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Liberalized and Neglected?

Food Marketing Policies in Eastern Africa

Edited by Pekka Seppälä

March 1998

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

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This study has been prepared within the UNU/WIDER project on the Impact of Liberalization on Key Markets in Sub-Saharan Africa, which is co-directed by Professor Giovanni Andrea Cornia and Professor Nguyuru H. I. Lipumba.

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FOREWORD

Analysis of structural adjustment and its impact on the economies of Sub-Saharan Africa has made considerable progress over the last few years. The debate has been vigorous and, although many disagreements remain, there has been some convergence of views. It is now recognized that liberalization alone is not sufficient to restore sustained growth to the region.

An important issue in the wider debate on structural adjustment is the liberalization of food marketing. During the 1980s SSA countries came under considerable pressure to liberalize food marketing, which had traditionally been subject to much government control in Africa and elsewhere in the developing world. This intervention reflects the importance of food as a consumption item and as a source of income for smallholder farmers. Considerable amounts of research were conducted into issues such as the respective merits of cooperatives and private traders, food price subsidies and urban food consumption, as well as overall strategies for food security. Most of these studies were distrustful of extensive government intervention in the food market.

Curiously, once the liberalization measures had been implemented, research interest in this field declined. There is a shortage of information on the impact of marketing liberalization on food prices and production. Since this impact is affected by the behaviour of many types of economic agent – individual farmers, traders, consumers, and government agencies – the end results of liberalization are far from predictable. It is therefore crucial to assess what the impact of liberalization has been.

This study, *Liberalized and Neglected? Food Marketing Policies in Eastern Africa,* fills an important gap in our knowledge. It presents three case studies of food marketing: Tanzania, Malawi and Kenya. Each is a middle-sized and poor country in which maize is the main staple food crop. The individual governments of the three countries differ in their policies towards liberalizing maize marketing. In Tanzania, maize marketing was liberalized ten years ago. In Malawi private traders were allowed to operate starting in 1987 but substantial government operations in marketing continued. The Kenyan government, after considerable pressure, has liberalized marketing only recently. These three different reform paths yield highly valuable policy lessons.

The food security issue is far from resolved in Sub-Saharan Africa. The per capita availability of food is declining and the region's food deficit is, in aggregate, growing. Food marketing is only one aspect of the food-security issue. But the food market is crucial for the welfare of both producers and consumers. Much needs to be done to guarantee the efficient functioning of food marketing systems in order to improve their ability to serve the poor.

UNU/WIDER has a long tradition of studies on food entitlement and food security, many of which have been led by Professor Amartya Sen. Some of these contributions have helped to reshape the policy dialogue on the relationship between food production and food provisioning. It is now widely accepted that the access to food by the poor is determined by their set of entitlements, which is in turn governed by society's institutions and by public action.

This study is part of the UNU/WIDER project on the Impact of Liberalization on Key Markets in Sub-Saharan Africa. The project aims to assess the rate of implementation and the efficiency of structural adjustment programmes in view of the financial and institutional constraints prevailing across the region. The project directors are Professors Nguyuru Lipumba and Giovanni Andrea Cornia.

Giovanni Andrea Cornia
Director, UNU/WIDER
March 1998

ACKNOWLEDGEMENTS

You can offer me food but if I have not eaten *ugali* (maize porridge)
during the day, I feel I have not eaten properly.

This is what Waliaula Makokha, a Kenyan teacher, used to tell me. So every day when we cooked together, we had *ugali*. When we did not have it, we had whole maize and beans cooked together. Maize was always on the table.

Maize is also spilled on most of the pages in this report. Now that the report has been concluded, I would like to cook a large bowl of *ugali* and invite all of you to dinner. I would also like to slaughter a he-goat and give its most valued parts to the co-authors Professors Ephraim Wadonda Chirwa and Gerrishon K. Ikiara who committed themselves with enthusiasm for collaboration in a very fruitful manner. I would like to offer the hind leg of the goat to Liisa Roponen and Janis Vehmaan-Kreula who kept the process moving. I would like to make a special tomato-onion sauce (using the tasty salt acquired from silted ashes of the burned empty maize cobs) for Deborah Bryceson and Marja-Liisa Tapio-Biström who provided me with intellectual stimuli and information. To Professor Giovanni Andrea Cornia, Director of UNU/WIDER, I would offer a special honorary seat, in thanks for his direction and determination. For my colleagues, Professors Nguyuru H. I. Lipumba, E. Wayne Nafziger, Marja Liisa Swantz and Germano Mwabu, I would like to brew grain beer and offer it with gratitude for their comradeship. Professor Tony Addison, who gave advice in the final stages of the report's preparation, would also be most welcome to the feast. And you, the reader, I would like to invite you as well, for your interest in this vital issue.

If you have any problems with this report, you should, in the first instance, blame reality. Then, you might consider your own premises. But the authors take full responsibility for all remaining mistakes.

Pekka Seppälä

LIST OF ACRONYMS

ADD	Agricultural development division (Malawi)
ADMARC	Agricultural Development and Marketing Corporation (Malawi)
ASAC	Agriculture Sector Adjustment Credit (Malawi)
CPI	Consumer price index
CSRP	Cereal Sector Reform Programme (Kenya)
EDDRP	Entrepreneurship Development and Drought Recovery Programme (Malawi)
EIU	Economic Intelligence Unit (Tanzania)
FAO	Food and Agriculture Organization of the United Nations
FRDP	Fiscal Restructuring and Deregulation Programme (Malawi)
GDP	Gross domestic product
ITPAC	Industrial and Trade Policy Adjustment Credit (Malawi)
KCC	Kenyan Cooperative Creameries (Kenya)
KDB	Kenya Dairy Board (Kenya)
KGGCU	Kenya Grain Growers Cooperative Union (Kenya)
KNTC	Kenya National Trading Corporation (Kenya)
KFA	Kenyan Farmers Association (Kenya)
MDB	Marketing Development Bureau (Tanzania)
MDC	Press Corporation and Malawi Development Corporation (Malawi)
MEPD	Ministry of Economic Planning and Development (Malawi)
NAPB	National Agricultural Products Board (Tanzania)
NCPB	National Cereals and Produce Board (Kenya)
NMC	National Milling Corporation (Tanzania)
SAP	Structural adjustment programme
SAL	Structural adjustment loan
SEDOM	Small Enterprise Development Organization of Malawi
SFRFM	Smallholder Fertilizer Revolving Fund of Malawi
SGR	Strategic Grain Reserve (Tanzania)
URT	The United Republic of Tanzania
WTO	World Trade Organization

ABSTRACT

Food marketing is one of the fields where structural adjustment has been implemented throughout the Sub-Saharan Africa. This study analyses the impact of reform on the functioning and efficiency of food marketing. It is based on a comparative analysis of three maize-producing countries, namely Tanzania (by Pekka Seppälä), Malawi (by Ephraim Wadonda Chirwa) and Kenya (by Gerrishon K. Ikiara).

The case studies show a noticeable variation in the reform paths and the outcomes among the three countries. Tanzania can be singled out as a country which has implemented its liberalization measures decisively during the 1980s. The private marketing system has managed to cover the country fairly well but, due to a lack of investment in storage and the dominance of small-scale traders, price fluctuations are still fairly large. The consumer price of maize has declined during the 1990s. The production of maize has slightly declined and the 1997 food shortage has hit the country hard. In comparison, Malawi has been more hesitant in dismantling the public marketing body. Although private traders are allowed to operate, the public marketing has managed to control a large part of marketing. The severe droughts of 1992 and 1994 have influenced the government to maintain a stake in marketing and to support smallholder food production. Kenya is a country which has a progressive estate farming and milling sector and one in which marketing reform has been vigorously opposed to by the government. Only after concerted donor pressure was the private marketing liberalized in the 1990s. The liberalized marketing system has been turbulent due to changes in both importing regulations and in domestic production. The competitiveness of liberalized maize milling (especially small-scale hammer mills) has led to the decline in the price of maize flour.

The case studies in this report show that governments have been able to modify the reform process to suit their own purposes, at least to some extent. Private marketing seems to be operational in most parts of the countries studied. Traders in all three countries still complain about the unpredictability of government policies. It is also clear that governments have invested very few resources to enhance the skills and financial resources of traders.

The era of structural adjustment has witnessed a slow decline in food production. Although no direct causality can be drawn from marketing reform to food supply, it seems apparent that the private marketing system has only a limited capacity to deal with the high fluctuations of rain-fed production. During unfavourable years, net consumers are vulnerable as they cannot afford the inflated food prices. Limiting the responsibility of the government to charity-type food distribution after each drought is an inadequate solution to the food problem.

CHAPTER 1

INTRODUCTION

Pekka Seppälä

The food problem continues to dominate Sub-Saharan Africa. Despite the end of the cold war, despite fundamental policy changes, and regardless of past and present development fads, the food problem persists. Food production per capita in certain countries continues to decrease while in many others, advances in food production are not reflected in domestic nutritional levels.

At the same time, food marketing has gone through major reform. During the past 10-15 years, a wave of privatization has swept through food marketing in Africa, dismantling cooperatives and large state parastatals. This has left in its wake a large number of small traders, who hitchhike on lorries or push overloaded bicycles to transport food from the farms to the markets or bigger towns. The petty traders are confronted with an enormous task; as unofficial representatives of the market forces, they are expected to match the rural producers to the urban consumers, and to mediate between the two effectively. Traders, who are simply trying to make a living, are burdened with a task which also has wide repercussions on regional politics, and welfare and income distribution. Given the magnitude of the job on hand, there is every reason to wonder, how the traders are managing the responsibility.

This report introduces three case studies on food marketing in Eastern Africa. Past policies of government-controlled food marketing are studied but the main emphasis is on the recent events which are causing the private traders to assume an increasing role in food marketing. The countries of the case studies – Kenya, Malawi, and Tanzania – are comparable because each relies on maize as its major food crop. The difference among these countries is apparent in the level of commitment to the liberalization of food marketing. Tanzania implemented liberalization measures already some ten years ago, Malawi introduced reforms in a half-hearted manner and Kenya continued to object to all the major reforms until pressed to the extreme. Eventually, these countries surrendered in the face of largely external pressure, but the process and the results vary considerably.

The case studies show that the shift has not been a night-to-day move but rather a gradual process. This is to say that the difference in the marketing conditions of the pre- and post-reform eras is less clear than what the dichotomous terminology (state-governed versus market-oriented policy) would indicate and that the changes are not irreversible. Indeed, there is no scientific or ideological need to maintain the illusion of a full reversal in policy. Instead, it may be worth evaluating what kind of mediating positions exist between the ideologically constructed extremes, how these mediating

positions actually function and how they could be improved. This is a challenging task because the conventional tools of economic analysis are more suitable for examining 'pure' market-oriented systems than mixed systems, which simultaneously strive toward diffuse aims.

The official doctrine (or initial hypothesis) triggering marketing reform was based on the postulate of higher efficiency on the part of the private traders relative to the government bureaucracies. According to the World Bank, private traders are able to serve the farmers and customers better than government officers. This supposition needs to be tested in this study.

The efficiency of private marketing is a straightforward matter for empirical research. In simple terms, the farmers are wondering, whether the traders will come to their farm-gates and, if they do, will the price be reasonable. Cash-strapped farmers are concerned because these traders are frequently their friends, equally short of cash. Farmers can cite numerous cases of inefficiency on the part of past governmental marketing parastatals. There were incidents of being robbed by corrupt officers or being stranded with crops not collected. Still, other farmers can recall the secure comfort of having the producer price confirmed to the entire nation on radio even before the seeds had been sown. They can also remember the easy access to cheap fertilizer from cooperative shops and a reliable marketing system. With private traders assuming responsibility for marketing, the certainty of a trader coming to a remote village, and the fairness of the price offered, are far from self-evident. Consequently, producing food for sale continues to be a risky business. Empirical research is needed to determine whether or not reform has eased the plight of the farmer and the consumer.

Locating proper tools for the analysis of food marketing requires flexibility and analytical breath. A time series analysis of producer and consumer price data can be used to examine profit margins, market integration and producer incentives. However, we need to be cautious about the premise for such an analysis. A well-functioning market does not mean uniformity in prices, it means price variations which reflect production conditions, distances to market, and locational shadow prices. In addition, a well-functioning market does not mean that total food production will necessarily increase or that food security will be guaranteed. Market functions can be optimal even though a number of producers and consumers at the same time are marginalized and suffering. These considerations create the need to supplement the market-oriented analysis with institutional and political research.

In this introductory section, we first review the process of food marketing liberalization in Sub-Saharan Africa. We then discuss the methodological choices involved in the task. Third, we introduce our case study countries and finally, we present our entry-points and the focal issues that are dealt with in the case studies.

1.1 The food marketing liberalization saga

1.1.1. The motives for liberalization

It is possible to locate both push and pull factors for the liberalization of food marketing. The major push factor, due to extreme budget constraints, is the need to reduce government expenditure on food marketing. The pull factor is the competitiveness of the private marketing system. In the following we argue that the push factors are at least as important as the pull factors.

In order to understand the push factors, it is helpful to study food marketing reform as part of a much wider evolution, namely the structural adjustment programme (SAP) of Sub-Saharan African (SSA) economies. The wide SAP framework helps to conceptualize the motivations of the World Bank for extending liberalization to food marketing. In implementing SAPs, the World Bank has been concerned mostly with the *fiscal* situation of the SSA governments (and their capacity to repay the World Bank loans). The major element of structural adjustment programmes has been the short-term stabilization of fiscal and external balances. In the pre-SAP period, food marketing was a major drain on government resources. More precisely, the marketing boards and cooperatives were allowed (and often forced by the central government) to finance expensive crop marketing operations. This exercise was costly because of two logically distinctive and morally opposite reasons. On the one hand, these operations were merely a form of income distribution, effectively transferring resources via the government from sections of food producers to sections of consumers. Thus food marketing was a form of social policy.[1] On the other hand, state marketing operations were expensive because the agencies of the state were operationally ineffective. This was repeated by the World Bank so often that in many quarters, it was taken as fact, and state food marketing became inefficient by definition.[2]

Whatever the reason for the fiscal costs of public food marketing, the fact remains that food marketing drained government resources in the pre-SAP period. As stated by T. S. Jayne and Stephen Jones in their well-presented paper 'Policy Synthesis for USAID' (1996:2), 'the principal driving force behind food market liberalization in the 1980s and 1990s has been fiscal crisis.'

As for pull factors, the increasing coverage of the black market would have been adequate proof of the competitiveness and reliability of the private market. However, policy control of food marketing was often so decisive that the black market on grain

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[1] The final effect on income distribution was not easy to estimate, because the matrix of input and produce subsidies and shadow prices was a complex one. The World Bank's well-founded counter-argument was that while income transfer was planned to support poor consumers, it tended to fall short of this target. Nevertheless, the income transfer policies were never solely directed towards poor urban consumers. They were similarly targeted towards the peripheral producers. In addition, these policies also implicated certain abstract welfarist aims like peace, nation building, regional equality and better overall food security.

[2] Indeed, there were certain operational wastes such as large overheads, corrupted administrators, year-round organizations for seasonal products, but some of the mismanagement fell within the political policies of pan-territorial pricing, or compulsory crop collection for bulky produce which amplified the inefficiency.

was cornered. Therefore, no adequate proof of the superiority of the private market existed; the only way to test it, was to launch the marketing liberalization reform.

1.1.2. The reform measures: the simple and the complex

In principle, food market liberalization is technically easy to implement: one only needs to pass only a few laws in parliament and to call off the policemen from the road-blocks. After that, it is up to the private traders. It is understood that without re-organization and additional resources, the state marketing agencies are likely to fade away on their own. Food market liberalization is also simple to implement financially, as deregulation requires no expenses. However, the technical and financial simplicity is a fact only when liberalization is conducted in a single swoop, but food marketing liberalization cannot be implemented in any real economy in such a simple manner. There are two reasons for this.

First, even in a liberalized economy the government still has the legitimate obligation to guarantee minimal food security. This requires state marketing operations which are only partly different from those before the reform. In quantitative terms, marketing operations should be significantly reduced, but the exact level of cut-back is based on political decisions and there are vested interests to keep the state's involvement high. In other words, the qualitative reform needs to be backed by a corresponding quantitative operationalization. Second, private marketing agencies need fostering. They need support to be able to function competitively, and the competition needs to be directed in order to eliminate the dysfunctional side-effects. Thus, government intervention is still necessary even in the liberalized markets.

The reform measures can be divided into two categories. There are simple reform measures, which are mainly concerned with deregulation, and expensive measures such as the construction of new institutional structures. It takes only little effort to bring about deregulation, but a major undertaking to achieve the necessary institutional structures.

It should be clear now that even in a liberalized setting, *both* government and public agencies are needed. There are several 'handbooks' which define the right functions in the liberalized economy for each marketing agency, be it public or private (e.g. Thomson and Terpend 1993; World Bank 1995). The major strength of these technical presentations is that they are systematic: they show what can be done in ideal circumstances without major financial and institutional constraints. They are also able to introduce new initiatives in which the dichotomy between 'private' and 'public' is broken and new innovative forms of complementariness and cooperation are formulated. For example, the government can provide services like information services or hiring storage capacity to the private sector or contract private sector actors to do certain tasks, like managing transport in food security operations or conducting marketing research. Complementary functions are the segmentation of markets when, for example, the government provides food for arid, sparsely populated regions or the government is responsible for input supply market.

Naturally, the presentation of the optimal division of labour is hindered by the fact that it is based on the premise of an ideal world. The task of empirical research is to identify the real-life processes in a historical setting. In the real world, the state and private actors have competing interests and the cooperation/complementary operation is far from a smooth division of tasks. There are also cases where the abstract border between 'private' and 'public' sector is crossed and these sectors merge for a specific purpose. For this reason, it is beneficial for empirical research to disaggregate the 'private sector' and 'public sector' into several agencies with positional interests. Markets in reality tend to be segmented and market actors try to 'regulate' their own segment through horizontal and backward and forward linkages.[3] These factors can cause policy measures to veer away from the liberalization track.

1.1.3 The rate of the implementation of liberalization measures

The most systematic analysis of the rate of the implementation of food marketing reforms in SSA is by the World Bank (1994). This research shows that several countries in western Africa had never really used state monopsony arrangements for major food crops. In other parts of Sub-Saharan Africa, state interventions had been more popular although the degree of intervention has varied considerably. The analysis, based on the 1992 situation, argues that only two countries (Kenya and Zimbabwe) had retained heavy state interventions, while three countries (Malawi, Mauritania and Zambia) had retained 'limited' state intervention on food marketing. After the publication of the report, even these reluctant countries implemented liberalization measures. The structural adjustment of food marketing towards market economy has been officially implemented in all of Sub-Saharan Africa.

The implementation of reform is always coupled with a number of twists and turns in practicalities. These may be minor details but can actually have a significant impact on the functioning of food marketing. Here we list four possible sources of complication. First, payments like license fees, direct taxation and produce levies influence traders and their marketing behaviour. If payments are manageable, they can be included in the prices but if they are too high, they become a dis-incentive to enter trading or, at least, to invest in trading. Second, if the governmental 'food security' purchases and food releases are handled through unpredictable and subvented prices, these distort the market situation. Third, regulations on imports and exports which continually change, and fluctuations in world market prices and in food aid allocations can have sudden and disturbing effects on local marketing conditions. Finally, the macroeconomic reforms which affect interest rates and foreign exchange rates have a direct effect on the marketing regime.

Making small adjustments to policy is a common form of calibrating a market system to local conditions. The question is, when do these 'small steps' actually amount to a major change in the marketing environment that can fundamentally modify the situation. We can use food security operations as an example. The shift from a marginal position of

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[3] Cf. to the filière analysis by Bernstein (1996) on the regulation that institutional players operate upon 'private' maize marketing in South Africa

ten per cent of marketed grain to a price-setter position with a 25 per cent share (and locationally even higher) can only be triggered by an administrative order to fill the reserve godowns to a stipulated level. In other words, an administrative adjustment appearing to be small can totally change the marketing regime.

TABLE 1.1
THE IMPLEMENTATION OF FOOD MARKETING REFORM

		Marketing		Fertilizers		Wheat imports		Rice imports	
		Before	After	Before	After	Before	After	Before	After
Country	Crop	reforms		reforms		reforms		reforms	
Benin	Tubers	●	○	■	◆	✪	✪	✪	✪
Burkina Faso	Millet; sorghum	●	○	■	□	⊙	⊙	⊙	⊙
Burundi	Beans	○	○	■	□	⊙	✪	..	✪
Cameroon	Cassava	◎	○	■	▣	✪	✪	⊙	✪
Central African Republic	Cassava	●	○	■	◆	✪	✪	✪	✪
Chad	Millet; sorghum	○	○	■	□	✪	✪	✪	✪
Congo	Cassava	◎	○	..	..	⊙	⊙	⊙	✸
Côte d'Ivoire	Tubers	○	○	◆	□	✸	✸	⊙	⊙
Gabon	Cassava	○	○	..	..	..	..	..	..
The Gambia	Sorghum; millet	●	○	■	□	..	✪	⊙	✪
Ghana	Tubers	○	○	■	□	⊙	⊙	✪	✪
Guinea	Rice	●	○	■	□	⊙	..	⊙	..
Guinea-Bissau	Rice	●	○	□	□	..	..	⊙	✪
Kenya	Maize	●	●	■	□	⊙	⊙	⊙	✪
Madagascar	Rice	●	○	■	□	⊙	⊙	..	✪
Malawi	Maize	●	◎	■	■	✪	✪	✪	✪
Mali	Millet; sorghum	●	○	■	□	⊙	✪	⊙	✪
Mauritania	Millet	◎	◎	■	□	✪	✪	⊙	✪
Mozambique	Maize	●	○	..	□	⊙	✪	⊙	✪
Niger	Millet	●	○	■	□	⊙	⊙	⊙	⊙
Nigeria	Yams	○	○	■	■	n.a.	⊙	n.a.	n.a.
Rwanda	Sorghum	○	○	▣	▣	..	..	..	..
Senegal	Millet; sorghum	◎	○	■	□	⊙	⊙	⊙	⊙
Sierra Leone	Millet; rice	○	○	■	▣	..	..	⊙	✪
Tanzania	Maize	●	○	■	▣	⊙	✪	⊙	✪
Togo	Maize	◎	○	■	□	⊙	✪	⊙	✪
Uganda				■	▣	..	✪	..	✪
Zambia	Maize	●	◎	■	□	..	..	..	..
Zimbabwe	Maize	●	●	▣	▣	⊙	⊙	⊙	✪

Source: World Bank 1994. Adjustment in Africa.

Notes
- ● Major restrictions on purchases and sales.
- ◎ Limited intervention by government buying agency.
- ○ No intervention except in food security stocks.
- ■ Marketing controlled and prices subsidized.
- ◆ Market 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.

TABLE 1.2
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	▲	▼	▼	O	
Expanding imports of food	▼	▲	▲	O	▼
Subsidize food production:					
Foods not traded internationally	▼	▲	▲	▲	▲
Foods traded internationally	O	O	▲	▲	▲
Reduce subsidies on food production:					
Foods not traded internationally	▲	▼	▼	▼	▼
Foods traded internationally	O	O	▼	▼	▼
Subsidize food prices for consumers, maintain producer prices	▼	▲	▲	O	O
Augmenting incomes targeted or market-wide	O	▲	▲	▲	▲

Source: World Bank (1988)

Key:
- ▲ Improvement
- O No effect
- ▼ Moderate deterioration
- ▲ Moderate improvement
- ▼ Deterioration

1.1.4 The unpredictable effects of marketing reform

The effects of marketing reform are difficult to define. It is impossible to disentangle this reform from other on-going reforms. Moreover, even if we locate a clear trend in a reformed economy, we cannot be sure whether the trend would have been different without reform. A comparative analysis of country cases with an adequate number of similarities is the best approximation we can reach. In this study, we deduce some results from the comparative evidence, fully acknowledging that in the ultimate analysis the case studies are not fully comparable.

Barrett (1997) and Seppälä (1997) argue that the various reforms taken during SAP, if implemented simultaneously, have ambiguous effects on food prices. For this reason it is impossible to predict the final impact of the concerted reforms on food prices. In the words of Barrett (1997:156):

> For a variety of structural reasons, any single macroeconomic or sectoral policy change may vary in its effects on different agricultural subsectors.

Liberalization efforts combining several such reforms thus naturally have aggregate effects on commodity prices which that are ambiguous *ex ante*.

The World Bank has also acknowledged the contradictory effects of the various reform measures as well as the varying impact on the shareholders. This is exemplified in Table 1.2.

The food market in Africa is very vulnerable because it is based on surpluses: farmers sell their surplus produce and some traders, preferring normally to deal with more profitable items, use only their spare resources on food marketing. The 'surplus nature' of food marketing can thus mean that a small change in total production can decisively affect the amount of marketed produce. For example, if self-provision accounts for 80 per cent of food production during a normal year and if harvest falls just 10 per cent below the normal level in an exceptional year, the amount of marketed food will drop 50 per cent.

This all boils down to just one factor. Food market is crucial for life but the functioning of the relevant market is extremely difficult to predict accurately. More empirical research is needed on the issue.

1.2 The methods for analysing food marketing reform

1.2.1 Analysing the economic policies: market as a yardstick?

On the methodological plane, the ultimate question is what analytical tools do justice to the marketing systems of the pre-reform state-governed era and the post-reform market-governed period. If we use only neoclassical economic tools, we are using methods designed for the analysis of the post-reform setting. If we concentrate on the political economy approach, we can grasp the complexity of pre-reform policies more easily but the microeconomic impacts may go unnoticed.

The food marketing reform is usually summarized as a move from planning rationality to market mechanism. However, depending on the intellectual tradition of the researcher, the change is interpreted in different ways. A result-oriented liberal economist would describe the phenomenon as a change from failed planning to market mechanism. A cynical liberal economist would say that the shift is a more incremental change from failed planning to regulated market. A political economist might see the transition from planning rationality to regulated market. We shall reserve our verdict to the concluding chapter of this study. Nevertheless, we wish to point out that the choice of methodological tools distort the factors likely to enter into the analysis. In order to avoid serious distortions, the authors of this study endeavour to combine both neoclassical economic theory and political economy.

In the following, we dig deeper into mechanics of food marketing, asking first, what kind of product food is, and second, analysing the institutions that take part in food marketing.

1.2.2 Analysing the process: how institutions matter?

The school of institutional economics has a word to say on economic inefficiency that results from either a too rigid or a too unpredictable institutional setting. While institutional economics provides interesting questions, the method of analysis – the location of deviations from idealized market analysis – is too broad to provide compelling answers. The analysis is geared towards translating a complex issue into new terminology and, along with the process, simplifying it to a pre-destined dimension. In our report, we have taken up institutional issues but refrained from this extra translation work.

Institutions do matter but one cannot take for granted that the different institutions – and the stakeholders they represent – are striving towards a common aim. Even the aim of economic policy is subject to contestation. In this situation, the institutional analysis should concentrate on two issues: the degree of coherence and institutionalization among the stakeholders, and their relative power positions. In the following we restrict the discussion of institutionalization to the analysis of farmers, traders and the regulating state, and the relationship among these.

In our analysis of farmers, two issues are pertinent. First, the producers are divided into large-scale farmers and smallholders. This distinction is reflected in issues like technology and market access. Grain markets tend to be segmented so that large farmers have access to inputs and machinery. They also try to guarantee access to storage and institutional buyers while smallholder producers use inputs sparingly and sell their small surplus to petty traders. Although smallholder farmers tend to dominate the SSA scene, they should not be taken for granted. Second, smallholder farmers are seldom employees working under the capitalist employer-employee relationship. For the smallholder, farming is not a livelihood, it is – usually – an attempt to make his life easier. Because he is not 'free' from control over his own labour and land use, and because he also has the option of producing for self-consumption, the farmers constitute an unpredictable lot. The farmer tends to be conservative and it takes an effort to convince him; to be assured that a positive price trend is developing, he needs a steady, continuous incentive through reasonable prices, plus a reliable marketing system. Also, a farmer testing new technology needs at least a 20 per cent increase in production before being able, in the absence of any bookkeeping system, to acknowledge that the new farm technology has its advantages.

With regard to traders, the degree of commitment by this group to food trade should be examined. Are they professional full-time traders with adequate storage facilities, reliable access to capital and transport, and full knowledge of market information? Or are they resource-poor youngsters in the trade part-time or as a step towards more reliable work? Is trading institutionalized to the extent that farmers and customers can expect a certain standard of conduct from individual traders? Do traders have a 'voice' in the political scene or are they vulnerable underdogs who are blamed when things go wrong? Again, it should be remembered in the analysis that traders are not a homogeneous group, all sharing the same expectations and resources.

The state is perhaps the most complicated institutional actor to be analysed in this context. The state is never a monolithic actor completely following the policy papers tabled at the beginning of a planning cycle. The 'state' is made up of politicians and administrators. Politicians may have a number of pressing concerns (political stability, own constituency, regional politics, forthcoming elections) while administrators are more straightforward with long-term commitments to existing institutional set-up but also with private interests of making a living. Political decisions on resource allocations have a definite impact upon the capacities of state administrators to do their task. Often the failures of state administration can be refuted back to the lack of political commitment to match resources to the official operational principles.

In the field of food, state policies tend to be *reactive* rather than active and the state tends to change policies after food shortages. Once food shortages are tackled, policy statements become less frequent and financial commitments less convincing. This fluctuating commitment is a natural result of weather-controlled agriculture and there need to be distinctive food policies for the good and the lean years. The question is whether the policies can stand the test of lean years without too many casualties.

The final focus of institutional analysis is the interface between producers, traders and state institutions. Institutional analysis can easily indicate how well each group is organized, what means it has at its disposal to make demands on other groups, and what institutional factors are crucial for the outcome. The institutional analysis may show the types of power coalitions certain sectors of the stakeholders can form in order to advance their own line. Furthermore, the political process has feedback effects. In the process of negotiation, policy issues are reformulated and the composition of stakeholder alliances is reshaped.

1.3 The case studies on private food marketing

The three case study countries, Kenya, Malawi and Tanzania, were selected because these nations, although similar in many respects, differ in one aspect – their policy towards market liberalization. Thus, they form a unique comparison.

The similarities between countries are naturally always the result of the selected criteria and the exactness of scrutiny. The three case study countries are classified as the middle-sized countries in Sub-Saharan Africa. The past history for each has been shaped by similar colonial encounters and peaceful years of independence. Their economic progress differentiates in terms of gross production and distribution of wealth. Still, these three countries can be termed poor, having limited industrial capacity and high dependence on agricultural income. In terms of food production, each country has its favourite domestic staple crops but maize is the dominant food crop for all. All three have also historically strived towards a high level of food self-sufficiency. Kenya and Tanzania are linked by the sea to world food markets but this has not affected their past policy line: enhancing domestic food production. Some indicators on Kenya, Malawi and Tanzania are presented in Table 1.3

TABLE 1.3
BASIC INDICATORS FOR THE ECONOMY OF THE CASE STUDY COUNTRIES

	GNP per capita in 1996 (USD)	Population in millions in 1996	Rural population below poverty line 1990 (per cent)	Variability of production of food stables 1965-90
	Column 1	Column 2	Column 3	Column 4
Kenya	330	27	55	11
Malawi	180	10	85	13
Tanzania	130	31	60	11

Sources: Column 1-2: World Bank (1997:6, 35).
Columns 3-4: IFAD (n.d.:60-3).

Variability is calculated as the standard deviation of variable (xt-Tt)/Tt where xt refers to the annual observations and Tt the corresponding trend values, calculated on the basis of a line fitted by the least squares regression method.

The notable difference between these countries is the commitment of their governments to the liberalization of food marketing. All three countries have been pressured by the international financial institutions to implement structural adjustment programmes and, as a part of the programmes, to deregulate food marketing and minimize state interventions in food market. The government of Tanzania implemented food marketing reforms decisively already in the mid-1980s. The government of Malawi started the reform by implementing the deregulation of private trade in 1988 but also continued with heavy state interventions, thus reducing the scope of operation for private traders. Finally, the Kenyan government persisted in maintaining marketing controls into the 1990s and, when forced to adapt changes, has continuously amended the administrative regulations and so, reshaped the playing field. Due to the differences in policies, these three countries provide a good case for comparing the dialectics between policy and its impact. The case studies provide necessary historical background but they concentrate on the recent reform process and developments after reform.

1.4 The topics of analysis

There is no doubt that the liberalization process has started in all the countries studied. It is our intention to determine whether the reform measures undertaken are conducted according to plan and whether all possible efforts are taken to achieve maximum benefit without the harmful side effects of reform. In order to address this question, the analysis concentrates on four logically related but analytically separate topics:

i) What is the policy orientation towards food security during and after reform?

ii) How do the private traders conduct business?

iii) What is the policy orientation to the construction of 'enabling environment' for private trade?, and

iv) What are the impacts of marketing reform?

1.4.1 Food security: an aim, an excuse or an abandoned dream?

Food security was a major policy line publicly endorsed during the pre-SAP period. During the reform process and after, the food security issue has received less attention. Still, governments conduct some food security operations and offer political statements on their efforts, should there be any disruption in food security. Thus, food security is still on the agenda. The question is whether the means applied by the governments are adequate to guarantee food security.

By analysing government policy on food security, we are able to determine whether the government is a 'passive' (reactive) actor in food policies or whether, during and after the reform process, it still endeavours to make a 'decisive contribution' to guarantee food security. We can also define whether the state is an unified actor, having the structure to implement the stated policies, or whether the separate public institutions simply guard their own plots.

1.4.2 Private traders: How do they trade?

In the process of marketing liberalization, private traders are expected to emerge onto the scene and to provide a reliable means to mediate food crops from the farmers to the customers. Therefore, we should know more about these traders and how they operate. The first empirical question concerns the social characteristics of private traders, and more specifically, the *mix of petty and large-scale traders*. If petty traders dominate the scene, one needs to inquire further whether they command the financial capacity to tackle the seasonal price fluctuations. One can also ask whether small-scale traders are professional traders or seasonal/part-time traders? Regarding large-scale traders, one needs to ask, what is their relationship to patrimonial state, importation and institutional buyers?

The second empirical task is to look at the coverage of traders, which needs to be assessed to determine whether private traders are capable of providing marketing services for the whole country at reasonable prices, and for all the major crops. This assessment is relative, since the coverage is a function of the lowest acceptable price.

The third essential question is the private traders' effectiveness and competitiveness, which can be examined through a price analysis. Competitiveness and the 'integration of markets' can be analysed through the variability of prices between locations and between seasons.

After a review of these three questions, we are better equipped to understand the position of the traders in the reformed marketing setting. A major question is whether the farmers perceive traders as useful partners of society, or as selfish exploiters who – if not despised – need at least to be supervised.

1.4.3 Enabling policy environment to support private traders: a missing step?

Private traders are always subject to government policy measures. The policy environment can be conveniently divided into regulatory measures, support measures

and taxation. The next research issue is deciding whether the final step in the sequence of reform measures, namely the creation of an enabling environment, has been taken.

Regulatory measures strive to enhance competition among the traders and, at the same time, to guarantee the minimum quality of the product. Licensing of traders is a primary vehicle of the regulatory environment. In analysing these licensing requirements, one should observe the difference between the official stipulations and the actual demands of the field.

Support measures include a wide array of instruments which indirectly and directly aim to help the private traders. Direct support measures include credit facilities and training projects; indirect support concerns infrastructural improvements such as the construction of roads and marketplaces. When direct policy environment is studied, the taxation of traders should also be considered. As the World Bank, on the one hand, advocates the creation of a conducive trading environment and an increase in taxation on the other, it is a matter of empirical study to determine whether trader taxation has decreased or increased along with the overall reform.

Apart from policies directly geared towards marshalling private trade, the government manipulates the 'enabling environment' indirectly through its own food security operations on limited food collection, food import and food selling operations. These are carried out under the rationale of 'marketing agency in the last resort' for various food security reasons. Whatever the motivation, these compete with private traders since any influx of commodities in a liberalized economy has an effect on prices throughout the system. Any food allocation, even when donated or provided at subsidized prices to a targeted group of the needy, can be resold on the open market. Consequently, the volume of public food marketing operations need to assessed. Only after reviewing quantitative (and price) information is it possible to assess the impact of public operations on private marketing. In this data set, government action is more important than the official statements on policy motives. Finally, for the trader, not only are the actions of the government important, but also the government's affirmative measures to accomplish these. It makes a difference whether food security operations are predictable or unpredictable, and whether they are conducted through market-based prices or through the announced prices.

