); Gibbon, Havnevik and Hermele (1993).

hesitant. It makes the distinction between food/non-food in its analysis of SAP implementation. When it comes to policy recommendations, the report avoids spelling out separate food policy directed towards protecting marginal producers or consumers. Concerning marketing reform, the report states that 'The elimination {!} of agricultural marketing parastatals is high on the adjustment agenda' (p186). Concerning poor consumers/producers, the report states that:

It is difficult to target the poor through food subsidies or income subsidies, because they are not the dominant consumers of any food staple nor the dominant participants in any single food-producing agricultural activity. Programmes that aim to benefit them by subsidizing specific goods or activities thus will have substantial leakage to the nonpoor (ibid:210).7

A recent technical paper on agricultural marketing produced by World Bank (1995) does not single out the different policy perspectives for food crops and other agriculture. The guidance provided for all governments is a move towards free market structures, including such safeguards as selling crop futures and taking insurance. The differences in the World Bank papers show that it is one thing to approach food marketing as a purely technical issue and quite another to make responsible policy statements. When the special needs of Sub-Saharan Africa are recognized and politics included, the need for interventionism seems more apparent. Still, the thrust towards a pure market solution seems to be increasing.

The World Bank implements policies through two means: by political conditionalities in the programme aid and by directing its project loans to specific purposes. During the 1980s, political conditionalities of the programme aid have become increasingly important for several reasons. First, the World Bank has been increasingly frustrated by the slow or negligent results of the projects. Second, while World Bank loans provide only limited relief, the backing provided by donor communities has substantially increased the importance of conditionalities. Finally, the indebtedness of the African countries has meant they are cornered and bound to accept even harsh and unpopular policy changes.

The World Bank has two major loan schemes for adjustment: agricultural sector adjustment loans (ASALs) and structural adjustment loans and credits (SALs). Of these, the latter is substantially more important. Detailed records of these instruments are maintained in Adjustment Lending Conditionality and Implementation Database (ALCID) which apparently is not available for external researchers (Knudsen and Lindert 1995). Three public reviews on the efficiency of ASAL and SAL instruments have been publicized by the World Bank (1988, 1990 and 1992).

⁷ For the detailed discussion on the 1994 report, see Lipumba (1994).

⁸ These loans are not important because of the financial flows they provide, but because they form a gate for indebted governments to a wide donor front and attendant grants and loans. As Commander (1989) convincingly shows, the major part of the WB/IMF adjustment lending has been directed to middle-income countries outside the SSA. As far as the SSA is concerned, the net flow of adjustment lending has been small or even negative in several years.

The conditionalities which have existed in ASALs and SAL are presented in Annex 2 and Annex 3. As Annex 2 shows, conditionalities on agricultural pricing and subsidies have been placed in every SAL in the 1980s, with the exception of Zaire where minerals far exceed crops as a source of revenue and where food marketing is largely in the hands of the private sector. Annex 3 reveals that agricultural pricing and subsidies reform have been a conditionality in all ASALs in the 1980s and 1990s. Other institutional reforms which accompany and make the price reform more effective have also been a standard feature of both SALs and ASALs. The tables show that the World Bank has seen marketing reform as a key feature in the agricultural sector reform. This reflects the emphasis placed on getting prices to reflect market conditions which, rather suggestively, is also called getting the prices 'right'. In comparison, conditionalities which affect production capacity and technology (investment promotion, research activities and land reform) have been fairly seldom a loan condition.

Conditionalities have been neatly outlined in the loan agreement papers but their implementation is often a different story. ALCID database includes evaluations of governments' performances in fulfilling conditionalities. Evaluation varies from 'none' or 'partial', through 'substantial' and 'full' to 'more than full' implementation. The rates of implementing conditionalities (i.e. the subjective self-evaluation conducted by the World Bank) are presented in Annex 4. It is worth noting that published results cover all loan recipients and corresponding data is not available for the Sub-Saharan countries as a distinctive group.⁹

When the fulfilment of conditionalities is evaluated, it is of limited use to compare only the number of achieved conditionalities because these vary in terms of scope and importance. For this reason, the World Bank has separately classified the 'critical' conditionalities. Compliance to these selected critical conditionalities is shown in Annex 2 as the bracketed figures. Self-evaluation shows that 67 per cent of critical conditionalities related to agricultural policy in SALs and 48 per cent in ASALs were fully implemented. These figures can be analysed further through agricultural policy sub-categories. Reform in pricing and subsidies had even higher rates of fulfilment. Reform in institutional setting was implemented as successfully as in SALs while ASALs had a much lower implementation rate. Conditionalities relating to investment promotion, incentives, technological development and research were far less frequently demanded and even less frequently fulfilled.

In the following, reform measures are studied separately for regulatory reform (liberalization) accompanying institutional reform and economy-wide measures.

5.2 Liberalization of food crop marketing

First we analyse the key conditionalities which are directly pertinent to the liberalization of food marketing. The World Bank has pushed for the liberalization of food marketing

⁹ The World Bank does not provide data on the implementation rate for individual countries. According to Toye (1994:31), the rate of slippage varied from 17.6 to 50.3 per cent. See also Mosley *et al.* (1991:134-45).

through several means. Changes in major staple food marketing, fertilizer marketing, and wheat and rice imports are presented in Table 2.

TABLE 2
THE IMPLEMENTATION OF FOOD MARKETING REFORM

		Mark	eting	Fert	ilizer	Wheat	imports	Rice I	mports
Country	Crop	Before	After	Before	After	Before	After	Before	After
		reforms							
Benin	Tubers	•	0		•	0	0	0	0
Burkina Faso	Millet; sorghum	•	0			0	0	0	0
Burundi	Beans	0	0			0	0		O
Cameroon	Cassava	0	0			O	0	•	0
Central African Republic	Cassava	•	0	-	•	0	O	o	0
Chad	Millet; sorghum	0	0	=		0	0	O	0
Congo	Cassava	0	0			0	0	0	*
Côte d'Ivoire	Tubers	0	0	•		*	*	0	0
Gabon	Cassava	0	0				.,		
The Gambia	Sorghum; millet	•	0	-			0	0	٥
Ghana	Tubers	0	0			0	0	0	0
Guinea	Rice	•	0			0		0	
Guinea-Bissau	Rice	•	0					0	0
Kenya	Maize	•	•			0	0	0	O
Madagascar	Rice	•	0			•	•		0
Malawi	Maize	•	0			0	O	O	0
Mali	Millet; sorghum	•	0			0	O	0	0
Mauritania	Millet	0	0			0	0	0	0
Mozambique	Maize	•	0			•	0	0	O
Niger	Millet	•	0			0	0	0	0
Nigeria	Yams	0	0			n.a.	0	n.a.	n.a.
Rwanda	Sorghum	0	0						
Senegal	Millet; sorghum	0	0			0	0	0	0
Sierra Leone	Millet; rice	0	0	=				•	O
Tanzania	Maize	•	0			0	0	0	0
Togo	Maize	0	0			0	0	0	O
Uganda							0		۵
Zambia	Maize	•	0						
Zimbabwe	Maize	•	•			0	•	0	O

Source:

World Bank 1994. Adjustment in Africa.

Notes:

- Major restrictions on purchases and sales.
- Limited intervention by government buying agency.
- O No intervention except in food security stocks.
- Marketing controlled and prices subsidized.
- Marketing controlled, but at world prices.
- □ No controls on prices or marketing.
- ☐ Marketing liberalized, but some fertilizers sold at below-market prices or prices controlled.
- No monopoly
- * Private monopoly
- Public monopoly
- .. Data not available.
- n.a. Not applicable.

Interventions in the *marketing* of critical food crops before adjustment included total marketing bans and more limited crop transport restrictions, official floor prices for purchases and official selling prices. The level of governmental control in food marketing was high in fifteen countries before the structural adjustment period. By late 1992, the figure had dropped to two – Kenya and Zimbabwe. In these two countries, maize price is subject to severe political conflicts. In Kenya, the government has made repeated back and forth modifications in its policy, continuing to shadow boxing with the donor community (cf. Ikiara *et al.* 1995). In Zimbabwe, the history of dualistic production and marketing between the estate and smallholder sectors has left its imprint in the post-reform situation.

Government has also reduced its intervention in *fertilizer* provision. Columns 5 and 6 in Table 2 show that in late 1992, the government controlled fertilizer marketing and subsidized prices in only two countries, namely Malawi and Nigeria. In two other countries, the government took control of procurement at world prices and in six others governments subsidized fertilizer prices. All in all, the provision of inputs shows a fairly clear tendency towards liberalized trade. The utility of this policy is another matter and depends on circumstances. Reform has in some countries reduced significantly the use of fertilizers. First, the withdrawal of subsidies has increased fertilizer prices beyond the reach of smallholders. Second, the withdrawal of government sales has created a vvacuum as private sector traders have been hesitant to embark to the fertilizer markets (Gibbon *et al.* 1993:16).

Government can influence urban food provisioning through the import of urban staple foods like wheat and rice. Government has direct impact through its monopoly position on imports. The alternative, a less visible means to achieve the same result, is import licensing, import tax and tariff modification. Columns 6-9 in Table 2, which summarize government monopolies in wheat and rice imports before and after adjustment, show that governments had wheat import monopolies in fourteen countries and rice import monopolies in seventeen countries before the reform period. In late 1992, the figure had had dropped to nine and four respectively. 11

5.3 Institutional reforms

Structural adjustment conditionalities have included institutional changes as a natural complement to changes in pricing policies. Policy directives have been hostile to both cooperatives and parastatals, a position diametrically opposite to policy directives before the adjustment debate (cf. World Bank 1990b). Governments are currently being asked to diminish their support to any governmental marketing agency and the remaining tasks

¹⁰ According to UN statistics (UN 1995:365), total consumption of nitrogenous and phosphate fertilizers has remained at constant nominal level in Africa. However, this figure does not reveal shares to the smallholder or estate sector, nor the distribution between food crops and export crops, some of which are highly dependent on large amounts of fertilizers.

¹¹ The Berg report (World Bank 1981:64) advocated that food imports should be subject to duties, at least when the price was artificially low due to the overvalued local currency. Thus local producers should be protected from competition caused by the excessive import of wheat and rice which leads into import dependency.

often outlined are the maintenance of food security stocks and the provision of 'enabling environment' for traders.

As for stock maintenance, governments take responsibility for maintaining security stocks of grain even after reforms. The size of this stock and rules governing its deviations determine whether the stock has a marginal or central effect on food prices. When the government also imports grains, its scope for manoeuvre is even more extensive. Since grain has no stipulations, food originally targeted for the poor or for emergency areas can destabilize the normal market. According to the orthodox position, security stocks should be kept at the minimum level and governments should rely on FAO's early warning system and other databases to predict possible deteriorations in their food security situation in ample time.

The scaling down of public marketing agencies is a difficult task. It is not exceptional for governments to allow a marketing agency to continue functioning with substantial manpower even after the actual rate of marketing has been reduced to a minimum. There are several reasons for this. First, marketing agencies developed during the pre-adjustment period into significant sources of political power and, consequently, there are vested interests in continuing their operations. Second, crop marketing agencies have trained personnel and developed infrastructure which are clear assets and should not be wasted in a political pendulum. Third, even when the marketing agencies have a limited share in the total crop marketing, they still can provide several necessary non-commercial functions. They can utilized to maintain food security storage, for marketing research and quality controls. The importance of these tasks is recognized; it is simply a question of how they should be organized. As a part of the liberalization ideology, proposals suggest that the remaining tasks be administered through management contracts, thus allegedly increasing efficiency. However, contracting is technically difficult to arrange in this field and experiences to date have not been promising. One problem area is the performance criteria; other difficulties are limited individual management incentives, reduced revenues for the agency, government failure to repay for costs incurred in carrying out its non-commercial 'social role' and, finally, the overall budgetary squeezes which have left agencies without money. When the overall structure is underfunded, it is difficult to single out one section for privatization. (Hubbart 1995) Smith and Thompson (1991:60-2) point to related problems in contracting. They say that contracting a part of the market can be uneconomic because of the risk premium: 'If governments are much more tolerant of risk, the cost advantage of private section production may be outweighed by the risk premium'. They also add that contracting creates costs for the government because it needs to monitor and police contract fulfilment.

The second element of the institutional reform, namely the enabling environment to traders, can be coughed in several ways (Thomson and Terpend 1993; Jones 1995; World Bank 1995). In the current academic debate, there is wide agreement that extensive government involvement is necessary to foster the emerging private sector. The question is, what kind of resources do governments in view of their fiscal constraints, have available to boost the institutional development of the private sector.

The structural adjustment loans include very limited conditionalities which would direct the use of resources to this effect. (See also discussion in section 6).

The quest for enabling environment includes measures to simplify trader licensing and to facilitate private sector operation by low licensing costs and taxes. Paradoxically, the adjustment packages include concurrent demands for governments to expand their overall tax base and revenue collection rate — a demand pushing in a diametrically opposite direction. Policy line in this regard is likely to be unstable as governments react to conflicting pressures.

When enabling environment for private traders is discussed, most often mentioned problems are the lack of credit and poor infrastructure. It is repeatedly argued that private traders are not able to operate properly if they are not provided with easy access to substantial credit. It is equally often argued that the bad shape of roads and transport facilities increases the risks of traders and diminishes trade in less accessible areas (Platteau 1996). Donors have noted the importance of traders but so far they have provided limited support. Increasingly, Bilateral and multilateral donors perceive the NGO option as a feasible route for channelling support to the private sector. While some have responded to the demand, the majority of NGOs view social sector and emergency aid as their primary targets.

To sum up, institutional analysis shows that the private sector has largely taken over the task of food marketing in Africa. This does not mean, however, that governments have been unable or unwilling to intervene in crop marketing when it fits in with their plans. Governments have the methods to modify the rules of the game as necessary. There is also no guarantee that change would continue in the same direction. African governments tend to take food security issues seriously¹² and they can revise policies, even contrary to prevailing international agreements, to drive their own agenda.

5.4 The economy-wide measures

In addition to price policies and institutional policies, there are several other adjustment lending conditionalities which have direct or indirect impact on food production and marketing. These are, among others, changes in the exchange rate regime and level, tariff and non-tariff border controls and agricultural taxation.

Exchange rate regimes in many countries have been modified in a more open direction. Government control over the allocation of foreign exchange has decreased significantly; fifteen countries have currently market-based flexible rates while others have pegged to a basket of currencies or fixed rates. Most countries have implemented substantial devaluations, and thus the difference between flexible and fixed currency regimes is less noticeable. Devalued currency means increased costs for imported fertilizers but also increased prices for food imports and thus increases in prices.

¹² For a historical account on food security as a cornerstone of the national policy in Tanzania, see Bryceson (1993)

The reduction of tariffs and non-tariff barriers has advanced significantly during the implementation of SAPs. According to the World Bank (1994:90), most countries have removed all price controls, except for a few strategic goods. The tariff structures have also been rationalized and the average weighted level of tariffs has been lowered (ibid:74). There are still other, more sophisticated or indirect, barriers which aim at protecting local producers. These include domestic sales manipulations, bureaucratic licensing practices etc. When food imports are concerned, it is worth remembering that the majority of imports is connected to bilateral agreements with some concessionary element.

Fiscal policies concerning the agricultural sector have relevance on food marketing. African governments have shown great diversity in agricultural taxation during the implementation of structural adjustment programmes. When it comes to expenditure on agriculture, a major factor is donor involvement. During recent years, donor involvement in the agricultural sector and related infrastructure has been decreasing in volume. There has been considerable interest to support the private sector, including crop trade, but so far actual disbursements have been rather limited.