1.4.4 The impact of marketing liberalization of food prices and production

The international financial institutions have loaded the structural adjustment programmes with very wide agendas in the SSA. Food marketing reform has been only a minor element in the SAPs to be enforced as much for the consistency of policies as for their inherent rationality. It can be seriously questioned whether full scale liberalization of food marketing is beneficial for the Sub-Saharan countries. More specifically, it can be asked whether the withdrawal of subsidized and guaranteed producer prices have led to the following adverse situations (and here we simply note down the possible negative consequences without prior hypotheses):

i) stagnant food production and increasing import dependency, thus taxing the scarce foreign exchange reserves;

ii) increased food price fluctuations over the years;

iii) increased seasonal and regional price differences;

iv) increased vulnerability among the poor producers and consumers in peripheral areas; and

v) continued need for high state investments in food security operations.

The evidence on these issues is likely to vary case by case, but in general terms it can be noted that the liberalization of food crop marketing has meant a new situation for the beneficiaries of food policies. It has had wide-ranging *distributional* effects and welfare impacts which need to be scrutinized. The analysis of price and production data can tell us, whether liberalization has been beneficial for the people.

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CHAPTER 2

TANZANIA – DECISIVE LIBERALIZATION PATH

Pekka Seppälä

2.1 Introduction[1]

Among the maize producing countries of eastern Africa, Tanzania can be singled out as a country that liberalized its food marketing system in a decisive manner. The measures of deregulation were largely accomplished during the second half of the 1980s. Some small state operations were continued into the early 1990s to smoothen the impact of the policy change which was mainly concerned with the regional redistribution of production, but even these measures were later abandoned. The liberalization of food marketing has been accomplished in Tanzania and private marketing has dominated the scene throughout the 1990s. This analysis is particularly timely in the case of Tanzania because the recent drought in 1997 has cast a dark shadow over the promising trend started by the liberalized marketing regime.

In this chapter I analyse the development of private food marketing in Tanzania, particularly the maize trade of the 1990s. Although this may narrow the scope of the analysis, it also allows us to dig deeper into the local variations. The chapter is constructed around the hypothesis that regional and locational specificities have their impact on the workings of the national market. In other words, 'market mechanism' needs to be anchored to the local institutional set-up. Our main concern is the degree of market integration in Tanzania.

Typical of the private marketing era, all production figures are rather rough guesstimates.[2] Given the decentralized pattern of production and marketing, there is no simple way to reliably assess production. In contrast, price figures are collected systematically and, given competitive markets, price fluctuations of non-perishable food grains in a certain market at a certain time remain within narrow limits. For these reasons, we base our analysis on food price data, particularly on maize. Although this does not allow possible substitution effects, a more in-depth view of the situation in maize marketing is achieved.

Based on the general neoclassical literature on the liberalization of food marketing, we can present a few theories. Instead of constructing a model to explain the development

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[1] I would like to express my gratitude to Deborah Bryceson, J. Mdadila, Maisa Tapio-Biström and O. A. Ntikha and Bernard Ulaya who have generously provided the data for the analysis. Detailed information on data handling is available from the author on request.

[2] The production figures prior to reform are equally questionable, although for a different reason: figures from the local authorities tend to reflect the target level more than the actual production level.

of the average real consumer prices, we prefer to analyse the efficiency of existing markets and to hypothesize that liberalization means:

i) more integrated markets; but

ii) continued seasonal price variations reflecting storage costs; and

iii) spatial producer price variations reflecting accessibility to major markets.

The intensive research of the 1980s provides ample points of comparison as well as material for more detailed, historically-founded theories. Based on previous studies, three hypotheses can be summarized as follows:

i) The integration of private maize markets will increase during the advancement of liberalization. As the majority of traders are competitive petty traders (Bryceson 1993), the producer/consumer price ratio will decrease (World Bank 1994). Integration is dependent on the condition of the infrastructure. Although Dar es Salaam is a major market, its importance should not be overestimated (cf. Van Donge 1994). The end result is a complex multi-supply-area cum multi-demand-area matrix.

ii) Seasonal and inter-annual price fluctuations are an integral feature of the private marketing system. Seasonality is high in the surplus production areas, particularly the southern highlands, and low in central consuming areas, especially Dar es Salaam, because supply can be transported from various locations as well as imported (Santorum and Tibaijuka 1992a:438).

iii) The liberalization of food marketing has an impact on the regional distribution of production. The removal of pan-territorial prices implies decreased scope for market access in remote areas. Given the paucity of production information, we concentrate on price data and hypothesize that real producer prices have decreased in remote areas (cf. Coulter and Golob 1992:424).

These hypotheses, which arise from the neoliberal framework, need to be supplemented with a political analysis of the feasibility of private marketing. We need to assess whether price stability, an 'enabling' trading environment, total food production and protection of vulnerable producer and consumer groups are properly addressed.

The study advances as follows. In Section 2.2 we contextualize the food marketing liberalization in Tanzania within the frame of wider economic reform and food problems. Section 2.3 reviews the implementation of food marketing liberalization. Section 2.4 includes a social analysis of private traders. In Section 2.5, price data on maize are used to analyse the functioning of private marketing. This section includes the major new empirical input in the discussion. Conclusion is given in Section 2.6.

2.2 Food security in Tanzania

2.2.1 Structural adjustment as a context for food policies

In order to put the data in context, a few words need to be said about the economic reform process in Tanzania. The country's economic situation has been described as a 'crisis' from the late 1970s to the late 1980s. The period was shaped by a conflict between the official ideology of *ujamaa* and the actual efforts of the population, which resulted in the 'informalization' of a large part of economy. One-third of the GDP was attributed to the 'second economy' in the late 1980s (Maliyamkono and Bagachwa 1990). The 'informalization' of the economy meant that the official sector (which was largely controlled by government) lost in terms of production capacity. The official marketing systems collapsed and parallel markets strengthened. As living conditions worsened, people relying on subsistence economy developed their own means for sustaining their livelihood (Sarris and van den Brink 1993:57).

The economic crisis forced the government to change its course and in 1986, the economic recovery programme was launched with certain IMF conditionalities. In subsequent years, the liberalization process was extended to the whole economy.[3]

Structural adjustment in Tanzania has been the major policy determinant for the whole economy, including food marketing. As in other Sub-Saharan countries, the focus of structural adjustment was on the stabilization of external balances through stringent control over government expenditure and reliance on open market mechanisms in the field of production. Food is perceived by the World Bank as one commodity among the others (Seppälä 1997) and thus food policies generally are not given special status in structural adjustment. But for the government of Tanzania, food is more important.

2.2.2 Food production and food security

Food security was a central political issue during the first two decades of independence in Tanzania. Moreover, the government institutions had only limited operational capacities to direct food supply trends, and farmers and traders tended to make their own allocative decisions. In addition, a continuous stream of exogenous incidents disrupted food production and marketing. Food supply has been affected by droughts, refugee populations, abrupt villagization schemes, the collapse of the East African Community, the Ugandan War, oil crises, donor whims and dozens more local incidents. Rather than repeat the story, we refer the reader to Deborah Bryceson's *Liberalizing Tanzania's Food Trade* (1993) which provides an excellent starting point for this analysis. It tells the story up to 1988.

In the following we give a brief, formal analysis of food supply in Tanzania. We introduce a few indicators which describe food security operations and the relative status of some major crops. Later, the analysis will be limited solely to maize. Any data on

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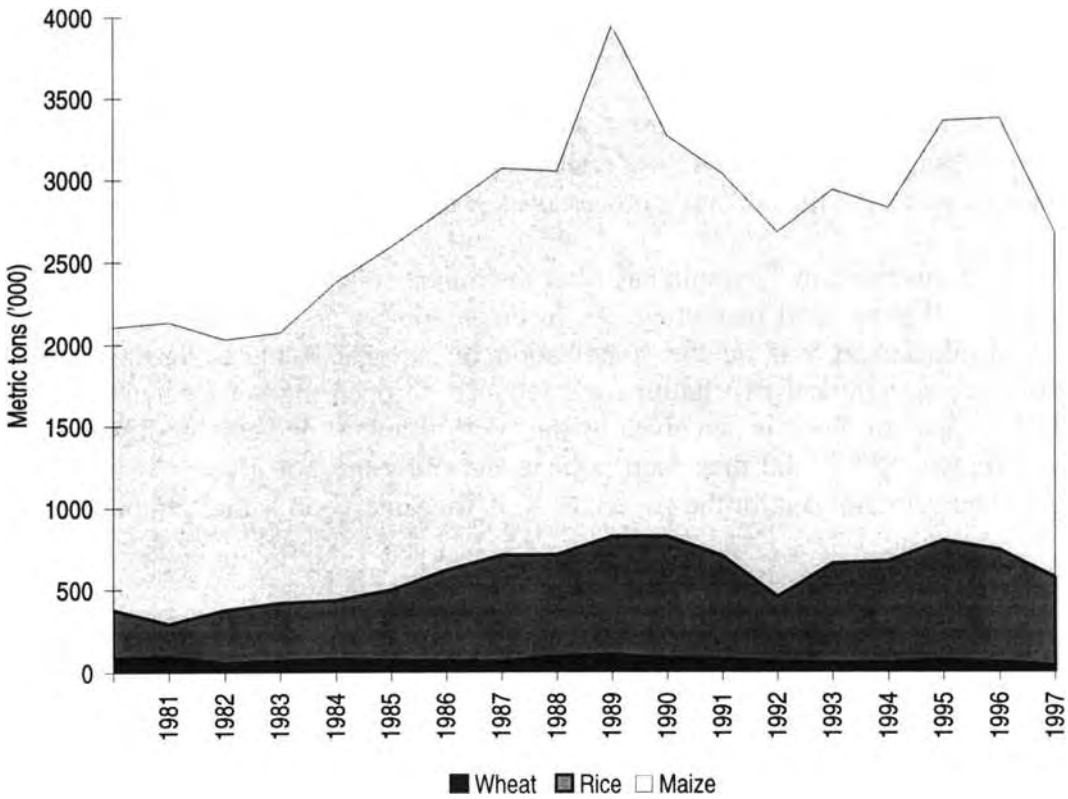
[3] The political and economic phases of the structural adjustment have been the subject of several studies. (Due 1993; Gibbon (ed.) 1995; Havnevik 1993; Hyden and Karlström 1993; Kiondo 1991; Sarris and van den Brink 1993; World Bank 1996.)

production quantities need to be viewed with reservation, as various sources tend to report figures differently.

A prominent feature of Tanzania's food production is its reliance on smallholder agriculture; only wheat is produced on estates. The majority of the smallholders primarily produce food crops for subsistence and only secondarily for sale. Marketed food produce thus consists of the surplus over domestic use. Production of food crops for sale is typical only in a few selected areas. The orientation of food production towards subsistence farming has definite impacts on the functioning of the food market.

FIGURE 2.1
PRODUCTION OF MAIZE, RICE AND WHEAT



Source: FAOSTAT, except the 1997 forecast, which is from TFSB (1997/1:16).

Years refer to a year-cycle ending in June. Data for 1996 deviate from data used in Table 2.1.

The exceptional figure for maize production in 1989 calls for explanation as it cannot be related with yield-increasing factors like rain or fertilizer consumption.

Tanzania is a vast country which produces a variety of staple crops, including maize, sorghum, millet, rice, wheat, cassava, sweet potatoes and bananas. In terms of cultivated area,[4] cereals account for 58 per cent, root crops 16 per cent, pulses 11 per cent, and cash crops the remaining 15 per cent. Within the category of cereals, maize is overwhelmingly the most important crop and constitutes 58 per cent of the total area for cereals. Other cereals in order of importance are sorghum, rice, millet and wheat (World

[4] The area breakdown by crop cultivation is not very accurate because monocropping is seldom practised.

Bank 1994:19). Since millet, sorghum, pulses, bananas and roots crops are seldom traded in urban centres, marketing studies tend to concentrate on maize, rice and wheat (Figure 2.1).

Table 2.1 shows the relative importance of all staple crops.

TABLE 2.1
PRODUCTION OF STAPLE FOOD CROPS, 1991-97

Crop (000 mt.)	1991/2	1992/3	1993/4	1994/5	1995/6	1996/7*
Maize	2226	2282	2159	2567	2638	2107
Paddy	394	600	614	723	681	533
Wheat	64	59	59	75	61	41
Pulses	312	337	302	378	385	378
Banana	794	800	834	651	631	769
Cassava	1776	1708	1802	1492	1478	1611
Potatoes	200	220	230	240	245	336

Source: FAOSTAT; Estimates for the year 1996/7 from TFSB (1997/1:16-7).

Note: Cassava figures refer to dried cassava.

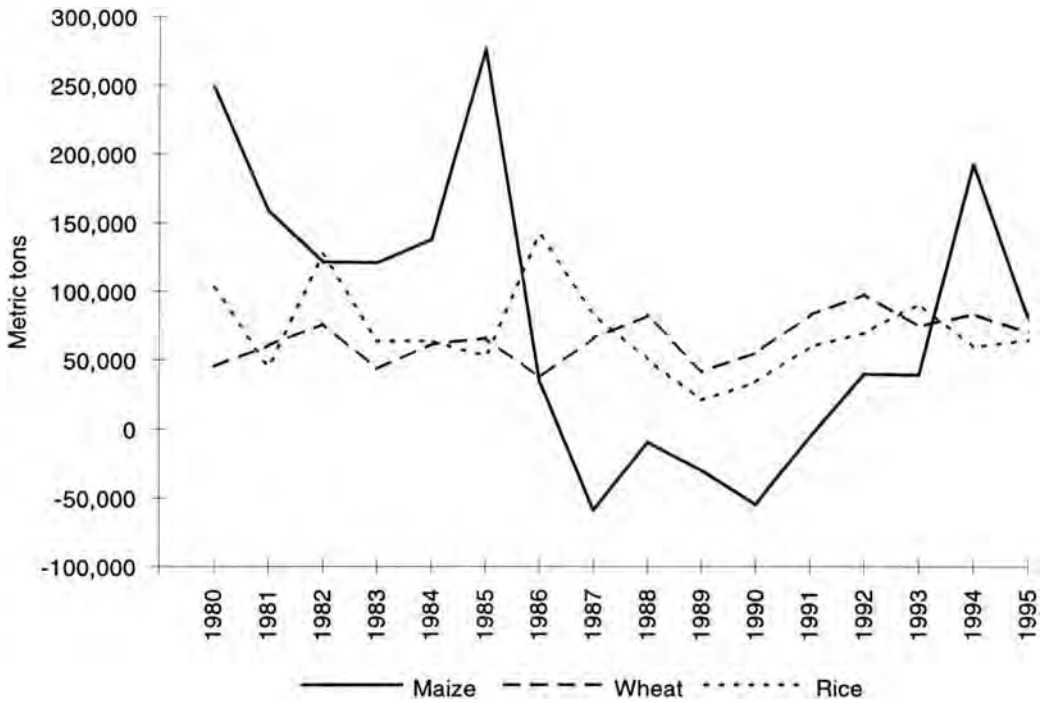
A comparative analysis of key crops shows that production has increased significantly only for paddy while maize, wheat and pulses have less favourable trends. Overall, food production per capita is steady, showing no major peaks or slumps in production in the 1980s and early 1990s (ADI 1995). However, the dramatic maize production estimates for 1997 (and the trend throughout the 1990s) show that Tanzania is moving towards a deficit in the overall production of cereal, and perhaps even with maize. The swings in maize production have been partly off-set by root crops (which have a longer harvesting period) and by other more drought or policy tolerant coarse grains and plantains.

The trends in maize, wheat and rice trade show that Tanzania is a net importer of cereals. Maize imports amounted to over 10 per cent of local production in the early 1980s. Since then, production increased sufficiently to enable Tanzania to become a net exporter of maize. During the 1990s, import figures have been substantial only occasionally because local prices have remained below the import parity price, even during the scarcity period in the mid-1997 (FEWS 1997:4).[5] Wheat and rice imports have been more steady throughout the period studied.

It is worth noting that a considerable part of all cereal imports, particularly in the 1980s, has been food aid. Food aid statistics give an impression of increased food security. However, these statistics do not reflect actual need because of the often exaggerated requests for aid, the political wrangles involved in supplying food and the slowness in distributing aid.

[5] Considerable caution should be exercised in reviewing these figures. Different sources provide greatly varying import and export figures. MDB (1994:18) argues that the Customs Department in the Ministry of Finance does not have the resources to collect data and the latest figures published were three years old.

FIGURE 2.2
NET IMPORTS OF MAIZE, WHEAT AND RICE



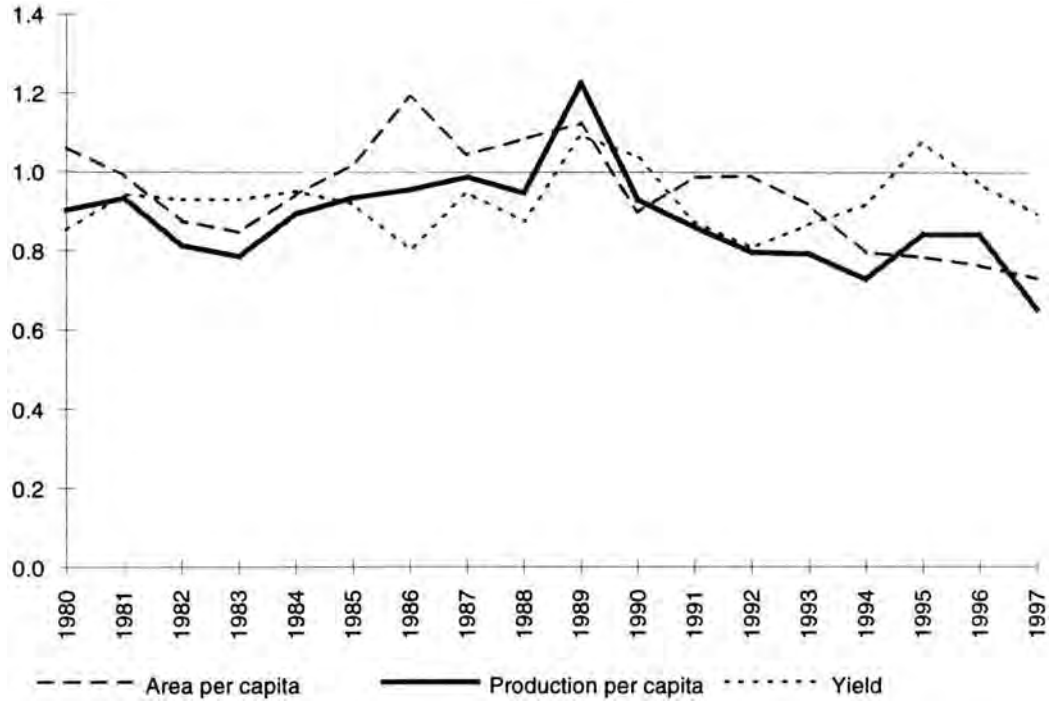
Source: FAOSTAT database.

The technological development of food production has been rather dismal. Food production gains have been achieved largely by increasing the areas cultivated and the total labour used. The question arises, is there still scope for expanding this type of extensive low-input agriculture or should more input-intensive forms of agriculture be developed. World Bank (1994:22) estimates that 'with a base rate of growth in the rural population of, say, 2.4 per cent per annum, theoretically there is land available (disregarding other considerations) for another 20 years of expansion at current levels of technology'. Nevertheless, this statement is based on a theoretical premise without consideration for ecological or economic factors. Tanzania is already burdened with large areas where congestion exceeds the carrying capacity of the land. Thus it is likely that food production will develop through intensification within the major consumption areas and through extensive agriculture elsewhere.

Next we focus on the total maize production. Figure 2.3 shows the development of maize production, yields and area cultivated. Maize production per capita has remained stagnant or decreased slightly throughout the 1990s, a fact that can be partly explained by the decline of cultivated area per person. World Bank (1994:22) is confident that maize production is still going to expand horizontally, through opening new fields for cultivation. The World Bank estimates that, even when the need for fallow (at 60 per cent of total cultivated area) is taken into consideration, Tanzania has 9 million hectares of suitable land available for maize cultivation. Land may be available in some locations, but the question is whether land is available near the major consumption areas. Currently the total (absolute) area cultivated with maize is less than ten years ago,

indicating that many farmers do not perceive the cultivation of maize for sale as profitable.

FIGURE 2.3
MAIZE PRODUCTION, AREA CULTIVATED AND YIELD
(AVERAGE FOR 1989-91 = 100)



Source: FAOSTAT database. Estimate for 1997 from TFSB (1997/1:16).
Reservation should be used with the peak figure for 1989.

Average yields show great variation, which can be partly explained by the rains, or more precisely, their sparsity, and partly by the removal of fertilizer subsidies. Yield figures correlate heavily with total production figures.

2.2.3 Regional profiles of food production

Different regions have distinctive profiles. Producer prices reflect different realities according to food-surplus and food-deficit regions. In the surplus areas, food crops can be considered as a price-responsive cash crop while in the deficit areas, only a certain few holdings produce surplus maize and producer prices are more erratic.

Second, a distinction needs to be made between the regions where maize is the major staple food and the regions where other crops are equally or more important. For example, cassava is an important part of the diet in the Mtwara, Lindi, Morogoro and Mara regions. Sorghum is produced extensively at least in the Dodoma, Mara and Tabora regions. Rice appears to be a significant crop in Morogoro and Tabora. Bananas and plantains form a vital part of the diet in Kagera, Kilimanjaro and Arusha. This breakdown excludes Mwanza which is an example of an area with highly varied staple

crops; in addition to maize, sorghum/millet, rice, cassava and potatoes are produced locally (TFSB 1997/1:16).

TABLE 2.2
FOOD PRODUCTION BY REGION

Region	Population, million	Land use intensity	Adjusted land use intensity	Regional food self-sufficiency	Per capita production of maize	Number of food production seasons
Columns	(1)	(2)	(3)	(4)	(5)	(6)
Dodoma	1.61	207	351	52	29	1
Arusha	1.76	80	170	35	20	2
Kilimanjaro	1.45	201	517	85	32	2
Tanga	1.67	93	151	62	48	2
Morogoro	1.60	13	23	79	29	2
Coast	0.83	52	78	11	19	2
Dar es Salaam	1.77	201	290	-	-	2
Lindi	0.84	29	48	124	64	1
Mtwara	1.16	68	138	233	31	1
Ruvuma	1.02	19	40	125	177	1
Iringa	1.58	14	34	109	207	1
Mbeya	1.93	17	34	108	111	2
Singida	1.03	107	124	79	56	1
Tabora	1.35	21	39	92	49	1
Rukwa	0.91	14	32	181	209	1
Kigoma	1.11	25	51	77	61	2
Shinyanga	2.31	70	90	138	136	1
Kagera	1.73	40	60	166	58	2
Mwanza	2.45	34	51	133	76	2
Mara	1.27	68	77	71	33	2
Total	29.40	34	62	100	72	

Notes:
Column 1) 1988 census multiplied with 1.3 as an approximation of 3 per cent growth rate.
Column 2) Land use intensity calculates a share of gross area suitable for annual crops by the currently cropped area. This is a theoretical figure with no relation to other land uses, environmental considerations and other factors (World Bank 1994:23).
Column 3) An adjustment for fallow period is included (World Bank 1994:23).
Column 4) Forecast for season 1997/8 (TFSB 1997/1:18). National food self-sufficiency is expected (i.e. total is 100). Regional estimates vary heavily from one year to another. For comparison, the forecast for the previous year ended up with a forecast of 17 per cent average surplus (TFSB 1996/3:17).
Column 5) Based on forecast for season 1997/8 (TFSB 1997/1:16).
Column 6) Based on data reporting 'Smallholder farming during vuli' in latest agricultural census (URT 1996:34).

Third, we need to identify the areas where it is possible to harvest two crops of maize instead of only one crop. Approximately 20 per cent of Tanzania's annual maize production (Table 2.2) is grown during the second, short rainy season in the northern parts of the country (URT 1996:35).

2.2.4 The causality between food supply and marketing liberalization

The Food Security Department of the Ministry of Agriculture records data on prices (produced by MDB) and rainfall. When either datasource hints at a local food security problem, the Department conducts more detailed studies on the spot. Otherwise, the food production estimates are based on occasional agricultural surveys. Production data on subsistence-oriented smallholder agriculture is seldom without problems. Although the Tanzanian government has established extensive follow-up mechanisms, the food production statistics need to be read with caution.

Eriksson (1993) has analysed the price responsiveness of the Tanzanian peasants and in comparing several analyses, she concludes that the smallholder farmers are price responsive. Nevertheless, the opportunity to transfer resources beyond agriculture proved to be crucially important to the peasants. The studies were conducted before full liberalization of cash and food crops and thus partly reflect a degree of control as a price determinant. So far, no studies on price responsiveness in a liberalized marketing situation have been published.

It is courageous to identify direct causal relationship between the liberalization of food marketing and supply response. Food production trends after liberalization show that Tanzania temporarily achieved an overall food-surplus position at the end of the 1980s. This was accomplished during marketing liberalization but also during the period of continued state subsidies to peripheral regions and to fertilizer consumers. During the 1990s, maize production per capita has stagnated or declined slightly but food imports, with the exception of the drought period, have been rather modest. Low maize production could reflect the relatively low prices offered by the liberalized maize market, the removal of fertilizer subsidies, or the increased production of other food crops. In any case, it is clear that the increase in maize supply was very modest and has not been sustained under the liberalized trade regime.

2.3 The implementation of food marketing liberalization

2.3.1 The deregulation of food marketing in Tanzania

The liberalization of food marketing is a special issue because of the 'political geography' of Tanzania. In this vast country, the fertile maize surplus areas are located in the south-western highlands, while the central and north-eastern highlands have also traditionally produced excessive harvests. The *de facto* capital, Dar es Salaam, is far from these agricultural areas and thus production capacities and consumer groups are not aligned. The problem has its roots in the lack of investment in infrastructure and human capital during the colonial regime, which left the newly independent Tanzania with a poor resource base where agriculture was largely hoe farming for subsistence. Given the political geography and the level of agricultural development, the task of setting up a modern agriculture was a huge one.

The government of independent Tanzania took on this challenge but never forgot the basics: food security for the population was always given priority (Bryceson 1993). Political decisions were based on the premise that the population was overwhelmingly

rural and poorly educated. Unfortunately, good intentions were at times coupled with political decisions that were too paternalistic and, equally important, with the 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 were first differentiated according to food-surplus and food-deficit areas and later on, among the various regions. Territorial self-sufficiency was the aim. Even though the system was fairly efficient, it was replaced by private marketing in 1957. A degree of state intervention was re-instated again in 1963 when the National Agricultural Products Board (NAPB) was established to provide guaranteed pan-territorial (in-store) prices. The actual crop collection was organized by cooperatives which turned out to be extremely inefficient. Farmers were disillusioned with the low producer prices once the costs of the cooperatives were deducted from NAPB's in-store price. Consequently, reliance on parallel markets increased in the 1960s. NAPB was replaced by the National Milling Corporation (NMC) but the general policy line continued. The pan-territorial prices meant a significant subsidy to the farmers in the peripheral food-surplus regions. This policy resulted in a manifold increase in total crop collection in the 1970s and the development of the southern highlands as the maize bowl of Tanzania.[6] Consumer prices were concurrently kept at an artificially low level, another policy line (Ellis 1988; Raikes 1988; Bryceson 1993).

Between 1973 and 1982 commercial bank loans to agricultural marketing parastatals rose from 31 to 61 per cent of total lending (Bryceson 1993:21). The fiscal crisis of the government forced Tanzania to turn to the IMF; subsequently at least three agreements with the IMF and an agricultural adjustment credit agreement with the World Bank were signed. The overall policy stance has been geared towards the liberalization of the economy since 1984. Subsidies on maize flour were removed that year, local grain trade was allowed, and devaluations were started. Between 1987 and 1990 all restrictions on interregional trade of maize were removed and private traders started to compete with NMC (Gibbon *et al.* 1993:52-59).

The level of government intervention has decreased gradually. The share of officially marketed maize started to drop even before marketing controls were legally removed. However, estimates of the share of officially marketed maize are inaccurate because of imprecise estimates of total production. According to Coulter and Golob (1992:420), the official marketing channels provided over 90 per cent of maize crop to Dar es Salaam in 1980/1, but dwindled to 50 per cent in 1985/6.[7] Still, during the second half of the 1980s, the government bought sizeable amounts of grain, especially from the southern

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[6] Van Donge (1994) argues that price incentives may have been a secondary aspect in this development. He points to supply factors (like population migrations and consumer good hunger) as explanations for the increased production. He also points to considerable variation in production figures over decades and among regions within the southern highlands.

[7] Chachage (1993:234) argues that the alleged maize boom of 1988-9 can be explained by the unification of the parallel and official markets. According to Chachage, this indicates an underestimation in the official production figures and the importance of parallel markets prior to liberalization. Thus, the boom of 1988-9 could merely be a statistical error.

highlands. The government continued the subsidies over the transition period into the early 1990s. After the liberalization measures, the government has restricted its domestic purchases to food security operations which have been retained at the level of three per cent of production. This may seem minimal, but is in fact a significant portion of the *marketed* production, influencing prices in many towns.

TABLE 2.3
LIBERALIZATION MEASURES AFFECTING FOOD MARKETING

	Food marketing liberalization	Other liberalization measures
1984	- Traders were allowed to transport grain up to 500 kg loads - Cooperative unions were introduced to replace crop authorities	- Withdrawal of subsidies on consumer goods - A major devaluation
1986	- Consumer subsidies on maize removed	- All consumer goods decontrolled (excluding few essential items) - A major devaluation
1987	- Free transport of grain allowed - NMC was designated to work as Strategic Grain Reserve (including import and aid distribution)	- Import and marketing of agricultural inputs liberalized, seeds and fertilizers excluded
1988	- deconfinement of cassava, sorghum and millet at union level. NMC can choose where to buy	
1989	- Deconfinement of all grains at primary society level - Exporting all grains allowed (except rice and wheat)	
1991	- NMC ceased to buy food crops directly from farmers - Regional cooperative unions disengaged themselves from food trade	
1992	- SGR took direct control over food security procurement from NMC, which became defunct	
1991-3		- Removal of subsidies on fertilizers

Sources: Amani and Kapunda (1990:76-7); World Bank (1994:178); MDB (1995:12-3).

The reform of NMC was gradual but decisive. Starting already in 1982, the functions of NMC were slowly curtailed and following the functional diminution, its manpower and assets were cut. It was assigned the task of maintaining Strategic Grain Reserve (SGR). However, the terms of operation for food security were at first outlined only in very broad terms; this was also the case with respect to price stabilization and food supply to Dar es Salaam (Bryceson 1993:187-8). Within these limits, NMC could have maintained a dominant role on the market. With regard to the motives of government intervention, Bryceson argues convincingly that 'it is food security *per se* rather than government power that the Tanzanian state finds most difficult to relinquish. Furthermore, international agencies are themselves in partnership with the Tanzanian government in this position.'

Government expenditure towards active food policies (i.e. marketing, producer and consumer subsidies) has diminished considerably during the 1990s. What is left are relatively small but costly (welfarist) food security operations. The actual level of resources allocated to food security operations has changed considerably from one year to the next. SGR has tried to maintain some degree of regional balance in stocking its godowns. Previously prices were administrated but recently buying for SGR is done through competitive tendering (TFSB 1996/3:13).

The political geography of Tanzania has exposed maize marketing as one additional factor that has weakened the government's control over prices and production levels – the possibility of cross-border trade, which during the years of state-controlled marketing took the form of smuggling. Smuggling was prompted by the nearness of market and differences in pricing policies. Easy access to incentive goods also encouraged this trade[8] (e.g. Raikes 1988:59). In a situation of liberalized domestic marketing and fairly liberal foreign trade, cross-border trade is likely to remain substantial.

2.3.2 The policies towards the traders

Private marketing did not emerge from dust. Parallel marketing increased steadily in the second half of the 1970s and throughout the 1980s. In percentage terms, parallel/private marketing increased from negligent figures to 80-90 per cent of marketed food grains (Coulter and Golob 1992:420). Still, the emerging private marketing system was hampered by the lack of credit for crop buying and investment. The majority of traders were small operators working with limited capital. Long distances causing high costs and regional producer price variations were the key characteristics of the marketing system (Coulter and Golob 1992; Santorum and Tibaijuka 1992a; Bryceson 1993; Parsalaw 1996).

In the mid-1980s, official policies towards private food traders could be best described as ambivalent. Whereas party officials termed the traders as 'racketeers' and criminals, sucking the blood of innocent farmers and consumers, the government increasingly allowed private trading because of its negotiations with the IMF and its financial problems. This created a situation where three competing bodies – private traders, cooperatives and NMC – co-existed with each trying to carve a niche for itself. In the latter part of the 1980s, the cooperatives were slowly marginalized while the role of NMC was limited. But the traders continued to be affected by abruptly changing economic environment, local level fees and restrictions, and the competitive measures of the government. These factors reduce incentive to invest for long term.

During the 1990s the situation was stabilized by the dominance of private trade. Although private traders are occasionally viewed with suspicion, food traders are still

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

considered the more familiar and reliable partner. The dominance in food marketing of African traders versus traders of Asian origin can partly explain this attitude.

The most recent twist for the 'enabling' trading environment is caused by taxation. Both the Tanzania Revenue Authority (recently reorganized) and the district councils (just entering a phase of reorganization) have started to collect revenue more efficiently. This has discouraged the private traders somewhat and/or steered them towards trading patterns in which tax collection can be avoided.

2.3.3 Food marketing policies: decisive moves

We can summarize the food marketing reform as a policy shift which has been implemented in a decisive manner. Reform sequencing has functioned well in the sense that the producer areas which had enjoyed pre-reform subsidies were given transition support for five years. The marketing reform was practically accomplished in the early 1990s. Although some steps have been taken in the fields of market information and infrastructure, measures to support the enabling environment for the private traders are yet to be introduced.

The reform also has its political dimension. At the level of political discussion, the entire food security issue has become marginalized. During the era of *ujamaa*-policies, food security was strongly advocated and the government implemented comprehensive, active food policies. During the current era of market economy, food policies are limited to a narrow, welfarist interpretation of food security. It would seem that food security is an insignificant budget line, a non-issue, and particularly the important policy papers, such as the Policy Framework Paper for 1996/7-1998/9, overlook food policies. Does this imply that, according to politicians, the problem of food security has been solved?

2.4 Socio-economic profiles of the private traders

International literature on the liberalization of food trade is dominated by the demand to reduce the role of state involvement in crop marketing. A far less researched issue is the actual performance of the food traders operating in the recently liberalized marketing environment. In this section we rely on a series of small surveys, including the author's own studies, in Tanzania conducted over the last ten years. This is supplemented with official agriculture and informal sector surveys.

In this section, we analyse private marketing from the perspective of the traders themselves, with emphasis on the resources they have at their disposal and their aims. This framework gives a more down-to-earth view of the realities of marketing reform.

2.4.1 The social characteristics of the food traders

A very comprehensive analysis of food traders has been written by Deborah Bryceson (1993). As part of an impressive historical study, a non-random survey of 198 food traders, particularly in cereals, was conducted in five towns in 1988. The study revealed that an overwhelming majority of the traders had started operations before the onset of liberalization measures in 1984. Three quarters of the traders were men with an average

age of 32.9 years (36.1 years for female traders). A trader, on the average, had been engaged in the business for 3-7 years, depending on the town (Bryceson 1993:119-26). A food trader should not be perceived as an atomistic individual. A trader is usually a member of a household and has a number of tasks apart from food trading. Trading activities can extend beyond food marketing and are integrally interwoven with other cash flows. The profitability of food trading is determined by the cash flow between these various activities.

a) The differentiation of traders

Bryceson (1993) delineates a hierarchy of occupational specialization among the grain traders, identifying broadly three different types of market traders. First, there are itinerant intermediaries who collect crops from the farmers and supply the produce to the demand areas. Second, there are stationary wholesalers who collect the crop and resell it to the retailers. Finally, there are the retailers who sell the grain to the customers. The actual structure of the hierarchy depends on the crop marketed, size of the town, and the relative amount of surplus in the surrounding areas.

Interaction between traders is based on mutual trust developing over time. The pattern of interaction is shaped by the low circulation of cash, a fact which necessitates trading practices whereby crop changes hands when only a part of the consignment has been paid. The buyer then proceeds to sell the crop onward and pays the debt after the operation is complete. Although this practice causes delays and occasionally thefts, it usually enhances the ties among trading partners within the hierarchy. Thus networking is an inherent quality of food marketing (Bryceson 1993:126-37).

Van Donge (1992) has studied a more specific group of traders, namely the Waluguru food traders working between the Morogoro region and Dar es Salaam. He emphasizes that almost all Waluguru have engaged in some trading at a certain stage of their lives. Van Donge locates a number of phases in the development of a resource-poor, dependent trader to becoming a more independent and financially secure operator. He makes a distinction among the groups of i) small itinerant traders in two locations; ii) the small-scale Dar es Salaam-based traders; iii) the larger traders with stalls in Dar es Salaam, and iv) the wholesale traders working in different parts of the country. Although these categories reflect different stages in the trading chain, they also implicate a possible path for career advancement. In addition to these categories, the trading scene includes a number of brokers who finance and organize the trade but who take very minimal risks themselves. In comparison to the brokers, the life of a common trader is filled with risks and uncertainties.

Other specific studies on maize trade include Santorum and Tibaijuka (1992a) and Parsalaw (1996). Santorum and Tibaijuka interviewed 41 wholesalers in Dar es Salaam in 1990. The sample, representing 50 per cent of the registered wholesalers in the major Tandale market, shows that these traders were highly specialized in terms of their function within the trading chain: traders do not store maize, nor do they own transport or process the crop, and credit they provide only occasionally. The authors maintain that the traders encounter difficulties in expanding their business due to a paucity of working capital and of managerial experience. Parsalaw conducted a survey of 150 maize traders

in Arusha region in 1991/2. This particular study shows that the number of traders was increasing and that two-thirds had started operations within the last three years. The study supports previous observations that traders tend to be petty entrepreneurs who do not own transport, storage and milling facilities. Nevertheless, they may have other income-generating activities unrelated to cereal trading

All the studies reported here exclude the category of large importing traders. Abundant maize harvests have eliminated the need for imports, except during drought years, but rice and wheat have been imported regularly. According to the Food Security Department experts,[9] there are merely a handful of private food traders with importing capacity and most of these are Asian by origin.

b) Networks among the traders

Informal networks among traders are crucial for obtaining market information. Traders tend to be sociable people who continuously gather facts on places, prices and personalities. An intimate knowledge of the scene is vital for successful trading and collecting facts on the current situation in a distant market requires reliable connections.

In theoretical literature networking is often presented as the means to reduce economic risks and to stabilize the forward and backward linkages. However, the actual scope of binding and stable connections varies enormously among traders. It is easier to establish a link with a supplier because customers, according to the traders, are rather unreliable.

Horizontal networking among the traders is conducted within strict parameters. It includes providing mutual help or sharing information but sharing capital or workers is very rare. The reluctance to combine financial resources reflects the lack of trust as to the honesty of partners. It is widely believed, particularly by men, that trading operations with a partner can end up disastrously. The degree of distrust in money matters makes the pattern of trading very individualistic. This lack of trust is also a major factor inhibiting the expansion of the trading units.

New networking studies have been able to include the complexity of power structures into their theoretical arsenal. In the old studies, the social relationships (i.e. forward, horizontal and backward linkages) were thought to be dyadic. According to recent theories of *flexible specialization* and *filière*, hierarchical and unequal relationships are considered a part of the network formation. The end result of these analyses shows that competition between larger complexes or networks is at the same time almost exclusive externally and hierarchical internally. The structure of a single network reflects a loose patron-clientship model, which is more easily defensible in view of empirical material than a classical model of non-hierarchical atomistic/dyadic network relationships.

c) Trader organizations

In the recent discussion on privatization, civil society organizations are given a prominent role as the voice of parties otherwise underrepresented. In this fashion,

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[9] Based on personal communication.

traders are also expected to form organizations that serve their interests in the public debate. This development is given high priority in donor circles because the existence of trader organizations reflects the maturation of real market mechanisms. They provide the means to incorporate the 'civil society' aspect of development cooperation into the field of private entrepreneurship and also provide a possible channel to allocate resources.

Broadly speaking, trader organizations have two functions. First, they safeguard the traders' interests against the state. The Tanzanian Chambers of Commerce has reached this status but is geared towards large-scale traders and businessmen.[10] Following the initiative of the minister, a task force of traders was established during the recent period of food scarcity. It promptly demanded lower taxes for traders. A common characteristic of the advocacy trader organizations is that their key members handle large amounts of money.

Some district or location-based organizations of micro-entrepreneurs have emerged in recent years. These trade organizations have a lower political profile and are geared instead towards their second task, namely the provision of basic services, such as credit facilities and business training.[11] It is worth noting that there is already a large amount of dormant organizational capacity in the cooperative sector which would be highly relevant for such service provisioning as training the traders and operating revolving credit schemes. However, in spite of efforts to steer marketing cooperatives towards democratic reform, traders and farmers still view the cooperative as a government body and not their own organization.[12]

2.4.2 Cereal trading as a part of livelihood strategy

a) Small-scale trading as an income source

The field of petty trading and service provisioning is extensive, and people tend to move from one activity to another. Table 2.4 shows that there are close to one million micro-enterprises related to food trading and processing in Tanzania. Food marketing constitutes a wide domain of activity and the cereals trade is merely a tiny portion in a chain of trading and processing activities. In terms of value added, the grain trade is barely more significant than processing grain and plantains into beer. There is a considerable degree of overlap among the petty traders. For example, it is fairly common for fish traders to transport fish inland and grain to the coast. Shopkeepers often accept grain as payment which is then 'hoarded' for re-sale within the village or in urban centres during the lean months.

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[10] Recently specific trader organizations have been established by traders dealing in cashews and gems.

[11] The smaller organizations are suitable partners for the international NGOs. Indeed, a number of organizations have been formed with the single purpose of milking an international NGO and bilateral aid funding.

[12] A few exceptional cooperatives have shown the capacity for renewal. The coffee cooperative in Kilimanjaro is the best known example.

The micro-enterprises working in the field of trading are commonly small with only one person. One fifth of the enterprises have been in operation for less than a year while every second enterprise has operated for less than three years (URT 1991:1/25). The low median age of micro-enterprises can be explained by the relatively low entry threshold to some trading activities. Easy entry is coupled with a corresponding low exit threshold. Since no or very little fixed capital is invested in trading, it is simple to switch to another activity. Most of the trading micro-enterprises are seasonal ventures; only about 40 per cent operate throughout the year (URT 1991:2/10).

TABLE 2.4
MICRO-ENTERPRISES IN TRADING AND RELATED SERVICES

	Number of enterprises	Percentage
Shop	86,000	9.2
Cooked food sale	94,000	10.2
Fruit and vegetable sale	65,000	6.9
Fish and meat sale	110,000	11.8
Uncooked food sale	75,000	8.0
Local beer sale	277,000	29.7
Charcoal sale	48,000	5.1
Restaurant or food stall	79,000	8.5
Other sale and trading	99,000	10.6
Trading and restaurants total	934,000	100

Source: ROT (1991:1/23).

Statistical studies do not directly address the career patterns of the traders. My own studies show that many traders have moved in and out of food marketing and other activities. For a prospering trader, the most profitable avenue is to diversify from food to cash crops. In southern Tanzania, petty traders handle cereals in combination with legumes and vegetables and they shift to cashew during its harvest period (Seppälä 1996). Unfortunately, the private trade of major cash crops has not been systematically analysed.

b) Professionalization of the traders

The case studies give different figures on the professionalization of traders. Here, certain contradictory processes seem to be taking place simultaneously. Although individuals seem to continue trading for long periods, this does not imply that they necessarily stick to the cereal trade. Individual traders may change their commodity within the food provisioning chain or switch to a completely different field of trade.

The general discussion assumes that all traders are professionals with long careers behind them and ahead of them. Paradoxically, the trader's own perspective may include the aim to get out of trading. After all, trading is a harsh job; travelling over long distances with whatever transport is available, making deals with partners less scrupulous, and carrying sums of money representing several months labour that can be stolen or lost. While trading has its advantages, many migratory traders visualize it as

work which should be discontinued once a person reaches a certain age or has accumulated sufficient capital to start more decent work.[13]

I have shown elsewhere (Seppälä 1996) that the household level diversification strategies shape the economic patterns of the petty traders. Diversification is a *modus operandi* which rests upon personal networks and economy of affection. The tendency towards partial specialization defies professional full-time occupational categories. It works on the level of *miradi* (Kiswahili for an income-generating activity). For the local economy, partial specialization is participation in a network where market segmentation and flexible specialization are crucial elements. For the household, partial specialization in several income-generating activities means diversification.[14]

It is worth emphasizing that conceptually diversification is not directly opposite to professionalism. Diversification is a household level strategy, whereas profession is a category at the level of the individual.[15] It is possible that a household diversifies, say, to three different activities but each activity is conducted by one person. For this reason it is important to indicate clearly whether an analysis is conducted on the level of a household, an enterprise or an individual. This is well illustrated by comparing two ways of posing a question. Bryceson questioned traders about their own time use for trading and found that approximately 9 out of 10 respondents indicated using almost 90 per cent of their work time on trading. According to Bryceson, the study shows that occupational commitment to trading is increasing (Bryceson 1993:119-26). When in 1990, Amani and Maro (1992:40) interviewed 34 traders on their different functions, 18 reported to be also farmers; eight listed transporting, grain milling or shopkeeping as a secondary profession and only eight had no businesses other than trading. This shows that if the question is redirected from the individual to the family (or from the main occupation to petty activities), we can more easily note the tendency towards diversification.

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[13] This perspective of discontinuity or non-commitment in trading is hard to detect in survey studies because the conventional trader survey implicitly steers the respondent to exaggerate his or her commitment and therefore to respond positively to the expectations of the interviewer. Several survey studies on income distribution and entrepreneurship in Tanzania have addressed the issue of occupational specialization (e.g. Collier et al. 1986; URT 1991; URT 1992). A conventional approach is to ask the 'main occupation' and the 'supplementary occupation'. However, the use of official terms like 'occupation' or 'profession' seriously limits the number of the side-line activities that the informants report. Similarly, the words 'enterprise' and 'business' refer to activities which have a high profile and, when confronted first with questions on business and entrepreneurship, the interviewees may refrain from revealing these secondary activities. There are great difficulties in a formal interview situation to overcome these biases and to identify the petty side-line economic activities that are conducted on a part-time or seasonal basis. Anyone experienced in fieldwork knows that people avoid talking about minor projects or simply do not recognize them as economic activities, even when these can cumulatively be as important as wage labour or agriculture.

[14] According to a recent World Bank (1996:81) estimate, about 78 per cent of all Tanzanian households have more than one source of income. Agriculture is commonly combined with other activities.

[15] It is often emphasized that households seldom combine resources together and that many resources remain within gender-based domains in Tanzania. However, even in households where resources are allocated in this fashion, there tend to be (exploitative or cooperative) interdependencies and important shared non-cash resources. Moreover, when it happens, sharing of all resources definitely provides increased scope for adjustment for a unified household.

This pattern towards diversification is very institutionalized in Tanzania and has created regimes of production and trade which have their own, unique operational settings. The paradox of these strategies is that diversification is theoretically compatible with effective market mechanisms. The operational costs of non-specialized traders are low. It is possible to trade effectively through extensive networks of low-resource part-time traders working in collaboration with resource-rich professional traders.

2.5 The performance of private marketing system

In this section we analyse the statistical evidence on the functioning of the liberalized food markets with the neoclassical model of integrated market as the explicit reference point. The expectations for liberalized markets are the following:

- marketplaces along trading routes have correlating consumer prices,
- seasonal consumer price fluctuations are reduced as traders buy into storage,
- producer/consumer price difference decreases.

The major part of the analysis concentrates on consumer and producer prices of maize in the 1990s. After studying producer and consumer prices, we take a quick look at the other parts of the marketing chain. Then, we analyse fertilizer prices, wholesale prices, prices for maize flour and import prices.

The computing of data aimed for high regional coverage, subject to the quality of data series. The computed data include producer and consumer price data for maize grain as well as consumer price data for maize flour.

It is logical to compare producer prices in the major surplus areas and consumer prices in the major deficit areas. The analysis is based on the assumption that the producer price data are reliable for the period immediately after harvest, whereas the consumer price data are relevant throughout the seasons. Some exceptions on both classifications are possible due to shifts in the locational deficit or surplus situation.

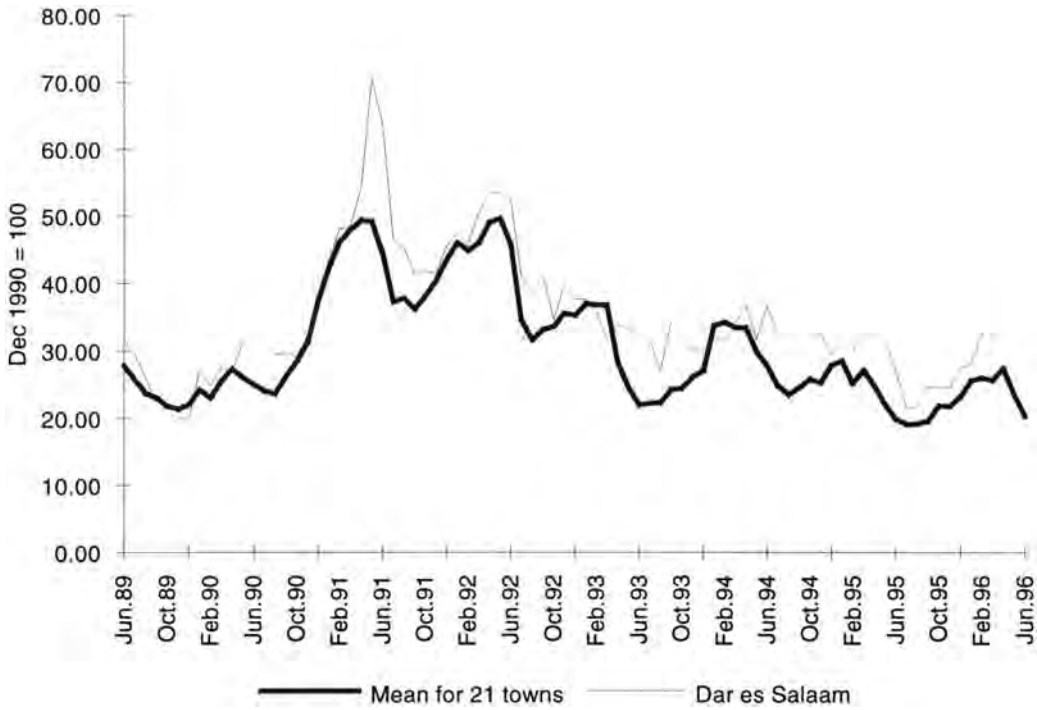
There are no absolute criteria to assess the integration of markets because there are always some price differences between two localities due to the transport/marketing costs. In other words, it is impossible to estimate what the price differences would be between two localities if full competition were present. What we can infer is the *trend* towards market integration or towards less integrated markets.

2.5.1 The development of consumer prices

The development of consumer prices is outlined in Figure 2.4 to show the development of real prices by month (the comparison includes the mean of the 21 localities studied). Since Dar es Salaam is a major consumption area, the Figure also indicates the price for maize in that city.

Consumer prices have increased significantly during the 1990/1 and 1991/2 seasons. Average real consumer price almost doubled during the two years, returning thereafter to the pre-peak year level.

FIGURE 2.4
THE REAL CONSUMER PRICE OF MAIZE



Source: MDB, various issues.
Note: Real prices at December 1990 level

The basic indicators – mean annual real price and the coefficient of variation within the year for real prices – for the development of annual prices for each location studied are given in Annex 2.1. Urban consumers have gained from the marketing reform, but other accompanying reforms have squeezed the welfare of urban residents. The share of staple food expenditures out of total food costs rose to 55 per cent in 1988 whereas historically it has been 45-50 per cent (Bryceson 1993:180). A survey in 1991 estimated that only 43 per cent of urban food expenditure was used on cereals (World Bank 1993:27). A smaller drop is evident in the ratio between food costs and total income. While urban consumers used 68 percent of their income on food in 1988, the corresponding figure in 1991 was 64 per cent (Bryceson 1993:285; World Bank 1993:26).[16]

2.5.2 Spatial consumer price variations

Existing studies show that food marketing is an easily accessible form of trade and for this reason, the coverage of trade is fairly good. It should be noted that, despite official policy, the coverage of public marketing agencies was not complete in the pre-

16 The results are based on separate interview surveys and thus the trend information should be elicited with caution.

adjustment era. The government marketing board and cooperatives repeatedly failed to buy crops because they lacked the finances or operational competence, thus helping to promote parallel markets in the beginning of the 1980s. When liberalization measures were officially undertaken, a continuous increase in marketing activity and further integration of the markets were anticipated.

The best indicator of market integration is the covariation of consumer prices among different locations.[17] It is hypothesized that high covariation means active trading where the large spatial price differentials encourage the transport of grain from low price to high priced markets, reducing price differential and increasing covariation.

In Bryceson's analysis on town-town correlations in 1982-85 and 1986-89, she received relatively low correlations in which the highest reported positive correlation was less than 0.60 (1993:242 and 300). This, no doubt, reflects the strict analysis methods.[18] Several significant covariations existed among locations outside the real trading routes (i.e. locations physically far apart). Bryceson concludes:

> A comparison of the price correlations infers a more extensive, virtually nationwide network in the latter period. The 1986-89 pattern suggests that the 'big four' regions, Rukwa (Sumbawanga), Mbeya, Iringa (Njombe) and Ruvuma (Songea), continued to be important maize suppliers but that the direction of their supply had a more northeasterly bias. The Lake deficit area is more apparent but less tightly integrated into the more central and southern parts of the country. (...) Some of the strongest correlations between 1983 and 1985 were between deficit and supply points, whereas in the latter period the higher correlations tend to be between supply areas, for example Songea and Arusha, or between deficit areas like Lindi and Mpwapwa. This could reflect the exercise of 'just price' criteria on consumer prices in deficit areas and/or the convergence of official and unofficial maize prices. However, one needs to be cautious. Correlations of 0.40-0.60 are too low for drawing conclusions (Bryceson 1993:146).

Van Donge, in an innovative analysis of locational price variations[19] in the 1980s in Tanzania, 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 the determining forces of supply and demand, one would expect price

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[17] The ecological environment of the country generates maize production cycles which vary from one location to another; the southern and central regions yields one harvest, while two harvests are possible in the northern areas. This factor should logically reduce the price correlations among these areas.

[18] Bryceson studied differentials rather than price data directly. She also assigned a high price value for the months when maize was not available to market, differentiating non-availability from missing data.

[19] It is likely that Van Donge used consumer price data although the primary data is not clearly documented.

> 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. If there is a significance then it can in some cases be explained by geographical proximity (Van Donge 1994:166).

Locational correlations of Van Donge are higher than those located by Bryceson. Three methodological reasons for this can be located. First, Van Donge has a longer time series for analysis. Second he uses (presumably) nominal price values instead of first differences. Third, he does not report similar treatment of missing values as Bryceson.

Van Donge gives several hypotheses for his non-integration argument. He argues that dissolution of pan-territorial official pricing affects different areas in different ways. The largest beneficiaries were the southern highlands which then were to lose during reform. Similarly, the highlands had benefited exceptionally from the subsidized supply of seeds and fertilizers although there are variations between districts and regions within the area. Input prices and yields naturally create changes in local producer and consumer prices. Van Donge also mentions locational migrations and population changes as a source for changes in production and prices. Perhaps a more important factor is the effect of the official consumer prices. This is analysed in detail by Bryceson. She notes that the official producer prices still had their effect until 1988, although the official and unofficial prices slowly converged. The official (NMC) supplies were available for some consumers in some towns, and this reduced at least seasonal price variations (with direct effect on locational price differences) (Bryceson 1993:147).

In order to compare results, we have repeated the studies by Bryceson and van Donge using data from the 1990s. In repeating Bryceson's formula, we have not given a high value for 'maize not available' (this category is no longer included in primary data) and estimates were given for all values that were missing. Thus our data manipulation is slightly less strict. Still the town-town correlations of the first differentials for the three-year spans of 1990-93 and 1993-96 give relatively low correlations, only slightly higher than those of the 1980s. The statistical significance of the correlations is also very poor. During the 1990-93 span, Dodoma had a high price correlation with several locations. During the period of 1993-96, the towns in north-eastern Tanzania were strongly linked with one another.

Next we have adopted methods similar to those used by van Donge.[20] The correlations of the consumer price data are given in Annex 2.1. The data show that the overall integration of market has increased considerably since the 1980s. Average correlation between the localities was 0.63.[21] Looking at the locational data, we note high correlations within the major trading areas. The northern areas from Arusha to Tanga are well connected. The southern border areas from Songea to Lindi show high correlations.

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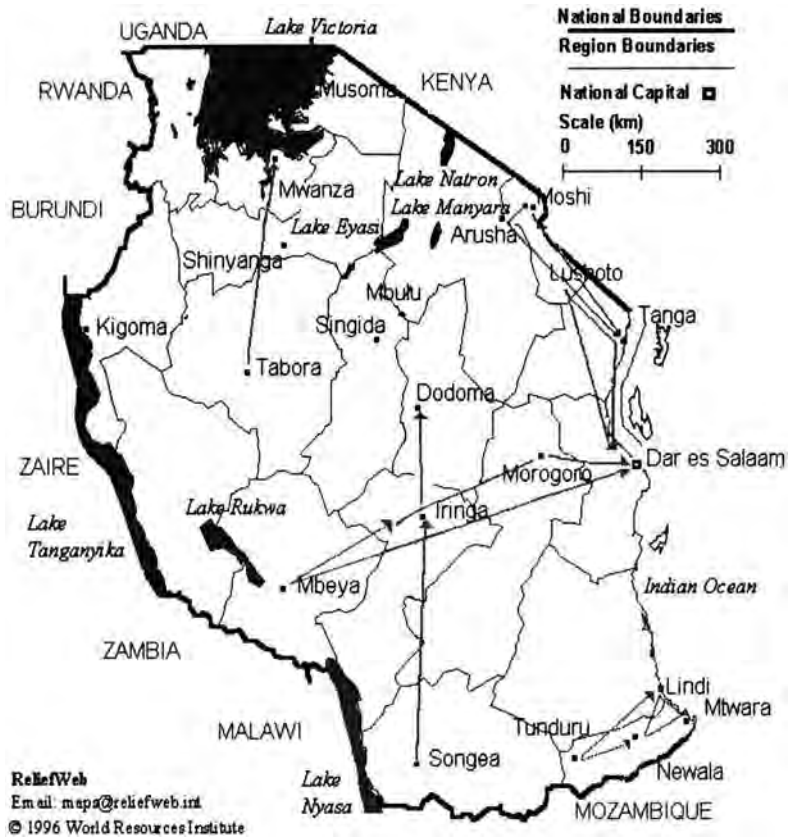
[20] A change in the selection of locations was necessary due to paucity of information; consequently Tarime and Tabora were excluded from the analysis. The six-year span of the analysis is similar and missing value treatment has not been conducted. 'Missing values' and 'maize not available at the market' are not individually itemized in the primary data.

[21] Quartiles for the set of correlations were 0.47, 0.66, 0.78 and 0.96.

Dodoma prices vary in Morogoro, Dar es Salaam and the southern highlands. Compared to earlier studies, market integration has increased considerably over the past ten years.

Figure 2.5 depicts the cases where high (>0.8) correlation exists along physically well connected localities.

FIGURE 2.5
HIGH MAIZE CONSUMER PRICE CORRELATIONS



Sample of 21 towns (cases with fairly complete primary data).
Includes cases where correlation is above 0.8. and when locations are connected by road/rail.

Market integration, naturally, depends on the existence and the quality of road (and rail) network and Tanzania is at a disadvantage with regard to road density and quality (Platteau 1996). There are other linked towns with equally high correlation but these are not really along the trading routes and have thus been omitted from the map (cf. Annex 2.1).

Utilizing different sets of towns, trading routes in Tanzania have also been mapped by Santorum and Tibaijuka (1992a:432) and Bryceson (1993:300). We have selected towns which provide complete or almost complete data set information for the 1990s. Much of the price information is lacking for a large part of western Tanzania, perhaps due to the impact of the refugee population. A time-series for Shinyanga, Rukwa and Kagera could not be constructed because of poor basic information, which is unfortunate as Shinyanga

in particular had enormous surplus production of maize during the past years and this would have made it analytically interesting.

What factors cause high consumer price correlations and market integration? One might hypothesize that market integration is a function of the availability of market information. In this respect, market liberalization has increased the prospects for market integration. Market price information is broadcasted by the government at regular intervals on radio. Local newspapers report prices regularly but the slow or non-existent delivery of newspapers to remote locations is a problem. Often, the quickest and most extensive source of information is still fellow traders.

According to another hypothesis, the high degree of correlating prices is caused by the spatial relocation of maize production. When maize is mainly produced near the consumption areas, the regional self-sufficiency ratios reach almost 100 per cent, eliminating the need for long distance trade. When maize production merely satisfies the local need, the demand for the produce is distributed over a wide geographical area. Even surplus regions have many net consumers and their purchases increase the seasonal price fluctuations of maize in these areas. In deficit areas, the surpluses need to be bought from various sources. Thus 'market integration' in reality means a more widely scattered market. It is not a function of the efficiency of traders but of the more evenly distributed demand. This hypothesis, which is difficult to test (due to lack of data on the volumes of grain marketed among individual locations over time), introduces a different version of the market integration theory. Integration is conventionally believed to equal with regional specialization of production and the increase in the traded volumes. In this alternative view, integration means specialization of production and a decrease in the traded volumes, households (and thus regions) are minimizing marketing costs, producing with the aim of self-sufficiency and, if economically justified, replacing maize with other local crops in the consumption basket. Thus the liberalization of maize marketing would cause a shift of resources to the production of other food crops, tradable cash crops or non-agricultural products.[22]

Changes in price variability among all locations

Locational variability is naturally a function of time. One could expect that variation has a seasonal pattern and two hypotheses can be presented here: first, variation is high immediately after harvest because prices will be exceptionally low in surplus areas. Second, variation is high in the scarcity months because of exceptionally high prices in maize deficit areas. Interestingly, a cross-the-board analysis of variability between locations does not confirm either pattern clearly. In some years, the variation has been the highest in December while in other years, March or June have high locational variability. (The mean of coefficient of variation during 1989-96 was the highest in February and lowest in March). This is evident from Figure 2.6.

Can this result be interpreted to mean that the traders are competitive and no large profits can therefore be made by transferring grain from one location to another during

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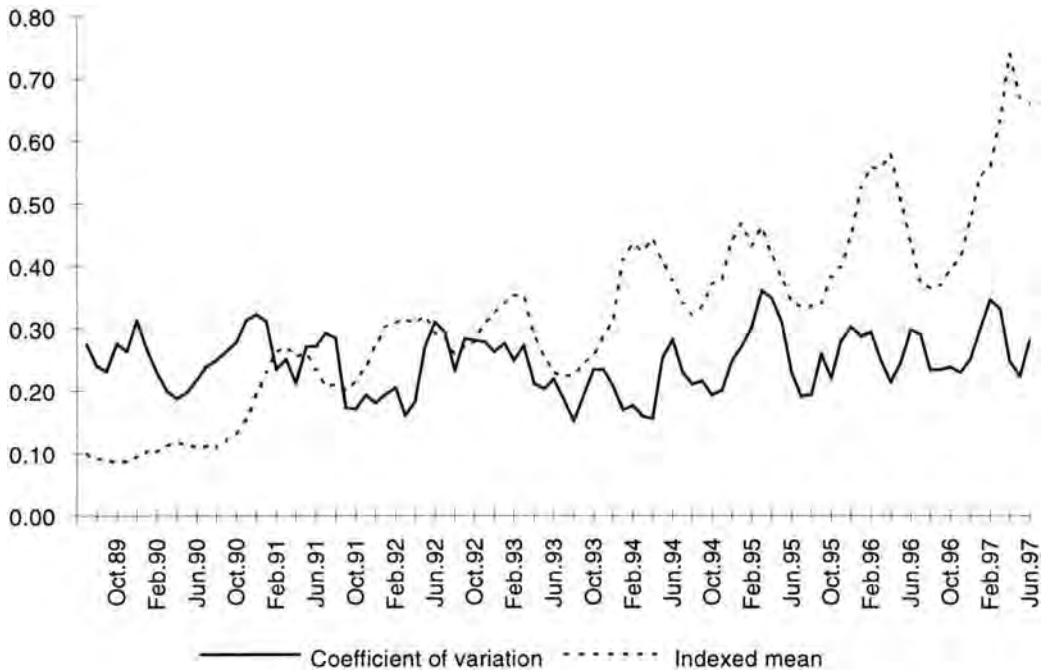
[22] The production figures given in Table 2.1 do not support the hypothesis of a shift to other food crops The possibility of a shift to tradable crops or non-agricultural products is not tested here.

the lean months? Although this is a too far reaching conclusion, the data indicate that there is no uniform seasonal pattern in the degree of competitiveness of markets.

The dotted line in Figure 2.6 which traces the monthly mean nominal consumer prices (mean for 21 locational nominal, indexed to fit the same y-axis) shows a peculiar twin-peak pattern. However, a closer look reveals that the high price months vary from one year to the next and that the average price development takes a slightly different shape each year.

FIGURE 2.6
VARIATION OF NOMINAL CONSUMER PRICES AMONG 21 LOCATIONS, BY MONTH



Source: MDB.
Note: Based on nominal prices. Estimates for missing values included.

2.5.3 Exceptional demand centres

Tanzania is a vast country where prices vary for several reasons. Concentrating on demand-side aspects, cross-border trade, refugee populations and sudden local migrations are major factors.

Cross-border demand affects prices at least in Kilimanjaro, Arusha, Kagera, Rukwa, Mbeya, Mwanza and Mara regions (MDB 1995:21). The extent of smuggling/cross-border trade is difficult to estimate.[23] The low official production figures in Arusha and Kilimanjaro areas may reflect the demand for maize across the border in Kenya, while the lack of price data on regions in north-western Tanzania may be an indication of the demand in neighbouring Uganda, Rwanda and Burundi.

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[23] It is estimated that undocumented trade across the Kenya-Tanzanian border is valued at US$ 23 million per annum (MDB 1995:22).

Refugee populations from Rwanda and Burundi, which during some periods in the mid-1990s numbered over one million, are a significant consumer group in the Kagera and Kigoma regions. Although the majority of refugees in camps were provided with grain from abroad, there have been increasing attempts to use local food supplies as well.

Sudden local migrations have been caused by the gold rush in the Arusha and Ruvuma regions. Chachage (1995) has estimated that the total population of gold miners has increased from almost nil to half a million in five years. Even if this figure is an over-estimation, actual numbers are likely to be significant. Given the nature of the work and the working conditions at the digging sites, the miners are net-consumers of food.

Exceptional demand centres tend to create peak prices. For example, Tunduru in Ruvuma region temporarily had the highest maize price during the gold rush. During the 1997 drought, Mwanza (with good harbour facilities to export maize to neighbouring countries) had very high maize prices. The peak price can easily be double the price in towns merely a few hundred kilometres away, a fact which raises doubts about the capacity of traders to take advantage of sudden opportunities and the speed with which they can adapt to new situations.

It is necessary to highlight the importance of exceptional demand centres for the following reason. They underline the fact that the demand of maize is not simply concentrated in Dar es Salaam and other major towns, but that demand also exists in the rural areas and neighbouring countries. This fact balances the geographical distortion between rural production areas and urban demand areas. Given the locational distribution of exceptional demand centres along the border areas, the pattern of demand for maize can be termed as multi-centred, which reduces regional price differentiation.

2.5.4 Seasonal consumer price variations

Market integration is also expected to reduce seasonal price variation. Farmers and traders are expected to store grain during the post-harvest period and release it during the period of scarcity. But, optimal behaviour is governed by a moderate level of seasonality because of the costs of storage.

Studies conducted in the 1980s argued that neither traders nor consumers stored maize in any sizeable quantities. Instead, supplies were filled regularly. This can be expected to lead to high price variability over the seasons. We have analysed seasonal variation through coefficient of variation. The fluctuations of nominal consumer prices are calculated separately for the whole sample and for each location. The values are calculated individually for each year.

In the comparison, the seasonal variation of real prices was the highest in 1990/1 when coefficient of variation reached 0.31.[24] A high variation figure of over 0.20 was also

[24] Two technical reservations about the analysis of price variation should be made. The first concerns the annual cut-off point. The conventional cut-off point after June highlights the problem caused by inadequate short rains, which is reflected in the high prices during April-June in the northern areas and the increased difference between minimum and maximum price. The difficulties caused by insufficient long rains, which precipitate scarcity in January-March, are not equally well reflected in the analysis. They

reached during the period 1992-96, except for the 1994/5 season. On average, the coefficient of variation was 0.21 for the period studied (see Annex 2.2). The question arises, does a decline in supply cause scarcity, which is then reflected in high price fluctuations. However, official production figures give no indication of a large variation in maize supply in the 1990s.[25] Trade figures (Figure 2.2) indicate that Tanzania was even a net exporter of maize in 1990.

Nominal prices show very large seasonal differences. Figure 2.6 shows that the mean price of 21 locations almost doubled during a few months in the 1990/1, 1993/4 and 1995/6 seasons. For a consumer, this price development is very frustrating and creates distrust of the traders.

Comparison of seasonality between locations

Table 2.5 shows the annual degree of variation for each location. It is possible to compare our results with those by Bryceson for certain locations and in this manner to obtain comparative results for the 1980s and 1990s.

TABLE 2.5
SEASONAL VARIABILITY OF NOMINAL CONSUMER PRICES IN FIVE LOCALITIES

	Coefficient of variation during 1982-89 (mean of annual values)	Coefficient of variation during 1989-96 (mean of annual values)
Dar es Salaam	0.18	0.19
Mwanza	0.24	0.22
Mbeya	0.21	0.21
Arusha	0.26	0.23
Songea	0.23	0.26

Source: Column 2: Bryceson (1993:272); Column 3: Author's calculation.

As shown in Table 2.5 the seasonal fluctuation has remained largely at similar levels in the 1980s and 1990s. It shows that buyers in Dar es Salaam are considerably less concerned with seasonal price variations than, say, buyers in Arusha. However, this comparison is based on nominal prices and includes the effect of inflation. Therefore these figures need to be viewed with caution in comparing the two periods for each location.

There are some locations where the price variation has been considerably high during the 1990s. For example, Lindi and Newala – both deficit areas in terms of maize production – have shown large price fluctuations with a coefficient of variation 0.30 and 0.31 on the average, respectively.[26] Lately maize production has increased in the neighbouring Masasi district and consequently price fluctuations are likely to decrease in the near future (EIU 1996/4:14).

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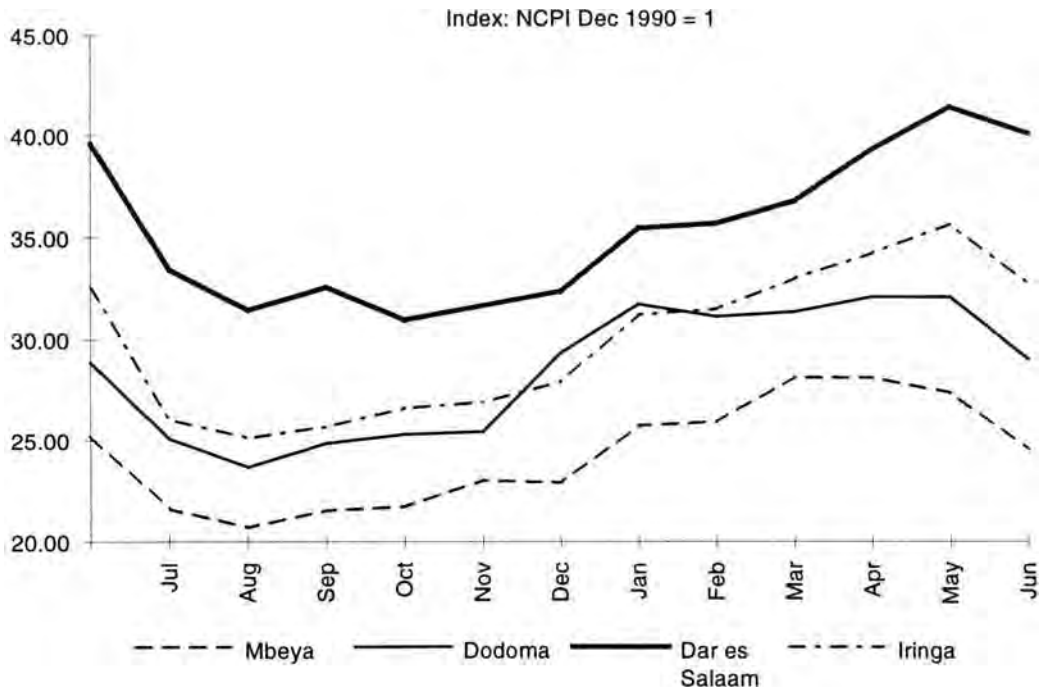
would be more visible if the study year covered April-March instead of July-June. Second, the use of monthly national consumer price index is a crude tool in the analysis of specific price variations.

[25] Cf. Figure 2.1 and Table 2.1.

[26] In these two locations, the seasonality of maize price is increased by the fact that the main cash crop, cashew, is harvested and sold just before the food scarcity months.