5.5 Compliance to SAP conditionalities: an inadequate criteria of reform

It is necessary to emphasize that analytically the rate of compliance to World Bank conditionalities is not an indicator of anything else but itself. It is theoretically possible that compliance is dysfunctional to efficient crop marketing. Another alternative is that a SSA country independently implements other measures which increase the efficiency of crop marketing. Thus the compliance criteria should not be stressed too much. In the following we study i) suspect reform within SAP, ii) reforms missing from SAP, and iii) independent reforms by governments.

The functionality of the SAP model depends largely on local peculiarities. While African economies have high tolerance for facilitating institutional reforms and other shocks, any such change creates both winners and losers. One aspect of reform with high potential distributive effects is the sudden elimination of pan-territorial prices. It has marginalized food producers operating in the hinterlands far from roads and towns. When pan-territorial pricing is removed without a period of preliminary preparation, it can have a shock effect on the losing areas. The change can be said to 'correct' price ratios and, over a long run, to increase the sustainability of agriculture. It reduces the budgetary burden of the government to maintain 'egalitarian' regional policies. Nevertheless, it tends to marginalize areas which for other reasons are likely to be meagrely endowed, thus having a negative impact on national integration, with possible political repercussions.

The list of missing reforms measures is long, but overall reform has to be compared to the financial capacities of governments. If some omission has to be pointed out, it is the lack of support for traders enabling them to access finance and transport. All in all, the character of SAP is first and foremost directed to 'making room' for private sector operations. Reforms are negative in the sense that they imply dismantling institutional structures and conventional practices. There are fewer positive measures for building up

institutional structures. Instead, the private sector is expected to create independently the structures it needs. Given the thinness of the African entrepreneurial class with significant financial resources, this expectation is poorly founded and the donor community has done very little to alleviate the problem. Perhaps NGOs have better capacity to provide support for rural credit and foster other trading institutions but their priorities are focused towards the social sector.

Examples of 'home-grown' adjustment often mean policies similar to SAP but implemented before — or sometimes instead of — adjustment programmes. Policies implemented independently by governments tend to be more moderate. There is also a tendency for governments to liberalize first but, after a local food problem, to revert to some of the control measures.

6. POLITICAL ECONOMY OF FOOD MARKETING

6.1 Setting the scene

It is one thing to seek for an economically optimal marketing system, another to propose an efficient system which would also be politically viable, and still another to analyse the past and possible future trends in the real political economy. Here we embark on the third, disillusioned, road — a road where self-interest is often a motivating force which surpasses general good and where totality is determined by the interaction of conflicting motives and aims rather than careful planning.

Political economy is a filter which shapes, dilutes and modifies the effects of policies, however carefully they have been planned. For this reason, an analysis of the political economy is a logical necessary step before an analysis of the impact of SAP.

Stakeholders in the political economy of the food marketing issue are producers, consumers, traders and government. In addition, foreign powers enter the scene through the import at world market prices and through the political conditionalities of development aid. The political process means first and foremost alliances between major stakeholders and their sub-groups. At the centre of the political scene is the government because it can change the terms of food marketing by legislation and coercion.

It is a serious error to consider any of the stakeholders as a homogeneous group. 'Government' involves a whole myriad of conflicting interests; the entire nation in miniature. First, high politics at governmental level tend to include interventions on food markets which can strike like a sudden flash in the early rainy season. Second, regional and ethnic politics at lower levels affect food security considerations. Third, trader connections impact on governmental decision-making. (Earlier crop parastatals and cooperatives were able to generate their own power bases within the state apparatus and could modify proposed changes. The wave of reform has recently diminished the importance of this power base.) Thus governmental policies are linked to constituencies, patronage networks and a balancing of conflicting interests.

As far as consumers, producers and traders are concerned, each group can easily be divided into two sub-groups – the poor and others. Poor consumers are likely to face the severest difficulties in food provisioning because they have limited capacities to protect themselves from spatial and seasonal variations, which can fluctuate as much as 50 per cent below or above the average trend price. In comparison, rich consumers can buy food after harvest, or to take advantage of food in surplus areas and store it in safe storage facilities.

In food production, a major difference exists between smallholders (below or above subsistence level) and estate food producers. Smallholders have erratic and expensive input supply and they are likely to sell a part of their product immediately after harvest. By contrast, estate farmers have possibilities to market the product to deficit areas during food shortages. They can also bypass some of the lower sections of the food marketing chain to increase their own profit margin.

Traders are a mixed lot. Petty traders can be very efficient as they use whatever transport is available for short distances. However, the existence of surplus labour and high rate of entry to trading has flooded the market with young inexperienced traders. Harsh competition diminishes their profit margins. A major factor determining the profitability of food trade is (exogenous) question of whether trading is practised by specialized food traders or by non-specialized traders. Several studies indicate that large-scale traders seldom specialize in food marketing but direct their resources to whatever item of trade is most profitable (e.g. Chachage 1993:234 and Parsalaw 1996 on Tanzania). One can hypothesize that food trading is conditioned in many areas by the trading of export crops which tend to have higher per kilo profits. Thus, long distance trading of food crops competes seasonally with export crops in the availability of transport and funding. Large scale traders enter the food trade only when they can see comparatively high profits.

With this network of stakeholders and sub-divisions, the political process is complicated. Reverting to the central role of government, a question worth asking is whether and when does a government see food producers or food consumers as its primary target group and in what circumstances are the needs of traders directly served? While each group has legitimate claims on the state, it is the task of political process to direct distribution. Each group is further divided into sub-groups with antagonistic interests. Table 3 provides basic analysis of the relationship between different instruments and their distributive effect among consumers and producers. Interestingly, this World Bank table does not show estate farmers, nor any trader groups or government representatives as interest groups.

TABLE 3
HOW DIFFERENT POLICIES AFFECT DIFFERENT GROUPS

	Effect on real income in short/medium term					
	Effect on food prices	Urban poor	Rural landless	Subsistence farmers	Small farmers with surplus	
Reducing imports of food	A	•	•	0		
Expanding imports of food	₹	À		Ö	▼	
Subsidize food roduction:			^	-		
Foods not traded internationally	•	A	A	•	•	
Foods traded internationally	0	0	A	A	A	
Reduce subsidies on food production:						
Foods not traded internationally	•	•	•	•	•	
Foods traded internationally	0	0	•	•	•	
Subsidize food prices for consumers, maintain producer prices	•	A	•	0	0	
Augmenting incomes targeted or market-wide	0	A	A	A	A	

Source: World Bank (1988)

Legend: Improvement
No effect
Moderate deterioration
Moderate improvement
Deterioration

▼

How do the alliances between stakeholders change? A growing concern in liberalized economy has been the austerity of the state's fiscal situation and the resulting alliances of leading politicians with businessmen. This is most clearly felt in situations where multi-party politics has eroded the ruling political elite's direct access to state finances. Alliances between top politicians and large traders/farmers are facilitated by the overlap between these groups. Gibbon et al. (1993:147) maintain that in this situation, privatization means allowing 'the state bourgeoisie to legally privatize its interests without transforming its essentially parasitical form of economic operation'. However, it should be added that private food marketing provides relatively limited opportunities for exceptionally high profits (except for imports exempt from duties). Consequently, it is a marginal playing field.

The political economy perspective should also include international actors, namely the private sector, Bretton Woods institutions and other donors. Again, new coalitions are emerging within and among these groups and the domestic stakeholders. Whereas donors have classically supported centralized governmental organizations in food

marketing, they have increasingly turned towards solutions in which private traders and market mechanisms are seen as the key players. Donors still cooperate with governments as it is extremely difficult to bypass the government to provide aid directly to traders. In this turn, and the concomitant hesitation in project aid, donors have used programme aid, including political conditionality, as a convenient tool to make their position known.

History shows that food marketing has always been a battlefield with high political stakes. In the following, we define seven intertwined political issues which continue to exist or become even more delicate during structural adjustment: urban food provisioning, overall food security, intervention to stabilize fluctuating food prices, inter-regional interventions, trader policies and food imports.

6.2 Subsidized urban food provisioning

The first political battle concerns policies to keep politically-conscious classes satisfied through moderate food prices. This is commonly translated as the issue of urban food provisioning. Urban food prices were kept low in order to keep wage-inflation low. Low inflation was a major aim in pre-adjustment economies where exchange rate and foreign trade were controlled and wage inflation would have limited the command over economy.

It was widely believed that liberalization of food marketing and particularly a decrease in urban food subsidies would induce riots. While riots did occasionally take place during the course of price deregulation, they have been less frequent than initially anticipated. This may reflect the fact that a large section of urban food provisioning was supplied by parallel markets or through self-provisioning. Although efforts were directed at low-income groups, food subsidies targeted to the poorest urbanites tended to disappear only to re-emerge in the parallel markets.

The high rate of urbanization translates into accumulated urban food problems. Urban agriculture has partly provided food to urban people but this window for the poor is closing. The scale of the problem depends on the individual country and town. Lagos is an extreme example: its population is estimated to reach 24 million by 2015 and for such magnitudes, no minor solutions will be feasible.

6.3 Overall food security

Food security is a larger political issue. It concerns food prices but even more so, food availability in emergency areas. International organizations and donors have pushed for the creation of storage facilities which would guarantee the availability of basic grains in poor years. This is not a minor investment; Pinckney (1993:325) estimates that the storage of food grain would require high initial capital costs to build facilities plus an annual cost between 15 and 25 per cent of stock value. Since harvests vary considerably, governments have been tempted to build considerably large storage facilities.

However, grain and storage facilities designated for emergencies can also be used for other purposes. Since food demand is usually below supply, and since price can be

manipulated by sudden influxes to the market, political leaders have been tempted to use security food to canvass votes or political support; political considerations here surpass economic rationale.

Emergencies receive political recognition and create international participation. If there is one group of forgotten and powerless stakeholders, it is the rural poor who are net food consumers but are not affected by emergencies. In the political debate, their interests have been largely ignored.

6.4 National food self-sufficiency

While food security is a major political issue, the question is still whether the government relies on imports to reach this goal or whether it concurrently hopes to aggregate food self-sufficiency. Self-sufficiency may not be an important aim in itself, but if imports lead urban consumption patterns to favour pure importables, and if rural producers losing their buyers also lack substitute crops with good markets, the policy leads to rural impoverishment.

In practice, self-sufficiency is a long-term production issue and marketing policies have limited possibilities for improving the degree of self-sufficiency. National self-sufficiency in all major staples is an unrealistic short-term aim for most countries. Given the discrepancy between consumption and production patterns, and given the (common) comparative advantage of export crops to food crops, many governments have abandoned the idea of self-sufficiency. The WTO is actually forcing the SSA to agree to a certain amount of food imports. Countries are exempted from tariff reduction in major staple foods as long as imports are at least four per cent of consumption in 1995 (Hoekman and Kostecki 1995:206).

6.5 Price stabilization

One related political question is, whether (and to what extent) government should stabilize food prices. This actually concerns two separate issues: the stability of producer prices and the stability of consumer prices.

Producer price fluctuations are caused by several factors. Firstly, the supply of food is seasonal and erratic. Secondly, when farmers sell only their surplus, they can withdraw from market trade if the producer price development is unfavourable. A part of food producer price fluctuations can be explained by the allocative strategies of food producers. Thirdly, traders need to allocate their scarce resources to food trading and other activities according to seasons. With limited capacities to finance crop purchases, they tend to pass price fluctuations onwards. What traders can more positively do is to reduce a part of spatial price variation. The mechanism for producer price fluctuation is more readily understood when it is acknowledged that food marketing constitutes surplus resources in double sense of the word. First smallholders sell their surplus production to markets and then traders apply their leftover resources to food marketing. It is easy to see that food marketing, based on such precarious mechanisms and marginal resources, could be subject to fundamental problems.

Volatile changes in producer prices are likely to diminish the interest of farmers to invest in agriculture. Fluctuations have also another impact: the seasonal variations coupled with inflation hide the increases in real prices from the farmer. In other words, producer price increases need to be very substantial for the producer to recognize it as an incentive instead of just a temporary fluctuation.

Volatile markets are usually expected to hurt poor consumers and thus price stabilization is expected to have a positive impact on equality. Pinckney (1993:326-7) argues on the basis of other studies that '(1) costless price stabilization may or may not be beneficial, depending on the shape of the demand curve; and (2) that the welfare costs of price instability, when they exist at all, are relatively unimportant.' Thus governments should not intervene in food market. However, he continues that this is based on static analysis and that there are several dynamic factors that have welfare costs or effects on investments. Based on model calculation for a free market situation, Pinckney estimates that the coefficient of variation of price would range from 22 to 38 per cent, depending on the country. Pinckney concludes that governments should adopt transparent methods to intervene in the markets and that they can intervene effectively with much lower stocks than what they generally have maintained.

The existence of heavy seasonal price fluctuations and spatial price variations does not indicate the failure of marketing reform in the sense that traders were not competitive. Fluctuations and variations can equally be indications of imperfectness in infrastructure. In realexistierende capitalismus there are always similar imperfections. The issue is whether such fluctuations are permissible. A review of studies shows that governments are unwilling to tolerate full price fluctuations but tend to intervene through imports or other means. Here, government policies vary to a large extent. It is interesting to note that some of the countries which have tried to keep up food reserves and the control of marketing of key food crops are landlocked ones, e.g. Malawi, Zimbabwe, Zambia. Governments have continued interventions in countries where key crop prices (both producer and consumer prices) are central to open political debates, e.g. Kenya and Zambia.

6.6 Limiting spatial price variations

In the political economy of food marketing, spatial distribution of benefits is a special issue because it tends to unite different stakeholders with similar ethno-cultural background. The existence of strong regional cliques may cause divisive policies which then call for counter-measures by national leaders.

Many SSA countries have significant variations in the agro-ecological zones within their borders. Population densities are not necessarily located according to good agricultural areas and as a result, food needs to be transported from one location to another. During the pre-adjustment era, most interventionist governments provided pan-territorial prices for all citizens. The aim was two-fold: first, to increase national political cohesion and, second, to boost agricultural production in the peripheral areas. In large and sparsely populated countries, this policy directive was extremely costly. Adjustment policies have eliminated the concept of guaranteed pan-territorial prices. Consequently,

differences between regions within a country are expected to increase. The losers from this trend are peripherals who produce simple staples and who, due to distances and/or natural conditions, are unable to shift to bulky and perishable vegetables or other food crops.

When the spatial variation of food prices is analysed, and when the role of parallel market is fully observed, food prices for several crops show noticeable local differences. Localized marketing circuits create price variations which can be multiplied during drought (Endale 1993). Van Donge has conducted an excellent analysis of locational price variation in Tanzania. He states that:

... maize markets throughout Tanzania appear to be highly segmented, and the pattern of supply and demand may be locally determined to a large extent. If national policies and economic constellations are determining forces of supply and demand, one would expect price movements of, e.g., maize to correlate throughout Tanzania. That appears hardly to be the case. A correlation of open-market prices in 14 different places over the period 1983/89 shows few significant correlations (van Donge 1994:166).

This result is in sharp contrast with the conventional national frame which calls for more localized solutions to the food issue (cf. also Berry 1993).