The lowest variability in consumer prices can be identified in Dar es Salaam, which benefits from a competitive supply from several locations (each with its own seasonal production pattern) and the influx of imported maize.[27]

FIGURE 2.7
SEASONALITY OF REAL CONSUMER PRICES IN DAR ES SALAAM AND ITS MAJOR SUPPLIERS



Note: Estimates for missing values included.

Next we examine the seasonal price curves for different locations, utilizing real prices and calculating the mean price for each month for the period 1989-95.[28]

The data indicate that real prices start to increase in December and continue to stay at a high level until at least May.

While analysing seasonality of consumer prices, one should note the existence of maize cultivation during short rains in some northern regions (cf. Table 2.2). The pattern of seasonality is noticeably higher in the deficit areas of the south compared to major deficit regions in the north.

2.5.5 The producer prices data

The review of producer prices is an important component in analysing trade. However, compiling primary data creates major difficulties. The farm-gate producer price varies

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[27] Annex 2.1 provides data on the coefficients of variation for real consumer prices. The results are largely similar to the nominal price data.

[28] The problem with using real prices is that food has a heavy weight in the calculation of the deflator (NCPI) and thus the price variation is partly damped.

considerably, depending on the traders' accessibility to a specific location. For example, a hamlet located five kilometres from a passable road is likely to have a low farm-gate price compared to a village on the main road. This is well illustrated by Coulter and Golob (1992:424) who analysed the price received by producers located 15 kilometres from the main highway in the Mbozi district, Mbeya region. The producer was paid TSh 1,800 a bag by the first trader, whereas the second (transporting) local trader paid TSh 2,400, and the buyer in the urban centre paid TSh 3,200. After further transport to Dar es Salaam, the expected price was TSh 5,500.

It is technically cumbersome to compile producer prices at the farm-gate at village level. MDB has collected figures from major towns on 'producer prices', which actually include the price for a sack of maize and the cost of trading the commodity from a rural village to town. Thus, the term 'producer price' is misleading, as it merely refers to the price per sack paid by the wholesale dealer, whereas consumer price refers to the price per *debe* (a measure of approximately 18 kg) in the same market. The analysis of data series shows that the producer price is occasionally higher than the consumer price in the same town. MBD producer price data are useful when we utilize only data-sets from surplus areas for the period after the harvest.

2.5.6 The efficiency of private marketing

Empirical studies confirm that traders are reasonably competitive. According to Bryceson, 'the combination of easy entry into staple food trading, the ability of traders to operate with extremely low fixed overheads, and the non-convergence of trading and transport enterprise made it unlikely that excess profits would accrue to traders' (1993:200).

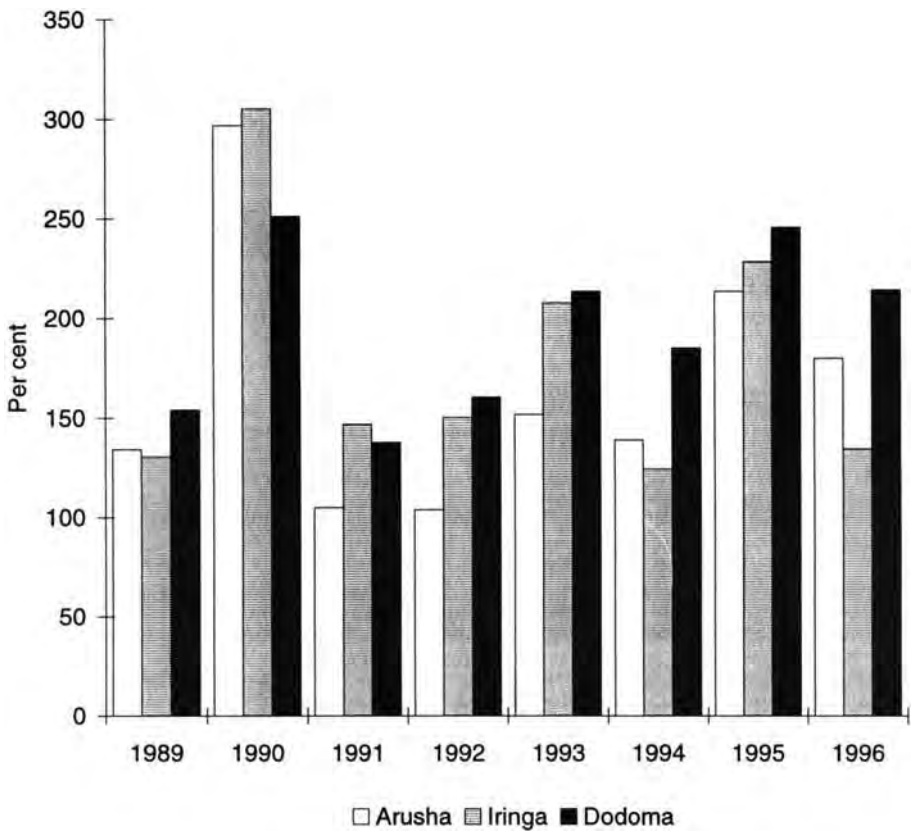
The low profit margins are partly explained by conjunctures as the liberalization of maize marketing coincided with a period of good harvests. The change in marketing arrangements and abundant harvest orchestrated a decline in prices. Santorum and Tibaijuka (1992:433) estimate that in real terms, the retail price of maize between 1985-89 fell by 25-40 per cent depending on the region, whereas producer price fell on the average 52 per cent during the same period. However, the comparison may be misleading because 1984-5 witnessed exceptionally high producer prices.

Bryceson (1993:147) argues that the marketing margin for maize between producer and consumer prices was smaller for private traders than for the official marketing system. According to her calculations, the margin varied from a low of 7 per cent to 37 per cent, whereas the official marketing system had a margin of 47 per cent in 1988. Parsalaw (1996:89) estimates that the marketing margin for the official marketing system in Arusha varied between 36 to 57 per cent during the period 1986-91.

Due to a lack of farm-gate prices, we are unable to construct our own estimates on the profits available through the whole trading chain. We can only infer the price difference between major production and consumption areas, by using the simple indicator of the percentage ratio between consumer price in Dar es Salaam and producer price in certain selected supply areas.

Annex 2.4 shows the price differential between supply and consumption area when maize is sold immediately (cf. 0-month lag table in the annex). This gives a baseline for the mark-up, which consists of the cost of transport plus profit, for trading maize to Dar es Salaam. During the 1990s, the mark-up has increased for traders operating from Dodoma while it has fluctuated for those trading from Mbeya and Iringa. This reflects the competitiveness of the grains from different regions. Consequently, after harvest maize is bought primarily from Dodoma (and related northern areas) due to its favourable price and good quality. In November or December when the warehoused maize from these areas has been depleted, traders shift to Mbeya and Iringa where producer prices are still low but where the maize, produced with hybrid varieties, is of inferior quality. Figure 2.8 shows the relationship between consumer and producer prices when a trader transports grain to Dar es Salaam and stores it for six months before re-sale.

FIGURE 2.8
PRICE RATIO BETWEEN CONSUMER PRICE IN DAR ES SALAAM AND PRODUCER PRICE IN SELECTED TOWNS, WITH 6-MONTH LAG a)



Source: Compiled by the author on the basis of MDB data.

Note: a) The producer price refers to August prices and the consumer price the price in February the following year. For detailed figures, see Annex .4, 6-month lag-table. See also Figures 2.7 and 2.9.

Estimates used for the following figures: Dodoma 1990, 1991 and 1993, Mbeya 1992, Dar es Salaam 1997.

During 1995, the maize mark-up in Dodoma and Iringa was over 100 per cent. At the same time the real consumer price of maize was exceptionally low (see Figure 2.4). The only possible explanation is the combination of domestic oversupply, exceptionally low

producer price, and high export price. At that time, a sack of maize cost TSh 3,250 in Iringa; in comparison, the price a year earlier had been TSh 4,500.

Comparing the 0-month lag-table with 3, 6, and 9 month lag-tables in Annex 2.4, one can evaluate the profitability of storing maize instead of direct resale. As revealed in Annex 2.4, there is no significant profit or advantage to storing maize for the three months of August to November. It may even become a source of loss because in Dar es Salaam the price of maize remains roughly stable throughout the period. But, storage for 6 or 9 months (from August to February or May) may be profitable. If we use the 0-month lag as a base price and deduct the 0-month lag from the 9-month lag, we get the estimate for storage mark-up (including profit, inflation, storage costs, interest on the capital and spoilage). This gives us only 31 per cent in 1994 but 113 per cent in 1995 as the mark-up for a Dodoma trader able to incur nine months of storage.[29] Therefore, the storage mark-up for maize is generally higher than inflation throughout the study period, but profitability varies from one year to the next. In summary, it can be concluded that the storage of maize seems to be very profitable on occasion but without a guarantee.

2.5.7 Maize deliveries to Dar es Salaam

Dar es Salaam is a major maize consumption area. Although the city comprises only twenty per cent of the country's urban population, its share in urban consumption is proportionally higher because many smaller towns have more urban agriculture. On the other hand, Dar es Salaam is a port town and imported maize supplements the domestic supply. The following analysis is based on the data on some 30-70,000 tons of domestically produced maize which annually pass through the major wholesale markets.[30]

Dar es Salaam is linked to the major maize producing areas by either road or railway. Competitiveness of the various supply locations depends on the distance and the level of the transport link. In the past, the competitiveness of the southern highlands was greatly enhanced by the construction of a railway and a highway in the 1970s. Regional policies had supported deliveries from the southern highlands during the pre-reform era. The removal of pan-territorial pricing meant a major deterioration to the competitive advantage of this region. Immediately after early liberalization measures, food prices offered by the private traders in the remote areas were extremely low. Between 1983-5 and 1986-8, price differentials between the traditional major supplier areas in the southern highlands and Dar es Salaam dropped from TSh 288 to TSh 135 (World Bank 1994:143). This calculation, however, includes the exceptional year of 1984. The real

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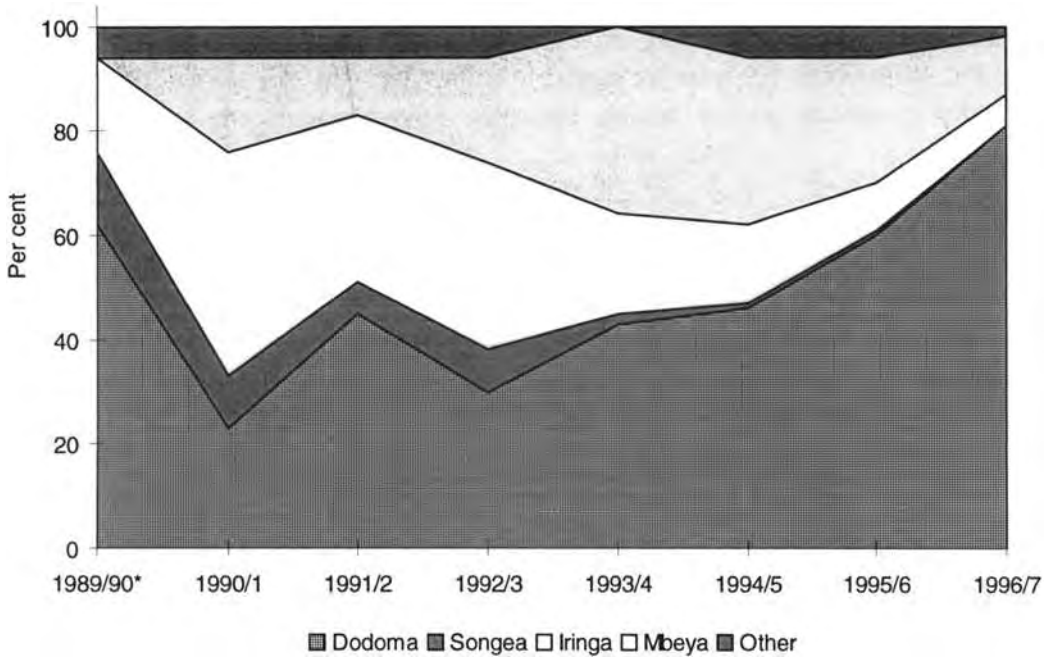
[29] The 1996/7 drought year has not created any major profit-generating opportunities for the traders. However, the calculations may distort the results because the February 1997 maize price was not available and an estimation based on the January price was used.

[30] The total supply of food to Dar es Salaam has not been analysed recently. Our rough estimation is based on the following premises: i) all locally produced maize passes through the recorded market-places; ii) no maize is imported to Dar es Salaam; iii) total wheat and rice imports serve only Dar es Salaam; iv) no conversions for weight-equivalents of different grains are made and, v) townspeople consume only these grains. Based on these assumptions, local maize supply covers approximately one-third of the staple food consumption in the city. Since maize is the cheapest grain, it is the food of the poorest section of the population.

price of maize in the urban centres of the southern highlands as a totality was fairly stable during the second half of the 1980s. According to Van Donge (1994), the government consciously tried to soften the effects of the production decline in the southern highlands in the second half of the 1980s with two measures. First, buying by NMC continued – and even increased locationally – in these regions, suggesting that 'food security' measures included a regional policy dimension.[31] Second, the government continued until the end of the 1980s to subsidize fertilizers, which were in proportion heavily used in the southern highlands.

After the removal of these safety measures, the remote areas of the southern highlands have lost some of their market share in Dar es Salaam. A marked redistribution in the southern highlands has taken place so that Iringa, which is nearest to the capital, first gained in market share. Later, Mbeya merged as the more important supply centre for Dar es Salaam. A boost in prices was recently noted in Songea but this does not necessarily mean shipments to Dar es Salaam. It can also reflect immigration and income increases from the gold rush. Under the liberalized regime, Rukwa is too remote to supply the Dar es Salaam markets (Van Donge 1994). Lately, a decline in the production of maize is evident even in Iringa.

FIGURE 2.9
MAIZE DELIVERIES TO TANDALE, DAR ES SALAAM



Source: MDB (various issues).

Note: * Datafor 1989-90 seasons start from December.

[31] The last single supportive operation was in 1991 with the purchase of 225,000 tons of maize from the southern highlands at a high price (Tapio-Biström 1996:9).

One clear indicator of the spatial impact of marketing liberalization is the relative shares of the various regions in supplying maize for the wholesale market of Tandale. Information on this issue has been collected by the MDB since late 1989 and is given in following Figure 2.9.[32]

The data on the Tandale market show clearly that Dodoma is recorded as the dominant supplier to the Dar es Salaam market. But it does not necessarily follow that Dodoma, the officially recorded supply town, is also the actual area of production. Instead, it needs to be remembered that Dodoma is also the loading site for trucks coming from the central regions of Arusha, Shinyanga and Tabora, which are gaining foothold, to the disadvantage of the southern highlands. The better quality of maize in central Tanzania is opening up new pockets of supply such as Gairo in Morogoro and Kibwaga in Dodoma. Once the supply from the central route is exhausted by approximately November-December, traders shift their attention to the southern supply areas.

The shift of maize production to central Tanzania also has adverse effects – maize is being produced in areas of bi-modal but unreliable rainfall. The risk of maize production is particularly high during the short rains, as was evident in central and northern parts of the country during the drought of 1996/7.

2.5.8 Prices through the marketing chain

Naturally, the food marketing chain has more steps than merely the producer, the trader and the consumer. The seller of inputs, the wholesaler and the miller should also be added to the chain. Based on qualitative evidence, it is safe to conclude that the increase in private milling has changed both the wholesale market and the milling market. Private milling is profitable as a small-scale operation handling small quantities of maize in hammer mills directly for consumers, and as a large-scale enterprise, i.e. factory producing maize flour.

The government has collected data separately on the producer price, the wholesale price, the retail price and flour retail price. Coverage varies from a few casual observations at selected localities to complete monthly data. We have selected Dar es Salaam and Iringa for a more detailed analysis. This review indicates that in Dar es Salaam, the ratio

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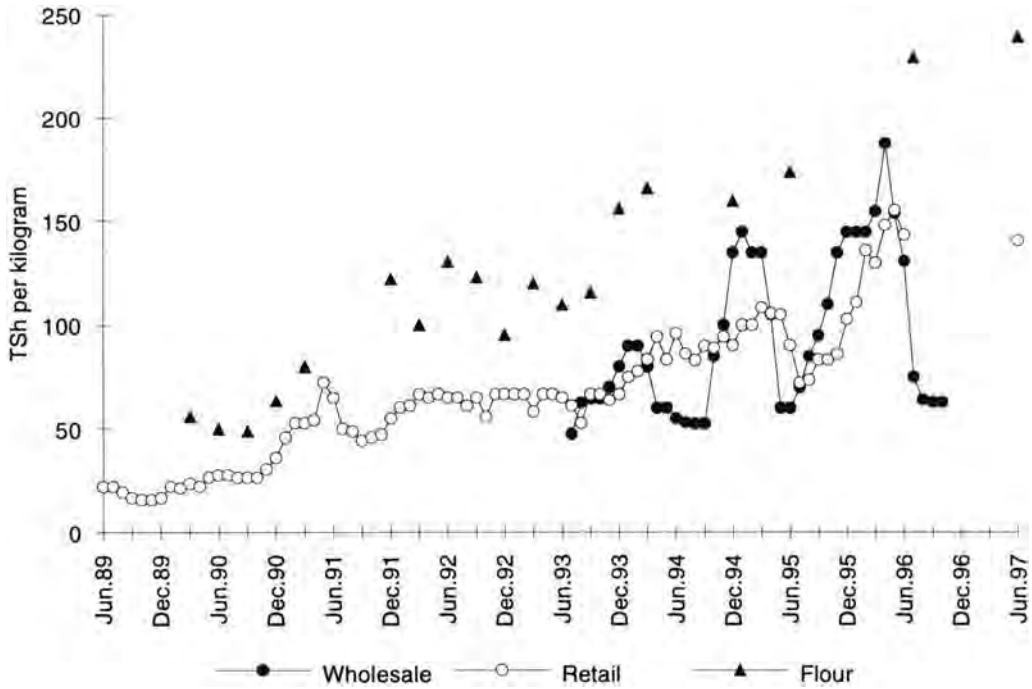
[32] Total supply has been relatively stable between 1991/2 and 1995/6. A part of the crop is traded through the Buruguni and Mbagale markets, which are not statistically covered by MDB for the entire period (MDB 1994:23-4). Only the latest market bulletin gives these data, revealing that Tandale has handled over 60 per cent of all deliveries. Markets at Buguruni and Mbangale are less favourably located. Mbangale, near the road to the south, accounts for more than 20 per cent of Dar es Salaam's supply while the Mbalala market for over 10 per cent. In both Buguruni and Mbangale, the Dodoma traders provided over 60 per cent of maize in 1996/7. Thus Tandale data are almost, if not fully, representative of Dar es Salaam's maize supply.

According to MDB experts, the supply data compiled by Dar es Salaam are fairly reliable, although some maize in transit to Zanzibar is included. Some millers buy directly, by-passing Tandale. The success of the Tandale market has caused congestion and will be replaced by the Mbezi market, once construction of the infrastructure for the new market is completed. Some caution is warranted in reading the 1996/7 figures because the total volume of maize is reported to have dropped by roughly 50 per cent. Therefore, it is possible that considerable quantities of maize have been sold either directly to the millers or black-marketed in order to avoid market-place taxes.

between consumer price of maize and maize flour has fluctuated between 40 and 70 per cent during the 1990s. The latest observations show a price ratio of approximately 60 per cent. Wholesale prices have fluctuated more than retail prices, perhaps reflecting the fact that wholesale prices indicate domestic prices and that consumer prices are affected by imported maize.

FIGURE 2.10
NOMINAL WHOLESALE, CONSUMER AND FLOUR PRICE FOR MAIZE IN DAR ES SALAAM



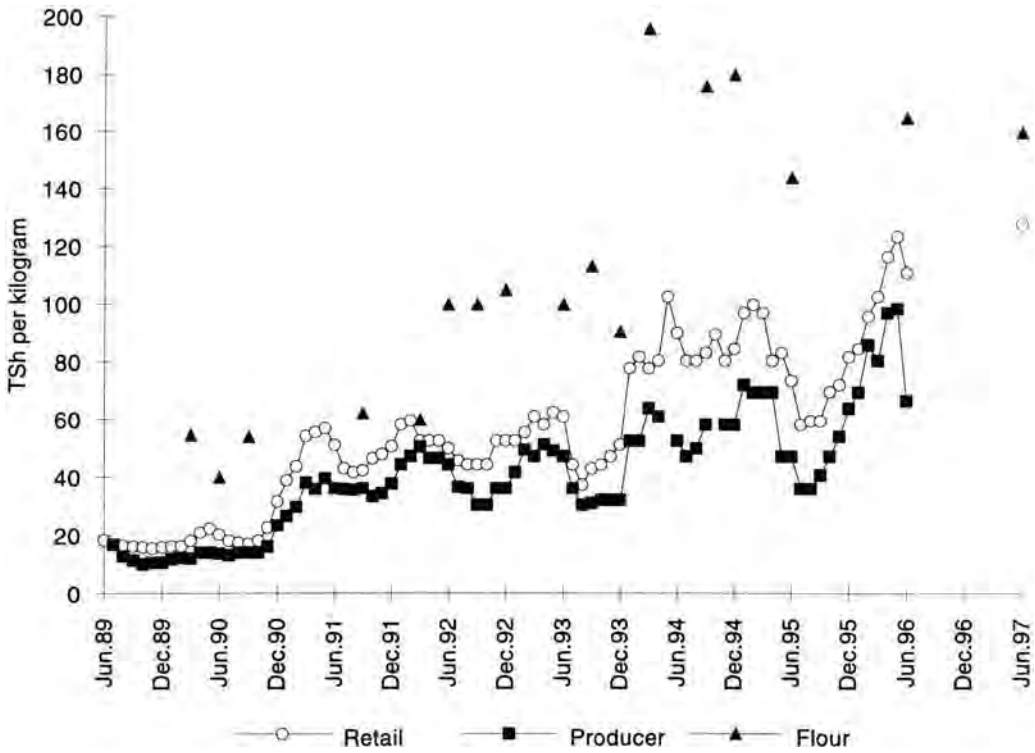
Source: Compiled by the author on the basis of MDB data.

In Iringa, a typical surplus area, the producer price parallels the consumer price fairly closely. The price for maize flour shows larger fluctuation. The price difference between dry maize grain and maize flour was exceptionally high in 1994, but since then the milling mark-up has diminished considerably.

Consumer price data on maize flour are too robust to provide a picture of the competitiveness of maize milling. Data overlook the quality of maize flour, which can have considerable differences in taste and quality between industrially produced and hammer-milled (*posho* mill). The industrial production of maize flour has been effectively privatized and NMC is facing competition from the private market actors.[33] Having gained popularity especially in rural areas but also existing in urban areas, the small hammer mills were a favourite source of investment during the 1980s and the 1990s.

[33] NMC is challenged at least by Bakhressa Ltd., Coastal Millers, Jogoo Mills and Interchick Feed Miller. These companies produce both flour and animal feed. In 1996, NMC still exceeded the combined production of private enterprises (TCDC experts 1996:8).

FIGURE 2.11
NOMINAL PRODUCER, RETAIL AND FLOUR PRICES FOR MAIZE IN IRINGA



Source: Compiled by the author on the basis of MDB data.

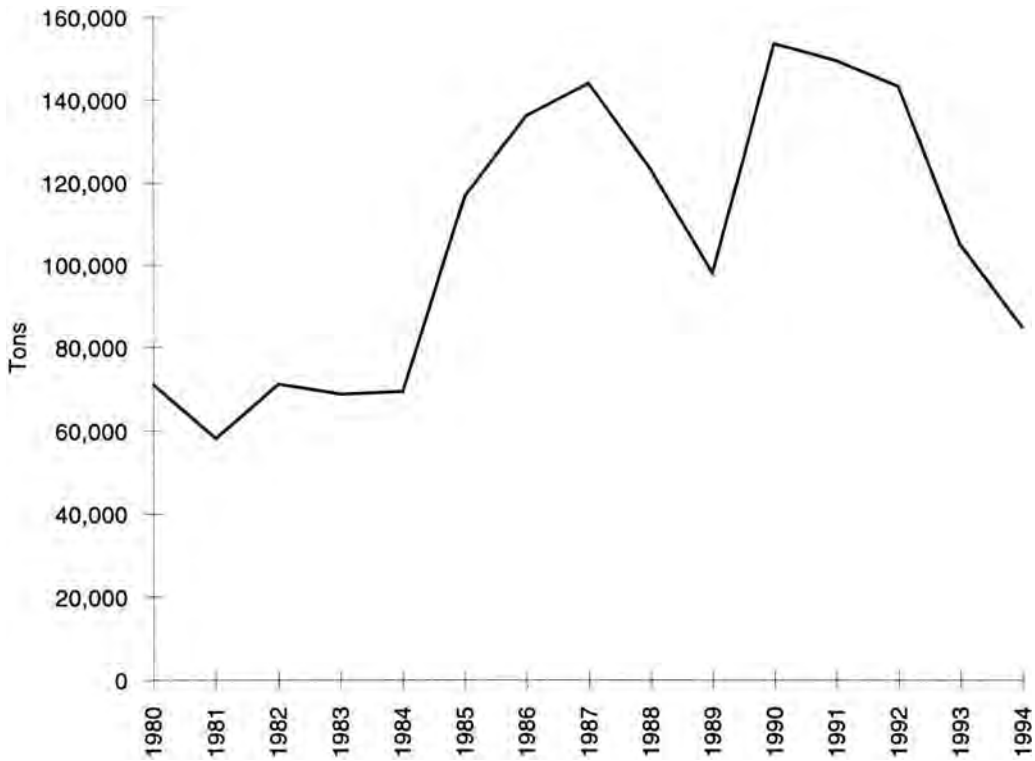
2.5.9 The functioning and impact of fertilizer pricing

Fertilizers could increase maize production considerably but the use of nutrients (and improved seed) is still rather limited. Amani (1992:124) estimates that fertilizer is added to 20 per cent of the maize cultivation and improved maize seed is used only for 5 per cent of the planted area.

Obviously, the removal of fertilizer subsidies in the early 1990s changed the relative shares of the various districts in total maize production. Van Donge (1994:168) calculates that four regions of the southern highlands consumed some 60 per cent of fertilizers in 1977-86 and the subsequent cancellation of subsidies has been especially harmful for maize production in these regions.

The use of fertilizers dropped substantially during the 1990s. Figure 2.12 shows the trend until 1994. Although the Food Security Department (TFSB 1996/3:4) argues that the availability of fertilizers was satisfactory during the 1995/6 season, the effective demand was dampened by high retail prices. On the average, fertilizers were priced between TSh 5,000 and TSh 10,000 per 50 kilogram bag. This is more than double the earlier subsidized price.

FIGURE 2.12
TOTAL FERTILIZER CONSUMPTION



Source: FAOSTAT database.

Availability of fertilizers has also been adequate during the 1996/7 season. However, the effective demand has been rather modest. The low level of fertilizer application may account for the low maize yields, especially in the southern highlands where nitrogen is needed. The availability of improved seeds has been satisfactory but, again, the problem is the purchasing power of the farmers (TFSB 1997/1:4).

2.5.10 The functioning and impact of private food imports and exports

As part of the liberalization measures, private imports and exports of food have been allowed, although periodic bans on exports during the lean years are still exercised. Food is primarily imported through the Dar es Salaam harbour and exported from the surplus production areas of the interior, especially Rukwa and Mbeya.

The import of maize is governed by a handful of large companies.[34] Information on the volume of import is too unreliable and too old to be used in food security estimations. Although border control for volume and quality exists, border authorities do not provide updated information.[35] Apparently, it is not profitable to import maize to Dar es Salaam, especially if official tariffs are paid (e.g. FEWS 1997:4). It is interesting to note that some maize has recently been imported to Mtwara town from Mozambique.

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[34] These include Bakhressa, Coastal Miller, Export Traders, ER Investment and Rajani Industries.

[35] Cf. Figure 2.2 and footnote 3.

The export of maize takes place through various small border posts on the western and northern borders. Since cross-border trade is controlled by small traders, information on quantity is difficult to obtain, despite the fact that MDB has made sporadic checks on the volumes of cross-border trade. Large-scale export is a different matter. During the 1995/6 surplus season, some 105,000 tons of maize were exported. Part of the consignment was purchased by international aid organizations that channelled it as food aid to the neighbouring food-deficit countries (TFSB 1996/1:9).

2.5.11 The functioning and impact of food security operations

Before marketing liberalization, food security operations were a component of the operations of NMC. It maintained strategic reserves, organized food import and channelled food aid. It was very difficult to draw a line between factual food security operations and other political interventions exercised through the same institutional set-up.

The Strategic Grain Reserve (SGR) was established in its current form in 1986. It was to keep a reserve of 100,000 tons, distributed among its warehouses in the main towns. In 1991 the size of reserve was increased to 150,000 tons, with the increase earmarked for price stabilization operations. It was anticipated that SGR re-cycle two-thirds of this reserve annually which translates into food selling operations in the magnitude of 100,000 tons annually. The major item stored by SGR is maize, although some rice and sorghum are also included. Even though the actual reserve does not usually reach this target level, it is obvious that the food security operations are considerable in terms of volume and due attention should be given to the manner in which they are carried out (TFSB 1996/3:13; Tapio-Biström 1996:8).

In principle, the Strategic Grain Reserve is supplied with commercial purchases made through competitive bidding in towns where SGR depots are located. In the beginning of the 1990s, the southern highland areas provided a considerable part of SGR supplies. Later, this support, which eased the way to liberalization in these regions, was removed and the regional distribution of purchases started to reflect fairly accurately the regional distribution of surplus production.[36]

The operational principle of SGR has evolved towards non-interference in the market. However, the operations of the Strategic Grain Reserve have been less than satisfactory because of practical problems, such as lack of funds for purchases as well as storage and transport of the grain. In recent years, the buying price has been more closely linked to the market situation.[37] For example, SGR on occasion has been unable to buy maize in

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[36] During the 1990/1 season, three-quarters of SGR supplies were procured from the Rukwa, Iringa and Ruvuma regions. According to plans, SGR supplies during the 1996/7 season were to be bought in Arusha (17 per cent), Dar es Salaam (28 per cent), Dodoma (17 per cent), Shinyanga (5 per cent) and, Iringa, Rukwa and Ruvuma (11 per cent each) (TFSD 1996/3:12).

[37] The World Bank (1994:148-9) has suggested that the purchase procedure based on agency system was unsatisfactory and should be replaced with tendering. Also selling price (100 per cent above the into-store price) was to be replaced with a more market-oriented approach because 'political interference in the SGR release and stock management at the district and regional levels tend to endanger efficient management of the SGR'. Apparently, reforms on both buying and selling practices were implemented after 1994.

Rukwa at approved prices although Rukwa is considered to be a low-priced surplus area. A likely explanation is that the export price across the border exceeds the domestic price level used by the SGR in other regions.

On a nation-wide basis, some 10-25 per cent of the marketed maize – but only three per cent of total production – is subjected to governmental food security operations. Although the percentage is significant, operations have developed towards a policy of reduced interference, so as not to distort markets unnecessarily. Given the high levels of poverty and unpredictable weather conditions, this level of food security operations is necessary. The objective of the food policies, after all, is the well-being of the population rather than the well-being of a market. It is still worth pointing out that the major part of food security operations is a rotational renewal of security stocks which should not, when implemented through open tendering, sway the market situation in any significant manner.

Another component of food security operations is the food aid shipped to Tanzania by various donors and distributed through different channels. It is difficult to obtain reliable data on food aid. The level of food aid has been below one per cent of domestic production during the 1990s.[38] We will not venture to estimate the impact of food aid on regional food prices due to the incompleteness of data.

The food security system faced a critical test during the 1996/7 season when the short rains failed. Drought affected the most parts of central and northern Tanzania and the government declared a national emergency. Food deficit was estimated to be 900,000 tons, corresponding to the needs of some four million people. The government, in addition to putting a ban on grain exports and waiving taxes for maize importation, also called for food aid. Commercial importers, who were saddled with the main responsibility, responded very poorly and the level of imports was very low (*Daily News*, 26 November 1997). In comparison, the donor agencies have responded, albeit slowing, to the need. World Food Programme plans to coordinate food distribution for some 1.5 million people. The government distributed some 20,000 tons from the SGR. Later, the onset of the long rains which have been more than adequate, particularly in southern highlands, started to alleviate situation. In September 1997, the average maize price was only 32 per cent above last year's level (*Business Times*, 21 November 1997). SGR had some 30,000 tons in its reserves in October. The price differentials were still very high, indicating the location-specific pattern of drought.[39] The high price differentials (over 100 per cent for wholesale price of maize) among the various towns raise serious doubts about the capacity of the domestic private marketing system to manage food distribution in such extreme circumstances.

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[38] It seems that some food aid (over 10,000 tons) was obtained during the 1992/3 and 1993/4 seasons. Some 36,000 tons were obtained during the 1994/5 season while a consignment totalling 19,000 tons was to be distributed in the 1995/6 season. These figures have been collected from various sources and can be completely misleading.

[39] At the close of 1997, the Food Early Warning System Bulletin questioned the accuracy of the previous figures on drought-induced food deficits.

2.5.12 The World Bank's assessment on the functioning of private food marketing system

In its 1994 report on Tanzanian agriculture, the World Bank concluded the following on the liberalized food marketing of the country:

> - a sustained increase in grain supply has been maintained (...)
> - the average real maize price fell dramatically (...) Between 1983-85 and 1986-88, real maize prices fell by 50 per cent (...)
> - for maize, the main food crop, there has been a marked and sustained reduction in the price differentials between producing and consuming areas (...)
> - there has been some reduction in seasonal price variations for maize, as private merchants intervene by storing during periods of low price and selling when the price goes up. However, seasonal price swings still remain substantial (...)
> - maize prices at harvest in the surplus regions in the Southern Highlands appear to have dropped somewhat, in real terms (...)
>
> (World Bank 1994:143-4).

In the following, we assess these conclusions with the data provided by the World Bank and our own analysis. The World Bank (1994:145) shows an increase of maize production from 1,770 thousand tons (before reform in 1981-84) to 2,560 thousand tons (after reform in 1988-91). This is a substantial increase. However, the production increase figure is influenced by one exceptional year, namely 1989/90. Moreover, absolute production has not increased during the 1990s. Sustained supply seems a slightly overoptimistic evaluation for the 1990s as food production has remained at the same nominal level while per capita production has decreased considerably.

According to the World Bank, the average consumer price has decreased dramatically. Using 1983-85 as a base year is, however, completely misleading because prices were exceptional in 1984. Using a longer time series and excluding the 1984 and 1991 bumper crop years, it is obvious that retail consumer prices for maize have remained roughly at the same level throughout the 1980s and the 1990s.

The decrease in price differential between producer and consumer areas is based on a similarly biased calculation. A casual look at the World Bank's own figure (World Bank 1994:145) shows that the favourable price differential is again generated by including the exceptional year of 1984.

The World Bank assessment of the seasonal price fluctuations is made without any reference to primary material. Our assessment shows that there is high variation between lean and high production years in terms of seasonal price fluctuation. The coefficient of variation for real prices has been 0.21 and for nominal prices 0.25 on the average in the twenty-one studied locations during 1989/90 to 1995/6.

According to the World Bank, maize prices have also dropped in the southern highlands. Once the government discontinued its regional politics favouring these areas, private traders have preferred to buy maize from the north. Consequently, farmers in the southern highlands have had occasional difficulties in selling their maize. Still, certain districts within the southern highlands have managed to keep production at a high level both before and after reform.[40]

The World Bank's observation on market integration seems to be valid, at least when correlation data on major district centres are used as an indicator. In general, it seems that the World Bank assessment is biased to highlighting the benefits of market liberalization in very simple terms. It is true that when the situation is reviewed only on the basis of data from the 1980s, it gives a favourable picture. However, when a time series to include the 1990s is introduced, it becomes evident that the state and the net consumer have benefited from the liberalization of maize marketing, but that the net producer has lost in terms of income generation.

2.6 Conclusions

We have analysed the implementation of marketing reform and the social and economic development of private marketing.

The private marketing system is fairly competitive in Tanzania. Private marketing has developed slowly over 15 years without major public or donor support. Despite the lack of transport and capital, private marketing has done well because of the flexibility of the private traders. The adaptive strategies of the traders are an good indication that the existing potential for domestic private trading has been competitively utilized. The market segment of large-scale traders with importing capacity seems to be controlled by very few entrepreneurs. The efficiency of private marketing system is reduced by the lack of investment and poor marketing infrastructure.

The government of Tanzania has shown remarkable concern for ensuring food security, particularly before market liberalization. The excellent monitoring system of food prices is one example. Previously, food security measures were used for various purposes, such as balancing urban-rural incomes or regional inequalities. During recent years. food security operations have been used as a supplement to, but not as a replacement for the market mechanism. At the same time, intervention mechanisms have changed from broad supply-generating procedures to narrow, albeit welfarist, demand-stabilizing measures.

At the beginning of this chapter, we presented three hypotheses for the analysis of the economic development of private marketing. First, we hypothesized that market integration had increased. Comparing the town-town correlations in the 1980s and 1990s, we conclude that an increase in market integration has taken place. The average town-town consumer price correlation rate (for period 1989/90-1995/6 over twenty-one locations) was 0.63. The analysis of the correlations of first differentials over shorter

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[40] Cf. Van Donge 1992.

time periods (1990-93 and 1993-96) gives only slightly higher correlations than the similar data from the 1980s. We suspect that a part of high price correlation is explained by the development of external demand (i.e. 'exceptional demand centres' across the borders) which exists in addition to normal domestic town-based (and Dar es Salaam dominated) demand. High correlations may also reflect the decrease in the traded amounts and the geographically more balanced demand for surplus maize.

Second, we hypothesized that private marketing was accompanied by seasonal price fluctuations, especially during years of low national production (commonly the result of low rainfall), because the traders, farmers, and consumers do not invest in supplies. The data indicate that price fluctuations have remained at a relatively high level. The average annual coefficient of variation for real consumer prices (for period 1989/90-1995/6 over twenty-one locations, indexed with NCPI) was 0.21. There is a noticeable difference between lean years and bumper harvest years. When harvests are good, traders selling to Dar es Salaam show only small profit margins. There may still be other demand centres which provide better opportunities for profit.

Third, we assumed that regional producer prices decreased in remote areas. It seems that regions far removed from Dar es Salaam have alternative markets and thus producer price decrease is smaller than expected. However, 'remoteness' can also imply distance to major roads in any specific production area. Here the available data from regional centres do not correspond to the situation and we are not able to come to a conclusion because of the lack of more detailed (village level) price data. Thus, more detailed trading analyses, starting from the farm-gate situation at the village level, should be conducted.

The total production of maize seems to have remained stagnant throughout the 1990s. Still the country managed well without any major influx of commercial import or food aid until the drought in 1997. The drought came as a surprise and confirmed the necessity of maintaining and even increasing the level of 'preventive' food security operations. It is curious that major policy papers do not mention food security and have very little to say in general on food production. Surely, food security should still be a major issue for the Tanzanian economic policy.

2.7 Annexes

Annex 2.1 Correlations of consumer prices among localities, 1990-96

Annex 2.2 Annual coefficient of variation for nominal consumer price of maize

Annex 2.3 Mean annual real consumer price of maize

Annex 2.4 Maize consumer/producer price ratios

ANNEX 2.1

CORRELATIONS OF CONSUMER PRICES AMONG LOCALITIES, 1990-96

	Arusha	Mbulu	Moshi	Lushoto	Mwanza	Tarime	Kigoma	Dodoma	Tabora	Mbeya	Iringa	Songea	Mtwara	DSM	Newala	Tunduru	Singida	Lindi	Morogoro	Musoma	Tanga
Arusha	1.00																				
Mbulu	0.57	1.00																			
Moshi	0.91	0.48	1.00																		
Lushoto	0.79	0.51	0.79	1.00																	
Mwanza	0.54	0.35	0.48	0.60	1.00																
Tarime	0.54	0.50	0.55	0.38	0.71	1.00															
Kigoma	0.46	-0.06	0.45	0.59	0.84	0.35	1.00														
Dodoma	0.75	0.67	0.72	0.82	0.67	0.37	0.45	1.00													
Tabora	0.59	0.50	0.44	0.54	0.83	0.55	0.76	0.66	1.00												
Mbeya	0.81	0.34	0.84	0.85	0.72	0.36	0.78	0.83	0.71	1.00											
Iringa	0.87	0.40	0.81	0.84	0.62	0.38	0.63	0.84	0.67	0.95	1.00										
Songea	0.75	0.25	0.75	0.71	0.47	0.40	0.63	0.77	0.62	0.85	0.87	1.00									
Mtwara	0.36	0.29	0.44	0.61	0.68	0.07	0.79	0.55	0.60	0.72	0.60	0.70	1.00								
DSM	0.81	0.29	0.79	0.81	0.73	0.47	0.71	0.84	0.70	0.95	0.93	0.77	0.54	1.00							
Newala	0.46	0.05	0.45	0.57	0.75	0.42	0.85	0.56	0.70	0.83	0.68	0.67	0.90	0.74	1.00						
Tunduru	0.51	-0.24	0.55	0.74	0.64	0.52	0.85	0.47	0.63	0.86	0.72	0.71	0.79	0.83	0.90	1.00					
Singida	0.69	0.48	0.45	0.65	0.43	0.30	0.30	0.74	0.61	0.67	0.73	0.61	0.40	0.61	0.43	0.48	1.00				
Lindi	0.44	0.09	0.45	0.57	0.69	0.33	0.84	0.45	0.68	0.79	0.66	0.65	0.94	0.69	0.94	0.89	0.43	1.00			
Morogoro	0.74	0.38	0.73	0.74	0.78	0.40	0.75	0.86	0.70	0.92	0.83	0.86	0.71	0.87	0.75	0.75	0.65	0.71	1.00		
Musoma	0.44	0.41	0.26	0.49	0.84	0.72	0.72	0.30	0.77	0.40	0.40	0.40	0.29	0.42	0.49	0.35	0.46	0.39	0.39	1.00	
Tanga	0.88	0.61	0.86	0.93	0.59	0.50	0.57	0.90	0.62	0.87	0.86	0.75	0.50	0.87	0.59	0.65	0.62	0.50	0.84	0.45	1.00

ANNEX 2.2
ANNUAL COEFFICIENT OF VARIATION FOR NOMINAL CONSUMER PRICE OF MAIZE

	1989/90	1990/1	1991/2	1992/93	1993/94	1994/95	1995/96	1996/7	Average
Arusha	0.14	0.50	0.18	0.12	0.33	0.09	0.26	0,37	0.25
Mbulu	0.12	0.46	0.14	0.15	0.38	0.15	0.34	0.41	0.27
Moshi	0.13	0.30	0.24	0.23	0.31	0.08	0.19	0.32	0.23
Lushoto	0.18	0.48	0.28	0.17	0.33	0.11	0.28	0.38	0.28
Mwanza	0.06	0.33	0.18	0.26	0.29	0.08	0.32	0.44	0.25
Tarime	0.12	0.34	0.31	0.37	0.32	0.25	0.22	0.38	0.29
Kigoma	0.14	0.31	0.21	0.35	0.23	0.15	0.26	0.09	0.22
Dodoma	0.18	0.34	0.15	0.15	0.31	0.16	0.32	0.27	0.23
Tabora	0.23	0.31	0.15	0.23	0.23	0.20	0.35	0.32	0.25
Mbeya	0.13	0.32	0.19	0.18	0.28	0.13	0.22	0.20	0.21
Iringa	0.13	0.47	0.12	0.13	0.34	0.10	0.27	0.17	0.22
Songea	0.17	0.49	0.16	0.28	0.37	0.29	0.09	0.25	0.26
Mtwara	0.11	0.34	0.21	0.25	0.31	0.42	0.34	0.42	0.30
Dar es Salaam	0.20	0.38	0.16	0.06	0.18	0.09	0.28	0.23	0.20
Newala	0.18	0.49	0.31	0.22	0.39	0.34	0.24	0.36	0.32
Tunduru	0.19	0.33	0.34	0.27	0.25	0.40	0.22	0.29	0.29
Singida	0.11	0.34	0.17	0.22	0.32	0.10	0.21	0.32	0.22
Lindi	0.11	0.36	0.30	0.34	0.32	0.39	0.25	0.39	0.31
Morogoro	0.30	0.43	0.20	0.12	0.26	0.22	0.35	0.36	0.28
Musoma	0.11	0.28	0.26	0.31	0.27	0.10	0.26	0.29	0.24
Tanga	0.16	0.40	0.25	0.15	0.36	0.15	0.27	0.33	0.26
Average	0.15	0.38	0.21	0.22	0.30	0.19	0.26	0.31	0.25

Source: Compiled by the author on the basis of MDB data.

ANNEX 2.3
MEAN ANNUAL REAL CONSUMER PRICE OF MAIZE

	(Index = prices for Dec 1990)							
	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	Average
Arusha	21	36	52	34	33	25	21	32
Mbulu	19	36	47	27	22	15	12	26
Moshi	22	33	52	31	30	29	23	31
Lushoto	24	37	48	30	33	26	25	32
Mwanza	32	38	45	40	30	23	27	33
Tarime	32	51	56	39	33	30	25	38
Kigoma	31	42	33	35	26	25	25	31
Dodoma	19	38	47	28	25	21	21	28
Tabora	24	36	39	39	28	19	19	29
Mbeya	21	24	32	25	23	23	22	24
Iringa	22	35	42	30	28	29	23	30
Songea	12	23	29	20	20	19	14	20
Mtwara	24	39	44	31	28	26	23	31
Dar es Salaam	26	43	47	37	33	32	29	35
Newala	25	44	34	35	30	30	29	32
Tunduru	18	22	32	29	26	30	25	26
Singida	26	42	39	33	25	20	17	29
Lindi	26	44	41	35	32	32	28	34
Morogoro	23	41	44	32	29	26	26	32
Musoma	33	45	46	44	30	21	23	35
Tanga	26	42	51	27	31	24	24	32
Average	24	38	43	33	28	25	23	30

Source: Compiled by the author on the basis of MDB data.

ANNEX 2.4
MAIZE CONSUMER/PRODUCER PRICE RATIOS

THE PRICE RATIO BETWEEN CONSUMER PRICE IN DAR ES SALAAM AND PRODUCER PRICE IN MAJOR PRODUCER AREAS. MAIZE PRICE RATIO AFTER DIRECT SELLING OR AFTER 3, 6 AND 9 MONTH LAGS.

O MONTH-LAG

	1989	1990	1991	1992	1993	1994	1995	1996
Arusha	122	148	83	95	103	115	115	128
Iringa	119	153	117	138	141	103	123	96
Dodoma	140	125	109	147	145	153	133	152

3 MONTH-LAGS(1

	1989	1990	1991	1992	1993	1994	1995	1996
Arusha	99	172	81	86	124	131	135	112
Iringa	97	177	113	125	170	117	144	84
Dodoma	114	145	106	133	175	174	155	133

6 MONTH-LAGS(2

	1989	1990	1991	1992	1993	1994	1995	1996
Arusha	134	297	105	104	151	138	213	180
Iringa	131	305	147	150	207	124	228	134
Dodoma	154	251	138	160	213	185	245	214

9 MONTH-LAGS(3

	1989	1990	1991	1992	1993	1994	1995	1996
Arusha	167	406	114	104	91	145	243	208
Iringa	163	418	160	150	102	130	260	155
Dodoma	192	343	150	160	107	194	280	248

Notes: (1 Buying in August of a given year in the producing area and selling in November in Dar es Salaam.

(2 Buying in August of a given year in the producing area and selling in February of the following year in Dar es Salaam.

(3 Buying in August of a given year in the producing area and selling in February of the following year in Dar es Salaam.

Estimates used for some missing values.

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CHAPTER 3

FOSTERING PRIVATE FOOD MARKETING AND FOOD POLICIES AFTER LIBERALIZATION – THE CASE OF MALAWI

Ephraim Wadonda Chirwa

3.1 Introduction

The Malawi economy is predominantly agricultural, contributing about 35 per cent of gross domestic product (GDP). The agriculture sector is the mainstay of the economy providing employment and source of livelihood to about 85 per cent of the eleven million Malawian population. The agriculture sector is divided into two main sub-sectors: the smallholder sector and the estate sector. The smallholder sector is the largest, contributing about 70 per cent of gross domestic product originating from the agriculture sector. This smallholder sector produces a greater proportion of food products, while the estate sector mainly produces cash crops. The smallholder sector is further categorized into three groups by type of farmers: net food sellers, intermediate farmers and net food buyers.[1] The net food sellers are those with land holding of more than 1.5 hectares and who produce more than their subsistence needs for survival during the year. These are able to sell part of their farm produce. The intermediate farmers are those with land holding of between 0.7 hectares and 1.5 hectares and who produce just enough for their survival but have very little for sale. The net food buyers are those smallholder farmers with land holdings of less than 0.7 hectares and are not able to produce enough food for their subsistence needs. In order to meet their food requirements, these farmers purchase additional food from the market. It is estimated that the net food buyers are between 40 per cent and 55 per cent of the smallholder farmers. The implication of this distinction is that agricultural policies will affect different categories in different ways, with net food buyers losing and net food sellers gaining as a result of increases in the prices of food crops (Chilowa and Chirwa 1997).

Due to the importance of the smallholder agriculture sector in the incomes of the smallholder farmers and the rural population and food security of the country, both the colonial government and the post-independence government were interested in ensuring proper marketing of smallholder agricultural produce. Marketing of smallholder agricultural produce and inputs has largely been in the hands of state-owned enterprises. However, within World Bank/International Monetary Fund (IMF) sponsored structural adjustment programmes (SAPs) which Malawi has been implementing since 1981, several institutional and policy changes in the agriculture sector in general, and in food marketing in particular, have taken place. The role of private traders has been clearly defined with most institutional barriers to their entry and operation eliminated. Notably,

[1] This is based on the Malawi government (1987) classification of the smallholder agricultural sector.

legislation governing the *modus operandi* of private traders in the purchase and sale of agricultural produce including food was introduced; there have been periodic adjustments in agricultural produce prices; restructuring and divestiture of the state marketing corporation and liberalization of export trade.

The main objective of this chapter is to assess the impact of liberalization of food marketing in Malawi. Specifically, the case study focuses on: food marketing in the context of structural adjustment programmes in Malawi, the development of private marketing, analysis of the policy environment for private marketing, and the competitive acts of public agencies. The chapter is divided into five main sections. The next section outlines the various institutional and policy developments leading to liberalization of food marketing in Malawi. Section 3.3 reviews the private marketing system in Malawi focusing on the structural characteristics of private traders and the spatial extent of their operations. Section 3.4 analyses the performance of the private marketing system in terms of supply of key crops, food supply, efficiency of private marketing, price variations and the role of private traders in international trade in food crops. Finally, section 3.5 provides concluding remarks stressing on the welfare gains of private food marketing.

3.2 Agricultural produce marketing and structural adjustment programmes (SAPs)

3.2.1 The origin of state-enterprise marketing activities [2]

State intervention in the marketing of agricultural crops in Malawi dates from the colonial era with the establishment of the Native Tobacco Board in 1926. In 1949, motivated by government concern about the availability and price of food, two more statutory bodies were created – the Maize Control Board and the Cotton Control Board – to give the overall marketing services to maize producers and cotton growers, respectively. Kandoole *et al.* (1988) observed that the price of maize was fairly stable at one penny per pound for a long time (about seven years). The Maize Control Board was renamed the Produce Marketing Board with wider powers including authority to purchase other crops as groundnuts and beans. In 1956, the African Tobacco Board, the Maize Control Board and the Cotton Control Board were incorporated into the Agricultural Production and Marketing Board. The board was given the task of providing a stable and efficient marketing system for the main cash crops produced on trust lands. The official policy was to pay growers a price that provided a 'reasonable return'. However, in 1957 the policy stance changed and the government implemented the minimum uniform pre-planting prices.

After the general elections in 1961, the board was superseded by the Farmers' Marketing Board in 1962. The functions of the new board were more extensive than its predecessors. The Farmer's Marketing Board was responsible for marketing, processing,

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[2] This section relies on ADMARC (1974). The historical developments are also discussed by Kandoole *al.* (1988), Scarborough (1990) and Chirwa (1997).

and disposing of agricultural products; providing adequate price stability in order to protect farmers from world price fluctuations and increased agricultural output; providing storage facilities for food reserves on behalf of the government, and subsidizing agricultural inputs to increase yields (Kandoole *et al.* 1988). In 1971, the Agricultural Development and Marketing Corporation (ADMARC) was established to replace the Farmers' Marketing Board. The principal mandate of marketing agriculture inputs and output was to the support government's commercialization efforts in the agriculture sector.

It is clear that ADMARC was established to foster the development of the agriculture sector by offering marketing services to smallholder farmers. However, as indicated in ADMARC (1974), its mandate broadened to include establishment and development of agro-industry enterprises which fully exploit the agricultural potential of the country. ADMARC was able to assume this role by investing the surplus reaped from the trading activities into various sectors of the economy including estates (Harrigan 1991). The extension of activities, especially towards investment in non-agricultural activities, was not included in its official mandate (Chirwa 1997). Nonetheless, ADMARC was empowered to grow, cultivate or raise cotton, livestock, produce or tobacco for demonstration and commercial purposes. Although ADMARC had monopsony powers only in the purchase of cotton and tobacco from smallholder farmers, this seems to have filtered informally to encompass many other agricultural produce that were also supposed to be freely operated by private traders.

3.2.2 The causes and consequences of the marketing crisis

Food marketing in Malawi has always been dominated by private traders. As noted by Kandoole *et al.* (1988), although statements of the marketing board objectives give the impression that they are monopsonists in maize marketing, data suggest that ADMARC often handles a small proportion of traded maize surplus. For instance, ADMARC accounted for 6 per cent and 13 per cent of the traded surplus maize in 1970 and 1975, respectively. The rest of the maize surplus has been handled by private traders (licensed or otherwise) in various marketplaces including farm-gate, local markets, district council markets and urban markets. The Agricultural and Livestock Marketing Act of 1964 only gives monopsony power to ADMARC to purchase and sell smallholder cotton and tobacco. Otherwise, private trade in commodities produced by smallholder farmers preceded official marketing institutions and has always been accepted.[3] Rules had been established only for restricting the activities of large and non-African traders (for example, with an upper limit on the quantity of produce a single trader may purchase). Nonetheless, most food crops were under marketing control and required one to obtain a license to conduct trade.[4] Prices for all food crops under control were

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[3] Scarborough (1990) argues that although ADMARC had limited monopsony power, private trade in other crops had been very effectively discouraged through alternative means, such as multiple licensing and red tape in the licensing of traders.

[4] The following crops were under price control and trader licensing requirement: burley, beeswax, black gram, bulrush millet, Canadian wonder beans, capsicums (dried), cashew nuts, cassava, castor, chilies (dried), chick peas, delicious beans, dried peas, green gram, groundnuts, honey, macadamia nuts, maize,

officially determined by the government. Moreover, a separate license was required in respect of the right to purchase each separate class of produce.

FIGURE 3.1
MAP OF MALAWI

State marketing activities in food products were therefore supported by the private marketing system, with most trade by private traders not being recorded in official statistics. The co-existence of the two market segments facilitated the marketing of food crops in Malawi since independence until the late 1970s. The informal private trading system complemented activities of the state marketing agency. As asserted by Scarborough (1990), until the late 1970s and early 1980s, ADMARC provided assured and reliable markets for smallholder output; paid farmers with cash on delivery;

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mixed beans, paddy rice, pigeon peas, sesame, sorghum, soya beans, sugar beans, wheat and white haricot beans.

provided credit on, and subsidized the cost of supplying inputs to members of farmers' clubs; stabilized prices seasonally and annually; paid maize producers higher than export parity prices and probably subsidized the consumption of maize and rice.[5] The operations of ADMARC's marketing activities in the 1970s were very favourable with most of the crop trading accounts recording favourable surpluses and better export prices for most crops. According to Harrigan (1991), ADMARC had built up large surpluses in the 1970s through its export trading activities which originated from the implicit tax on smallholder farmers. These surpluses supported the expansion and diversification of ADMARC into loan and equity investments in various sectors of the economy. Between 1971 and 1979 ADMARC extracted about MK 181.9 million from the smallholder sector, of which 14 per cent was used to cross-subsidize smallholder food production and consumption (maize and rice), the remainder being used for investments and loans, only 4.3 per cent of which were related to the development of smallholder agriculture (Kydd and Christiansen 1982).

The operational efficiency of ADMARC as a state marketing agency of smallholder food crops started facing problems. These problems were among the many macro and micro economic problems that characterized Malawi in 1979 through to 1981. This was a period of economic crisis in Malawi.[6] For the first time, the impressive economic performance of the economy of the 1970s deteriorated in 1979 and negative growth rates were recorded in 1980 and 1981. In 1979, Malawi was hit by its major problem due to her landlockedness through the closure of the Beira route to the Indian Ocean as a result of the intensification of the civil war in Mozambique. The economic crisis was characterized by deteriorating terms of trade, transport bottlenecks, rising costs of fuel, adverse weather conditions and weakening internal demand. Furthermore, the economy had structural weaknesses that included inefficient production resulting from price controls; poor performance of smallholder agriculture; inadequate funding of agriculture; inefficiencies of most parastatals due to unsystematic and wasteful investment; emphasis on a few agricultural commodities which are subject to wide fluctuations in international prices, and overvalued exchange rates (Chilowa and Chirwa 1997).

The general decline in economic activities implied adversely on most sectors of the economy in the 1980s. The inherent structural problems faced by parastatals and the deterioration of the terms of trade, meant that ADMARC's principal mandate was greatly affected. According to Scarborough (1990), various external factors in combination with the illiquid nature of ADMARC's investments, its increasing number of employees and its operational inflexibility led to the weakening of its capacity to sustain the quality of its marketing activities. The external factors that affected ADMARC's performance in the early 1980s included deteriorating prices for the country's exports; change in government pricing policies; adverse weather conditions; a

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[5] However, Harrigan (1988) observed that prices paid by ADMARC for smallholder tobacco, cotton and groundnuts were well below export-parity levels throughout the 1970s.

[6] Kaluwa *et al.* (1992) discuss the origins and making of this crisis.

directive to establish and manage a strategic grain reserve; increasing external transport costs and finance costs.

Moreover, the government used ADMARC marketing activities as instruments of implementing and enforcing price policy in the agricultural sector and the wage-earning sector, particularly for maize.[7] The main pricing policy was in two parts: the maize producer price policy and the maize consumer price policy. According to Kandoole *et al.* (1988) the stated objectives of the maize price policy included provision of incentives for smallholder farmers to produce more maize to meet domestic demand, ensuring a steady cash income for smallholder farmers, diversification of agricultural production, maintaining an adequate return to ADMARC's operations and ensuring that there is no reduction in the nominal price of maize. On the other hand, the objective of the maize consumer price policy was to enable wage earners to consistently purchase enough maize for a calorie-adequate diet. However, Kandoole *et al.* (1988) and Harrigan (1988) noted that there were conflicts among policy objectives. These conflicts resulted in several changes in maize pricing policy. Nonetheless, Kaluwa (1992) argues that the twin objectives of raising producer prices as an incentive to produce while maintaining consumer prices at 'reasonable' levels have resulted in a serious threat to ADMARC's financial viability, particularly the profitability of maize crop trading.

The structural weaknesses in the public marketing system and the inefficiency of the pricing policy was manifested in the deterioration of the financial position of ADMARC's crop trading account and the decline in crop purchases from smallholder farmers. Table 3.1 presents the financial performance of ADMARC's crop trading account by crop since 1970. It is apparent from the data that between 1970 and 1978, the financial performance of the crop trading account was impressive and profitability from ADMARC's marketing activities was increasing. However, the profitability performance of the crop trading account started to deteriorate since 1979, the period the economy was in a crisis. For the first time since 1970, a loss of about K 18 million was registered in 1986. This was followed by a loss of similar magnitude in 1987. Thereafter, the financial performance of the crop trading account improved but started deteriorating since 1992. Although profitability generally fell for all crops, the inefficiencies in food crop marketing is apparent. Cash crops were heavily cross-subsidizing trading activities in the two major staple foods – maize and rice. Trading accounts for maize and rice have been recording losses since 1976. These losses have been substantial in the case of maize.

There are several factors that can be attributed to the deteriorating performance of the state marketing agency. First, the persistent losses on food crop trading are a direct result of an inefficient pricing policy driven by food security concerns. It is clear from Table 3.2 that the gross margin defined as the percentage difference between the producer and consumer price of maize has been declining and was fixed for considerable periods of time. For instance, between 1967 and 1969 the gross margin between producer and consumer prices had been K 20 per metric ton, which was 100 per cent of the producer price. However, the consumer price was kept constant between

[7] Kandoole *et al.* (1988) and Harrigan (1988) elaborate on the pricing and storage policies that were supposed to be achieved, and the resultant conflicts.

1970 and 1972 while the producer price was raised and kept constant. This led to a fall in the gross margin to K 10 per metric ton, being only 33.33 per cent of the producer price. In 1973 and 1974 the gross margin was increased to 65 per cent of the producer price. Between 1975 and 1977, the gross margin fell to 32 per cent of the producer price and went as low as 14 per cent in 1985.

TABLE 3.1
ADMARC NET PROFIT/LOSS ON CROP TRADING, 1970-95
(MILLIONS OF KWACHA)

Year	Tobacco	Cotton	Groundnuts	General produce	Rice	Maize	Total
1970	1.72	0.17	1.57	0.23	-0.67	0.34	3.98
1971	–	–	–	–	–	–	–
1972	5.55	0.80	2.11	0.43	-0.18	-0.04	8.72
1973	3.54	0.91	2.14	-0.05	-0.14	-0.07	6.34
1974	2.5	1.45	1.77	0.61	0.41	1.58	8.11
1975	4.91	3.16	1.08	1.09	0.57	0.22	11.03
1976	10.61	0.46	1.27	0.54	-0.03	-2.87	9.98
1977	15.76	1.91	5.99	1.71	-1.08	-1.61	22.68
1978	25.86	1.41	4.50	1.38	-0.78	-2.33	30.04
1979	4.22	1.21	2.22	0.54	-0.68	-3.32	4.19
1980	2.71	0.46	3.75	-1.10	-1.56	-4.18	0.08
1981	3.23	-0.79	4.23	-0.45	-1.40	-4.49	0.33
1982	9.14	2.75	3.28	-0.52	-0.66	-5.13	8.86
1983	18.62	0.72	0.78	-1.01	-1.12	-5.77	12.22
1984	13.36	-0.25	0.28	-0.89	-0.46	-5.49	6.55
1985	15.73	-1.21	-0.90	-0.76	-1.18	1.17	12.85
1986	-6.97	-0.68	-4.76	1.51	-1.24	-5.65	-17.80
1987	3.89	-7.82	-3.48	1.91	-0.54	-10.60	-16.63
1988	12.48	-2.81	-4.70	-1.32	0.01	0.13	3.79
1989	19.89	-2.47	-12.65	0.21	-0.02	0.72	5.67
1990	16.66	3.61	-0.73	2.66	0.49	6.59	29.29
1991	13.27	2.75	1.71	-1.49	0.16	5.67	22.07
1992	-24.77	-3.95	1.50	-1.00	-0.17	14.80	-10.68
1993	-31.88	-4.60	-0.37	-0.02	-0.79	4.41	-32.54
1994	-7.24	6.28	0.02	6.62	-1.67	28.84	32.86
1995	-2.67	-0.62	-3.15	-6.87	1.21	-34.95	-47.05

Source: Kandoole *et al.* (1989); ADMARC (various).

Table 3.2 also shows the volume of marketed maize by ADMARC and free market prices of small-scale private traders monitored in major urban markets. It is interesting to note that although pan-territorial prices were set for maize, higher prices were obtained in the free market system. It is possible that because of the price differences, ADMARC's maize purchases from smallholder farmers might have been a small proportion of marketed maize output. Another observation is that the quantity of maize purchases from smallholder farmers dropped from 120,300 metric tons in 1979 to 82,400 metric tons in 1980. However, between 1982 and 1983 maize purchases from

smallholder farmers increased by 80 per cent. Kandoole *et al.* (1988) has attributed this to price response. In 1982, the government actually increased the producer price for maize by 66 per cent. This had the effect of sharply increasing smallholder sales of maize to ADMARC.

TABLE 3.2
ADMARC MAIZE TRANSACTIONS, 1967-96

Year	Nominal maize prices (K/mt)			Gross margin (%)	Volume ('000 mt)	
	Free market	Producer price	Consumer price		Purchases	Sales
1967	39.70	20.00	40.00	100.00	–	–
1968	40.50	20.00	40.00	100.00	85.83	127.05
1969	52.70	20.00	40.00	100.00	54.03	59.48
1970	45.10	20.00	40.00	100.00	8.28	51.65
1971	48.90	30.00	40.00	33.33	31.87	34.00
1972	48.40	30.00	40.00	33.33	64.59	50.29
1973	64.20	30.00	40.00	33.33	63.07	13.63
1974	83.50	30.00	50.00	66.67	65.53	17.70
1975	91.50	40.00	66.00	65.00	29.16	29.24
1976	85.00	50.00	66.00	32.00	65.11	30.51
1977	86.20	50.00	66.00	32.00	89.84	41.62
1978	94.70	50.00	66.00	32.00	120.30	93.93
1979	122.20	50.00	90.00	80.00	82.40	136.81
1980	155.50	66.00	90.00	36.36	91.21	136.85
1981	162.60	66.00	110.00	66.67	136.59	95.82
1982	190.10	111.00	130.00	17.12	246.09	84.21
1983	196.50	111.00	140.00	26.13	244.92	134.89
1984	195.60	122.00	140.00	14.75	296.44	174.68
1985	246.50	122.00	140.00	14.75	272.28	115.46
1986	255.50	122.00	148.50	21.72	112.64	246.86
1987	258.00	122.00	191.69	57.12	59.47	198.11
1988	270.00	166.00	244.44	47.25	135.30	102.40
1989	300.00	240.00	320.00	33.33	233.10	98.69
1990	380.00	271.95	360.00	32.38	200.63	340.17
1991	380.00	281.97	392.44	39.18	602.80	216.24
1992	510.00	322.53	492.08	52.57	44.21	308.69
1993	630.00	441.21	947.82	14.82	484.71	50.94
1994	990.00	519.67	902.56	73.68	49.99	263.53
1995	1520.00	1254.45	1800.00	43.49	87.07	230.76
1996	2690.00	1560.28	1806.44	15.78	95.31	–

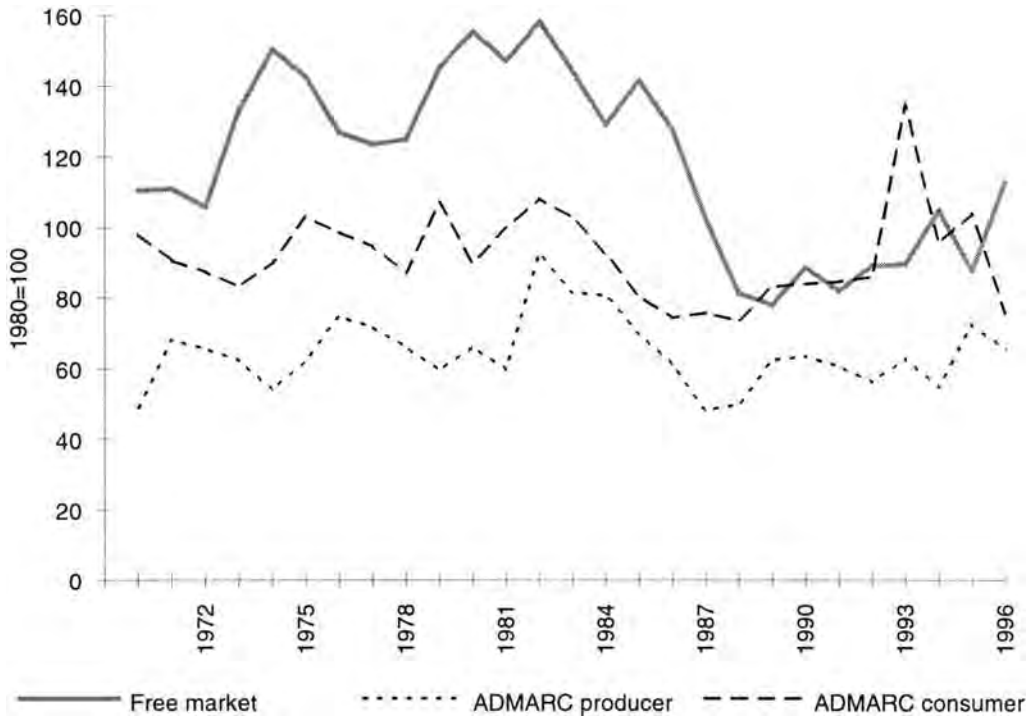
Source: Kandoole *et al.* (1988); ADMARC (various); Reserve Bank (various); Ministry of Agriculture and Livestock Development.

Note: – data not available.

However, the macroeconomic instability had implications on the real producers and consumers. The movement in nominal prices may appear favourable. Figure 3 2 represents the real maize prices from various market agents. In the pre-liberalization period (1970-86) private market real maize prices grew at an annual rate of 1.44 per cent while in the post-liberalization period, real prices only grew by 0.01 per cent. Similarly, ADMARC producer prices in real terms revealed that on average the producer prices

were increasing at 2.98 per cent in the pre-liberalization period and at 1.87 per cent in the post-liberalization period. The real consumer prices offered by ADMARC were actually falling at an average rate of 1.18 per cent per year but increased at 2.48 per cent in the post-liberalization period. In all cases, there was great instability in real prices of maize even after marketing and pricing liberalization.

FIGURE 3.2
PRIVATE TRADER AND ADMARC REAL PRICES, 1970-96



Source Author's calculations based on Table 3.2.

Second, the declining role of ADMARC in the marketing of smallholder crops was a result of ADMARC's expansion in portfolio investments. This meant a gradual shift from specialization in crop marketing services towards a holding corporation. Since 1971, when ADMARC's mandate was broadened, ADMARC has invested in portfolios which were not related to the development of the agriculture sector. Portfolio investments diverted financial and managerial resources from crop marketing activities. As argued by Kydd and Hewitt (1986), much of ADMARC's 1970s profit from implicit taxes on smallholder production was filtered out of the smallholder sector into estate agriculture and the manufacturing sector. It turned out that these portfolio investment generated very little return for ADMARC.

Third, the government in 1981 built a strategic grain reserve which was managed by ADMARC. Amidst an economic crisis, the strategic grain reserve was costly as it did not bring immediate returns to ADMARC and with the producer price increased in 1982, ADMARC's procurement to maintain the grain reserve increased substantially.

Finally, ADMARC as the principal outlet of farm inputs to smallholder farmers had been subsidizing inputs, such as seeds and fertilizers, by selling them at prices below the purchase price plus transport and handling costs. The aim of the subsidy was to improve the adoption of technology by smallholder farmers in the production of maize in form of application of fertilizer and use of hybrid maize. With increasing transport costs and import prices, these subsidies were a drain on ADMARC's resources. Furthermore, the burden of subsidies took different forms. According to Harrigan (1988), part of ADMARC's profit in the 1970s was also used to finance ADMARC's developmental role in the smallholder sector such as subsidizing an extensive network of markets and employment, defending pan-territorial prices for producer goods and inputs, cross-subsidizing certain producer prices such as for maize and rice, and defending the subsidized consumer price of maize. In the 1980s, ADMARC was faced with the demand from the World Bank that producer prices be substantially increased for maize and major export crops without being relieved of the burden of developmental activities, financing and management of grain reserves and defending consumer prices. This financial drain was exacerbated by the adverse international environment via deteriorating terms of trade and increasing transport costs caused by the civil war in Mozambique.

3.2.3 Structural adjustment programmes and food marketing liberalization

a) Push and pull factors for food marketing liberalization

It is apparent from this background that changes in the policy stance in marketing of food crops were largely due to push factors following the adoption of World Bank and International Monetary Fund sponsored structural adjustment programmes (SAPs) since 1981. It is argued that the major impetus of SAPs is to address internal and external imbalances faced by the developing countries. Malawi adopted these SAPs because of the economic crisis that manifested in the late 1970s. According to Harrigan (1991), preparatory work for the first structural adjustment loan (SAL) identified six structural weaknesses in the economy: the slow growth of smallholder exports; the narrowness of the export base and increased reliance on tobacco; dependence on imported fuel and on a declining stock of fuel-wood; the rapid deterioration of parastatal finances; the increasing budget deficits, and the inflexible system of government-administered prices and wages.

These structural weaknesses and external shocks led to the inefficiency of public marketing institutions. The financial performance of state-owned enterprises dwindled. The general economic trend of the late 1970s and early 1980s worsened the performance of most sectors including agriculture. Hence, crop marketing activities by ADMARC were similarly affected. ADMARC became heavily dependent on the government and accumulated debt in order to support most of its activities. This was a drain on government resources and contributed to government fiscal imbalances. Under SAPs, the state-owned enterprise sector was targeted for reform as one strategy for reducing the fiscal pressure. This partly led to the restructuring of ADMARC and re-orientation of its activities. According to Harrigan (1988), the Malawi government was under heavy pressure from the World Bank, IMF and other bilateral donors to implement reforms in

the pricing and marketing of smallholder agriculture crops. It is argued that donors emphasized on rapid commercialization and diversification of smallholder agriculture, which in essence conflicted with government's emphasis on food security.