6.7 Policies to provide a conducive environment to private traders

Another political debate concerns the policies towards traders. Government should have political control of the traders but should simultaneously support their activities. Policies towards traders need to be permissive but, if large-scale traders join ranks to make demands, they will soon become an independent political force. Even small-scale traders can form their own political platforms for demands and, since they are overwhelmingly young and poor, they may easily resort to violence. These developments are hardly acceptable to governments and efforts are made to co-opt the traders.

A major question in trader policies is the role of 'non-indigenous' (local or foreign)-large traders. Trading may require large amounts of available money for investment, and as non-indigenous traders have often capacity for investment, they can play a key role in urban food marketing. This tends to create racist antagonism which is exacerbated by the populist undertones in the multi-party politics. Political debate commonly offers proposals for property confiscation of the 'non-indigenous' traders which likely will decrease the willingness of these traders to make long-term investments.

Government is expected not only to control traders and to arbitrate their interest conflicts but also to help them through the provision of services and infrastructure. Political discussion has increasingly changed in the fact that traders are no longer seen as 'parasites' but as having an important function in the totality. Nevertheless, the ability of the traders to handle vast quantities of money, their mobility, and the cases of quick enrichment of a few individuals, tend to create jealousy in other interest groups. Thus it

is not easy for a government to make large visible investments which would directly serve the needs of the traders.

Traders have always made their own policy choices. Cross-border trade has been widely practised in countries like Tanzania where high-potential agricultural areas are near borders and where large markets exist across the border. Cross-border trade is further enhanced by the price differentials between the countries. In the pre-adjustment situation, differences in controlled prices were so extreme that even crops collected through official marketing systems in distant areas leaked across the border, making food security calculations very difficult for the government. For traders, trade was a profitable commercial operation. With structural adjustment (including exchange rate adjustments) in effect in both neighbouring countries, price differentials have diminished, a factor which has lowered cross-border trade. Official statistics for cross-border trade are so unreliable that it is impossible to estimate the effect of liberalization of food marketing on cross-border trade.¹³

6.8 Adequate food import

The last political question, namely import policy, is directly linked to the four questions discussed above. First, imports affect the rural-urban bias. Second, food import is a major tool for price stabilization. Third, food import to coastal towns sets these centres apart from the hinterlands. Fourth, food import is potentially a good business opportunity for large-scale traders.

Food import has increased in many SSA countries during the last ten years, reaching such levels that total agricultural import (primarily food) equals the export level of agricultural products (primarily non-food crops like coffee, cocoa etc.) (FAO 1995b:76). Entire Africa consumes 184 kg of cereal per person per year, of which 42 kg is imported (Alexandratos and de Haen 1995:365). Import-dependency of the individual countries varies considerably, with small islands and Mauritania leading cereal imports (see column 6 in Annex 1). Annual import requirements vacillate considerably from year to year, reflecting sporadic ecological and man-made catastrophes. Some of the import-dependent countries in Annex 1 have been temporarily handicapped by draught in southern Africa or by political disturbances.

Control over food imports is a political issue and many governments had a monopoly on import in the pre-adjustment era. The reasons were two-fold: first, to protect the emerging local production capacities and, second, to gain certain advantages from the control of food, such as forms of political clientage but also form of rents acquired from a control position in restricted food markets.

Food aid constitutes food import at a bilaterally agreed concessional price and where the concessional element is at least 25 per cent of the market value. Food aid formed over

¹³ Yeboah (1993) has conducted a thorough analysis of the official cross-border trade of food in Africa. His results show that the level of cross-border trade is very low compared to international food trade. A part of the cross-border trade is actually a result of the purchases of food aid conducted by external donors. Cf. Clay and Benson (1991) on such triangulation operations of aid.

30 per cent of the cereal import in Angola, Burkina Faso, Cape Verde, Chad, Ethiopia, Lesotho, Liberia, Madagascar, Malawi, Mozambique, Niger, Rwanda, Sao Tome and Principe, Somalia, Sudan, Uganda and Zaire in 1990/91 (cf. column 2 in Annex 1). Recent estimates suggest that the need for food aid is increasing but that availability of surplus stocks for conversion to aid is decreasing in the USA and Europe. Here, the policy line of donors is the determinant factor and recipient governments need to adjust their commercial food import to the aid situation. Governments have good reasons to exaggerate the need for food aid as it can minimize the need for food import. In this sense, food import is a residual policy parameter. However, given the difficulty of crop estimation (and the need for early import decisions to allow time for shipments), decisions on the quantities imported are most likely to be political, based on fiscal situation as much as effective demand.

6.9 Diverging aims

Political economy shows that food production is subject to diverging political aims and the government may try to balance between these aims. However, it has only a limited control over food markets. In the 1960s and 1970s, the food marketing scene was overshadowed by nation building in which food marketing was a tool to achieve this end. In the 1980s, the political scene changed and governmental interventions tended to be strategic and targeted to short- or medium-term impacts. Actions by farmers and traders may fully off-set the original aims of the government. Politics on urban and rural bias is based on the suggestion that urban consumers are a vocal political group. This is true but it does not mean that rural producers are without any political means. Rural producers can shake national economies simply by making household level allocative decisions (through 'exit' or diversification in production and through networking and effective links in circulation) which can result in major shifts in production patterns. Unpredictable supply responses are an indication of this political muscle (Hyden 1980; Berry 1993).

Finally, it is worth repeating that none of the stakeholders form a homogeneous group. Instead, a part of the government may form alliances with estate farmers while another department may join ranks with smallholders For these reasons, the effects of policy changes – like marketing reform – are not straightforward.

7. THE IMPACT OF MARKETING REFORM ON FOOD PRODUCTION AND PRICES

7.1 Contradictory effects of structural adjustment measures on agriculture

When marketing reform has been advocated, the aim has been two-fold: increased producer prices and subsequently increased production levels. Many case studies take up

¹⁴ The reservation to this prognosis is that the production capacity of the USA, Canada and European Community depends on the levels of subsidies and the policy on acreage temporarily removed from use. The production capacity of the former USSR and the consumption level of China are other factors creating uncertainty in the predictions of the future grain markets (Boonekamp and Cathelinaud 1996).

the issue of whether price increases (established in the SAP context) provide adequate incentive for farmers to invest increasing efforts and resources on crop production. Some studies point out that price incentives are secondary to the availability of attractive consumer goods. Yet, others argue that the importance of input prices (fertilizers, transport etc.) and availability are more significant than output prices. Platteau (1995:469) argues that increased prices will only generate an once-for-all response which is unlikely to lead to continuous increases in the current technological system. He calls for more technological innovation and other reforms to tackle production issues directly. In the state-peasantry relationship, he calls for less paternalistic and interventionist policies because 'guiding' has heavy transaction costs and provides limited returns. Given these reservations, it is unlikely that the effect of potential price increases would be unilinear.

Actually we can ask, whether increased producer price is the primary objective of SAP. Initially the aim of structural adjustment programmes was to provide incentives for rural producers through increased producer prices. At the same time, there were pressures to keep local consumer prices, especially for food, low. In order to reach both objectives, the costs of marketing (including transport etc.) should be decreased. Table 4 shows how different reform measures are likely to serve these three distinctive aims.

The figure indicates the short- to medium-term effects of key policy measures individually for non-tradeable crops, competitive crops and only importable crops. As it is evident from Table 4, the different measures have contradictory effects. While one measure can increase producer or consumer prices, another measure may have diametrically the opposite effect. For example, deregulation on the part of crop prices may increase prices but on the part of input prices, it may increase production costs and diminish profits to the farmer. When measures have opposing signs, the end result is not easily predictable.

Reading Table 4 horizontally, we can see that each measure may have different effects if the impact is disaggregated according to crop category. For example, liberalization of import is likely to decrease marketing costs of competitive (i.e. locally produced and imported) crops and (pure) importables, but it does not have direct impact on the prices of non-tradeables.

In the analysis, the effects of marketing reform (i.e. domestic price deregulation) are difficult to separate from other (SAP related or independent) policy changes, or changes in the external environment.¹⁵ The analysis of producer prices is a classical example where the effects of marketing reform are linked to other factors. Perhaps the most accurate indicator of the success of marketing reform is the producer/consumer price ratio. However, there is a profound lack of primary data and this ratio has not been

¹⁵ The methodological problems of analysing the effects of the SAP (as opposed to other factors) are well-known (e.g. Killick 1995:36-53; Krueger et al. 1991). The problems of analysing the effects of a single reform measure (i.e. domestic marketing liberalization) are even more difficult. In the case of marketing liberalization, the issue is further compounded by the fact that different measures have contradictory effects.

systematically collected for a number of countries for a sufficiently long period to make the pre- and post-adjustment comparison possible.¹⁶

TABLE 4
THE EFFECTS OF LIBERALIZATION MEASURES ON FOOD PRICES

Reform measure	Profit for producer			Consumer price			Marketing costs		
	ı	11	111	I	11	111	į	11	III
Domestic price deregulation	-	7	71	7	71	71	-	ä	Ä
Input price deregulation (1)	_	ä	Ä	_	71	71	_	_	
Reduced food security interventions (2)	<u>-</u>	71	-	7	71	7	7	7	Z Z
Liberalized food import		'n	→	Ä	7	→	u	7	→
Exchange rate depreciation	-	71	→	71	71	→	-	-	-

Notes: Legend for columns:

I - Importable

II - Competitive

III - Non-tradeable

Given the limitation of data, we have to utilize the second best data sources. In the following, the review starts with a time series analysis of food production data and then proceeds to analyse price data. The objective is to determine whether countries show some significant variation that can be explained by the implementation of marketing liberalization measures.

7.2 The effects of liberalization measures on food production

The World Bank has analysed the implementation rate of food marketing liberalization measures and FAO provides data on food production in Sub-Saharan Africa. By combining these two data sets, we can estimate whether countries with liberalized food marketing have in fact increased their production levels more than countries which have not liberalized. In addition, there is a third group of countries; i.e. those that have had private sector control over food marketing both before and after adjustment.

⁽¹⁾ This means usually the end of subsidies price for inputs.

⁽²⁾ Less food aid at concessionary prices; smaller buffer stocks; strict criteria for food security interventions.

¹⁶ Bryceson (1994) calls the small and quick surveys on traders and their marketing behaviour as 'impressionistic', advocating for more systematic analysis with a combination of quantitative and qualitative methods.

Even though the following analysis utilizes much of the data and categories used by the World Bank (1994 and 1996)¹⁷, it is still not possible to fulfil all the requirements. For example, the World Bank uses certain selected key crops while the FAO data has a slightly different crop selection.¹⁸ The time-series data on the production of key food crops is plotted on Figures 1a to 1e (see also Annex 6) on which the year 1990 is the base year. The data shows that there has been significant variation in food production both before and after adjustment but no clear pattern exists between countries with liberalized marketing or retained control measures, and countries which have always relied on private marketing channels.

The classification of countries calls for an explanation. Countries are classified according to 'liberalization score', an indicator reflecting policy change, specifically constructed for this analysis. It has been constructed by combining two indicators which characterize circumstances 'before SAP' and 'after SAP' (World Bank 1994:85). The values of the liberalization score are ordinal scale values which reflect change in policy between before and after SAP situations. The liberalization score is allocated four values; the value 'private marketing' demotes no intervention on key crops. 'Liberalized food marketing' identifies countries where previous state intervention had been removed by 1992. In countries where some or heavy intervention had existed before SAP and some retained in 1992, the value is 'limited intervention'. Finally, if major restrictions have been retained, the value is 'major restrictions'. The classification can be converted into an ordinal scale because the World Bank primary data does not include cases in which a country had shifted from a more liberalized position to a more interventionist position. Instead, all countries are reported to be on lineal development towards liberalization (cf. columns 2-3 in Table 2). Full liberalization of key crop marketing has taken place in 15 of the analysed 28 countries. These countries accommodate 129 million people out of a total of 332 million; thus, liberalization is affects 39 per cent of the population studied.

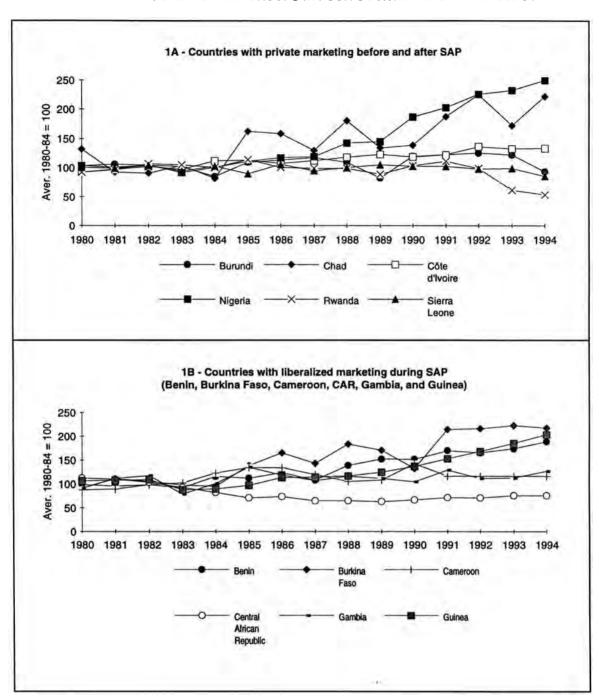
The data presented in Figures 1A-1E is descriptive and shows the variation in full, indicating differences in food production are higher within the country groups than between the country groups. Thus, classification of countries by the liberalization score explains only marginally the growth performance of key food crops.¹⁹

¹⁷ There are good grounds to challenge the analysis of both data and categories of the World Bank in some individual cases. However, given the overall deficiencies in the statistical data and the lack of definite alternative criteria for the degree of marketing liberalization, we have opted to use the data as it is. The same applies for FAO data. See Raikes (1988:17-23) on the accuracy of the FAO production estimation for Africa.

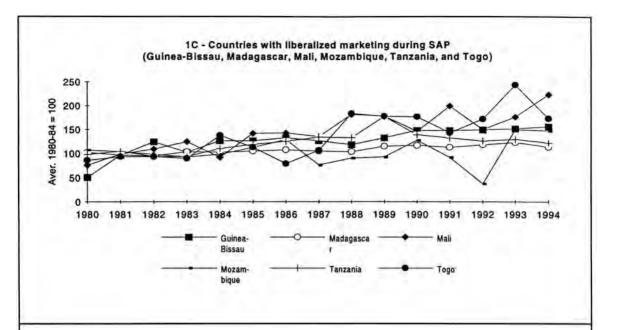
¹⁸ The key to the analysis is the categories used by World Bank (1994:85). See Annex 5 for the key crops in various tables. The World Bank production tables exist only from 1985 and for this reason original FAO statistics are used in tables starting from 1980. This modification has caused minor changes in reported key crops (e.g. 'tubers' replacing cassava). Whenever data is available for the same crop or its relevant substitute, it is included in the analysis; otherwise the crop is dropped. If no crop remains for analysis, the whole country is dropped. It is noteworthy that the following analysis covers then only selected key crops, not the total food production.

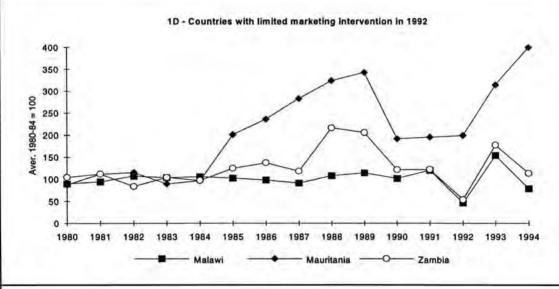
¹⁹ Two reservations concering the results need to be made. First, the time period is still short. It is convincingly argued that there can be a lag of 5-10 years between policy reform, price changes and the supply response. Although the African farmers have been shown to be price responsive in some studies in

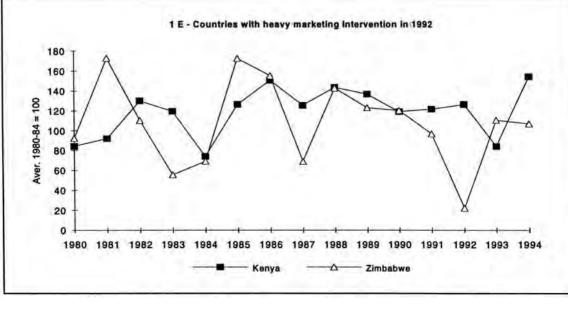
FIGURE 1
FOOD PRODUCTION OF KEY CROUPS IN FOUR COUNTRY GROUPS IN 1980-94



the 1970s, it is not evident that they would have means to be as responsive in the contemporary situation (Harvey 1985:6). Second, countries differ in terms of the initial situation in the efficiency of agriculture. If agriculture is already utilizing available land and labour relatively efficiently, liberalization measures have less scope to generate improvement.







In order to simplify the differences between country groups to the extreme, we have counted the population weighted average growth rate for the years 1990-94 (see Table 5).²⁰ The country group comparison implies that growth has been highest in countries with private marketing while countries with state interventions in food production have lower growth rates. The population weighted average growth rate of key crop production in countries with private marketing was 4.9 per cent, compared to 1.3 per cent for liberalizing countries. Production of key crops decreased in the interventionist countries. Looking at these figures only, it can be said that liberalization of food crop marketing enhanced a positive agricultural production environment in the early 1990s, providing an incentive to increase production of that particular crop while state interventions were a disincentive for the key crop.

TABLE 5
THE AVERAGE GROWTH RATE OF KEY FOOD CROPS IN 1990-94
(SSA COUNTRIES GROUPED BY THE LIBERALIZATION SCORE)

Liberalization score	Population weighted average growth rate in 1990-94	Number of countries	Population in 1994 (in million)
Reliance on private marketing before and after SAP	4.9	6	144
Marketing liberalized between 1980 and 1992	1.3	14	129
Limited state intervention retained in 1992	-5.9	3	22
Major state intervention retained in 1992	-1.7	2	37

Sources: World Bank (1996:228-31) for data and World Bank (1994:85) for categories.

Next we analyse the growth in the individual countries within country groups in the early 1990s. Countries relying on private marketing of key food crops before and after SAP include West African countries plus Burundi and Rwanda. Within this croup, the production of cereals in Chad shows a substantial growth in the early 1990s. Burundi and Rwanda are dismal cases which can largely be explained by political unrest

The countries which liberalized food marketing during the course of SAP implementation are numerous. Positive examples are Burkina Faso (cereals), Guinea (rice) and Mali (cereals). Also Benin (roots and tubers) shows a steady growth over a longer period of time. The Central African Republic which produced decreasing amounts of cassava in the 1980s, signed its first SAL in the 1987 and has shown a slight recovery in the early 1990s. While none of the countries can be classified as failures in the 1990s, it is evident that Cameroon (cassava), Madagascar (rice) and Tanzania (maize) have not done well.

²⁰ The production data is significantly affected by a few exceptional figures, reflecting the 1992 drought in southern and eastern Africa and warfare, e.g. in Burundi.

Countries with continued government intervention in food marketing after SAP show wide differences in key food crop performance. Mauritania (cereals) has an excellent growth path in the 1990s. Malawi (maize), Zambia (maize) and Zimbabwe (maize) were extremely hard hit by the 1992 drought but recovered fully recovered in one year with the exception of Zimbabwe which was again defeated by drought in 1994. In Zimbabwe, large farmers, frustrated by marketing policy, shifted to other crops (Jiriyengwa 1993:319). Kenya (maize) has performed moderately.²¹

Competitiveness of various crops is an intervening variable which partly explains the variation between the country groups. Different key crops face different competition. In general, the production of non-tradeable key crops has increased more than the production of rice and maize in this sample. An average population weighted increase of key crop production was 3.9 per cent for countries with non-tradeable key crop compared with 2.6 per cent increase for rice and 2.2 per cent decline for maize during 1990-94.²² This result in not independent from the liberalization score analysis. However, it points to the importance of the 1992 drought on maize producing countries. This is also evident from Figures 1A-1E.

Results for the 1990s hide also another factor related to demand. All countries classified as interventionist, with the exception of Mauritania, had reached a food staples self-sufficiency ratio above 100 in the period 1988-90 (IFAD n.d.:60). This does not mean that the interventionist countries (i.e. maize producing countries in eastern and southern Africa) had eradicated food security problems in all sections of the population but it does indicate a successful production increase in the late 1980s and that domestic production exceeded effective demand at the existing prices. Due to the resulting low maize prices some farmers, especially in the estate sector, have increasingly shifted from maize to other crops.

Roughly similar results between country groups are apparent if a longer time-frame is used to compare key food production figures to pre-adjustment and post-adjustment periods. This is done by comparing average production figures between the periods 1980-84 and 1990-94 and by multiplying the percentage change by the country's share in the population of the country group.²³ In countries relying on private marketing, the population weighted growth was 43.8 per cent between the two periods. In liberalized countries, the growth was 24.6 per cent. Key crop production increase was 12.5 per cent in countries which had sustained limited marketing intervention while in heavy intervention countries, growth was 9.5 per cent. Good performance of the 'private marketing' country group is largely explained by Nigeria's increase in root crop production. If Nigeria were excluded, production growth in the country group would be just 14.0 per cent (i.e. negative per capita change).

²¹ Kenya has actually embarked on liberalizing its maize marketing after the 1992 cut-off point used in this study. Its maize production increased considerably in 1994 but it is not self-evident whether the major explaining factor is marketing reform

²² Based on World Bank (1996:228-31) growth figures and key crops.

²³ This means that each country value is multiplied by its population size in 1992. Thus no changes in country populations (i.e. per capita figures for each year) are included in the equation. Long time-spans are used for country averages in order to minimize the effect of temporary droughts.

7.3 The effects of marketing reform on food prices

Next the analysis of countries classified by their implementation of marketing liberalization is repeated, but this time the data on producer prices is examined. The question is, are countries with liberalized food marketing able to provide farmers with substantially higher producer prices than before liberalization. Second, we can compare the liberalizing countries with others to determine whether there are significant differences in price development between the country groups.

The World Bank does not provide price data on all key crops in each country.²⁴ The paucity in data typically concerns roots and tubers which are bulky and thus have varying prices. Since price data is available only for some of key crops that the World Bank has used to describe the rate of implementation of liberalization policies, we are compelled to omit certain countries from the analysis.²⁵

In order to generate comparable price data, nominal prices (World Bank 1996:217-23) are deflated by GDP deflator. Real prices are then indexed to 1990 as the base year. The results are plotted in Figures 2a-2d (see also Annex 7.)

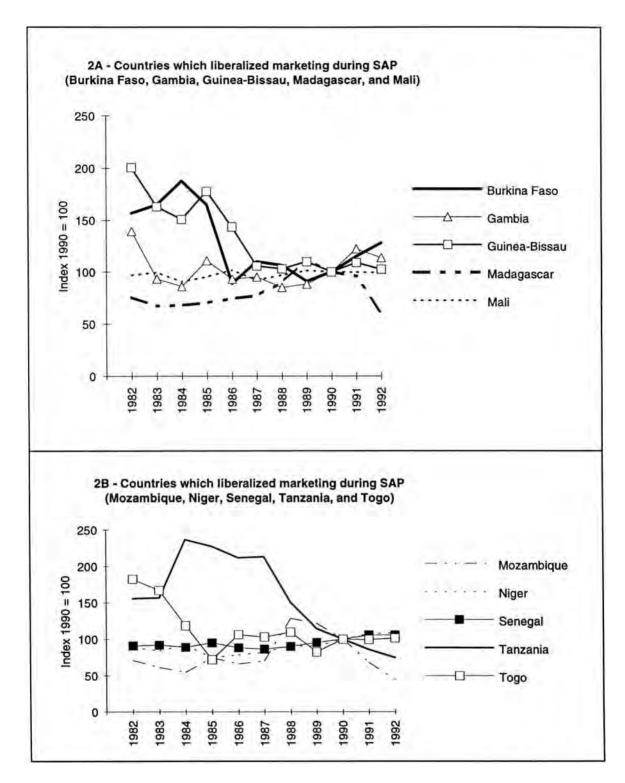
Again, the results between the country groups are, as expected, ambiguous. There are no simple distinctions in the key crop price development between liberalized and interventionist countries which could be located on the basis of descriptive plots. Variations within country groups are larger than between country groups. The results indicate that the importability of a crop is a likely explanatory variable. Crops like millet and sorghum have yielded good producer prices because of the lack of imports, while producer prices for maize and rice are more vulnerable due to competition.

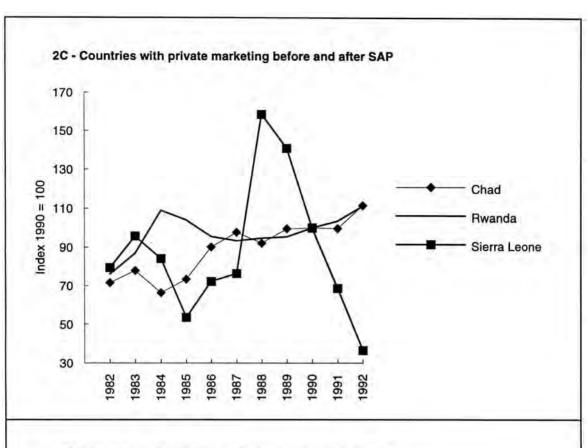
Three countries have relied on private marketing of key crops. Among these, producer price for rice collapsed in Sierra Leone in 1991-2 while Chad (millet) and Rwanda (sorghum) have a sustained level of real producer prices.

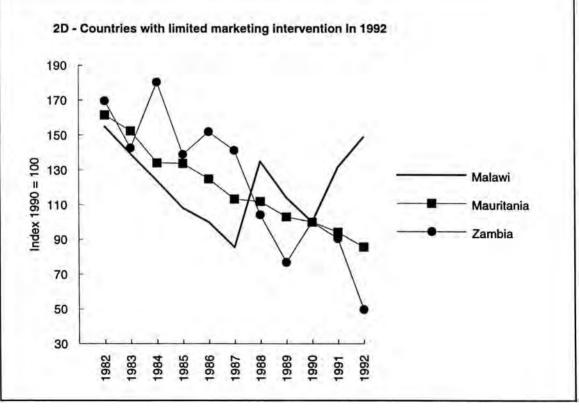
Countries (with available price data) that have liberalized food marketing are an extremely heterogeneous group. Guinea (rice), Guinea-Bissau (rice), Mozambique (maize) and Tanzania (maize) have declining food producer prices. No country can be singled out as an example of a substantially increased producer prices.

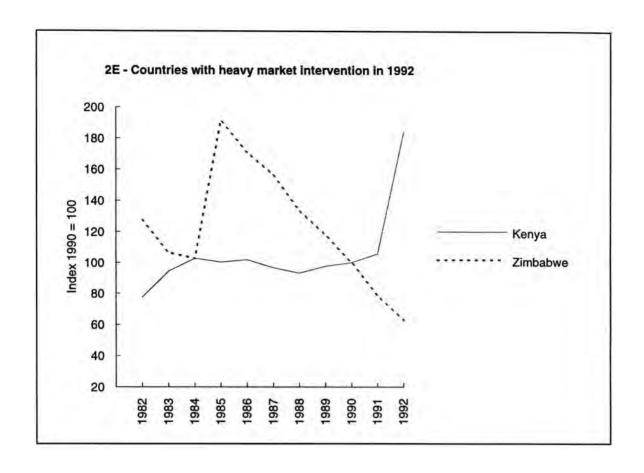
²⁴ The comparative price data available extends only to 1992. The time series is too short for calculating any regression coefficients for the post-adjustment period, given the fact that there is a lag of several years between the signing of reform and the possible impact on prices.

²⁵ See Annex 5 for countries and crops.









Countries with some government intervention in food marketing include Malawi, Mauritania and Zambia. Malawi (maize) has had a positive price development while producer prices in Mauritania (millet) and Zambia (maize) have been declining. Price decline in Zambia coincided with decreased production, the exceptional development being a reflection of the crisis in the national economy. Although nominal producer price increase was substantial, inflation still exceeded it. Two countries, namely Kenya and Zimbabwe, have sustained heavy interventions in key crop marketing. Real producer price for maize in Kenya in 1991-2 was above the average level of the 1980s whereas in Zimbabwe, maize prize declined.

The results show, by and large, that price development of key food crops is subject to several factors such as the importability of the crop, prices of substitute crops for cultivation and consumption, the existence of other incentives, and the prices of inputs. Thus no clear line can be drawn between the change in food marketing policies and food prices.

There are several explanations for the limited gains of rural food producers. According to one explanation, food price is not determined by demand or relative prices but by the poverty of producers which forces them to sell at a low price. Producers provide their own subsistence with subsistence cultivation and are thus able to sell surplus product at minimal price. When a rural producer enters the market, the sold produce is the result of self-exploitation. If the situation of food producers is so desperate, it is likely that the gains from food market liberalization will be reaped by traders and urban consumers.

8. THE IMPACTS OF FOOD MARKETING REFORM ON ECONOMY

Finally we analyse the causal link of food marketing reform to the economy. In this connection, we look at four issues: the impact of marketing reform on the overall food supply, relative prices between crops, the impact of food marketing reform on poverty and the impact of the reform on the fiscal situation of government. While these issues are important, the causal link is sometimes hard to prove. Thus the analysis in this section is subject to more reservations than the analysis of key crops in the previous section.

8.1 Impact on total food production

Food production has shown a dismal record in SSA for a long period. Production has been growing but population growth has been even faster. Several countries have had severe political unrest which has further deteriorated food production capacity. It is difficult to single out a country that has an exceptionally good record sustained for a long period of time.

A comparison of food production by the liberalization score is presented in Table 6. As indicated, the countries which have relied on private marketing have as a group sustained positive growth rates. Countries with state intervention in the 1980s also had relatively good development in food production in the second half of the 1980s. Growth in the early 1990s was also significantly lower, regardless of whether food marketing was liberalized or not.

An analysis of the country data shows that the overall positive record for private marketing countries was boosted considerably by Nigeria's high growth rate, which had been relatively easy to achieve because of Nigeria's very low record in food production during 1975-84 when oil money depressed these efforts. Thus, Nigeria's initial adverse circumstances account for the country's high growth rate for period studied.

The figures in brackets indicate growth rates in cereal import. Since import levels were initially low, it was easy to reach very high growth rates for individual countries which then distorted the weighted averages. Import levels were exceptionally high in the 1990s for country groups which have sustained marketing interventions, highlighting the severity of drought in these countries in 1992. As mentioned, these countries had reached a relatively high level of food self-sufficiency by the 1990s. The high import figure of the third country group, i.e. those with limited interventions in 1992, reflects the food aid channelled to Mozambiquean refugees through Malawi (cf. Table 1, column 2).