Apart from the deteriorating terms of trade for Malawi's export crops, inefficiencies in ADMARC's operations were also due to the fact that the marketing corporation was overburdened with developmental activities, multiplicity of conflicting objectives and its diversification into investment portfolio outside its mandate. This led to reduction in emphasis in its marketing activities. This motivated both the donors and the government to deregulate marketing activities in smallholder agricultural produce.

The World Bank and IMF believed that price signals are the best incentives for the promotion of smallholder export crops. In effect, two strategies were envisaged. First, in the short-term, periodic price adjustments of smallholder crop prices provided an interim solution to the problem. Second, introduction of competition by allowing more players in the marketing of smallholder crops would provide a long term solution. These price incentive strategies were based on the assumption that smallholder farmers are responsive to price signals to expand their production and to improve their productivity within a land constrained environment.

b) Sequencing and timing of reforms in the agriculture sector

Since 1981, Malawi has had seven structural adjustment loans (SALs). Agriculture sector reforms have been implemented within a broader macro-adjustment programme. Table 3.3 presents the SALs, agricultural related policy objectives and the main policy actions that have been executed in the agricultural sector.

The precise sequencing of reform measures in the agricultural sector reveals potential mismatch of policies. As Harrigan (1988) argues, poor sequencing was evident in the removal of subsidies on inputs in advance of increases in maize producer price, and in the liberalization of export crop prices via parity pricing in advance of market liberalization.

TABLE 3.3
STRUCTURAL ADJUSTMENT LOANS AND SEQUENCING OF AGRICULTURE SECTOR REFORMS IN MALAWI

Loan/(year)	Agriculture sector related objectives and main policy actions
SAL I	Objectives
	• Diversify export base
(1981)	• Ensure appropriate price and incomes policy
	Main actions taken
	• Annual increases of smallholder producer prices, notably for maize by 68 per cent in 1981/2 season

table continues

Table 3.3 cont.

Loan/(year)	Agriculture sector related objectives and main policy actions
SAL II	Objectives
	• Diversify export base
(1984)	• Ensure adequate incentives
	Main actions taken
	• Smallholder producer prices increased using IDA parity pricing methodology: 10 per cent increase in maize producer price, 29 per cent increase in tobacco price in 1983/4 season
	• Fertilizer prices increased by 21 per cent in 1983/4 season
	• ADMARC's financial capability was strengthened
SAL III	Objectives
	• Diversify export base
(1986)	• Promotion of exports
	Main actions taken
	• Continued adjustment of smallholder prices based on parity pricing: in 1987/8 season producer prices of maize, cotton, rice and tobacco rose by 36 per cent, 18 per cent, 23 per cent and 10 per cent, respectively
	• Postponement of fertilizer subsidy elimination to 1989/90 season
	• Divestiture of ADMARC's investments unrelated to marketing activities
SAL III Supp	Objectives
	• Expand the role of private sector in marketing of smallholder crops
(1987)	• Improve financial performance and operational efficiency of ADMARC
	Main actions taken
	• Legislation of the Agriculture (General Purpose) Act in 1987
	• Licensing of private traders in smallholder agricultural produce
	• Implementation of intra-regional producer and consumer price of maize
	• Government took over, from ADMARC, the financing of strategic grain reserves
	• Further divestiture of ADMARC's investments unrelated to marketing activities
ITPAC	Objectives
	• (No specific agricultural sector related objective)
(1988)	Main actions taken
	• Decontrol of beef prices
	• Reduction of the scope for export licensing
ASAC	Objectives
	• Increase efficiency and improve incomes of smallholder farmers
(1990)	• Increase efficiency of land use and protection of the environment
	Main actions taken
	• Continued adjustment of smallholder crop prices
	• Deregulation of fertilizer marketing
	• Reduction of fertilizer economic subsidy
	• Rationalization and government financing of ADMARC's developmental functions
	• Smallholder farmers allowed to grow burley tobacco
	• Shift of maize research to high-yield flint varieties
	• Frequent adjustments of estate land rents

table continues

Table 3.3 cont.

Loan/(year)	Agriculture sector related objectives and main policy actions
EDDRP	Objectives
(1992)	• (No specific agricultural related objectives)
	Main actions taken
EDDRP Supp	• Expansion of smallholder access to burley tobacco production
(1995)	
FRDP	Objectives
	• Complete removal of pricing and marketing constraints on smallholder agriculture
(1996)	• Removing binding constraints to broad-based private sector entry and development
	Main actions taken
	• All constraints on smallholder access to burley tobacco production were lifted
	• Replacement of fixed producer/consumer price system for maize with a price band
	• Removal of licensing and registration procedure for private traders in seed and fertilizer marketing
	• Adjustments in land rents

Source: World Bank (1996).

Notes: ITPAC = Industrial and Trade Policy Adjustment Credit, ASAC = Agriculture Sector Adjustment Credit, EDDRP = Entrepreneurship Development and Drought Recovery Programme, FRDP = Fiscal Restructuring and Deregulation Programme, Supp = Supplement.

It is apparent from Table 3.3 that prices of agricultural produce were under government control until price controls were completely removed in 1996, while the fertilizer subsidy was completely removed in 1990 under ASAC. Since 1990, farmers were largely facing market prices for their inputs but prices were under state control. The intermittent price adjustments which were made by the state did not fully give farmers the export parity prices for their produce. Similarly, marketing liberalization started in 1987 but export restrictions were still in place until 1988. The scope of products requiring export licence, in terms of numbers, was only reduced in 1988 and export permits were still required for produce such as maize and beans.

There were other policies whose sequence facilitated the liberalization of marketing activities. Two examples can be highlighted. Firstly, the restructuring and divestiture of ADMARC, in order to prepare it for agricultural trade competition, started in 1984 in advance of liberalization of marketing activities. Secondly, the removal of fertilizer subsidy in 1990 was accompanied by the deregulation of marketing activities for fertilizer and other inputs. None the less, one policy reversal occurred in the process of food marketing liberalization. The removal of fertilizer subsidy which started in 1984 was postponed in 1986 and resumed in 1990.

c) Nature of reforms in the agriculture sector

The reforms that have taken place in the agricultural sector under structural adjustment programmes fall within four distinct key areas – deregulation of marketing activities,

agricultural output and input pricing, fostering private marketing and the restructuring of the state marketing agency.

Deregulation of marketing activities

Marketing of smallholder agriculture crops was deregulated in 1987 by Act of Parliament. The new Agriculture (General Purpose) Act of 1987 essentially eliminated ADMARC's quasi-monopsony power in smallholder agriculture marketing in the domestic market. This was implemented under SAL III supplement. The regulation governing the activities of private traders in a liberalized market system had the following features:

- Private traders were to be licensed annually to operate in specific markets;
- Only Malawi nationals or businesses owned by Malawian citizens were to be eligible for licenses;[8]
- Minimum producer prices were announced annually and ADMARC would buy at these prices;
- Maize exports were controlled through the export licensing system;
- Traders were to submit monthly statements detailing prices paid and received and amounts bought and sold.

There were no significant barriers to entry in the marketing of smallholder crops with the new legislation, except the restrictions placed on foreigners. The licensing procedure was very decentralized. Each agriculture development division (ADD) was responsible for issuing licenses to private traders operating in that area, after satisfying additional conditions such as possession of a proper weighing instrument. This decentralization minimized the red-tape in the licensing process. The liberalization of produce marketing attracted many traders especially in the year following liberalization. According to Kaluwa (1992) the total number of registered traders in 1987/8 was 387 but increased to 917 in 1988/9 and fell to 543 in 1989/90. These fluctuations reflect the relative ease of entry and exit.

The rules of the game implied that most of the traders licensed were small-scale in their operations which effectively reduced market dominance by a few large foreign owned corporations. This had, however, implications for private traders' efficiency and effectiveness in bringing about the competitive edge in smallholder crop marketing. ADMARC, although buying at regulated prices, remained a dominant single buyer of agricultural produce, enjoying first mover advantages. The new small private traders faced several constraints in their operations to effectively compete with the state marketing corporation. According to Mkwezalamba (1989), private traders faced problems of transportation, storage, pricing, grading, crop procurement, marketing and finance. In addition to these constraints, Harriss and Crow (1992) argue that the

[8] This was in line with the restriction of Asian and European traders in retail and wholesale businesses in rural areas effected by the amendment of the Business Licensing Act in 1975.

evolution of the private marketing system faced problems of costly, partial and slow access to information, chains of delayed payments which undermined trader's finances and lack of state capacity to implement regulatory laws.

The requirement for obtaining a license to participate in the trading of smallholder crops has been relaxed over time, with many traders trading without licenses or trading without renewing their licenses. This was due to capacity problems in the Ministry of Agriculture to effectively monitor the activities of private traders, and hence many traders were not in a position to submit monthly statements to the ministry. As a result, in 1996 licensing is no longer a requirement for marketing of smallholder agriculture crops.

On the other hand, marketing of smallholder agriculture inputs was also monopolized by ADMARC until 1990. The prices of these inputs were heavily subsidized, prior to deregulation. In terms of sequencing, crop marketing liberalization was preceded by the liberalization of input marketing with a three-year lag. Importation of fertilizers for smallholder use was monopolized by the Smallholder Fertilizer Revolving Fund of Malawi (SFRFM) and the production of hybrid maize seed was under the National Seed Company of Malawi (one of ADMARC's subsidiary company). Msukwa (1994) argues that under these regulatory constraints both fertilizers and seeds were in short supply and these inputs were usually rationed through the credit system.

Liberalization of marketing and production of smallholder inputs was implemented in 1990 under the implementation of the agriculture sector adjustment credit (ASAC). Since then there has been some entry by private traders of various scale of operations in the marketing of farm inputs. Similarly, the number of firms producing and marketing crop seeds has increased, following the privatization of National Seed Company in 1991. The production and marketing of seeds was liberalized only in 1993.

Agricultural output and input pricing

Pricing of smallholder agriculture crops and inputs was basically determined by the government's objective of achieving a marketed surplus of maize rather than by the World Bank's desire to see considerable increases in the producer price of smallholder export crops (Kydd and Hewitt 1986). Indeed, active price adjustments in smallholder crops producer and consumer prices began in the early 1980s following structural adjustment programmes, in particular during the implementation of SAL II. Since 1982/3, the government began to incorporate more economic criteria into the determination of prices for smallholder crops and inputs. The International Development Association (IDA) parity pricing was adopted such that the producer price of maize was increased by 68 per cent in 1982. Harrigan (1988) argues that considerable price increases for a majority of smallholder export crops were announced in 1983/4 and 1984/5 growing seasons such that by 1985/6 prices were close to parity levels.

Following deregulation of smallholder crop marketing in 1987, prices of most crops were liberalized with ADMARC acting as buyer of last resort at minimum guaranteed pan-territorial and pan-seasonal prices. Private traders were free to determine their own prices for purchase of smallholder crops from farmers. Similarly, liberalization widened the

choice of farmers in crop marketing, especially where private traders were readily available.

In 1996 under the implementation of the fiscal restructuring and deregulation programme (FRDP), marketing liberalization of smallholder crops and inputs were almost completed. There was full liberalization of crop and input marketing by removing licensing procedures. Prices of all other crops, except for maize, were fully liberalized and the state marketing agency was free to determine the prices of these crops and vary across markets. In order to ensure food security, the price of maize was still under limited control especially with respect to state marketing activities. However, the fixed producer pan-territorial and pan-seasonal price system was replaced with a price band. Nevertheless, the consumer price of maize offered by ADMARC is still pan-territorial and pan-seasonal. ADMARC was entrusted to defend the price band. It is interesting to note that ADMARC is free to determine the producer price of maize, which varies across markets and seasons, within the price band.

Fostering private marketing

Some measures were put in place to foster private he marketing system, which addressed some of the constraints the small private traders faced in their operations. First, the Ministry of Agriculture provided training to some of the private traders in general produce marketing, financial management and bookkeeping. About 1,097 private traders from various ADDs were trained between 1989/90 and 1992/3. Second, the World Bank in 1993 provided a loan to the government through the Small Enterprise Development Organization of Malawi (SEDOM) to extend lines of credit to private traders. Nonetheless, most private traders are still facing constraints in accessibility to some rural areas and storage facilities.

However, there has been uncertainty on the government policy direction in the liberalization of marketing activities. According to Msukwa (1994), government had intermittently imposed embargoes on private participation in trading of certain crops. For instance, in 1988 private traders were not allowed to participate in bean marketing and intermittently in groundnuts marketing between 1990 and 1993. Such restrictions created some level of uncertainty and retarded the development of the private sector in the marketing of smallholder agriculture crops.

Under the fiscal restructuring and deregulation programme (FRDP) implemented in 1996, one of the objectives was related to the promotion of private sector marketing activities. Thus the FRDP also aimed at complete removal of pricing and marketing constraints on smallholder agriculture. During this period, there was complete removal of licensing and registration procedures for private traders in seed and fertilizer marketing.

Restructuring of the state marketing agency

Adjustments in pricing and marketing activities for smallholder agriculture crops and input were taking place concurrently with corporate restructuring of the state marketing agency, ADMARC. Restructuring of ADMARC started in 1984 under SAL II. This

restructuring has taken the form of asset swaps among ADMARC, Press Corporation and Malawi Development Corporation (MDC), divestiture of assets and privatization of subsidiary companies.[9] In 1984, the government embarked on rationalization of activities in its holding companies through portfolio swaps among Press Corporation, MDC and ADMARC. Other have argued that the portfolio swaps were intended to save Press Corporation (a major conglomerate) from collapsing by moving profitable investments from MDC and ADMARC to Press Corporation in exchange of poor portfolio (Harrigan 1991). However, from the government and donor point of view, the swaps were necessary to align portfolio holdings with the objectives of these corporations, with ADMARC specializing in agricultural oriented activities, MDC putting emphasis on industrial and service sectors and Press Corporation having a heterogeneous portfolio. For ADMARC, this was a move to re-orient the corporation towards its agricultural marketing activities.

Under SAL III and its supplement in 1986 and 1987, a major divestiture programme of ADMARC's investments unrelated to its marketing activities was implemented. In 1987/8 the divestiture exercise targeted industrial activities where ADMARC was a minority shareholder and most of its shareholding was sold to existing shareholders with pre-emptive rights. In addition, three estates which were wholly owned by ADMARC were sold to Press Corporation and the Commonwealth Development Corporation. In 1989/90, the emphasis was on small estates which were mainly sold to Malawian farmers. Between 1991 and 1993, large industrial portfolios were divested, with ADMARC retaining minority shareholding.

Due to first mover advantages and the support from the government ADMARC established an extensive marketing network in the rural areas. It is reported that ADMARC operated in 1,200 markets by 1987. Due to liberalization of smallholder agriculture crop trading in 1987, ADMARC rationalized its marketing activities by closing down markets that were unable to attain an annual throughput of 60 tons. About 125 markets (15 per cent) were closed on the basis of output criteria by 1988.[10] Unfortunately, this rationalization of markets affected markets which were mainly in remote areas, inaccessible to private traders.

3.3 The private marketing system

3.3.1 Characteristics of private traders

During the early stages of private marketing activities, several surveys were conducted assessing the impact of smallholder crop marketing.[11] These studies revealed that most traders are small-scale entrepreneurs (sole proprietors) with rural-based enterprises. A majority of private traders indicated that crop trading was their main activity. The

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[9] Chirwa (1997) gives a detailed account of ADMARC's divestiture and privatization activities.

[10] See Msukwa (1994) and Kaluwa *et al.* (1990).

[11] See Mkwezalamba (1989) and Kaluwa (1992).

studies also revealed that most of the traders were trading in maize and beans. There is a high incidence of diversification in terms of number of crops marketed by private traders. Kaluwa (1992) argues that such diversification cushioned private traders from adverse effects of a food marketing pricing policy primarily focused on maize. Latest estimates of the Ministry of Agriculture and Livestock Development indicate that about 60 per cent of traders in maize are small-scale enterprises while 25 per cent are medium scale enterprises.

Furthermore, most licensed traders deal in more than one type of crop and typically buy and trade domestically, although some supply other persons who are licensed to handle export trade. Private traders have been most active in the exportation of pulses accounting for about 60 per cent of exports.

However, over time, there has been entry into private trading by institutional traders. This has been so in the marketing of crops that are directly used as inputs in manufacturing industries such as maize, groundnuts and rice and exportable crops like pulses. According to Ministry of Agriculture and Livestock Development about 10 per cent and 50 per cent are institutional traders in maize and soya beans markets, respectively.

The high proportion of small-scale traders in crop marketing has implications for the competitive operation of the private marketing system. Entry and exit in crop marketing is relatively easy, and this has enabled large entry by small-scale traders. However, because of the problems small-scale traders face, there has also been high exit rate. In some cases, the number of traders in operation is much less than the number of registered traders. The small volume of trade handled by the large number of small traders vis-à-vis the large traders implies that the markets for various crops is oligopolistic with ADMARC and other institutional traders assuming a dominant position. According to Kaluwa and Chilowa (1991), the most important trading constraints faced by private traders were credit, transport availability and transport costs.

3.3.2 Spatial distribution of private traders

Private traders are concentrated in a few agriculture development divisions (ADDs). Table 3.4 presents the number of private traders licensed by location. Although the figures exclude the vast number of unlicensed traders who are known to be in operation, they do indicate the private sector response to market liberalization. The data show that most private traders operate in Machinga, Lilongwe and Blantyre ADDs. In 1988 and 1989, these ADDs accounted for 83 per cent of the total number of licensed private traders. However, these ADDs only accounted for 41 per cent of designated markets. Kaluwa *et al.* (1990) observed that entry by private traders into various ADDs was influenced more by remoteness than the number of designated markets. In ADDs where the road network was poor, the number of private traders was smaller. For instance, Mzuzu ADD had 278 designated markets but had only 35 licensed private traders in 1989. In sharp contrast, Blantyre, Lilongwe and Machinga have the largest urban population and are more accessible in terms of road infrastructure.

The other observation is that after a sluggish response in terms of entry during the first year of marketing liberalization, there was a massive entry in 1989, representing an increase of about 145 per cent in the number of private traders licensed. However, since 1990 there has been a decline in the number of licensed private traders. The declining trend is also reflected in cases of the Kasungu, Lilongwe and Blantyre agricultural development divisions. This trend might imply two things. First, the interest in private trading has been declining over time. Second, the regulatory laws were not effectively applied so as to capture the number of private traders. The latter suggests that many traders are trading without a license.

TABLE 3.4
NUMBER OF LICENSED PRIVATE TRADERS BY AGRICULTURE DEVELOPMENT DIVISION, 1989-96

Location	1988	1989	1990	1991	1992	1993	1994	1995	1996
Karonga ADD	–	27	–	–	–	–	–	–	–
Mzuzu ADD	22	35	–	–	–	–	–	–	–
Salima ADD	20	28	–	–	–	–	–	–	–
Kasungu ADD	27	27	17	7	16	10	19	20	11
Lilongwe ADD	113	139	137	162	206	210	197	207	175
Machinga ADD	109	224	–	–	–	–	–	–	–
Blantyre ADD	99	417	300	271	210	115	41	41	78
Shire Valley ADD	14	51	–	–	–	–	–	–	–
Total	394	948	543*	609*	–	–	–	–	–

Source: Agricultural Development Divisions (various) and Kaluwa (1992).

Notes: – denotes data not available.
* the total figures are for all ADDs including those where disaggregated information is not available.

3.3.3 New developments in private marketing

Several changes have been made to the regulatory aspects of private trading in Malawi. The government has been providing an enabling environment for private traders. Since 1996, private traders do not need a license to engage in marketing of agricultural produce. In addition, private traders were previously required to submit monthly statements relating to their marketing activities to Ministry of Agriculture and Livestock Development. However, with the removal of licensing requirement the private traders are not bound to submit monthly reports. These changes effectively eliminated licensing and other transaction costs such as private traders' transport expenses to the licensing office.

In essence, with a large number of private traders it was difficult for the government to monitor private traders activities and to inspect their measuring instruments. Ministry of Agriculture and Livestock Development reported that in some cases farmers sell their products to private traders without weighing. Such activities are not monitored by the authorities. However, for monitoring purposes, the Ministry of Agriculture and Livestock Development has price monitors in various parts of the country, collecting price and volume data from both the state marketing agency and private traders.

Another development in the private marketing system, is the extension of lines of credit to farmers by private traders in form of agricultural inputs such as seeds and fertilizers. This has increased farmers' accessibility to credit facilities. Within the government's policy of poverty alleviation, there have been substantial sums of resources geared for lending to small-scale enterprises. Such developments have increased accessibility to credit facilities. However, the revolving fund experienced high default. It is estimated that about K 58 million is in default, and most of the defaulters are elites in the political arena.

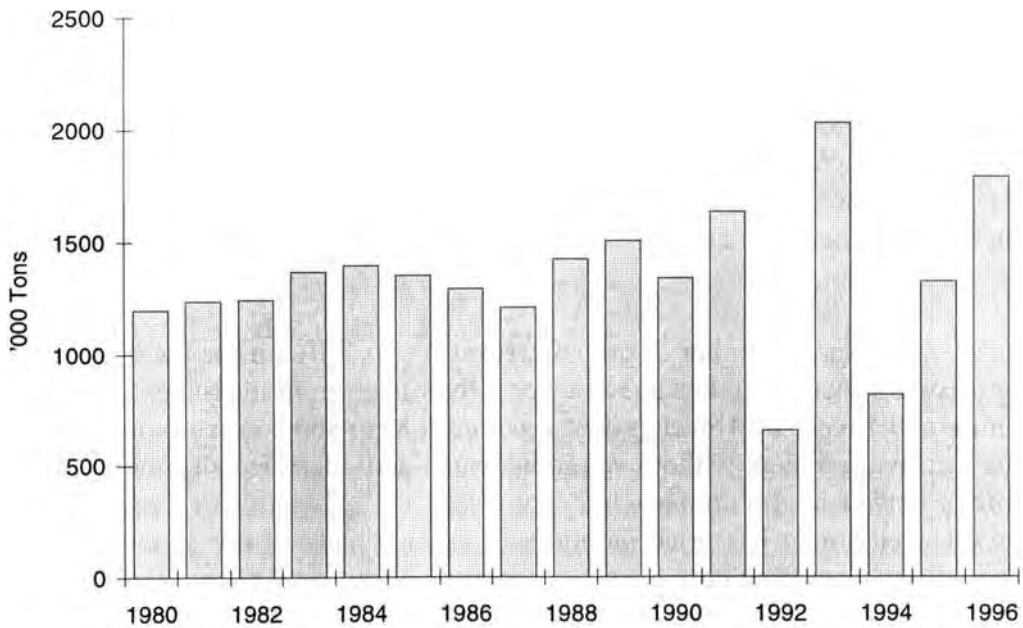
Liberalization of marketing activities was expected to trigger farmers' cooperative marketing societies to increase their bargaining power against private traders who offer lower prices. These institutions have not been developed in Malawi. The government is in the process of implementing a cooperatives policy which, among other things, aims at encouraging farmers to form cooperative societies. In addition, major problems exist with respect to road infrastructure, leading to inaccessibility of roads into most rural areas during the rainy season and harvest period.

3.4 Performance of the private marketing system

3.4.1 Supply of key crops

Malawi has three key staple food crops, namely maize, cassava and rice. Maize is the principal staple food for most of the population. Figure 3.3 shows estimates of production and growth in maize production since 1980. The figure reveals that production of maize in the early 1980s was more less stable, hovering between 1.2 million and 1.5 million metric tons. This is confirmed by the modest growth rate in

FIGURE 3.3
ESTIMATES OF MAIZE PRODUCTION, 1980-96



Source: Msukwa (1994); MEPD (1997).

maize production. However, production of maize in the 1990s was very erratic, basically due to drought and poor rains. The effects of the 1991/2 season and 1993/4 season drought is clearly reflected by a sharp decline in maize production in 1992 and 1994 by 60 per cent and 60 per cent, respectively.

The good weather conditions in the subsequent year after the 1992 drought led to a doubling in the production of maize and the recovery in maize production in 1995 and 1996. The other key crops, particularly rice, followed almost the same trend as Table 3.5 illustrates. One interesting observation is that the growth in the production of cassava has been positive in seasons of the worst drought in 1992 and 1994. In 1996, cassava production grew by 63 per cent. According to MEPD (1997) cassava hectarage increased by 23 per cent and average yield increased by 31 per cent over 1995 estimates. The increases in cassava production are partly a result of government policy to promote other food crops and as a response to the government's appeal to farmers to grow drought tolerant crops. The consumer prices for cassava have also been following an upward trend, increasing by 110 per cent in 1996.

TABLE 3.5
ANNUAL CHANGES AND THREE-YEAR MOVING AVERAGES IN PRODUCTION OF KEY FOOD CROPS, 1990-96

Year	Maize	Cassava	Rice	All key staples
		Annual changes (per cent)		
1990	-11	-6	-5	-10
1991	22	-17	21	18
1992	-60	7	-62	-56
1993	210	68	224	187
1994	-60	16	-37	-52
1995	62	31	-5	53
1996	35	63	86	42
		Moving averages (thousands of tons)		
1990	1,500	140	47	1,680
1991	1,210	130	39	1,380
1992	1,440	155	46	1,640
1993	1,170	198	42	1,410
1994	1,390	265	49	1,710
1995	1,310	370	51	1,740

Source: Author's calculations.

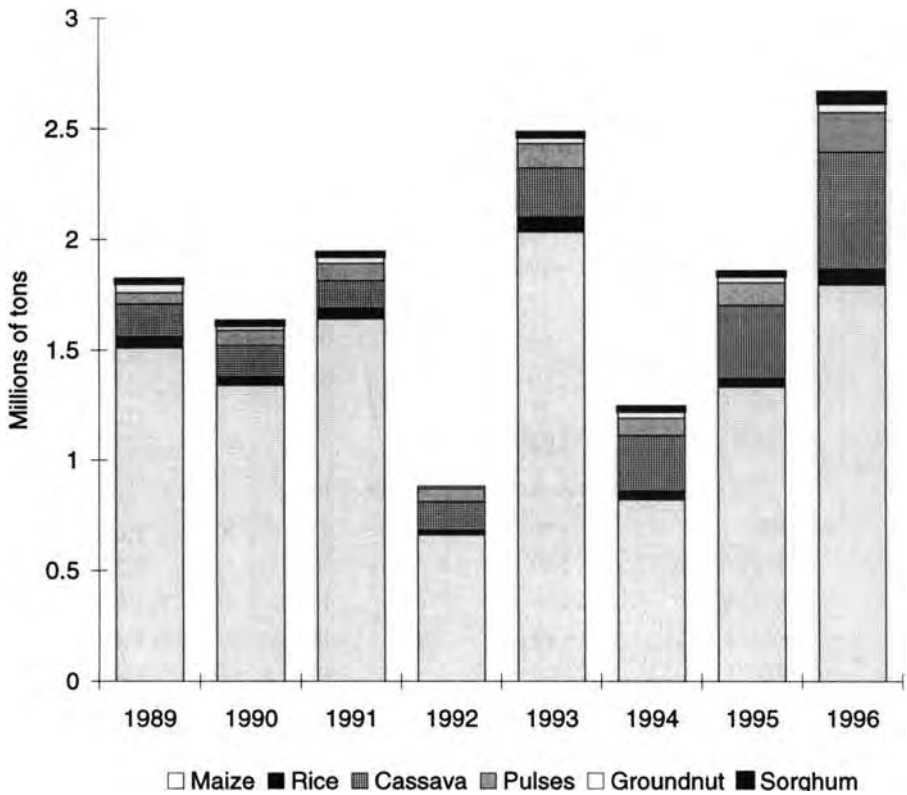
The supply of main crops is also illustrated by three year moving averages in Table 3.5. However, these moving averages are greatly affected by the occurrence of drought in 1992 and 1994. In essence all the averages include at least one drought production level. The average production rates have been oscillating for maize. Down swings occurred in 1991, 1993 and 1995 and up swings occurred in the rest of the years. Production of cassava, however, shows a consistent increase despite the drought, while that of rice is stable over the period.

There seems to be a positive correlation between prices and production, although this phenomenon is disrupted by occurrence of drought. It is difficult therefore to isolate the effects of the price incentive from that of weather. Prices for these key products have been increasing, but the overall supply of key food crops have been adversely affected by poor weather conditions.

3.4.2 Overall food supply and food security

The overall food supply and national food security is depicted in Figure 3.4. Arguably, the national food security situation has been adversely affected by the poor weather conditions and this has weakened the effects of food marketing liberalization policies. There was stability in the supply of food crops between 1989 and 1991, after which food supply has varied considerably.

FIGURE 3.4
DOMESTIC FOOD SUPPLY, 1989-96



Source: Msukwa (1994); MEPD (1997).

The instability in food supply had several implications on the low income poor households. The decline in food production in general, and maize production in particular in 1992 and 1994, created a lot of hardship for net food buyers, intermediate smallholder farmers and net food sellers. It meant serious food shortages for net food buyers, some intermediate smallholder farmers and net food sellers were food deficit and their cash income was adversely affected by the weather conditions.

There has been a steady increase in domestic food supply since 1995. However, the supply of food crops falls short of the domestic requirements. For instance, in 1995 the estimated maize requirement was 1.8 million tons but only 1.3 million tons of maize and 1.7 million tons of overall food crops were produced. Msukwa (1994) argues that since the 1985/6 season, the gap between maize production and total maize requirement has been worsening while population growth has been increasing, and the country has moved from a situation of national self-sufficiency in maize production to substantial food deficits.

The food security situation at household level is different, in that even in cases of good weather conditions and bumper harvest some households do not have adequate food throughout the year. According to MEPD (1995) the food security of rural households, who are maize deficit even in normal years, has been worsened by the high and unpredictable consumer and producer prices. In most cases, the consumer price offered by private traders has been more than the official consumer price of maize. However, there have been incidents in which private traders offered lower prices by almost a 10 per cent margin (MEPD 1995). The household food security situation in the urban areas has been worsened by increasing prices coupled with low and stagnating minimum wages.

On the other hand, private traders and net food sellers have benefited from the increases in producer and consumer prices of food crops. The margins for private traders in nominal terms have increased as a result of price increases and seasonal instability.

In drought situations, the government has supplemented the supply of maize through importation either as aid or for commercial sales. Since 1992, the government has been importing maize to supplement domestic supply. The balance of payments figures show that the country has imported K 1,318 million and K 1,172.9 million worth of commercial maize and free maize between 1992 and 1996, respectively.

3.4.3 Efficiency of private marketing and price developments

Price developments in food crops can be influenced by many factors including food supply, inflation and the cost of inputs. Table 3.6 shows average nominal and real prices of selected key food crops. Since liberalization of food marketing activities, there have been upward adjustments in the consumer prices for key food products. Nominal prices of all key crops show an increasing trend over time and the highest increase for almost all crops occurred in 1995. This was a cost push effect as a result of the elimination of the remaining subsidies on fertilizers and other inputs in the 1994/5 season and the effect of the 1994 drought.

The analysis of real prices shows that maize prices are more stable oscillating between K 0.08 and K 0.10 per kilogram. The rest of the commodities show an increase in real prices. Such real developments indicate that the private traders have gained in real terms and the real incomes of the net sellers have consequently improved with liberalization of marketing activities. The increase in real prices for most of the crops has had negative consequences on the smallholder farmers who are in the category of net food buyers and

on the low income urban wage earners whose income has fallen in real terms as a result of inflexible minimum wages.

TABLE 3.6
AVERAGE NOMINAL AND REAL PRICES OF SELECTED FOOD CROPS, 1988-95
(KWACHA PER KILOGRAM)

Year	Maize	Rice	Millet	Ground-nuts	Beans	White haricot beans	Cow peas	Cassava
				Nominal prices				
1988	0.27	1.29	0.89	1.91	1.38	1.30	1.14	–
1989	0.30	1.46	0.98	2.88	1.71	1.75	1.29	0.32
1990	0.38	1.62	1.16	3.24	1.81	1.79	1.32	0.37
1991	0.38	1.75	1.43	3.04	2.00	2.04	1.72	0.44
1992	0.51	2.77	1.94	5.70	2.70	2.89	2.21	0.61
1993	0.63	3.98	2.48	5.90	3.91	3.82	3.00	0.85
1994	0.99	5.35	3.98	9.18	5.97	5.86	4.06	1.28
1995	1.52	10.20	9.80	12.17	15.16	12.54	10.96	2.70
				Real prices				
1988	0.08	0.39	0.27	0.57	0.42	0.39	0.34	–
1989	0.08	0.38	0.25	0.75	0.45	0.46	0.34	0.08
1990	0.09	0.38	0.27	0.76	0.42	0.42	0.31	0.09
1991	0.08	0.38	0.31	0.66	0.43	0.44	0.37	0.09
1992	0.09	0.48	0.34	1.00	0.47	0.51	0.39	0.11
1993	0.09	0.57	0.35	0.84	0.56	0.54	0.43	0.12
1994	0.10	0.57	0.42	0.97	0.63	0.62	0.43	0.14
1995	0.09	0.59	0.57	1.22	0.88	0.72	0.63	0.16

Source: Ministry of Agriculture and Livestock Development.

The efficiency of the private marketing system can be determined by the consumer/producer price ratio. However, the available data in Malawi do not permit the computation of this ratio for private traders. The price monitoring system in the Ministry of Agriculture and Livestock Development only collects data on consumer prices of different farm products. Data on producer prices exist only for state marketing activities. Not withstanding the foregoing, the analysis of the efficiency of the private marketing system is somehow shallow. In order to gauge some price developments since liberalization of crop marketing services two ratios will be used: private trader/ADMARC consumer price ratio and ADMARC consumer/producer price ratio.[12]

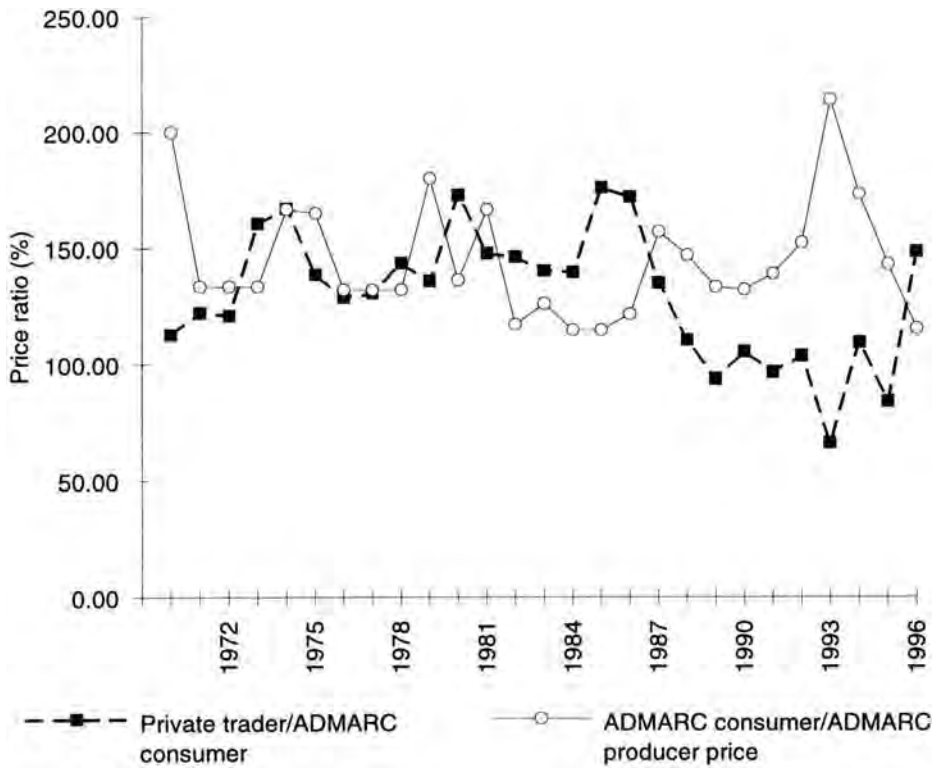
The price developments in the maize market are depicted in Figure 3.2 (on page 63). Both ADMARC producer and consumer prices and private traders prices were stable until the early 1990s. The data reveal that there were no immediate price hikes for maize following liberalization of food marketing activities. There are several reasons that explain this phenomena. First, the maize price was not fully liberalized since ADMARC

[12] Since the price band for maize was introduced, ADMARC's producer price varies across regions while its consumer price is pan-territorial.

was still buying and selling at fixed prices. Second, maize was already being sold by private traders at prices above ADMARC prices even before liberalization. Third, private traders were uncertain about the continuity of liberalization, especially resulting from intermittent policy reversals on groundnuts and beans. Finally, the general price level in the 1970s and 1980s was moderate and there was no justification to raise the producer and consumer price of maize.

After seven years of market liberalization coupled with high inflation since 1993 and the worst drought in 1994, prices for maize offered by both ADMARC and private traders were increased. In 1993 and 1995, the state marketing agency sold maize at higher prices than private traders. It is also interesting to note that the gap between ADMARC's consumer and producer prices widened since 1993.