TABLE 6
THE ANNUAL GROWTH OF FOOD PRODUCTION IN SSA, BY LIBERALIZATION SCORE (GROWTH IN CEREAL IMPORT IN BRACKETS)

Liberalization score		ed average growth production in:	Number of countries	Population in 1994 (in millions)
	1985-89	1990-94		
Reliance on private marketing before and after SAP	5.4 (17.4)	4.6 (30.9)	8	164
Marketing liberalized between 1980 and 1992	3.3 (0.0)	0.6 (11.0)	15	132
Limited state intervention retained in 1992	4.5 (25.1)	0.2 (38.7)	3	22
Major state intervention retained in 1992	6.5 (-25.3)	-5.0 (57.8)	2	37

Source: World Bank (1996:225 and 233).

8.2 Relative prices

When marketing reform is implemented for both key food crops and cash crops, its effect on the price ratio between food crops and between food and cash crops is difficult to predict. Often the *micro-sequencing* of liberalization reforms of various crops plays a key role in price development and subsequent cropping patterns. The cases of Zimbabwe, Zambia, Kenya and Tanzania show that liberalization measures can advance step by step, from few crops to all, over a period of more than a decade. During that period, especially large-scale commercial farmers are keen to shift to liberalized crops regardless of whether they are food or cash crops.

World market prices have different dynamics than local prices. When crop marketing was controlled by the state, it partly cushioned local price swings from international shocks. When world crop prices dropped, government revenue on that particular export crop diminished (Deaton and Miller 1995). Liberalized markets do not have equal safeguards and price fluctuations are more directly felt in the local economy.

Marketing reform also has an impact on the price ratio between non-tradeable and tradeable (i.e. imported) food crops. Their relative shares in the domestic food market will change over time as both importers and local farmers respond to the new situation. However, it is not possible accurately which crops will win in the long run. While wheat and rice are increasingly popular, their prices are also affected by changes in world demand. Given the estimates of income development in the SSA countries, it is far from certain that per capita consumption of wheat and rice can increase significantly.

A major policy factor having more direct bearing on the rate between tradeable and non-tradeable crops is change in the exchange rate regime to a market determined rate. In conventional macroeconomic approaches which study the equilibrium real exchange

rate, prices of non-traded crops are determined endogenously. The only usual exogenous arguments are macroeconomic policy changes and external market prices. However, one should not underestimate the importance of these non-political rural crops in agricultural reform. Delgado (1992) has made a compelling analysis of the exogenous effects of increases in rural staple food on the costs of rural labour, and thus on production costs of cash crops. Delgado argues that the non-traded starchy staples (millet, sorghum, yams, cassava, pulses etc.) amount to 20-40 per cent of consumer expenditure in West Africa. Since these are not easily substituted by importable grains, they effectively shape the economy into semi-open economy where domestic food production conditions and prices do matter. Consequently, policies which recognize domestic food price as determined endogenously by equilibrium real exchange rate are inadequate unless supplemented by an analysis of the development in the production of starchy staples.

8.3 Poverty

The effects of marketing reform on poverty are likely to vary significantly according to the cause of marginalization and at least four different target groups can be identified. *Poor urban consumers* are affected by higher price fluctuations when government food security interventions and price controls are scaled down. Urban residents able to garden farm in the cities or those who have close links to rural areas are better equipped to protect themselves from fluctuating prices. However, the difference between pre- and after adjustment periods should not be exaggerated. The evidence from Mozambique shows that subsidized food/food aid seldom reaches the urban poor, as middlemen corrupt food provisioning systems (Sahn and Desai 1995). Recent evidence from eastern Africa shows that the poor urban consumers gain when small-scale milling increases.

Poor rural consumers tend to be agricultural labourers or smallholders who are only seasonally dependent on marketed staple food. The impact of food marketing reform is likely to be small because rural consumers have always been largely beyond the reach of official marketing channels. Instead, rich rural consumers may increase their market dependency as their consumption of imported food increases. Consumers partly shift to imported food to imitate the urban consumption patterns, and partly to soften seasonal price fluctuations. Rice, which is often imported, has also gained importance as popular food at festivals and rituals.

Poor rural producers benefit from potential price increases only marginally as their production is largely geared to subsistence cultivation.

Petty traders gain from increased opportunities in marketing. A large part of rural trading is based on food and similarly, a large proportion of services relate to agricultural processing and food catering. Thus the rural poor benefit from new opportunities for income diversification. While the tendency towards diversification in non-agricultural income sources has a long history, it received new impetus from the liberalization of rural trade (Seppälä 1996.)

8.4 Fiscal situation

The literature on state-governed marketing arrangements provides a number of examples of the high costs to the state resulting from food marketing, caused by operational support to crop collection, transport and storage expenditures, and costs of subsidized prices. In case of excess production, the export of food was an additional source of expenditures. Since governments controlled the major part of financial institutions, these were obliged to provide credit for the marketing boards and cooperatives without a guarantee of repayment. This caused great difficulties to the financial institutions. The development also drained credit facilities to the extent where private sector enterprises exceedingly had to rely on informal credit. Thus the fiscal burden was spread to the whole economy.

Some examples of the support to maize marketing in eastern Africa, and the subsequent accumulated fiscal deficits, are provided in Section 9. These examples hint at the scale of the problem. Clearly food marketing became a major cost item for countries aiming to reach food self-sufficiency and to depress artificially urban consumer prices. The fiscal deficit was an even more serious problem because of the simultaneous debt crisis. Reduction of the fiscal deficit was a major target of SAP programmes. If marketing reform has reduced the fiscal deficit caused by marketing costs, it may be said that SAPs have been successful. However, there are some countries where, due to continued political inferences, marketing boards deficits have risen rather than declined after the reforms (Jayne and Jones 1996).

The impact of the fiscal problems needs to be weighted with the growth of production Direct domestic production of food has definite multiplier effects as the food is also locally processed. Increase in food production is also a factor creating higher nutritional levels which directly influence the productivity of labour. High level of domestic food self-sufficiency means that the external balance is easier to maintain as the import bill of food is lowered. Thus in spite of the fact that the direct effects of state marketing controls were costly, they also created indirect benefits for the whole economy.

8.5 Conclusions

The analysis above offers no systematic quantitative data because it is limited to one set of reform measures in a situation where wider structural and institutional changes have been accomplished. As a consequence, it would be difficult to point out clear causalities between these reform measures and the overall economic situation.

If anything, the previous discussion points out that major beneficiaries of marketing reform in the SSA are the governments. Their expenditure on food marketing has decreased and this has lessened their fiscal problems. The effects of the reform on total food production have been modest while the effects on poverty have varied from case to case. Behind the figures, there is often high-level politics as the following case-studies from eastern and southern Africa will show.

9. CASE-STUDIES ON MAIZE MARKETING IN KENYA, MALAWI, TANZANIA, ZAMBIA AND ZIMBABWE

9.1 A framework for the case-studies

The cross-country analysis on SSA countries provided us with a general picture of the implementation of food marketing reforms. There are, however, several institutional and agro-ecological factors which shape reform in the individual countries. The following case-studies shed light on the implementation and effects of marketing reforms in Kenya, Malawi, Tanzania, Zambia and Zimbabwe. These countries share a history of expansion in maize cultivation. Marketed to urban centres, maize has been subjected to exceptionally extensive marketing control by governments. Recently governments have liberalized marketing arrangements but in some cases, changes were made hesitantly and without commitment. While liberalization of food marketing policies have been implemented elsewhere in the SSA, maize marketing in eastern Africa has been dubbed by the World Bank as a trouble-case (1994:84).

The selected countries constitute a suitable focus for a comparative study since they are roughly similar in size and have the same major staple crop. Some major differences do exist in colonial history, agro-ecological conditions and economic policies but one should not exaggerate them too much. As Table 7 shows, there are significant differences in the overall wealth, but significant proportions of population in each country are below the poverty line. Most countries have attained a reasonable food production level, which, however, fell during the drought years well below the level of national self-sufficiency.

TABLE 7
THE BASIC INDICATORS FOR THE ECONOMY FOR FIVE CASE-STUDY COUNTRIES

	Column 1	Column 2	Column 3	Column 4	Column 5
	GNP per capita in 1994 (USD)	Population in millions in 1994	Rural population below poverty line 1990	Food staples self- sufficiency ratio 1988-90	Variability of production of food stables 1965-90
Kenya	250	26	55	110	11
Malawi	140	11	85	120	13
Tanzania	90 *	29	60	117	11
Zambia	350	9	80	105	19
Zimbabwe	490	11	60	148	26

Sources: Column 1: World Bank (1994:34).

Columns 3-5: IFAD (n.d.:60-63).

Note: * GNP in 1993.

A longer historical analysis shows that Zimbabwe was actually a significant coarse grain exporter during the 1970s and the 1980s while Kenya was a net exporter, Malawi was in balance and Zambia and Tanzania imported grain. During recent years, the situation

between the countries has levelled and during the 1990s even Zimbabwe and Kenya have become net importers (Jayne and Jones 1996:3).

TABLE 8
PRODUCTION OF COARSE GRAIN PER CAPITA FOR THE FIVE CASE-STUDY COUNTRIES
(Production in kg)

	1970-74	1975-79	1980-84	1985-89	1990-94
Kenya	102	133	132	126	99*
Malawi	328	286	267	228	196*
Tanzania	89	145	151	166	127*
Zambia	224	160	188	235	193*
Zimbabwe	340	285	267	266	184*

Source Jayne and Jones (1996:3).

Note: * Excluding the 1992 drought year. Zimbabwe witnessed drought again in 1994 and thus the figure refers to 1990-91 only.

Structural adjustment policies have been implementing with varying rigour in all the case-study countries. Malawi and Kenya were among the first to adjust, followed by Zambia and Tanzania and finally Zimbabwe. Structural adjustment loans to 1992 are presented in Table 9.

There has been considerable time-lapse between overall adjustment policies and the liberalization of maize marketing. Although liberalization of the domestic maize trade became effective in 1992-3 in Kenya, 1987 in Malawi, 1984-8 in Tanzania and 1993 in Zambia, administrative hindrances to private trade are still common in all countries. Zimbabwe has made some policy moves towards private trade since 1993 but state marketing boards constitute still a strong body in the field. The liberalization measures are presented in Table 10 (see also Table 2).

TABLE 9
LOANS PROVIDED BY THE WORLD BANK AND IMF FOR THE FIVE CASE-STUDY COUNTRIES

Country	IFI	Туре	Duration
Kenya	IMF	Stand-by arrangement	1979-81
	WB	SAL I	1980-80
	IMF	Stand-by arrangement	1980-82
	IMF	Stand-by arrangement	1982-83
	WB	SAL II	1982-83
	IMF	Stand-by arrangement	1983-84
	IMF	Stand-by arrangement	1985-86
	WB	Agricultural sector loan	1987-88
	IMF	Structural adjustment facility	1988-91
	IMF	Stand-by arrangement	1988-89
	WB	Industry and trade sectors loan	1988-90
	IMF	Enhanced structural adj. facility	1989-92
	WB	Financial sector loan	1989-91
	WB	Export development	1990-95
	WB	Agricultural. sector adjustment II	1991-95
	WB	Education sector adjustment credit	1991-94
Malawi	IMF	Stand-by arrangement	1979-81
	WB	SALI	1981-82
	IMF	Stand-by arrangement	1982-83
	WB	Fertilizer Ioan	1983-88
	IMF	Extended fund facility	1983-86
	WB	SAL II	1984-85
	WB	SAL III	1985-88
	IMF	Stand-by arrangement	1988-89
	IMF	Enhanced structural adj. facility	1988-91
	WB	Industry and trade policy loan	1988-90
	WB	Agriculture sector	1990-91
Tanzania	IMF	Stand-by arrangement	1980-82
Tanzama	WB	Export rehabilitation loan	1981-83
	IMF	Stand-by arrangement	1986-88
	IMF	Structural adjustment facility	1987-90
	WB	Multisector rehabilit. programme	1988-89
	WB	Industry rehabilit, and trade loan	1989-90
	WB	Agricultural adjustment credit	1990-92
	IMF	Enhanced structural adj. facility	1991-94
	WB	Financial sector	1991-94
Zambia	IMF	Extended fund facility	1981-84
Zambia	IMF	Stand-by arrangement	1983-84
	IMF	Stand-by arrangement	1984-86
	WB	Export rehabilitation and diversification	1984-88
	WB	Agricultural sector loan	1985-88
	WB	industrial sector loan	1985-88
	IMF	Stand-by arrangement	1986-88
	IMF	Stand-by arrangement	1986-88
	WB	Economic recovery programme	1986-90
	WB	Recovery credit (SAL)	1991-92
7imhahus		• • •	1983-84
Zimbabwe	IMF	Stand-by arrangement	
	WB	Export industry policy loan	1983-87

Source: World Bank (1992).

TABLE 10
CHANGES IN MAIZE MARKETING POLICIES FOR THE FIVE CASE-STUDY COUNTRIES

	Kenya	Malawi	Tanzania	Zambia	Zimbabwe
Government monopoly in maize buying from farmers until	(1984) (1988) 1993	1987	1987	(1990) 1991	
Government announced pan- territorial floor producer prices until	1994*	(1986) not removed*	1990	1993	not removed*
Liberalized domestic trade and milling from	1994	(1987)	1990	1993	1993
The reduction of the marketing board to the buyer in last resort	1996?*	1993*	1990-1	1993	
Price subsidies and marketing controls for fertilizers until		(1982) (1993)	(1990) 1992	(1990)	
Subsidy on consumer price removed in			(1984)	(1990) (1993)	(1993)
Government import monopoly until	(1991) (1994) 1995			1993	

Note: * In these countries the marketing boards pay a high price for producers and the boards still play a definite role in maize marketing.

Years in bracket mean partial implementation.

The introductory tables show that the problem of these countries is a paradoxical situation where production has reached a high level (reflecting heavy state support) but that still a sizeable section of the population remains undernourished - and this all is accomplished under the banner of food security. In these countries the liberalization of food production did not address the problem of inadequate supply but the problem of political control over food.

9.2 Kenya: the art of evasive politics

Kenya has a long history of expansion in and intensification of maize production. Already in the 1930s, remarkable results were acquired in some smallholder areas. The colonial system in Kenya was geared to protecting the interests of the small group of settlers. However, the settlers were more inclined to grow cash crops and wheat than to cultivate maize. For many years during the colonial period and the first decades of independence, maize production was higher than local demand. Recently, however, maize production has fallen below the level of consumption, partly reflecting the very rapid population growth and a relatively high rate of urbanization.

Kenya signed its first Structural Adjustment Loan (SAL) in 1980. The agreement included a policy conditionality on agricultural prices. Domestic producer prices were linked to world market prices, meaning import parity prices. In connection with the second SAL in 1982, the Kenyan government reformed its foreign exchange regime, introducing a crawling peg form of devaluation. These basic reforms together introduced

a definite change in the pricing policy (Gibbon et al. 1993:32-5). According to Bigsten and Ndung'u (1992:73), increases in producer prices were artificial because the marketing boards were inefficient, operating at a loss. In practise the increased prices were funded by government subsidies.

The most difficult part of reform has been the institutional change in the marketing organization. The National Cereals and Produce Board (NCPB) had developed into a large organization with close political linkages to the government. The World Bank has made several proposals to restructure the board and to reduce its organizational role to food security and as a last-resort buyer. The government of Kenya has ventured into a game with the World Bank whereby it first allowed inter-district trade to a four ton maximum. In 1984 it also allowed the state-organized Kenya Grain Growers Cooperative Union to market maize in competition with NCPB. The government managed to sign two more Agricultural Sector Adjustment Loans (ASALs), officially granted in 1986 and 1991. Initially the government of Kenya responded to the external pressure with minor administrative changes. In 1988 further modifications were made to NCPB's monopoly position in maize collection and, after twisting and turning, some other licensed buyers were allowed to entire the market in 1988/89. These licences were revoked in 1992 (Gibbon et al. 1993). These changing policies resulted in a decrease in the amount of officially marketed maize from an average of some 27 per cent of harvest in 1983-90 to 15 per cent in 1990 (Ikiara et al. 1995:37).

Ikiara et al. (1995) conducted a field-study on maize marketing in 1992 in which it was observed that official maize marketing was controlled by NCPB, KCGCU and a few powerful individuals. Maize transportation was legal but police still prevented private trade. Producer prices of maize were low and, since fertilizer prices were increasing, profit margins were small. Some of the collected maize was sold at the neighbouring countries. Famine relief food was used as a political tool for collecting votes. The following year, the Kenya government took steps to liberalizing maize marketing: first, inter-district trade of maize was genuinely permitted and the import of maize was liberalized. In 1994, total liberalization of the grain trade was announced. A field-study conducted in 1993 showed that NCPB still controlled over 50 per cent of marketing while other channels included private traders, individual sales and sales to schools. The group of specialized large-scale grain wholesalers was still rather small A web of transporters, brokers and market traders had emerged. The farmers had less maize to sell because of the drought but they were confident that increased prices would motivate additional efforts in the future.

Decontrol of maize marketing took place at a time when the large-scale millers, mainly Asian, called for the liberalization of domestic and external maize trade while large-scale farmers, politically eminent Africans, started to bend towards domestic liberalization. After liberalization, cheap imports began to flood the country. The context of rent-seeking thus changed from provincial administration-cum-cooperatives to import and domestic trade licensing. In any case, maize marketing was subjected to politico-administrative control for the benefit of the state class (EIU country report 1995/3; Lewa and Hubbard 1995).

Ikiara et al. (1995:34) call the quarrel between the government and the World Bank as shadow-boxing:

A pattern emerged whereby conditionalities were introduced and compliance promised, then withdrawn. Sometimes the donors appeared to go along with this pattern of events, agreeing to 'studies' whose terms of reference were clearly designed to reinforce the Kenya government's defence of the trade's structure. On other occasions sufficient reforms were undertaken to meet initial donor expectations but then excuses were found to go no further or even revert to the status quo.

For the government of Kenya, the demands of World Bank have given a platform for populist fight. The high politics of Kenya are a combination of populism, rent-seeking activities and genuine developmental efforts. It is far from evident that food security considerations are the most important issue in this context.

9.3 Malawi: a promise turned sour

When Malawi became independent, it was a poor country. Its subsequent advancement policy was based on the development of agricultural export. Under an authoritative political regime and a fairly open economy, agricultural production, especially the production of export crops, increased substantially. When economic hardships emerged in the early 1980s, it was soon noted that much needs to be done.

The Malawian government established a parastatal Agricultural Development and Marketing Corporation (ADMARC) as a monopsony buying agent for maize from smallholders. ADMARC provided pan-territorial and pan-seasonal prices for farmers. In the wake of rational planning, its tasks increased substantially during its years of operation. ADMARC was expected to market food at commercial criteria but simultaneously to provide stable prices, market clearing, farm input supply and overall food security. Beyond these functions it was expected to engage in other activities outside smallholder agriculture. Initially it fulfilled its obligations with the help of export incomes and it was able even to subsidize maize prices. In the early 1980s, its financial situation worsened due to deteriorating world prices and operational inefficiency (Cromwell 1992:124-5).

Malawi was among the first countries to receive substantial loans through SAPs. It signed its first agreement with IMF in 1979 and with World Bank in 1981. During the first years of SAP, the World Bank supported the activities of ADMARC. There was controversy between the government and the World Bank on the price level of food crops relative to export crops. The government still tried to maintain the goal of food self-sufficiency. As the financial problems of ADMARC evolved, the World Bank shifted its policy proposals towards the privatization of maize marketing. ADMARC was to be a commercially operating and financially self-sufficient organization but the government still resisted and implemented the proposals with hesitation.

According to Smith (1995:562), the major problem in marketing reform was that liberalization measures were implemented without prior adjustment of prices. Thus, reform was poorly prepared and conditions for private trade were not fully developed. Smith outlines a number of policies and constraints which were adverse to the private sector trade. He also notes that the ADMARC is still responsible for food security operations and its remaining non-commercial functions continue to be a financial burden. These results are supported by Cromwell (1992:124) who notes that the problems of marketing reform are the result of poor planning and the undefined role of ADMARC. In practice, ADMARC continues to have a major role in maize marketing.

The result of export-oriented agricultural policies is that maize production has not developed as forcefully as the export crop production in large estates (Livingstone 1985). In Malawi, maize cultivation is the major occupation for smallholder farmers who reserve over 60 per cent of their land for maize (which is often inter-cropped with beans). However only a tiny portion of this area is given over to hybrid varieties (Cromwell 1992:127). According to Mosley (1994:268-9), relatively fair fertilizer prices (in relation to maize price) have retarded large increases in the utilization of hybrid varieties although some development has taken place.

9.4 Tanzania: the benefits and costs of equality

Tanzania's circumstances are exceptional because of the 'political geography' of the country. A vast country, Tanzania has fertile maize surplus agricultural areas in the highlands in south-west but the central and north-eastern highlands historically have also produced surpluses. The *de facto* capital Dar es Salaam is far from these agricultural areas and thus the production capacities and consumer groups are differently located. The problem has its roots in the lack of investment in infrastructure and human capital during colonial rule which bestowed the newly independent Tanzania with a poor resource base where agriculture was largely hoe-farming for subsistence. Given the country's political geography and state of agriculture, the task of developing a modern agricultural sector was a huge one.

Independent Tanzania took up the challenge of developing agriculture but never forgot the priorities: food security of the population was always first (Bryceson 1993). Political decisions were made on the basis of the premise that the population was overwhelmingly rural and poorly educated. Unfortunately, good intentions were occasionally coupled with too paternalistic political decisions and, equally important, continuously shifting administrative arrangements.

The history of food marketing has seen many turning points. Soon after the Second World War, private marketing was replaced by state-controlled marketing and pricing. Prices differentiated between food-surplus and food-deficit areas and later on between the various regions. The aim was territorial self-sufficiency. Although fairly efficient at first, the system was replaced by private marketing in 1957. The level of state intervention was increased again in 1963 when the National Agricultural Products Board (NAPB) was established. It provided guaranteed pan-territorial (in-store) prices. Actual collection was organized by cooperatives which turned out to be extremely inefficient.

Farmers were disillusioned with the low prices after costs of the cooperatives were deduced from the NAPB's in-store price. Consequently, the reliance on parallel markets increased in the 1960s. NAPB was replaced by National Milling Corporation (NMC) but the policy line was continued. Pan-territorial prices meant a significant subsidy to the farmers in peripheral food-surplus regions. This policy resulted in a manifold increase in total collection in the 1970s and the development of the southern highlands as the 'maize bowl' of Tanzania. According to another policy line, consumer prices were concurrently maintained artificially low (Ellis 1988:69-92; Raikes 1988:58-9; Bryceson 1993:32-90).

Between 1973 and 1982, commercial bank lending to parastatals involved in agricultural produce marketing rose from 31 to 61 per cent of total lending (Bryceson 1993:21). The government's fiscal crisis forced it to turn to IMF, with which Tanzania subsequently signed three agreements and an agricultural adjustment credit agreement with World Bank. Since 1984 the policy line was geared towards the liberalization of economy. In 1984, subsidies on maize flour were removed and devaluations set in motion. Between 1987 and 1990, all restrictions on inter-regional trade were removed and private traders started to compete with NMC (Gibbon *et al.* 1993:52-9).

Private marketing did not emerge from dust. Parallel marketings made up well over 50 per cent of total marketing throughout the 1980s.²⁷ Still, the emerging private marketing system has been hampered by the lack of credit for crop buying and investment. The majority of operators are small traders working with small capital. A key feature of the marketing system is the high regional price variations. Even though the price margin between the southern highlands and Dar es Salaam has decreased during liberalization, lack of transport capacity and capital means that farmers in the southern highlands have great difficulties in selling their crops at reasonable prices (Coulter and Golob 1992; Santorum and Tibaijuka 1992; Bryceson 1993; Parsalaw 1996).

The political geography of Tanzania has exposed maize marketing to cross-border trade, a fact which has diminished the government's control over prices and production level. During the years of state-controlled marketing, cross-border trade was apparent as smuggling, generally encouraged by the nearness of market and differences in pricing policies²⁸ (e.g. Raikes 1988:59). In the situation of liberalized domestic marketing and a fairly liberal foreign trade, the level of cross-border trade is likely to remain substantial.

²⁶ Van Donge (1994) argues that price incentives may have been a secondary aspect in this development. He points to such supply factors as population migrations and consumer goods hunger as explanations for increased production. He also identifies considerable variation within the southern highlands in its production figures between decades and between regions.

²⁷ Chachage (1993:234) argues that the maize boom of 1988-89 can be explained by the unificiation of parallel and official markets. This indicates an underestimation in the official production figures of the parallel market volumes prior to liberalization.

²⁸ According to Coulter and Golob (1992:428) maize harvests in Tanzania are negatively correlated with those of most Southern African countries. This would indicate that demand across the border fluctuates differently from the national supply fluctuations. However, this result is based on unadmissible level of aggregation (i.e. national instead of district-wide correlations).

9.5 Zambia: rural policies for urban aims

Zambia is a prime example of a country where food production and marketing have singled out in the aim to keep the growing urban population satisfied. Maize has become a political crop and maize prices the centre for hectic political debates.

In the background of maize politics is an exceptionally high level of urbanization during the transitory period from colonial rule to independence. During these decades, economy was geared towards the mining industry. Cultivation of export crops was minimal; the share of agriculture in GDP at less than 15 per cent was very low compared to most neighbouring countries.

Maize marketing during the late colonial era was based on a dualistic organization: the large commercial maize farms had their own marketing networks with monopoly position in these areas while smallholders were served by the cooperatives. After independence, the government united these channels into the National Agricultural Marketing Board (Namboard). The government, giving equity due, started to support production in peripheral areas. The role of the Namboard was soon extended to non-commercial functions and the government announced that producer and consumer prices were fixed at levels which caused constant negative balance sheets (Kydd 1988).

The collapse of copper prices since 1975 caused the government to revise its policies. Economic liberalization was initiated with the support of IMF in 1981. The 1980s were characterized by sweeping economic reforms with the noticeable exception being maize marketing, for which responsibility was shifted by the government to the cooperatives in 1981. When efficiency did not improve, marketing was reverted back to Namboard in 1983. At the same time, private traders were allowed to compete with Namboard but the subsidy system ensured that Namboard continued to operate in many areas until 1989 when it was replaced by provincial cooperatives (Gibbon *et al.* 1993:87). During the 1980s, maize production increased substantially, especially in the new smallholder producer areas as a result of good access to fertilizers and credit, a reliable marketing system and pan-territorial prices. According to Gibbon *et al.* (1993:90), 'These positive developments were actually more strongly related to measures adopted in advance and retained in defiance of the adjustment programme than to adjustment itself as evidence from local studies demonstrates.'

Agricultural policies were implemented with the objective of food self-sufficiency and low urban prices in mind. It is noticeable that rural staple crops (cassava, millet and sorghum) were not subjected to any serious state-organized marketing (Kydd 1988:125). The subsidy for maize production inputs was coupled with artificially low prices for urban consumers, a policy that the government could afford to run until 1990. At that time, it was forced to implement partial liberalization by allowing trade between producers and millers, private traders and cooperatives (Shawa 1993). Consumer subsidies were also abolished (Gibbon et al. 1993:98). The subsequent political turmoil, compounded by the 1992 drought, whipped the economy into chaos. In mid-1993 the government cancelled all official producer prices and liberalized the import and export of maize. The country was hit by a new drought in 1995 and imports from South Africa

and Zimbabwe entered the market. During that year, the World Bank praised the country for its adherence to economic reforms and provided Zambia with the four-year agricultural sector investment programme (EIU country report 1996/1 and 1995/96).

Maize marketing in Zambia is totally embedded in political considerations and the recent developments are linked to changes in the political scene. The new government has bowed to international financial institutions. In the past, food riots have been triggered easily in Lusaka but the recent upheavals in the economy have forced both the government and the people to accept new policies more readily.

9.7 Zimbabwe: the heritage of dual economy

All countries in the analysis have had an estate cultivation sector during colonial times. Zimbabwe is unique in the fact that the policy regime which openly supported estate sector has persisted longer and effects of the dual agricultural policies are more clearly apparent.

The policy of segregation of farms has a long history; the government had supported the interests of the white farmers since the 1920s. A marketing board was established by the government as the sole buying agency for maize from commercial farms. In 1950, the Grain Marketing Board (GMB) was introduced and marketing was extended to some other crops. GMB worked fairly efficiently and did not require financial support from the government to subsidize producer prices (although the government had the expansionist aim of reaching and maintaining national self-sufficiency) until 1975 when the government started to intervene more heavily in producer and consumer prices. From the time of the Unilateral Declaration of Independence until 1980, the marketing board primarily served the white commercial farmers. Marketing depots had not been extended to the communal farming areas which at that time produced very little food for the urban sector (Thomson 1988:190-91).

All this changed after independence. The government started to build up a marketing infrastructure in the communal farming areas, incurring increased costs to GMB and causing pressure to decrease producer prices. In effect, income generated from commercial agricultural areas was invested in the construction of marketing infrastructure to the communal farming areas. The commercial farmers responded to this development by shifting to other crops and by making demands for the deregulation of maize marketing. (Jiriyengwa 1993:319)

Maize marketing had developed into a complex structure where farmers provided produce to monopsony buyers who organized milling and sold the maize flour to customers. The very scale and complexity of operations has meant a certain degree of centralization. The structure, when extended to communal farming areas, proved to be very costly. Jayne and Nuppenau (1993) and Nuppenau (1994) have estimated that the elimination of pan-territorial pricing and free movement of maize would decrease marketing costs substantially.

Considerable costs in maize marketing have also been induced by the aim for self-sufficiency. To be sure of success, the government imposed an attractive price to increase maize production. Since production fluctuations are substantial (Table 6), this meant that the reserve in good years has been high, creating additional costs for storage or export. These costs could have been avoided simply by allowing markets to determine the price. Bit, a free market situation would create extremely high price fluctuations. In these circumstances, researchers have recommended more moderate price interventions and low level of stock-keeping. This would mean less profits for large farmers and millers and lower prices for net consumers in rural and urban areas (Pinckney 1993; Jayne and Rukuni 1993).

In 1991 discussions with the World Bank and IMF led to hesitant promises by the government to adopt liberalization. However, liberalization of the maize marketing is, extremely difficult due to the lack of parallel markets waiting to be legalized. Policy change in Zimbabwe would thus need much wider efforts to set up the private marketing structures than needed in other SSA countries. In 1993 the government announced a reform programme to convert the GMB to a commercial enterprise with a decrease in its functions. The planning manager of organization, S. Jiriyengwa, argued strongly that the board's non-commercial functions and policies were the only guarantee of the small producers to reach the markets: 'Small producers are likely to be competed out of profitable markets by their commercial counterparts and left to satisfy a 'weather dependent' rural demand for grains' (Jiriyengwa 1993:321). In 1994/95 the country was hit by drought and GMB was forced to import large quantities of maize. At home, GMB offered a comparatively low price, so farmers sold to private dealers or smuggled maize out of country. During the 1995/96 season, harvest again exceeded demand and GMB was back in a strong buying position. It seems that high fluctuations in production help GMB operate as a clearing house for reserves, export and import. Although GMB continues to wield a strong position, the same cannot be said for the large-scale maize mills. The government removed the subsidy for roller meal in 1993, increasing its price considerably. Once permitted to operate, the small maize mills have proved to be highly competitive in Zimbabwe (Javne et al. 1996).