FIGURE 3.5
RELATIVE PRICES OF MAIZE, 1970-96



Source: Based on Table 3.2.

Another interesting issue is that there are differences in relative prices in the pre- and post- marketing liberalization regime. Figure 3.5 shows the relative maize price ratios between 1970 and 1996. Although distinct patterns of relative prices of maize in the pre- and post-liberalization era can not be identified, there seem to be some correlation between policy changes and the private trader/ ADMARC consumer price ratio. The private trader/ADMARC consumer price ratio had always been above 100 per cent prior to marketing liberalization. Marketing liberalization began to moderate the private sector consumer price of maize towards ADMARC prices. Private traders offered lower prices to consumers compared to ADMARC in 1989, 1991, 1993 and 1995. The fall in

relative prices may have been a direct result of the increased number of private traders and the effectiveness of ADMARC's policy of selling maize at a prescribed price.

3.4.4 Spatial price variations

Spatial variation of prices has some distributive effects on the households and traders. Mellor (1966) argues that spatial price variations create arbitrage opportunities and are a possible source of profit to private traders. This is possible through buying in one market and transporting for sale in another market. However, this depends on the availability of price information from different markets and the cost of shipping from a low-priced market to a higher-priced market. The spatial variation of prices for food crops is measured by the standard deviation of consumer prices monitored at sixteen markets across the country. Significant spatial nominal price differences are noticeable since 1993 for most of the crops. The large nominal spatial variation in prices is found in groundnuts and beans markets. For instance, the average spatial difference in prices for groundnuts and beans in 1995 was about K 6 per kilogram and K 3 per kilogram, respectively. In general, the consumer prices of different products in the urban markets have been higher than those that are obtained in the rural markets.

TABLE 3.7
RELATIVE SPATIAL VARIATION OF PRICES FOR SELECTED FOOD CROPS, 1988-95
(PERCENTAGES)

Year	Maize	Rice	Millet	Ground-nuts	Beans	White haricot beans	Cow peas	Cassava
1988	22.0	19.0	42.0	35.0	22.0	21.0	60.0	-
1989	14.0	13.0	36.0	33.0	14.0	14.0	30.0	44.0
1990	19.0	14.0	51.0	35.0	18.0	24.0	35.0	29.0
1991	18.0	15.0	66.0	34.0	22.0	20.0	30.0	31.0
1992	21.0	19.0	54.0	38.0	24.0	20.0	46.0	28.0
1993	31.0	11.0	87.0	34.0	20.0	23.0	47.0	23.0
1994	62.0	16.0	76.0	28.0	19.0	26.0	29.0	25.0
1995	15.0	13.0	80.0	20.0	26.0	22.0	36.0	50.0
Average	25.3	15.0	61.5	32.1	20.6	21.3	39.1	32.9

Source: Author's calculations.

Table 3.7 shows the relative spatial price variation defined as a ratio of the spatial variation (standard deviation) to the average price. Compared to the average price, the millet market has greater price volatility across the country, recording a maximum of 87 per cent of the price in 1993 and 61.5 per cent for the whole period of marketing liberalization. This was followed by the market for cow peas which recorded an average spatial variation of 39 per cent of the price. Maize and cassava which recorded lowest absolute volatility, recorded higher spatial variation relative to their prices. The large spatial variations suggest the relative immobility of private traders.

3.4.5 Seasonal price variations

Naturally, the demand and supply of agricultural food crops are seasonal. Such seasonality is likely to affect the trend in producer and consumer prices. It has been argued that agriculture in low-income countries is characterized by very large seasonal price fluctuations. Such stereotype concerns hold that farmers, because of poverty, are forced to sell their produce immediately after harvest (Mellor 1966).

TABLE 3.8
QUARTERLY AVERAGE CONSUMER PRICES FOR SELECTED KEY FOOD CROPS, 1989-96
(KWACHA PER KILOGRAM)

Year	Maize	Rice	Millet	Ground nuts	Beans	White haricot beans	Cow peas	Cassava
1989 Q1	0.29	1.56	0.94	2.58	1.73	1.63	1.14	0.22
Q2	0.26	1.45	0.91	2.67	1.46	1.47	0.93	0.27
Q3	0.28	1.42	0.81	2.64	1.76	1.59	1.04	0.34
Q4	0.34	1.66	0.92	3.51	2.04	2.01	1.27	0.33
1990 Q1	0.37	1.72	1.00	4.30	2.11	2.18	1.06	0.34
Q2	0.32	1.74	1.00	3.39	1.68	1.61	1.21	0.37
Q3	0.37	1.58	1.06	2.75	1.86	1.83	1.12	0.41
Q4	0.42	1.75	1.21	3.09	2.10	2.09	1.64	0.42
1991 Q1	0.47	2.03	1.37	3.11	2.15	2.12	1.90	0.44
Q2	0.35	1.84	1.62	3.03	1.90	1.91	1.30	0.43
Q3	0.35	1.70	1.51	2.61	2.05	2.02	1.47	0.49
Q4	0.39	2.04	1.37	2.91	2.37	2.45	2.08	0.42
1992 Q1	0.44	2.23	1.61	3.17	2.54	2.52	2.17	0.40
Q2	0.41	2.24	1.99	3.42	2.29	2.48	1.79	0.52
Q3	0.53	2.91	1.93	3.95	2.84	2.86	2.27	0.63
Q4	0.84	3.78	2.44	5.13	3.76	4.27	3.07	0.73
1993 Q1	0.86	4.47	2.77	7.25	4.52	4.53	5.89	0.92
Q2	0.57	3.99	2.95	5.80	3.51	3.34	2.78	0.87
Q3	0.55	3.62	2.32	5.37	3.87	3.73	2.57	0.86
Q4	0.66	4.15	2.26	5.81	4.44	4.44	3.38	0.88
1994 Q1	0.77	4.83	2.95	7.99	5.26	4.86	3.74	1.05
Q2	0.79	5.26	3.56	7.92	5.14	5.01	3.90	1.00
Q3	0.79	5.35	4.51	8.19	5.70	5.84	3.87	1.10
Q4	1.06	6.53	4.94	12.01	7.80	7.38	6.64	1.43
1995 Q1	1.36	9.24	10.61	17.44	12.65	11.75	12.00	2.03
Q2	1.33	9.70	11.01	16.64	11.63	10.38	9.41	2.17
Q3	1.61	10.85	10.85	20.75	14.45	13.55	10.53	2.60
Q4	2.28	13.81	11.84	30.20	17.69	16.66	14.46	3.00
1996 Q1	3.32	16.50	16.35	33.76	19.43	21.53	17.16	3.18
Q2	2.33	15.75	14.59	26.05	14.57	13.51	13.41	3.43
Q3	2.28	13.26	8.91	18.95	13.54	12.76	9.93	3.06
Q4	2.51	14.03	8.94	19.59	13.20	12.77	10.18	3.30

Source: Ministry of Agriculture and Livestock Development.

There are seasonal patterns in the consumer prices offered by private traders in selected key food crops as presented in Table 3.8. The evidence in Malawi is that, in general, prices tend to be higher in the fourth and first quarter of the year and are lowest in the second quarter and start rising in the third quarter. Maize prices are lowest in the second quarter. This is the period of surplus maize in most households, and hence the demand for marketed maize tends to be lower. However, specific crops reveal different seasonal patterns. For instance, rice and groundnuts consumer prices are lowest in the third quarter for most of the period under market liberalization. On the other hand, prices of beans and cow peas are generally lower in the second quarter while cassava prices are lower in the first or third quarter.

3.5 Conclusions

This chapter has reviewed the deregulation and liberalization of food crop marketing in Malawi as a result of the World Bank/IMF sponsored structural adjustment programmes. Malawi has been under structural adjustment programmes since 1981, but food marketing liberalization was implemented only in 1987. There was a good response to formalise private trading activities, although there were spatial variations in the number of private traders. In addition, many more private traders are participating in food marketing without being licensed. One limitation in the evaluation of the impact of food marketing liberalization in Malawi is the unavailability of data on the activities of private traders in terms of exact number of traders, investment levels, producer prices and output levels. Nonetheless, several issues emerge from the analysis.

The available evidence reveals that most of the private traders are petty traders and handle marketing services within specified location. In contrast to large and institutional traders, petty traders face problems of transportation, poor road infrastructure, lack of proper storage facilities and asymmetric information. These constraints limit the efficiency of the private marketing system. In many parts of the country the state marketing agency, ADMARC, is still dominating trade in smallholder agricultural crops with economies of market network.

Second, the evidence from the analysis is that there were no price 'bursts' in the years following liberalization of crop marketing services. What we observe in the case of Malawi are stable prices in early years of liberalization for most food crops and price up-swing in the latter years. Larger price variations are observed in the 1990s compared to the price volatility of the late 1980s. This suggests that the private marketing system in Malawi is not fully integrated for the elimination of both seasonal and spatial variations of prices. The likely reason for the inefficiency is the relative immobility of small and petty private traders to take advantage of arbitrage opportunities. Large institutional buyers do not sell the products to deficit areas within the domestic market since all produce purchased goes into manufacturing and exports.

Although the government has largely liberalized food marketing services, it has maintained control over the price of maize by introducing a price band within which the state marketing agency operates. The reason for maintaining some level of control over

the price of maize is that this is a staple food for a greater proportion of the population. We observe that spatial price volatility for maize has been limited compared to other food crops. Large seasonal and spatial variations of price have been observed in food crops whose pricing is completely liberalized. We argue that there is need for the government to maintain some level of intervention for the main food crops to ensure food security especially for the poor households. However, there is need to adjust the maize price band in light of domestic economic conditions. We also observe that because of the price incentive, more food crops have emerged as marketed products. For example, cassava is an emerging food crop in most parts of Malawi with an increasing trend in hectarage and output.

From a welfare point of view, different categories in the marketing system have been affected differently with food marketing liberalization. There are losers and winners as a result of policy reforms. The losers are mainly the smallholder farmers in the category of net food buyers, low-income or wage earners in urban and semi-urban areas and smallholder farmers in remote areas. These groups have suffered as a result of increased consumer prices and seasonal price instability for major food crops. Moreover, smallholder farmers in remote areas which cannot be accessed by private traders are losers because most of the markets in such areas were also closed by the state marketing agency. The closure of markets meant that net food buyers did not have access to surplus maize while net food sellers had difficulties in selling the surplus maize to private traders at better prices.

The winners are smallholder farmers in the category of net food sellers, private traders and institutional traders. This group has benefited from seasonal price variations. Not all net sellers have benefited from the food marketing liberalization. For instance, there is also a tendency of private traders to purchase products from smallholder farmers before ADMARC markets open. This enables private traders to offer low prices for their purchases, taking advantage of the cash squeeze faced by smallholder farmers. In some cases, the private traders purchase these products without weighing and tend to benefit from overweight of the produce. The consumer price trend for major food crops shows that the private traders have benefited from pricing liberalization and make use of arbitrage opportunities created by seasonality of markets.

In general, the private marketing system is not fully developed. Market integration is limited by the relative immobility of small-scale private traders. The road infrastructure in Malawi is not well developed to facilitate mobility of both traders and consumers. It is the private traders with the transport and storage facilities, a few in any case, who seem to reap many benefits from the system. In addition, many traders lack lines of credit from financial institution for investment or bridge financing for purchases. There is also need to enhance the collection of data on private traders activities in order to guide policy interventions.

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CHAPTER 4

RISING TO THE CHALLENGE: THE PRIVATE SECTOR RESPONSE IN KENYA

Gerrishon K. Ikiara

4.1 Introduction

Kenya's liberalization of food marketing, like other economic reforms in the country, has been characterized by strong government reluctance and resistance. By the end of the first decade since the initial attempt to undertake reforms in food marketing was made around 1982, very little progress had been achieved. It took strong external intervention in form of suspension of donor aid in November 1991 for the country to embark on serious implementation of economic reforms around 1992-95.

While lack of official 'ownership' of the reform process was one of the factors behind non-implementation of food marketing reforms, there were a number of other underlying issues that contributed to the official reluctance to fully embrace the liberalization process. One of these was the fear of possible adverse repercussions of dismantling the public sector institutions, especially the state marketing boards, which had been built over several decades. Over time they had become major sources of employment and a crucial patronage base for the country's political ruling elite.

There were also those who doubted the capacity of the private sector to respond effectively in taking over some of the responsibilities of the marketing boards such as storage and transportation of staple grains, maintenance of strategic food reserves and food security.

Some feared that if government ceases to provide farmers with subsidies, incentives and other support measures, cereal production would go down. Liberalization of imports of cereals was expected to aggravate the situation further by undermining domestic production and thereby exposing the country to food inadequacy and insecurity in the long-run.

There were also concerns about equity implications of liberalizing food marketing. The widely held view was that dismantling government controls on food pricing would lead to rapid price increases of staple food items, pushing them out of reach for the low income and other vulnerable groups.

On the other hand, the proponents of reforms saw implementation of reforms as an essential strategy that would help improve the workings of food marketing system in the country, reduce inefficiencies that were associated with government controls, and enhance productivity and efficiency in food production and distribution.

This case study looks at the process of food marketing liberalization in Kenya especially in the last five years and its impact on food marketing system. The chapter starts with a brief overview of the country's consumption and production of the main food commodities especially maize and wheat. This is followed by a review of the pre-reform food marketing system; an examination of the pull and push factors in the liberalization process; and an overview of the implementation of the food marketing reforms focusing on the phases of the key reform measures. Using evidence from recent studies, published and unpublished data from government departments, the paper discusses the impact of the reform measures on some of the key aspects of food production, milling, consumption, distribution and related issues. The study then discusses the policy environment under which food marketing has continued to take place in the post-reform period and its implications for the achievement of the main objectives of the reform programme. The last part of the chapter presents a summary and conclusions from the case study.

4.2 Production and consumption of staple foods

Although there is a wide range of food items consumed in Kenya, this case study focuses on maize and wheat.

Maize is the single most important food commodity, consumed by both low and high income groups, although more by the former group. Based on data from expenditure household surveys, maize accounted for about 12.5 per cent and 24 per cent of the total household food consumption in the 1980s for urban and rural households respectively. It is estimated that maize accounts for about 40 per cent of both calories and proteins in the country's diet (World Bank 1990). The per capita maize consumption estimated from Kenya's last comprehensive household budget survey was 98 kgs and 111 kgs per year for rural and urban areas respectively (Ephanto 1992:90). Maize flour is the most popular form of maize consumption by both rural and urban population, accounting for about 75 per cent of the total maize consumed. By early 1990s overall maize consumption averaged between 23 and 32 million bags (à 90 kg per bag) per year.

Maize is produced by both small and large-scale farmers. Small-scale farmers with between 0.2 and 12 hectares account for about 80 per cent of the total domestic maize production and 60 per cent of its marketed volume (Sasaki 1995:163). Maize production currently occupies about 1.4 million hectares of cultivated land area. Although the crop is grown in small quantities in many parts of the country, only about 10 districts are maize surplus areas accounting for most of the traded maize in the country. The main maize producing areas include Trans Nzoia, Nakuru, Kericho, Uasin Gishu, Kisii, Nyamira, Bungoma and Elgeyo-Marakwet (Figure 4.1). In years of good harvest, the country is able to produce enough maize to satisfy domestic requirements and also have some surplus for export. However, during bad years, or of drought, the country resorts to heavy importation of maize.

Most of the maize consumed in the rural households is produced by households themselves, with purchased maize accounting for 40 per cent of the total maize consumption (Table 4.1). A study of 10 districts drawn from Eastern, Central, Rift Valley, Nyanza, Western Provinces found that in these districts, the ratio of purchased maize in their total maize consumption was less than 30 per cent (Ephanto 1992).

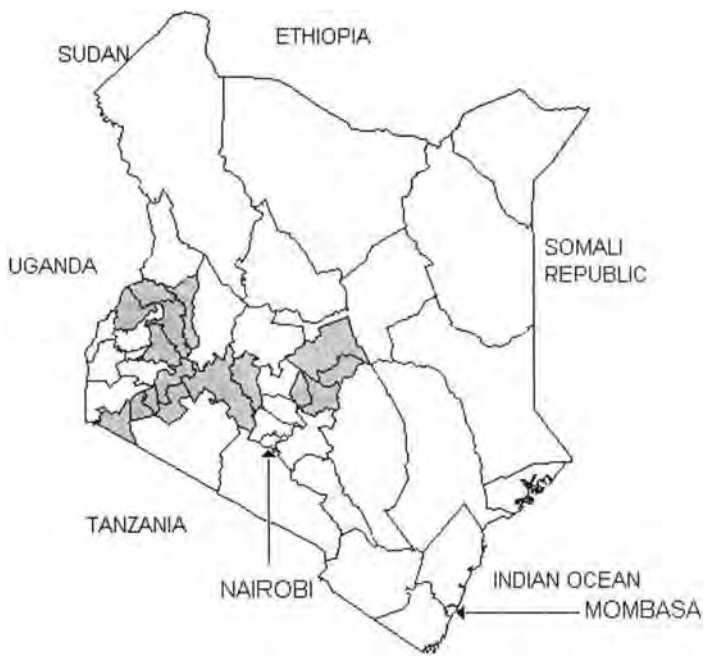
TABLE 4.1
SHARE OF PURCHASED TO TOTAL CONSUMPTION OF SELECTED FOOD ITEMS (%)

All rural	Maize	Milk	Meat	Beans	Vegetables	Cereals
All rural areas	40	23	74	21	30	57
Selected districts						
Machakos	41	22	74	16	50	87
Kitui	19	11	48	10	36	39
Meru	27	22	63	16	22	30
Nyeri	36	16	84	19	26	88
Nakuru	31	42	78	20	33	94
U. Gishu	18	14	67	13	44	72
Trans Nzoia	20	24	70	6	27	75
Kisii	15	16	84	15	26	31
Siaya	32	36	75	23	27	31
Bungoma	20	16	70	7	18	17

Source: Ephanto (1992).

Low levels of reliance on purchased food have been also reported with regard to milk, beans and vegetables – a reflection of the fact that a large proportion of domestic food production is consumed by the producing households. In the case of cereals, the reliance

FIGURE 4.1
MAIN MAIZE PRODUCING AREAS IN KENYA

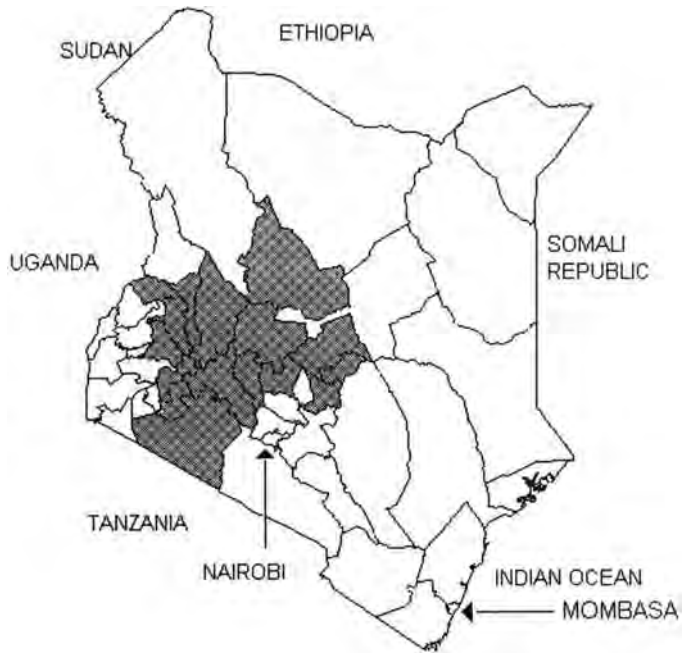


on the market was much greater, at 57 per cent for all rural households, with ratios of more than 70 per cent in about half of the districts (Table 4.1). The share of purchased meat to total meat consumption was much higher than other crops, at 74 per cent for all rural households, a reflection of the fact that most of the households in these districts are mainly agricultural-based, with a few animals kept largely for milk. Another reason that has been often advanced to explain these low levels of reliance on the market for key food items was the prevailing marketing restrictions up to early 1990s.

Market reliability, in terms of the availability of maize supplies when required by households was, however found to be satisfactory in all the districts surveyed. There was also active market participation of households in all the areas, with the majority of the households acting as both buyers and sellers at different times (Ephanto 1992:85).

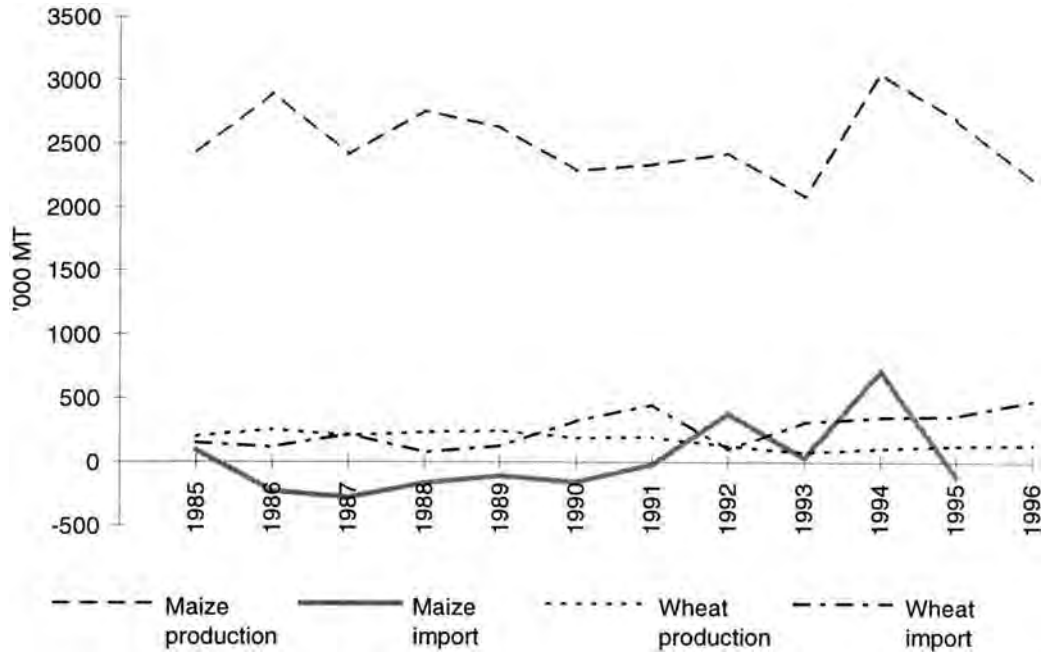
Wheat is the second most important cereal in Kenya's food sector. Wheat products have become important in the rapidly growing urban areas. While bread is not a traditional Kenyan food, it has become a popular food item for the middle and upper income households. According to the 1982/83 urban household budget survey, the share of bread and wheat flour in total household food consumption was 8.5 per cent.

FIGURE 4.2
MAIN WHEAT PRODUCING AREAS IN KENYA



There has been a widening gap between domestic production and consumption of wheat. Between 1993 and 1996, for instance, domestic production of wheat grew by an average of 6.4 per cent while total consumption grew by 31.1 per cent per annum. The shortfall was met by an increase in wheat importation, averaging 65.3 per cent of total wheat consumption per annum. Like maize, the main wheat producing areas are concentrated in the Rift Valley Province (Figure 4.2).

FIGURE 4.3
COMPARISON OF MAIZE AND WHEAT PRODUCTION



Source: Data on maize production and import from FAOSTAT; wheat production and import from Republic of Kenya (*Economic Survey).*

Note: Maize import covers net import; negative when export exceeds import.

4.3 Food marketing before reform period

In the 1960s and 1970s, Kenyan authorities, like many other governments in Sub-Saharan Africa, thought that the most effective way of modernizing agriculture and improving the welfare of both agricultural producers and consumers was to involve the government in the economy through controls on marketing, credit provision and supply of inputs. While this approach had some success in the expansion of input utilization, the approach was partly responsible for a number of failures and weaknesses including rising inefficiency and corruption, delays in decision-marking process, increasing public sector deficits, frequent food shortages, and weak incentives to producers. Government controls and subsidies not only failed to protect interests of consumers and producers as intended, but became mechanisms for transferring resources to some selected groups, especially those with political connections, through subsidized inputs, concessional credit and uniform regional pricing.

Pan-territorial pricing which was widely practised, created a number of problems in the economy, including reduced incentives for the private sector to invest in the marketing of grains, and distorted the regional pattern of grain production by sometimes encouraging low-potential areas to produce grains. Thus the reduction of the role of government in food marketing became one of the main areas of focus in the general agricultural reform programme.

In the last decade, considerable changes have taken place in food marketing in Kenya, broadly under the structural adjustment programmes (SAPs) which the country has been officially implementing since 1980.

4.3.1 The rise of state marketing boards

The marketing of Kenya's staple food items, especially maize, wheat, beans, milk and sugar, was tightly regulated by the government for most of the last three decades until around 1992/3. These crops were usually referred to as 'scheduled' crops to reflect the government's perception of them as strategic food commodities.

Private marketing of food in Kenya was constrained by a host of state regulations and controls introduced over time. Among the chief obstacles to private food marketing were restrictions on inter-district movement of cereals, price controls, restrictions on direct sale by farmers of cereals to large-scale millers and restrictions on both imports and exports of key food items.

Food marketing regulations were enforced through state marketing boards and state-cum cooperative institutions established to handle one or a number of these commodities. The marketing boards created to deal with food commodities included the National Cereals and Produce Board (NCPB), the Kenya Farmers Association (KFA) which at some stage became the Kenya Grain Growers Cooperative Union (KGGCU), the Kenya Cooperative Creameries (KCC), the Kenya National Trading Corporation (KNTC) and the Kenya Dairy Board (KDB). Some of the marketing boards were established in the 1930s, particularly to support European settler farmers.

The boards maintained tight controls over the marketing of the main food items through the 1960s and 1980s, in spite of the fact that Kenya was regarded as one of the leading countries in Africa in terms of strong orientation to a liberal market-based economy. The rationale for the regulations on food marketing was the widespread public belief in the 1960s and 1970s that they were the most appropriate forms of protecting the interests of both producers and consumers.

In the cereal sector, the government had granted a virtual monopoly of marketing maize and wheat to the National Cereals and Produce Board (NCPB) which was established in 1979, when the maize and wheat marketing boards were amalgamated. The NCPB operated through its depots spread in various parts of the country, and its buying agents who were licensed to purchase maize from farmers on its behalf. The agents were paid a commission on each bag of maize or wheat bought, to cover the costs of collection, storage, bulking, payment to the farmers and transportation. NCPB also used cooperative institutions such as the Kenya Grain Growers Cooperative Union (KGGCU), and district cooperative unions as its agents. These cooperative institutions, however, had limited capacity in terms of financing, management and storage. In some cases, large farmers and traders were allowed to sell maize directly to the NCPB, with the board reimbursing such traders and farmers for transport and other costs. The selection of such farmers and traders was usually not done in an open and competitive manner, but was based on political connections.

NCPB sold its grains to traders, institutional consumers like schools and hospitals, and large millers at officially controlled prices. The millers processed and sold sifted maize flour to wholesalers and retailers all over the country, especially in urban and maize-deficit areas. Private traders and large-scale millers were not allowed to buy cereals directly from farmers. It was the NCPB which supplied their maize and wheat requirements. However, most of the time, millers did not receive the amounts of cereals they required due to the rationing applied by the NCPB.

NCPB became more or less the buyer and seller of last resort and was responsible for the maintenance of strategic food reserves. Producer and consumer prices were fixed by the government and adjusted from time to time to reflect prevailing demand and supply conditions.

Until around 1991-93, there were pervasive restrictions on inter-district movement of cereals so that traders other than the NCPB, had to obtain official permits to allow them to transport cereals from one district to another. The board regulated cereals trade through a bureaucratic licensing process, which traders wishing to engage in cereal marketing across district boundaries had to comply with. The board also licensed millers and played a major role in setting ex-mill and consumer prices of wheat and maize products through interministerial committees. By 1980s, these restrictions had become a major obstacle to private trade in grains so that trade in maize and wheat took place only within a given district and was largely informal and limited in terms of volume.

Importation of cereals was also possible only with permission from the government. This importation was either undertaken by NCPB, other parastatal bodies like the Kenya National Trading Corporation (KNTC) or by private firms that were able to acquire import licences. Acquisition of these licences was heavily bureaucratic, with high levels of corruption involved in some cases.

Government also regulated the supply of agricultural inputs. Only a few institutions, such as the Kenya Grain Growers Cooperative Union, were allowed to import and distribute inputs like fertilizers and insecticides. Input prices were set by government.

4.3.2 Formal and informal cereal marketing channels

Trade in cereals, especially maize, has for a long time been conducted through both formal and informal markets existing alongside each other. Private sector traders have been more dominant in the informal markets compared with the formal markets where government controls and regulations had seriously suppressed their participation and growth. In many Sub-Saharan African countries, markets based on modern exchange are still underdeveloped, making them relatively unreliable and unstable. Significant volumes of trade have, therefore, continued to take place in informal markets.

The shares of various maize marketing channels before the liberalization of the cereal sector is roughly shown by the following estimated shares per season. The consumption of farmers accounted for about 58 per cent of the total maize production. The remaining

42 per cent constituted the marketed proportion, which was traded through rural informal channels (about 10 per cent), NCPB (22 per cent) and its appointed agents (10 per cent) (Odhiambo 1988).

Formal trade in wheat and maize and their products was thus dominated by the NCPB and the large milling companies. Although its degree of domination has declined since the liberalization of the cereal marketing around 1992-93 period, NCPB remains the leading player in the formal cereal market.

The informal marketing system is made up of the small 'market traders' and large-scale commodity wholesalers including 'lorry traders'. The small traders usually do not own any means of transport while the large ones have their own motorized transport. The small-market traders are generally found in local open-air markets, each dealing with relatively small volumes. These traders play an important role by collecting small amounts of the produce from the farmers for sale to the wholesalers or directly to the consumers in the area. Sometimes, these traders transport the collected grains to other markets. They also often engage in buying maize from wholesalers for retailing purposes.

The small traders consist of two main groups: permanent traders who usually own or rent a shop and are therefore based in a given market; and itinerant traders who move from one area to the other, buying and selling maize. The movement of these itinerant traders is determined by seasonal factors and regional variations in supply and demand for maize (Schmidt 1979). The grains are transported by bicycles, buses, donkeys and other available means.

Before restrictions were removed, informal maize marketing was mainly confined within district boundaries since any movement of the commodity outside a particular district required permits which were difficult to obtain by most informal traders. One of the issues that was often raised with regard to grain liberalization, was whether the informal and formal private sector had the capacity to play their anticipated role in a liberalized environment. The ability of the informal traders to respond to reform measures was, however, effectively demonstrated soon after implementation of the initial reforms. By the late 1980s, for instance, there was a notable increase in the number of informal traders following partial reforms implemented in 1988 (DAI 1989:21). The small-scale informal traders continue to operate on low volumes and are generally inefficient (DAI 1989:24). However, as already noted, the informal trading network plays a major role in the country's cereal marketing system.

Wholesalers participating in the informal marketing networks purchase maize directly from the farmers or from the small traders, particularly in maize surplus areas. They transport and sell it to retailers in maize deficit areas. In some cases, the large traders also sell their maize to NCPB and some directly to the millers. Before the liberalization of cereal marketing, their activities were regarded as illegal. Their share of the market has thus increased considerably in the last five years following the liberalization of cereal marketing.

Another important group of actors in Kenya's informal maize marketing chain has been the *posho* millers. These small-scale millers use hammer mills and are found in both rural and urban centres where consumers bring their own maize to be milled for a fee. Posho millers buy maize from small and large traders as well as farmers, mill it and sell it to consumers as whole maize meal.

4.3.3 Controls and distortion in the domestic milling industry

While cereal milling was not explicitly controlled by the government before reforms, the regulations on cereal marketing imposed considerable constraints on milling. Prior to the reforms, the industry consisted of both private and public sector milling firms. Large-scale private sector milling firms controlled the largest share of the market. Although in the 1970s the government had established a few parastatal milling firms, the private sector has continued to be the dominant player in Kenya's milling industry.

In addition to these large public and private sector milling enterprises, there were numerous private small hammer mills (popularly known as *posho* mills) spread all over the country in small towns and market centres. Unlike the large mills which processed sifted maize meal, the posho mills produced whole meal. Posho mills normally process maize in small quantities, brought by individual consumers, who pay a milling charge, based on the amount of maize milled.

The small private millers operated with fewer controls. Competition depended on the number of mills existing within a given area. Because these mills depended less on supply of maize from the NCPB, most of them were located in the maize surplus areas. By the early 1990s, 56 per cent of the installed milling capacity of the small-scale mills were in Nairobi, Nakuru and Kiambu (Mukumbu 1992). These are areas near or in maize surplus areas or close to densely populated urban centres.

The operations of small-scale millers were adversely affected by the restrictions imposed by the government on inter-district movement of maize. The urban mills were especially constrained by the transport restrictions. This had the effect of forcing many consumers to depend more on sifted maize meal processed by the large mills which in turn led to the distortion of consumer tastes. The distortion was further aggravated by government subsidies which were only applicable to sifted maize meal.

One of the constraints facing large-scale millers before liberalization was that they could neither procure cereals directly from farmers or traders nor engage in direct imports. They depended on the NCPB for all their needs for wheat and maize. Just before liberalization, the NCPB sold between 80 per cent and 90 per cent of its maize to the large-scale millers (World Bank 1990). Sale of maize and wheat to millers by the NCPB was also based on quotas which fell below the actual capacity of the mills. There were regular complaints from millers that the distribution of maize was carried out in a discriminatory manner (Ikiara, Jama and Amadi 1995) and that there were long delays in receiving available cereal supplies from the NCPB.

The uniform pricing policy applied throughout the country for sifted maize meal encouraged the establishment of large-scale mills in various parts of the country, often enjoying some regional monopoly. The overall effect of this was to act as an incentive for over-investment in milling industry. By the early 1990s, there were more than 30 large-scale millers with a total milling capacity of over 1.14 million tons per annum, against the country's total annual consumption of 255,100 tons of sifted maize meal (Mukumbu 1992). These pricing policies had thus led to a situation where the installed milling capacity was almost 4 times the national consumption of maize meal.

4.3.4 Pull and push factors in the liberalization of Kenya's food marketing

As already noted, liberalization of food marketing in Kenya has been a slow process. Although the country officially adopted SAPs in 1980, few of the agreed reform measures had been fully implemented by 1991, mainly because the reform proposals had emanated mainly from intellectual and donor circles. The Kenya authorities were therefore not enthusiastic about liberalizing food marketing, arguing that consumer and producer interests would be adversely affected and that imported products would depress the demand and prices of locally produced commodities. One of the popularly held view was that removal of controls would not only raise consumer prices and allow middlemen to exploit consumers, but that it would also reduce access to food by the vulnerable groups in the country.

However, while the arguments against liberalization of food marketing were usually put in terms of 'national' interests, there were often personal interests involved for those who were spearheading opposition to the liberalization process. Some of the key policy makers were themselves large-scale farmers with extensive interests in cereals. This group was not keen to face the competition from domestic or external sources after liberalization. Moreover, the regulations and controls on food marketing made it possible for the ruling authorities to exercise political patronage by granting favours to politically influential individuals, especially in awarding import licences.

Management and employees of the NCPB and the KGGCU were also opposed to the liberalization fearing that these bodies would have to retrench a significant proportion of their staff as private traders increased their share of food marketing. Indeed, one of the reasons why the government was generally lukewarm about liberalization was the anticipated adverse effects of the reforms on employment.

The forces that were in favour of liberalization of food marketing were led by private sector traders who wanted greater freedom to trade in food commodities. These had regularly complained about the restrictions on inter-district movement of cereals and importation of grains. Private traders were therefore strongly supportive of greater and faster liberalization of food marketing (Ikiara, Jama and Amadi 1995).

The large-scale millers constituted another group that was strongly supportive of reforms in food marketing. Some of their expectations were that the process would enable them to purchase maize and wheat directly from farmers and also to freely import the commodities when it was more profitable to do so. Freeing cereal marketing was

thus regarded as a step that would enable millers to reduce business problems arising from uncertainty in the supply of their raw materials, on the one hand, and inadequate milling quotas on the other, factors which contributed to high levels of capacity under-utilization.

The donor community was also a key factor in pushing for reforms in food marketing. The European Union and USAID, among other donors, argued that the declining performance of the agricultural sector and the failure to eliminate food insecurity were partly the result of inefficient food marketing which was distorted by excessive government controls, regulations and other forms of state interference. The withholding of donor aid in November 1991 was one of the main factors which finally pushed the government to implement major reforms in the period after 1991, especially between 1993 and 1995.