Zimbabwe exhibits a dualistic economy which has been able to provide a high level of national food self-sufficiency at the cost of marginalizing a large section of rural producers and consumers.²⁹ This dualistic economic structure is difficult to dismantle without jeopardizing either food security or creating higher and more variable food prices.

9.8 Summary

Why do maize policies in eastern Africa differ from food policies in other SSA countries? It seems evident that production and marketing of maize became more politicized than for other crops because it directly affects the vital interests of both urban and rural middle-classes. Maize became popular as a staple food for the urbanizing in

²⁹ While national food security is high, at the household level it is low in many communal areas. Several studies show alarming rates of malnutrition (e.g. Chipika and Chipika 1994).

the 1960s and 1970s. At the same time, maize cultivation expanded in acreage and intensified in input use among the 'progressive' farmers. Thus, in both urban and rural areas, maize was an indicator of modernity.

It would be misleading to state that the urban political class has totally dominated food policies. The countries in the study are large in terms of the size of elite and they cannot be governed through (face-to-face relations) unified elite, and since the elite depend on their respective rural political constituencies, the rural opinions enter the discussion. This forces top leaders to defensive positions where the maintenance of food security is a crucial issue. The use of pan-territorial prices as a political tool can be understood from this wider perspective. Paradoxically, the principle of equity implicates inequality: peripheral producers are integrated to urban food provisioning on 'equal' basis. But the staple food crops usually consumed in these peripheral regions are not eligible to similar level of support. Thus equality exists only in relation to a nation-wide project geared towards modernization.

The equality principle also hides the fact that a majority of officially marketed food is actually produced by large commercial farmers in these countries (Jayne and Rukuni 1993:334; Lewa and Hubbard 1995). Although maize is often considered as a smallholder crop, substantial quantities of marketed maize are supplied by large farms at least in Zambia, Zimbabwe and Kenya where the politics of production are also linked to the politics of milling. Consumer subsidies are also directed to refined maize flour whereas more coarse grain and flour are consumed by the poor.

State-governed marketing arrangements were costly as the following examples show: the Kenyan government has written off the National Cereals and Produce Board's debts at least twice. At one time the debt had mounted to 5 per cent of GDP (World Bank 1994:86). In Zambia, the support for the maize during the 1985/6 season was 131 per cent of the into-mill maize price (Coulter 1994:10). The subsidized price created an excess of production over the local demand during the end of decade. The cost of maize production and marketing was one factor behind the collapse of the national economy in the early 1990s. Zimbabwe has supported the consumption of maize processed through large-scale milling. In 1993, the roller meal subsidy was costing the government an equivalent of 2 per cent of GDP annually (Jayne et al. 1996).

All the studied countries have entered the liberalization path, although most of them show still hesitation in implementation. The governments have turned towards liberalized food marketing regime because of the fiscal problems of the governments and the changing political scenes. The abolition of the pan-territorial pricing policies implicates tendencies towards a policy where the regional politics and food self-sufficiency are abandoned in order to save the external support for the weak state. This has its costs, at least in the short run. The failure of the private traders to collect crops in the peripheries is reported at least for Tanzania (Chachage 1993), Malawi (Cromwell 1992) and Zambia (EIU 1996/2).

The changes in consumption patterns have accommodated the policy change. In urban areas wheat and rice are becoming increasingly popular among middle classes. These

crops are also, to some extent, locally produced but their local production is economically more marginal and the crops have not created similar rural power bases. The changes in maize consumption are also noteworthy because maize market is becoming increasingly segmented. The global market for white maize (usually consumed in the SSA) is thin while there is an abundant supply of yellow maize. Marketing liberalization may turn the poor customers from the conventional white maize towards yellow maize which is cheaper and more readily available. Similarly, when subsidies are removed the poor consumers may abandon (if they ever afforded to consume) refined maize flour, and rely on *posho* milled maize. Thus a segmentation of the consumption preferences has been taking place and this process is currently enhanced by the liberalization of food marketing.

The comparative analysis of five countries shows parallels in the polarization of maize production, marketing, milling and consumption. The analysis shows that the marketing reform cannot be understood without its political and ideological implications. The liberalization of maize marketing meant an elimination of the field of patronage which had bifurcating elements. On the one hand, the patronage politics meant state directed rural production policies and urban wage policies which aimed at a certain support to the peripheral producers and poor consumers. These policies can be named as populism but they also entailed a thrust towards equality. At the same time the populist policies hid an undercurrent of the favours given to large-scale farmers, millers and well-positioned administrators. This element was based on a highly unequal distribution of benefits.

10. CONCLUSIONS

10.1 Global environment

Before we can conclude the discussion of the effects of marketing and price reforms, we should note some trends in the world which have evolved regardless of whether marketing and price reforms take place or not. These are as follows:

- World food consumption increases heavily due to population increase and due to the use of cereals as animal fodder. The medium-term trend is that food prices will remain at the current levels whereas they used to decrease in the near past. Food stocks are diminishing, thus inducing seasonal and short-term price fluctuations (Boonekamp and Cathelinaud 1996);
- The world and Africa are becoming more urban, with urban staples (rice, wheat and maize) taking increasing role in the staple food (Salih 1995:22-30);

³⁰ If human consumption of yellow maize becomes popular, it is possible that its local production will also increase. There is already significant production of yellow maize for animal feed at least in Zimbabwe and South Africa.

• Technological development and increased production per hectare (through irrigation, high yielding varieties and fertilizers) have not taken place among African smallholders whereas these factors have increasing role elsewhere.

10.2 SAP, SSA and food marketing

During colonial period and the first decades of independent governance, several African countries developed extensive state institutions to control food markets in order to boost agriculture and guarantee food security. The accumulated evidence shows that whatever the intentions of African governments were, they could not achieve full control over food markets and subsequently in most cases, aimed only at limited strategic interventions. In practice this meant interventions in certain filière: the marketing of key food crops which were controlled more for the sake of urban food provisioning than to guarantee smooth rural production. On the part of these key crops, official marketing channels handled only a part of the total food trade, and were competed efficiently by parallel markets. Nevertheless, marketing boards and controlled pricing system meant heavy financial burdens to the state and financial institutions. Something had to done.

The World Bank launched a major programme to restructure the economy of the African countries. Structural adjustment policies have addressed price and marketing reform in the agricultural sector consistently throughout the 1980s and 1990s (World Bank 1981, 1989 and 1994). A major instrument was the pricist policies of marketing liberalization. Although policy was directed to boosting export crop production and the first cautious World Bank policy reports emphasized the special needs of food markets, in practice the broad policy line was (and through policy consistency claims) extended to food crops. It seems that the World Bank has largely achieved its aims in the liberalization of crop marketing. The question is whether this policy has been i) necessary, ii) feasible and iii) adequate in the food crop production and marketing.³¹

The necessity of marketing reform was first and foremost discussed in terms of the efficiency of marketing agencies. However, inefficiency hides two antagonistic elements. On the one hand, marketing boards exhibited operational inefficiency coupled with rent-seeking activities while one the other, they performed wellfarist non-commercial tasks aiming at stable prices, national equality and economic growth. If policy recommendations had separated these two elements, the resulting reforms would most likely have been different. First, reform should have been directed towards governments (and donors) who imposed these non-commercial functions in the first place, towards defining clearly demarcated tasks for the marketing agencies. Second, considerably efficiency gains would have been achieved by decentralizing organizations, combining state interventions with private pricing systems, using limited and locational interventions and, most importantly, through targeting (marketing, processing and

³¹ The analysis is, by necessity, inconclusive due to methodological problems (cf. Killick 1995:36-53). It is next to impossible to give counterfactual evidence on the likely trends in situation where the adjustment measures had not been implemented. Toye (1994:32) concludes as 'an area of greatest consensus' that the beneficial effects of adjustment policies in general have been greatly outweighted by external factors. This conclusion does not make any of the three questions unnecessary. As Toye puts it, 'Small improvements are, after all, superior to no improvements at all.'

consumption) subsidies on crops that the poor consume. The increasing segmentation of consumption patterns makes it possible to target food policies for the poor by focussing on crops like hammer-milled maize, cassava and plantains.

The feasibility of marketing reform can be measured with two criteria. First, do the farmers meet private traders at their farm gate and, second, is the cost margin of privatized trade smaller than the margin of public marketing agency? Regarding the first question, some farmers in the hinterlands have lost their marketing channel with the abolishment of pan-territorial prices. Here the effect is directly related to the pros and cons of active regional policy. The second criteria of cost margin, regardless of accumulated studies, is still to be unambiguously clarified. The comparative case-studies covering pre- and post-adjustment comparisons of marketing margins are difficult to run because of the high number of intervening contextual factors. Nevertheless, it seems that the aggregate food supply has responded positively to the liberalization of food marketing in several countries whereas producer prices have remained low.

The answer to the adequacy of reform policies is the usual – one can always do better. The major deficiency of food marketing reform is that it has based on the assumption of food traders having full financial capacities and know-how. In reality, food traders tend to be petty traders, able to react to policy changes but unable and unwilling to invest in any business more riskier. This means, unfortunately, losses to peripheral producers and seasonal losses to poor consumers.

10.3 Politics

The political and institutional analysis of food marketing reform shows that food is still a 'hot potato' in the political scene. Local problems in food security are still valid reasons for government interventions through food imports, food prices or modified institutional setting. Changing the rules also creates opportunities for rent-seeking activities and profits to administrators. The unpredictability of food markets keeps the private traders alert. Privatized food crop trading is thus hampered by limited capital investments and limited working capital reservations for crop buying.

10.4 Development

Food marketing reform produces varying results when viewed from the perspective of various stakeholders. It is also difficult to offer a reliable picture for the entire Sub-Saharan Africa as variations between countries (and districts within countries) are important. Collected evidence seems to indicate that marketing reform will, in the medium to long run, have some effects on cropping patterns and on directing cultivation towards higher spatial differentiation. Urban areas in the coastal regions are likely to be increasingly supplied by imported food, and urban-rural linkages may become weaker.

The full impact of marketing liberalization on rural producers and all consumers is yet to be seen. As the population in developing SSA is expected to increase from 532 million in 1994 to 1422 million in 2025, concern for food security issue will be a paramount development issue in the future. One can only speculate whether the policy

of private food marketing will be sustained or whether governments will step in and upgrade their machinery for interventions to prevent periodic hunger. It seems evident that neither the donor community nor the (associations of) private traders have placed the responsibility of food security at the top of their agenda. Given the fiscal difficulties of the SSA governments, it is likely that they can fulfil the responsibility only partially.

When governments intervene in food markets in the future, interventionism should not mean that the nation-wide state-governed marketing monopolies will be re-instituted. As we have shown, there are several, more modest ways for governments to provide an acceptable level of food security and price stability.

However, a major turn in policies is necessary if the level of food production is going to be increased to match the population growth. In order to achieve this aim, more equal access to land is one of the key measures still to be conducted. Another option is the extremely demanding task of adjusting modern technological support to the locational socio-economic and agro-ecological conditions. Due to the high variation in both respects, any top-down paternalistic patent solutions will be inadequate or unsuitable.

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ANNEX TABLE 1: FOOD SECURITY IN SUB-SAHARAN AFRICA

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
		Volume of		Average annual	
	Food aid in	cereal		percentage	Per capita
	cereals as a	imports as a	Food	growth of	average
	percentage	% of	security	cereal	import of
	of cereal	merchandise	index,	imports in	cereals in the
	import	imports	1990	the 1990s	1990s
Country	1990/91	1990/91	(*)	(**)	(***)
Angola	41.4	14.0	0.8	3.5	33.6
Benin	3.7	16.0	1.1	9.2	31.4
Botswana	0.0	14.9	0.8	6.5	0.4
Burkina Faso	31.6	23.0	0.9	-1.7	15.2
Burundi	9.7	17.0	0.7	30.3	1.5
Cameroon	1.7	14.0	0.9	-4.4	28.1
Cape Verde	76.8	30.4	1.5	-4.7	179.0
CAR	11.1	17.0	0.7	-0.2	10.8
Chad	41.1	17.0	0.5	15.9	9.5
Comoros	9.3	29.8	0.7	7.8	64.5
Congo	15.6	18.0	1.0	19.2	50.6
Côte d'Ivoire	9.2	18.0	1.2	1.4	43.4
Djibouti	14.1	24.4	0.3	7.2	82.0
Equatorial Guinea	13.0	10.2	0.6	-9.1	23.8
Ethiopia	111.5	14.0	0.7	29.3	15.43
Gabon	0.0	17.0	1.1	14.8	56.7
Gambia	11.3	51.9	0.9	9.1	95.0
Ghana	20.9	9.0	0.9	11.4	21.8
Guinea	4.1	18.0	1.0	15.9	1.5
Guinea-Bissau	10.9	32.0	1.0	11.6	65.7
Kenya	19.1	6.0	0.8	38.0	18.6
Lesotho	31.0	23.9	8.0	5.6	71.3
Liberia	39.6	24.0	0.9	4.4	42.3
Madagascar	33.3	13.0	0.9	-1.3	8.7
Malawi	150.8	7.0	8.0	38.6	29.7
Mali	16.4	18.0	1.0	-5.1	12.3
Mauritania	29.5	23.0	0.9	12.1	133.5
Mauritius	3.8	27.0	1.2	3.0	196.5
Mozambique	94.8	•••	0.7	10.2	38.2
Namibia	4.0	3.2	0.9	17.9	89.8
Niger	55.2	15.0	0.9	14.9	15.9
Nigeria	0.0	18.0	0.8	38.3	10.0
Rwanda	47.4	9.0	0.8	58.2	5.6
Sao Tome &Principe	51.1	21.1	1.0	-12.1	80.6
Senegal	5.0	26.0	0.8	-1. 5	80.0
Sierra Leone	9.3	24.0	0.8	-3.1	36.5
Somalia	46.6	19.0	0.6	-8.6	26.5
Sudan	38.1	22.0	0.7	0.7	30.9
Swaziland	12.8	8.5	1.0	-8.5	92.8
Tanzania	18.5	11.0	1.0	38.7	6.2
Togo	6.7	20.0	0.9	-11.3	25.5
Uganda	234.6	8.0	0.7	27.4	1.8
Zaire	31.9	22.0	1.0	-11.2	7.2
Zambia	3.8	8.0	8.0	4 5.2	36.5
Zimbabwe	6.1	5.0	0.8	104.6	50.3

Sources: Column 2-4: IFAD n.d: 61; Column 5: World Bank (1996:233) Column 6: SOFA95, FAO database1995 and World Bank (ibid).

Note:

- * Based on food production and consumption, including data on growth and variability. Value one is a cut-off point indicating relative food security compared to values below one.
- ** Based on data up to 1993.

^{***} Average import 1990-93. Value is litres (= thousands of metric tons per million people).

Annex Table 2: Policy Conditionality in 22 Agricultural Sector Adjustment Loans: Fiscal Year 1979-92

Country Fiscal Year To Board	Fiscal Year To Board	Agricultural Policy conditions			Exchange Rate Conditions	Trade Policy Conditions				
	Pricing/ Subsidy		Invest. Promo.	Tech/ Research		Import/Export Quantative Restrictions	Import Duty/ Subsidy	Export Duty/ Subsidy	Other Institutions	
Burkina Faso	85,92	Х	Х		V 1		X	Х	Х	Х
Burundi	89	X	X							
Chad	89	X	X	1						
Côte d'Ivoire	90	X	X	X			X	X		
Ghana	92	X	X	X			X			X
Kenya	86,91	Х	X	X			X			X
Madagascar	86	X	X	X						X
Malawi	90	X	X		X	X	X	X		X
Mali	90	X	X	Х			X		X	
Mauritania	90	X	X	X	X					
Nigeria	84	X	X							
Somalia	84,86	X	X		X	X	X			X
Sierra Leone	89	X	X							
Sudan	80,83	X	X		1	X				Х
Tanzania	90	Х	X		X	X	X			
Uganda	83,91	Х	X	X	X		Х	Х		Х
Zambia	85	X	X							

Source

See Kundsen and Lindbert 1995:384-385.

Annex 3: Policy Conditionality in 45 Structural Adjustment Loans: Fiscal Year 1979-92

Country Fiscal year to board		A	Agricultural policy conditions			Exchange Rate Conditions	Trade Policy Conditions			
					-		Import/Export	•	Export	0.1
		Pricing/ subsidy	reform	I Investment	l echnical/ Research		Quantative Restrictions	Duty/	Duty/ Subsidy	Other Institutions
		ļ		TOTTOTOTO	Tiesealch				Subsidy	IIISIIIUIIOIIS
Benin	89, 91	X	X				X	X		
Burkina Faso	91		X				X	X		X
Burundi	86, 88, 92	X	X		X	X	X	X	X	X
Cameroon	89	X	X				X	X	X	X
Congo	88							X		X
Côte d'Ivoire	82, 84, 86	X	X				X	X	X	X
Gabon	88	X	X	X			X	X		X
Gambia	87, 89	X	X	X		X		Х		X
Ghana	87, 89	Х	Х			X	X	Х		Х
Guinea	86, 88	Х	Х			X	X	Х		Х
Guinea Bissau	87, 89	Х	X			X	Х	X	Х	Х
Kenya	80, 83	Х	X			X	X	Х		Х
Malawi	81, 84, 86, 92	Х	X			X	X	Х		
Mali	91						Х	Х		
Mauritania	87	Х	X					Х		
Mauritius	81, 84	X	X			X	Х	X		
Niger	86	Х	Х	X			X	Х		
Rwanda	91	Х	Х			Х	Х	Х		
Sao Tome	87, 90	X	X	X		X	X	Х		
Senegal	81, 86, 87, 90	Х	Х	X	X		X	X		
Togo	83, 85, 88, 91	X	X		X		X	X		
Uganda	92						X			
Zaire	87		X	X				Х		
Zimbabwe	92		X	<u> </u>		×	Х			

ANNEX TABLE 4
THE RATE OF IMPLEMENTATION OF THE WORLD BANK'S POLICY CONDITIONALITIES
BY THE LOAN RECEIVERS BETWEEN 1980-92

(The implementation rates for economically 'critical' conditionalities are given in brackets.)

	Agricultural sec	ctor adjustment loans	Structural adjustment loans			
_	Full implementation	Substantial implementation	Full implementation	Substantial implementation		
A) Agricultural policy:	68 (48)	15 (33)	54 (67)	18 (18)		
Pricing and subsidies	73 (60)	12 (20)	49 (70)	21 (17)		
Institutional reforms	62 (26)	21 (37)	54 (65)	16 (19)		
entry/exit	70 (na)	30 (na)	20 (na)	20 (na)		
regulatory	30 (0)	40 100)	87 (0)	0 (100)		
subsector restructuring	63 (33)	16 (67)	54 (57)	15 (14)		
subsector planning	70 (20)	4 (20)	72 (100)	14 (0)		
marketing	76(100)	24 (0)	58 (67)	17 (33)		
other institutional	65 (67)	12 (0)	32 (100)	32 (0)		
investment promotion/incentives	66 (33)	24 (67)	58 (0)	25 (50)		
technology/research	88 (na)	13 (na)	60 (na)	0 (na)		
B) Trade policy conditionality:	78 (70)	10 (10)	60 (62)	16 (22)		
Quantitative restrictions (M/X)	70 (75)	10 (0)	55 (47)	31 (33)		
import duties/subsidies	57(100)	14 (0)	69 (71)	10 (14)		
export duties/subsidies	80 (50)	0 (0)	76 (83)	6 (0)		
M/X financing and credit	0 (na)	100 (na)	79 (100)	7 (0)		
Other X incentives and regime	100 (100)	0 (0)	61 (71)	17 (14)		
Other X institutions/promotion	75 (50)	25 (50)	43 (33)	14 (33)		
Other Trade policies	100 (na)	0 na)	52 (na)	15 (na)		
C) Exchange rate conditions	100 (na)	0 (na)	75 (77)	8 (0)		

Source: Knudsen and Lindert (1995:400-01).

Note: Coverage: all countries receiving loans.

'Full' and 'substantial' implementation rate: subjective evaluation by the World Bank.

Numbers in brackets: implementation rate for the 'critical' conditionalities.

ANNEX TABLE 5 MARKET LIBERALIZATION: INTERVENTION POLICIES AND KEY FOOD CROPS IN SUB-SAHARAN AFRICA, BY COUNTRY.

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Liberalization score	Countries	Intervention in food marketing before SAP and in 1992*	Crops used for constructing the liberalization score in table 5	Crops used for production data in Figures 1a-e and long-term comparisions.	Crops used for prime data in Figures 2a-d.
No control ever	Burundi Chad Cote d'Ivoire Gabon Ghana Nigeria Rwanda Sierra Leone	None/none None /none None/none None/none None/none None/none None/none None/none	Millet Cassava Cassava Yams Sorghum Rice	Pulses Cereals Roots, tubers Cassava Roots, tubers Roots, tubers Cereals Cereals	Millet Sorghum Rice
Liberalized	Benin Burkina Faso Cameroon CAR Congo	Major/none Major/none Limited/none Major/none Limited/none	Cassava Millet Cassava Cassava	Roots, tubers Cereals Cassava Cassava Cassava	Millet
	Gambia Guinea Buinea-Bissau Madagascar Mali Mosambique Niger Senegal Tanzania Togo	Major/none Major/none Major/none Major/none Major/none Major/none Limited/none Limited/none	Sorghum Rice Rice Rice Millet Maize Millet Millet Maize Maize Maize	Cereals Rice Rice Rice Cereals Maize Cereals Cereals Maize Maize Maize	Sorghum Rice Rice Rice Millet Maize Millet Millet Maize Millet Maize
Limited intervention	Malawi Mauritania Zambia	Heavy/limited Limited/limited Major/limited	Maize Millet Maize	Maize Cereals Maize	Maize Millet Maize
Heavy intervention	Kenya Zimbabwe	Major/major Major/major	Maize Maize	Maize Maize	Maize Maize

Sources: Columns 2-3: World Bank (1994:85)

Column 4: World Bank (1996:228-31) Column 5: FAO agristat database 1995. Column 6: World Bank (1996:219-23).

Note: * None = No intervention except in food security stocks

Limited = Limited intervention by government buying agency

Major = Major restrictions on purchases and sales.

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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Liberalization score	Countries	Intervention in food marketing before SAP and in 1992*	Crops used for constructing the liberalization score in table 5	Crops used for production data in Figures 1a-e and long-term comparisions.	Crops used for prime data in Figures 2a-d.
No control ever	Burundi Chad Cote d'Ivoire Gabon Ghana Nigeria	None/none None /none None /none None/none None/none None /none	Millet Cassava Cassava Yams	Pulses Cereals Roots, tubers Cassava Roots, tubers Roots, tubers	Millet
	Rwanda Sierra Leone	None/none None/none	Sorghum Rice	Cereals Cereals	Sorghum Rice
Liberalized	Benin Burkina Faso Cameroon CAR	Major/none Major/none Limited/none Major/none	Cassava Millet Cassava Cassava	Roots, tubers Cereals Cassava Cassava	Millet
	Congo Gambia Guinea Buinea-Bissau	Limited/none Major/none Major/none Major/none	Sorghum Rice Rice	Cassava Cereals Rice Rice	Sorghum Rice Rice
	Madagascar Mali Mosambique Niger Senegal	Major/none Major/none Major/none Major/none Limited/none	Rice Millet Maize Millet Millet	Rice Cereals Maize Cereals Cereals	Rice Millet Maize Millet Millet
	Tanzania Togo	Major/none Limited/none	Maize Maize	Maize Maize	Maize Maize
Limited intervention	Malawi Mauritania Zambia	Heavy/limited Limited/limited Major/limited	Maize Millet Maize	Maize Cereals Maize	Maize Millet Maize
Heavy intervention	Kenya Zimbabwe	Major/major Major/major	Maize Maize	Maize Maize	Maize Maize

Sources: Columns 2-3: World Bank (1994:85)

Column 4: World Bank (1996:228-31) Column 5: FAO agristat database 1995. Column 6: World Bank (1996:219-23).

Note: * None = No intervention except in food security stocks

Limited = Limited intervention by government buying agency

Major = Major restrictions on purchases and sales.

Annex Table 6: The production of key crop. Countries classified by liberalization score (Thousands of metric tons)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
Countries with private m	narketing															
Burundi	319	326	322	313	261	336	348	361	336	253	369	377	386	376	287	Cereals, total
Chad	573	401	393	450	354	704	687	563	782	582	602	812	976	747	963	Roots and tube
Côte d'Ivoire	3294	3466	3644	3467	3992	4025	3833	3997	4220	4395	4239	4368	4868	4736	4761	Roots
Nigeria	19	18	19	17	18	20	21	22	26	26	34	37	41	42	46	Cereals, total
Rwanda	273	286	316	310	296	337	297	292	292	262	306	329	292	181	158	Cereals, total
Sierra Leone	551	542	568	514	561	488	577	517	547	574	562	560	535	540	466	
Countries with liberalize	d market	ting														
Benin	1316	1273	1310	1231	1540	1490	1645	1438	1847	2026	2020	2259	2202	2316	2510	Cereals, total
Burkina Faso	1048	1270	1210	1119	1089	1583	1890	1637	2101	1952	1518	2455	2477	2552	2492	Cassava
Cameroun	980	1000	1100	1143	1374	1499	1496	1336	1176	1210	1588	1300	1300	1300	1300	Cassava
Central Arican Repul	920	900	850	760	675	580	601	529	533	516	547	586	580	620	620	Cereals, total
Gambia	79	96	101	68	87	116	102	92	100	96	90	111	96	97	109	Rice
Guinea	480	485	490	396	403	437	510	515	525	560	616	688	757	833	916	Rice
Guinea-Bissau	42	80	103	85	105	105	110	105	98	110	123	123	124	126	130	Rice
Madagascar	2109	2011	_. 1970	2147	2131	2178	2230	2178	2149	2380	2420	2342	2450	2550	2360	Cereals, total
Mali	913	1197	1324	1509	1113	1719	1728	1639	2197	2157	1771	2415	1819	2138	2705	Maize
Mozambique	380	370	350	330	350	400	459	271	322	330	453	327	133	533	526	Maize
Tanzania	1726	1839	1654	1651	1939	2093	2210	2359	2339	3125	2445	2332	2226	2282	2159	Maize
Togo	138	151	151	145	222	182	127	172	296	287	285	231	278	393	280	
Countries with limited m	arketing	interven	tion													
Malawi	1186	1245	1415	1369	1398	1355	1295	1202	1424	1510	1343	1589	612	2034	1040	Maize
Mauritania	47	6 0	62	48	52	108	127	152	174	184	103	105	107	169	215	Cereals, total
Zambia	937	1007	750	935	872	1122	1231	1063	1943	1845	1093	1096	483	1598	1021	Maize
Countries with major ma	arketing i	nterventi	ion	1												
Kenya	1620	1768	2502	2300	1422	2430	2898	2416	2761	2631	2290	2340	2430	1616	2970	Maize
Zimbabwe	1511	2833	1808	910	1133	2828	2546	1131	2341	2019	1972	1586	362	1812	1750	Maize

Annex Table 7: Real food prices of key crops in Sub-Saharan Africa, 1982-92

Country	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Crop
Chad	71.59	77.93	66.35	73.40	90.19	97.72	92.21	99.53	100	99.70	111.44	Millet
Rwanda	76.06543	86.95652	108.9053	103.9524	95.52658	93.425	94.70676	95.45028	100	103.4854	111.2543	Sorghum
Sierra Leone	79.45946	95.84285	84.16817	53.50059	72.30811	76.44	158.5892	140.8379	100	68.64841	36.43108	Rice
Country	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Crop
Burkina Faso	156.8571	164.7	187.6923	164.803	88.72727	109.8	106.2924	90.91076	100	114.9191	127.9223	Millet
Gambia	139.2962	93.13725	85.77878	110.7872	93.03591	95	84.89723	88.23529	100	122.2072	113.665	Sorghum
Guinea	#VALUE!	#VALUE!	#VALUE!	#VALUE!	188.2849	156.2765	136.5876	111.6825	100	84.72885	80.33349	Rice
Guinea-Bissau	200.5556	163.0533	150.7937	177.7778	143.4179	105.5556	102.9515	109.8583	100	108.9887	102.4811	Rice
Madagascar	75.39293	67.15556	67.93643	70.45674	74.34194	77.061	89.76238	111.3486	100	95.78115	60.53322	Rice
Mali	96.81192	99.51073	90.47408	95.29749	101.7209	92.05738	96.88492	101.1342	100	99.68662	99.29147	Millet
Mosambique	71.1 7 689	61.54159	54.83667	74.56626	66.16443	70.46512	128.2912	121.8473	100	68.40262	44.62898	Maize
Niger	88.21913	84.25867	91.91293	74.92463	78.52979	82.20655	91.11453	90.52774	100	107.5635	108.9657	Millet
Senegal	91.00592	91.85449	88.80434	94.96183	88.18576	86.51023	90.05682	95.47627	100	105.896	105.7803	Millet
Tanzania	155.8615	156.5732	236.6918	227.5664	211.7136	213.0108	150.6394	114.5275	100	85.84785	74.83064	Maize
Togo	182.3632	166.9692	118.453	72.15754	106.1458	102.912	109.735	82.46154	100	99.51055	101.6415	Maize
Country	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Crop
Malawi	154.8007	139.1694	123.6614	108.0278	99.94152	85.45	134.7792	114.238	100	131.529	148.8028	Maize
Mauritania	161.4224	152.3484	134.0983	133.75	124.7646	113.2863	111.7759	102.9746	100	94.09157	85.59811	Millet
Zambia	169.5608	142.5852	180.2802	138.7998	151.7843	141.1594	104.0231	76.79009	100	90.46503	49.58506	Maize
Country	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	Crop
Kenya	77.30996	94.31796	102.7773	100.2665	101.8196	96.525	93.11365	97.63017	100	105.6282	183.8571	Maize
Zimbabwe	127.2431	106.5574	102.6316	191.1765	171.0526	156	133.7907	117.5584	100	78.90744	62.57521	Maize

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