There was also pressure for reforms from some of the farmers who hoped to benefit from greater freedom to sell their produce to the highest bidder. Transporters were also in favour of marketing, hoping that the process would reduce the level of police harassment regularly encountered in the transportation of cereals then (Ikiara, Jama and Amadi 1995).

4.4 The process of marketing liberalization

4.4.1 Abolition of inter-district cereal movement

The main effort to reduce barriers to private marketing of food was carried out within the agricultural sector adjustment programme financed by the World Bank. One of the earliest attempts in this direction was in 1982 when the Bank made restructuring of maize marketing one of the conditionalities for signing Kenya's second structural adjustment loan.

The first area of focus with regard to maize marketing reforms was gradual reduction of inter-district movement restrictions. A major step in this process was taken when the government started to ease inter-district movement of cereals under the cereal sector reform programme (CSRP). This involved raising the amount of maize that could be transported across district boundaries without requiring a permit, from 2 bags (à 90 kg each) to 44 bags. This was achieved at the end of 1990. The next step implemented at the end of 1991, involved doubling to 88 bags the amount of maize that could be moved without permits. According to the CSRP, full liberalization of maize should have been achieved by 1992. However, this did not happen until December 1993 when the major legal barriers to inter-district maize movement were removed. A study carried out in 1993 showed that the actual implementation of the liberalization had not been effectively undertaken in some areas as police continued to harass maize traders and transporters along the country's main highways (Ikiara, Jama and Amadi 1995).

In the case of wheat, restrictions against movement of the commodity across district boundaries had been fully abolished by the end of 1992.

4.4.2 Easing of import restrictions

By 1994, restrictions on importation of wheat and maize had been removed. However, uncertainty persisted in this area because the government was often arbitrarily interfering with importation of cereals. For instance, in 1995, some controls on wheat imports were re-introduced following intensification of pressure from wheat farmers. Some of the attempts to control imports of grains were in the form of anti-dumping levies introduced in 1995 and later replaced with an ad valorem levy of KSh 279 per 90 kg bag of wheat (Table 4.2)

TABLE 4.2
PHASES OF FOOD MARKETING LIBERALIZATION

Year	Marketing agent	Market regulation	Pricing policy
1988 Maize	Financial and managerial restructuring of the NCPB begins; phased closure of the NCPB buying centres; construction of depots continues. GOK writes off NCPB debts. Crop purchase revolving fund established but not replenished NCPB was to be restricted to limited buyer and seller of last resort	1988/9 Phased increase in amounts of permitted purchases from traders by millers. Relaxation of unlicensed maize movement and milling 1991 Further relaxation of district trade limits 1992 Movement restrictions tightened 1993 Abolition of milling quotas and removal of inter-district movement 1994 Liberalization of internal and external trade	1988 Cereal Sector Reform Program CSRP envisages widening price margin. Margin actually narrows 1992 NCPB unable to defend ceiling prices 1993/4 Limits are set on NCPB purchases; NCPB unable to defend floor price
1992 Wheat	NCPB	1992 Elimination of movement controls for wheat products 1994 Relaxation of import and export controls 1995 Abolition of wheat imports	1992 NCPB retains role of setting producer prices; continues buying wheat from formers 1994 NCPB unable to defend ceiling prices 1995 Introduction of anti-dumping levy replacement of levy with and valorem levy of KSh 279 per bag
Rice	NIB	1990s Relaxation of milling controls	1990s Farmers allowed to process limited amounts privately

Source: Jayne and Jones (1996); and compilation from various government reports.

4.4 3 Reduction of subsidies on fertilizer

For a long time the government had subsidized prices of key agricultural inputs, especially fertilizers and insecticides. However, even in the pre-liberalization period, Kenya did not have as pervasive subsidies as many other Sub-Saharan African countries.

The main area in which subsidies were important in Kenya was in agricultural inputs. Due to the limited use of subsidies in the economy, the government found it easier to abolish subsidies compared to many countries in Sub-Saharan Africa where removal of subsidies was strongly resisted by either consumers or producers. Removal of subsidies on agricultural inputs was therefore one of the first agricultural reforms to be fully implemented in the country. This was accomplished in the early part of 1991. The next reform measure in this direction was the liberalization of fertilizer importation and distribution, which was implemented in 1991.

4.4.4 Reforms in the milling industry

Small-scale maize mills received a major boost from the liberalization measure which allowed transportation of gradually increasing amounts of maize without permits. This change improved availability of maize to the posho mills in the urban centres and allowed urban consumers to effectively choose between sifted maize meal from the large-scale millers and whole maize meal processed by the *posho* millers.

Another reform measure that had direct impact on the milling industry was the removal of the regulation barring millers from buying cereals directly from farmers or from directly importing cereals. This took place in 1992 in the case of wheat and at the end of 1993 in the case of maize. The dismantling of the monopolistic powers of the NCPB between 1992-93 had a major impact in terms of allowing large-scale millers to make independent decisions. The privatization of the public milling enterprises in 1994 was another important step towards full liberalization of the milling industry. The measure removed the rationale for discrimination by public officials in favour of government owned milling companies which was widely practised before.

4.5 Impact of liberalization of food marketing

Although the period of effective food marketing liberalization in Kenya is rather short, the reform measures taken so far have had considerable impact in a number of areas. The following sections review available data on how the liberalization process has affected participation of state marketing boards and private traders in grain marketing and storage, domestic cereal production and importation, cereal prices, and the milling industry.

4.5.1 The response of the maize traders

Emerging evidence in Kenya's food marketing shows that the role of the once dominant state marketing boards is gradually weakening as private entrepreneurs increase their share of the cereal market. Private traders have demonstrated that they are more competitive than the state marketing boards, in spite of the fact that private trading networks are hampered by poor infrastructure and an often inconsistent policy environment.

The private trading systems that have emerged are characterized by low levels of transactions, partly due to inadequate credit facilities and policy uncertainties. Farmers,

who are important components of private trading networks, have limited and often no access to credit and certain inputs, reducing their ability to participate and increase their volume of transactions. These have continued to hinder the growth of private trade in various food items.

Uncertainties surrounding the future role – and the continued domination – of the state marketing boards have had the effect of discouraging private sector entrepreneurs from committing large investments in storage and transportation facilities. Another source of discouragement for the private sector investment in marketing facilities has been relatively low and unstable profit margins in the cereal marketing (Jayne and Jones 1996).

Kenya's private sector can generally be said to have responded well to the liberalization of maize marketing. Just one year after the liberalization of maize marketing in December 1993, the private sector had responded positively by increasing transportation and storage facilities, the effect of which was reflected in a substantial reduction in the price differentials between various regions in the country. However, as a result of differential transportation costs, real quarterly prices of dry maize between various parts of the country continue to differ (see Table 4.4 later).

A survey of private lorry transport real costs shows that for most of the routes surveyed there was an average increase of 17 per cent in transport costs between 1992 and 1994/5. Out of the 18 routes surveyed, there were increases in transport costs in 15 of them and declines in the remaining three (Nyoro 1995).

In a detailed study comparing prices in two markets in various parts of the country between 1992 and 1994, it was found that the absolute values of the price differences were reduced in 182 out of 231 cases although there were increases in transport costs, (Sasaki 1995). In other words, in 182 cases out of 231, the price difference between paired markets was less in 1994 than it was in 1992. In the remaining 49 cases, the price difference in 1994 was larger than it was in 1992. The study found that following the marketing reforms in 1993, private sector transportation of maize became more active in various parts of the country.

With regard to storage, there was substantial storage capacity in both small and large-scale producers in many parts of maize producing areas, with about 85 per cent of the farms surveyed having adequate own maize storage capacity. The conclusion drawn was that storage was not a major constraint for increased participation of the private sector in grain marketing. The majority of farmers stored maize in order to sell after harvest at higher prices. About 63 per cent of the farmers stored some maize for at least two months after harvest in 1994, while 44 per cent stored all their maize for more than two months. Thus, contrary to widely held views, evidence from the study suggests that small-scale maize farmers in virtually all the 12 maize producing districts surveyed have substantial storage capacity.

Kenyan farmers, both small and large, needed to invest in creating facilities even before liberalization because there has always been seasonal variation of cereal prices offered

by the NCPB as well as for grains sold in the informal markets. Farmers with storage facilities were able to avoid selling grains at harvest time and to take advantage of seasonal price increases. In addition, there was always need for farm storage facilities in case of delays by the NCPB to collect the produce.

In some of the districts, especially Kisii and Nyamira, it was found that many farmers bought maize from the market soon after the harvests, stored it and sold it later at higher prices. The existence of predictable seasonal price changes in a region was found to be important for creating a conducive environment for the private sector to invest in the expansion of storage capacity (Sasaki 1995).

4.5.2 Trends in cereal deliveries to marketing boards

The liberalization of cereal marketing around 1992-93 period has increased the participation of the private sector in the marketing of key food items in the country (Figure 4.4). Following the removal of the restrictions on direct sales from farmers to millers and other traders, there was a sharp fall in the amount of cereals delivered to the state marketing boards, implying that larger amounts were being traded within private channels. The amount of rice delivered the board fell from about 31,500 tons in 1989 to about 15,900 tons in 1996. Wheat deliveries to state marketing boards experienced even more dramatic changes, going down by 63.3 per cent soon after liberalization of wheat marketing, from 199,000 metric tons in 1991 to 73,000 tons in 1993, as large millers started to buy directly from farmers.

This trend was also clear in the behaviour of farmers. In a survey undertaken at the end of 1993, one year after the liberalization of wheat marketing, it was clear that farmers were effectively using other trading channels (Table 4.3). Thus, while 69.4 per cent of the sample farmers from Rift Valley Province delivered their wheat to either the NCPB or the KGGCU in 1992, only 47.5 per cent of them were doing so a year later. More farmers were selling their wheat to private traders and millers.

TABLE 4.3
PROPORTION OF WHEAT FARMERS USING VARIOUS MARKETING CHANNELS, 1992 AND 1993

Marketing channel	1992	1993
NCPB/KGGCU	69.4%	47.5%
Private traders	27.8%	30.0%
Millers	12.5%	2.8%
Millers and NCPB	0	10.0%
Total	100.0%	100.0%
	(N = 40)	(N = 36)

Source: Ikiara (1995).

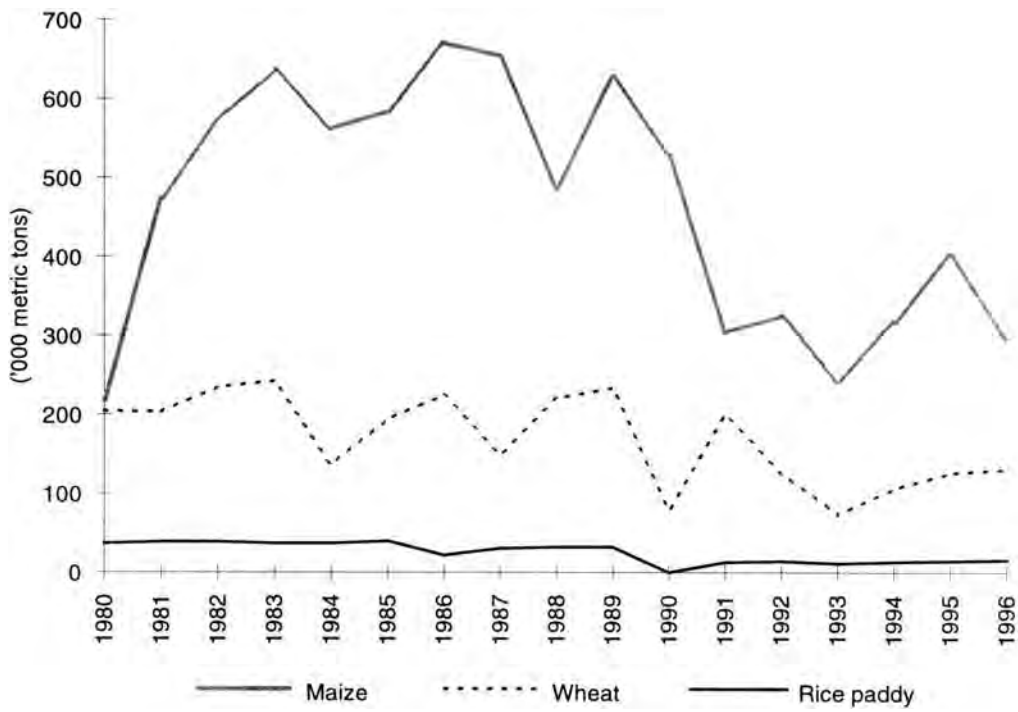
However, this trend changed soon after, with increasing amounts of wheat delivered to the NCPB. A more or less similar trend was taking place in the cases of maize and rice. The factors behind these reversal trends were increased imports which were often

TABLE 4.4
TRENDS IN REAL DRY MAIZE PRICES (QUARTERLY) IN VARIOUS TOWNS, 1992-97
(AT KSH 90 PER KILOGRAM BAG)

Year	Quarter	Nairobi	Mombasa	Nakuru	Kitale	Kisumu	Eldoret	Meru	Karatina	Kisii	Nyeri
		(January 1992 = 100, Lower Income CPI)									
1992	1st	410	898	465	439	427	381	348	485	367	632
	2nd	530	632	566	527	666	425	424	522	548	448
	3rd	732	941	614	696	732	811	787	850	468	618
	4th	635	744	477	455	567	527	684	578	608	573
1993	1st	554	708	486	432	496	462	521	500	423	502
	2nd	451	460	460	422	458	495	394	386	394	406
	3rd	471	480	459	414	450	471	423	458	341	457
	4th	576	549	494	388	508	500	510	551	497	533
1994	1st	565	658	515	444	512	537	542	558	463	549
	2nd	591	597	574	529	624	550	548	579	611	590
	3rd	483	503	504	420	396	483	535	591	414	576
	4th	401	485	351	234	326	326	378	595	349	484
1995	1st	368	456	280	260	327	289	340	344	264	322
	2nd	363	393	297	269	335	283	302	329	264	301
	3rd	350	386	285	285	297	284	316	337	229	322
	4th	304	387	229	212	265	228	317	302	228	306
1996	1st	290	347	238	201	275	207	259	301	232	302
	2nd	351	397	308	225	359	255	282	338	309	320
	3rd	391	425	389	348	380	334	352	401	344	406
	4th	426	482	330	330	424	332	438	423	462	408
1997	1st	513	556	434	412	541	433	502	504	457	489

Source: Compiled from data from Ministry of Agriculture, Livestock and Marketing.

FIGURE 4.4
SALES OF MAJOR CEREALS TO THE MARKETING BOARDS, MAINLY NCPB, 1980-95



Source: Republic of Kenya (*Economic Survey* 1985, 1990, 1995).

cheaper, limited storage and financing capacity of private traders that forced farmers to continue delivering a large proportion of their produce to the state marketing board. In addition, NCPB was guaranteeing farmers higher prices than those offered by private traders, at least up to 1995. For instance, in 1994 the NCPB price for wheat was 10 per cent higher than that of private traders, at KSh 1,100 per 90 kg bag compared with the private traders' price of KSh 1,000 per bag. NCPB was willing to guarantee a higher price to farmers, partly because the board was afraid that its role could be reduced if the farmers shifted their deliveries to private traders and large millers.

Nominal maize and wheat prices rose sharply soon after the removal of marketing restrictions. The average gross prices of maize rose by 10.4 per cent between 1992 and 1994 while that of wheat increased by 114.3 per cent in the same period. However, in real quarterly prices, the trend was quite different. There was substantial decline in real maize prices between 1993 and 1995.

4.5.3 Impact on importation and production of wheat

Dependence on imported wheat has risen rapidly since the liberalization of food marketing. By the mid-1990s, the country was importing more than 50 per cent of the total domestic consumption of wheat. This dependence on imported wheat is projected to increase even further in the coming decade because population growth and the demand for wheat products are considerably higher than the growth rate in domestic wheat production. By the mid-1990s, Kenya's total annual consumption of wheat was estimated to be about 5 million bags (à 90 kg) while its average annual domestic production was 2.5 million bags. Total domestic consumption of wheat is projected to rise to about 7 million bags per annum in the next decade while production is unlikely to go beyond 3.3 million bags per annum during the same period (Nyoro 1995:109). The country also produces only 'hard' wheat and has to import 'soft' wheat to enable millers to produce the required type of wheat flour for baking.

Because the millers could now obtain their wheat requirements from cheaper import sources, the NCPB found it difficult to dispose of its wheat stocks soon after liberalization, creating considerable problems for wheat farmers as the board was unable to pay for wheat delivered. In October 1997, wheat farmers in Uasin Gishu, one of the main wheat producing areas in the country, staged dramatic protests in Eldoret town, demonstrating against low prices and excessive wheat importation by private millers (*Sunday Nation* 1997). Continued discontent by farmers is likely to have adverse effects on domestic wheat production by reducing both wheat yields per hectare as well as the area under wheat production. The medium- to long-term impact of the liberalization on wheat production in Kenya is, however, not clear from available data.

Both the area under wheat production and the volume of production have highly fluctuated in the last two and half decades. First the area under wheat production declined by more than 20 per cent between 1970 and 1990. In terms of volume of production, there was a smaller decline of 3.3 per cent during the period. Over the years, the fluctuations in the volume of production of cereals in Kenya have been mainly

influenced by weather conditions and the level of anticipated prices to farmers (Republic of Kenya 1997:129).

4.5.4 Impact on wheat milling

By the mid-1990s, Kenya had an estimated installed wheat milling capacity of 81,000 tons per day. Large-scale mills located mainly in the large and medium- sized towns such as Nairobi, Mombasa, Kisumu, Nakuru, Nyeri and Kitui control most of the installed milling capacity. Unlike maize, where there are many small-scale millers spread in various parts of the country, there is limited small-scale wheat milling.

Liberalization of wheat marketing helped to reduce milling costs in three ways. First, the abolition of wheat quotas for large-scale millers enabled them to raise the level of utilization of the installed capacity, thereby lowering the unit processing costs. This was largely attributed to the fact that wheat grains constitute between 70 and 80 per cent of the total costs of processed wheat products. Data collected for two years, 1993 and 1994, show that the average capacity utilization of the large mills rose from 30 per cent in 1993 to 58 per cent in 1994, which was followed by a 9.4 per cent decline in the cost of processing wheat (Nyoro 1995). Liberalization made it possible for millers to procure wheat more easily either from the farmers or from overseas markets. Second, liberalization of marketing improved the millers' access to credit facilities, by facilitating direct contacts between millers and farmers. Millers have been able to negotiate with the farmers for the purchase of wheat on credit terms when necessary. This has helped to reduce the costs of obtaining working capital substantially. The ability of the millers to negotiate credit terms with wheat suppliers helped to cut down the processing costs by another 21 per cent, as a result of the reduced costs of obtaining working capital (Nyoro 1995).

The third way in which liberalization had a beneficial impact on wheat milling, was that due to the ability of millers to get wheat of the required quality, they were able to cut down the losses associated with poor quality wheat, helping to improve the millers' profit margins. Millers argue that if they were free to export their products into the neighbouring countries, they would be able to utilize economies of scale even more effectively, reduce the costs of processing, and further improve profit margins.

With regard to efficiency in wheat production, the study findings were that some of the large-scale wheat producing areas like Nakuru, Narok and Uasin Gishu were able to produce the commodity competitively as shown by the fact that their costs of production were equal to or lower than wheat import parity prices. However, in the case of small-scale production units in areas such as Nyeri, Laikipia, Uasin Gishu and Trans-Nzoia, the production was less efficient, with average production costs higher than import parity prices.

4.5.5 The impact on maize milling and flour prices

Liberalization of maize marketing has resulted in a number of efficiency gains. One of the areas in which these gains have been observed is in maize milling. As a result of improved availability of maize supplies to small *posho* mills, the share of these mills in

the maize meal market has risen in the urban areas. Their simple, low-cost technology enables the posho mills to lower the cost of whole maize meal. By the mid-1990s they had forced the large maize millers to reduce prices of sifted maize meal in order to compete with them. For instance, large millers reduced the price of a 2 kg packet from KSh 51 in 1993 to KSh 35 by early 1995. Increased efficiency in maize and wheat milling was the result of improved capacity utilization which rose sharply after liberalization, due to improved availability of maize supplies to millers.

An attempt to quantify the gains to consumers from lower milling charges by the posho millers shows that Nairobi consumers alone were saving as much as KSh 670 million per year (US $12.3 million) merely from a reduction in milling charges (Argwings and Jayne 1996).

Further evidence of efficiency gains have been observed in the conversion of maize grains into maize meal for domestic consumption, which resulted from the increased share of posho mills in the urban maize meal market. Large-scale sifted maize millers lose on the average 20 per cent of maize grains in the milling process, mainly in form of by-products. These by-products are, however, used in the manufacture of animal feed. The *posho* mills, on the other hand, lose very little, since they do not produce sifted maize meal.

Market liberalization has helped to lower cost of grain marketing and processing. The NCPB marketing system was inefficient as it involved unnecessary movement of grains over long distances. The system involved purchasing grain from farmers, transporting it to the depots, and later to urban based large-scale millers who then processed the grain and sold sifted maize meal to grain deficit rural areas. By facilitating the movement of grains from surplus to neighbouring deficit areas by private traders, liberalization has helped to reduce marketing costs. Second, liberalization of the grain markets made it possible for more households to gain access to cheaper whole maize meal processed by the small-scale mills. Estimates show that the total household expenditures on grains increased by as much as 30 per cent as a result of marketing restrictions prevailing in the industry before liberalization (Jayne and Jones 1996). This is the key welfare impact of the reform. By improving the availability and supply of grains to grain deficit areas, liberalization has also helped to improve food security in these areas.

Some of the large-scale producers, especially those with access to cheap transport to large millers, have gained from liberalization. Liberalization provided them with marketing alternatives which were hitherto not available. Delays of payment to producers have also been reduced as private traders and NCPB competed for grain deliveries by improving services to farmers (Ikiara, Jama and Amadi 1995). Grain producers, however, experienced some negative effects from the implementation of marketing reforms, particularly due to the importation of cheaper wheat which reduced the demand for the more expensive locally produced variety. The sharp decline in the share of domestically produced wheat in total wheat consumption in the period 1993-96 is a reflection of this.

As a result of the removal of state financial support to farmers at a time when alternative credit schemes and supply of inputs had not been established, per capita grain production has declined. Food prices have also generally been rising towards import parity. The fact that marketing boards have continued to act as the buyers and sellers of last resort has introduced uncertainty regarding the future role of these boards, making it difficult for the private sector to invest sufficiently in grain marketing. As Jayne and Jones (1996) observe with regard to six countries, including Kenya, studied in East and Southern Africa:

> So far, liberalization and privatization have replaced often unreliable, high cost, and centralized forms of state marketing with private markets that are competitive but often lacking in information, infrastructure, and are poorly integrated and or coordinated with other key production and market enhancing activities (ibid).

The authors further note that while private food trade in Eastern and Southern Africa has grown, and has brought important tangible benefits especially to urban consumers, emerging evidence suggests that the anticipated stimulus to technology adoption and food production has been weak; and that 'the major challenges of the newly liberalized grain marketing systems in Eastern and Southern Africa are to contain the effects of price instability, and most importantly, to support technical innovation and productivity growth in smallholder agriculture' (ibid).

4.6 Some policy concerns

4.6.1 The government ownership of reform

Because liberalization of food marketing in Kenya was implemented mainly through pressure from the donor community, the government has not actively and deliberately sought to strengthen the capacity of the private sector in food marketing, beyond the removal of restrictions and controls that characterized cereal and grain marketing in the country. Thus, lack of strong government 'ownership' of the reform process has had a negative effect on the government's willingness to initiate deliberate and active public support to increase the capacity of the private sector in the cereal marketing system.

The government's reluctance to strengthen the private sector food marketing system has been partly due to the fear that the private sector would take away a large share of the market from the existing parastatals. This would hurt the operations and threaten the survival of the NCPB, which continues to be a key actor in the cereal marketing chain. Several agricultural marketing boards in Kenya, some of which date back to the colonial days, still enjoy a central position in the marketing of agricultural commodities in spite of the measures taken to liberalize food marketing.

Due to the perceived strategic role of these boards, either for economic or political patronage interests, the state has been reluctant to allow the private sector to make major inroads in the marketing systems in which they operate. It is clear that if the government was to take policy measures to reduce private traders', and marketing costs and risks, the

private sector would realise higher profit margins from their operations and encourage them to raise their capacity to participate in grain marketing. But there has been no evidence of a clear and deliberate policy by the government to assist private sector traders to raise their capacity.

4.6.2 Marketing costs and price fluctuations

One of the effects of controlled movement of grains across districts and other forms of controls on the marketing of cereals was that it neither benefited consumers nor producers. The restrictions tended to depress producer prices and raise consumer prices (Mukumbu 1992).

The need to focus on reform measures that reduce marketing costs is very important in a country's efforts to improve consumer access to foods. Studies have shown that for staple foods, marketing costs contribute more to consumer prices than costs incurred at the farm level (Ahmed and Rustagi 1987). Thus reducing marketing costs by a given percentage is likely to result in bigger consumer gains than a similar reduction of production costs. Policies that help to reduce marketing costs should therefore be emphasized because they have more positive impacts for both producers and consumers.

One of the possible strategies for reducing price fluctuations from one season to the other is to increase private sector investment in essential infrastructure associated with food transportation and improve storage and transport facilities. More emphasis on these strategies could be more effective than increasing government expenditures on price stabilization programmes.

If access to food in Sub-Sahara African countries is to improve and be sustainable in the long-run, it will be necessary to invest more resources in establishing more efficient and reliable markets for both food items as well as agricultural inputs (Jayne *et al.* 1994:39) Additionally, the government must create incentives that encourage rural populations to move away from a subsistence economy to a modern system based on specialization and exchange.

4.6.3 Enabling trading environment

One of the key measures required to make the private sector operate more efficiently is to make readily available information that enables market to respond quickly to changes in the food markets.

One of the expectations of the reform of agricultural markets was that it would raise the overall productivity of the food system by offering farmers incentives to adopt new technologies in production, processing and marketing of food.

Subsidies may not necessarily enhance food security in a nation because they not only perpetuate high cost food practices, they also discourage the emergence of cheap food systems because of the entrenched interests of those who have been benefiting from the subsidies. Subsidies on refined staple products have tended to have regressive impacts

on the income distribution pattern, especially when they were not properly targeted (Jayne *et al.* 1994).

Subsidies on sifted maize meal in Kenya, for instance, benefited the higher income groups more, due to the fact that the lower income groups largely consumed whole maize meal whose processing and marketing did not attract any subsidies.

A survey carried out among 344 urban consumers in Nairobi in 1993 revealed that more than 80 per cent had stronger preference for whole meal than sifted maize meal, (Mukumbu and Jayne 1994). Thus the liberalization of maize marketing, especially the removal of restrictions on maize movement has helped to increase the volume of maize handled by posho millers and to reduce the share of the large millers in total maize consumption.

The study of Nairobi consumers also found that there was negative correlation between household income and consumption of whole meal. Mukumbu and Jayne (1994) show that consumption of whole maize meal was more prevalent among the lower income households while high income households preferred the sifted maize meal. The implication of this is that subsidies given to sifted maize meal largely benefited the higher income groups. Elimination of subsidies on sifted maize meal is thus supported as a measure to reduce this discrimination and help consumers exercise their preferences more effectively. It is also regarded as a policy measure that facilitates the development of a more efficient and equitable food distribution system in which institutions compete freely without distortions from a government controlled pricing system.

Another effect of the shift to small posho mills is that it would help to create more employment and improve the pattern of income distribution since the level of investment required to create a productive employment opportunity in small posho mills is less than that in the large-scale mills (Bagachwa 1992).

4.7 Summary and conclusions

Although the period since serious liberalization of food marketing in Kenya is quite short, ranging between 4 and 5 years for the key food items such as maize, wheat and milk, studies undertaken so far suggest that the reform measures have already had considerable impact in terms of food prices, range of choice for consumers, efficiency in production and processing, importation, institutions, trading networks and equity. Most of these have had positive impacts in terms of welfare gains in the country arising from more active private marketing.

Review of available data from surveys carried out with regard to the impact of key food items, notably maize and wheat, indicate that there have been efficiency gains from the reform measures taken in the last few years. The efficiency gains have resulted from the participation of private sector agents with relatively higher efficiencies than the state marketing boards which had monopolized the markets, as well as from the competition introduced into the system. This has forced the state marketing institutions to make

adjustments aimed at cutting down their costs to enable them retain their share of the market.

The gains resulting from increased private marketing was also reflected in more efficient processing of food. In the case of maize and wheat there were efficiency gains in milling, resulting in:

i) improved capacity utilization of installed milling capacity due to better availability of grains at the required levels and elimination of milling quotas earlier imposed by the NCPB which supplied millers with their requirement for cereals;

ii) considerable shift of maize to small-scale posho millers which had much lower production costs due to their simpler technologies;

iii) the ability of large millers to buy maize and wheat directly from farmers had enabled them to cut down the cost of getting credit for their working capital through negotiations with farmers for the purchase of cereals on credit.

While there has been an impressive response from the private sector in terms of the level of participation and development of new trading networks, private traders are still playing a secondary role, with the state marketing boards being dominant in food marketing four or five years after the reforms were introduced. In most cases, the private marketing firms have lacked adequate storage, transport, processing, financing and institutional capacities to seriously threaten the dominant positions of the state marketing boards. For instance, the limited storage and financing capacities of the large private millers has made it difficult for them to buy large volumes of maize and wheat from the farmers directly, forcing the latter to continue delivering a large proportion of their produce to NCPB. Apart from the short period of time since food marketing was effectively implemented, there are a number of other factors which have slowed the rate of growth and integration of private food marketing channels in Kenya. The first constraint has been the relative uncertainty about the future role of the existing and still powerful state marketing boards. Since the government's intentions about these boards have not always been made explicit, private sector investors have been reluctant to invest heavily in expanding their marketing capacities through the establishment of more facilities. In some cases, the state has been openly hostile to the new actors challenging the role of the state marketing boards.

Another constraint has been the general attitude of the government towards liberalization of food marketing. Since this reform process had more or less been forced on the government, food marketing liberalization has continued to be characterized by weak official ownership of the programme, with the government merely tolerating it. The end result has been that the government has not taken initiatives to assist the private sector to play a more enhanced role in food marketing.

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CHAPTER 5

CONCLUSIONS

Pekka Seppälä

The three case studies of this report provide evidence which partly confirms our expectations regarding the response of private traders to liberalization but which also bring forth interesting surprises. Marketing liberalization is not as simple an affair as it first appears to be. Liberalization needs to be conducted in a planned and orderly manner, to be followed by a number of follow-up measures. Furthermore, the reform process has a number of unexpected impacts on welfare and income distribution, which need to be tackled through policies and projects.

This concluding chapter is divided into three major sections. The first part analyses the evidence generated through the case studies; the reform processes in the three countries – Tanzania, Malawi and Kenya – are compared and major differences in the implementation of reform are reviewed. The second part includes a systematic analysis of material in the light of four research issues: food security policies, the response of private traders, the enabling trading environment and the impacts of reform on prices and production.

The third part of this chapter opens a discussion of general policy questions. In this part, space is also given for self-critique and for formulating further research questions.

5.1 The commitment to reform: evidence from the case studies

5.1.1 The World Bank – the invisible hand ?

The liberalization of food marketing is most forcefully driven by the World Bank. The World Bank has tried in many ways to guide food policy in a certain direction. The first question we pose is whether the World Bank has had the strength and the willpower to dictate policy in every detail.

The World Bank has mainly been interested in reforms leading towards unregulated prices. Once satisfied with a government's privatization measures, the Bank has officially advocated a strong non-interventionist position on markets and the transfer of responsibility for food marketing to private traders. It has only a limited interest in the creation of an enabling environment and institutional framework for privatized food marketing or to follow-up on its implementation (Seppälä 1997). Nevertheless, this study shows that the countries in question have had some scope in deciding the timing, sequencing and the depth of implementation of the reform.

In this study, we have purposely selected countries for analysis which differ in terms of their compliance to international financial institutions. The case studies show that despite the uniformity of the structural adjustment formula, each government has been able to customize the framework so as to set up its own policies on food related issues, thus proving that there is still scope for alternatives. The policy 'conditionalities' are not as strict (or as unpolitical) as they first appear. In Kenya, price deregulation was achieved only after a prolonged wrangle and even then, unsatisfactorily. The track record of a recalcitrant country like Kenya is far from perfect, yet this has not prevented the international financial institutions from supporting the government. While the government of Malawi has secured several loans from the World Bank, it has consistently intervened in both food production and food marketing. The case studies show that the World Bank is far more permissive/adaptive at operational level than at the level of its ideological policy statements – or that its power is far more limited than is often thought.

5.1.2 The governmental commitment to reform

The three countries have each adopted a different track for implementing marketing reforms. In Kenya, food marketing reform was discussed throughout the 1980s but, as Ikiara points out, the government was very reluctant to advance in this field. Only a few of the agreed reform measures were implemented before 1991. It was only concerted pressure from donors who threatened to withhold aid, that made the government reverse its policy. Even then, the president and leading politicians often condemned the reform and accused foreign powers of causing starvation in Kenya. Ikiara points out that the weakness of the reform process was the 'lack of government ownership of the reform'. Even though the birth of reform was difficult, private traders quickly took up the challenge and entered legal marketing in large numbers. The continually changing import/export regulations which had a massive impact on food prices became a major problem for the farmers and private traders. The unstable situation soon translated into diminished production, but it was not until the drought of 1996 that the vulnerability of the situation was fully recognized.

A summary of the implementation and impact of marketing reforms is presented in Table 5.1.

Malawi embraced food marketing reform early but maintained at the same time a sizeable governmental marketing organization. According to Chirwa, the government formally ended the quasi-monopsony of ADMARC in 1987, after which approximately 500-1000 licensed private traders started operations without major harassment. The government, however, still continued to dictate key prices and ADMARC continued to handle marketing operations. As Chirwa points out, there were some problems in sequencing reform measures with adjustments in input prices implemented before price and marketing liberalization. This complicated the operations of private traders and dampened the price incentives of farmers. In spite of the continued regulation of the price of maize, its volatility has still been high in the 1990s. Total maize production has also fluctuated enormously due to droughts. Production has generally been far below domestic demand and the government has continued to interfere in both production and marketing to ensure a reasonable production level. This policy line was also backed by

the fact that Malawi is a landlocked country and unexpected importation is still an expensive solution.

TABLE 5.1

IMPLEMENTATION AND IMPACT OF MARKETING REFORM IN KENYA, MALAWI AND TANZANIA

	Kenya	Malawi	Tanzania
IMPLEMENTATION			
Deregulation of private maize trade	Gradually from 1988 onwards, with occasional steps back to tightened control	Decisively in 1987	In two stages in 1984 and 1987
Reduction of government marketing operations	Officially buyer of last resort since 1994; confused government marketing agency financial relations	Government has continued to carry out heavy operations; price control removed in 1996	Gradually between 1987 and 1991
Commitment to the creation of 'enabling' trading environment	Insecure trading environment; several microcredit schemes in the country	Some training of traders; provision of credit facilities	Provision of market information and upgrading some market places
Commitment to food security after reform	High *post factum* commitment. Changing rules over import and aid pledges	A high level of *post-factum* commitment; interest in supporting farmers	Limited policy statements. Monitoring situation and maintaining modest food reserve; high *post factum* commitment.
IMPACTS			
Maize production per capita	Declining recently far below consumption level	Fluctuating but usually covering demand during good years	Fluctuating around the need but dropped heavily in the drought of 1997
Main beneficiaries of reform	Urban consumers because milling prices declined; importers	Net food producers; traders	Farmers in new central supply areas; government because of reduced costs of food security operations
Main losers of reform	Some government officers; smallholder farmers	Net food consumers	Farmers in the southern highland and in peripheral villages

Source: Based on case studies.

Tanzania which embarked on the path of food liberalization as part of a full economic policy reform in the mid-1980s. This was actually preceded and facilitated by the informalization of the economy for several years. Therefore, the reversal in official policies did not have dramatic consequences. Food marketing was also affected by the fact that the NMC and cooperatives had great difficulties in maintaining food buying operations and the black market took an increasing share of the total market. When marketing liberalization was introduced from 1984 onwards, the basic structure of private trade was already in existence.

During the following years, the government reduced its support to the cooperatives and NMC, but these were still allowed a role in food security and price stabilization operations. Furthermore, alleviating the transitional problems in regions which previously had benefited from production subventions was one of the conscious aims of these operations and the southern highlands were provided with support at least until 1991. After the transitional period, private marketing has prevailed. The private marketing system in Tanzania is dominated by small traders with limited capital and no lorries. There is only a handful of large actors dealing in maize imports and large-scale milling. Although private marketing has functioned reasonably well during the 1990s, it remains to be seen whether it can cope with the 1997 drought.

5.1.3 Explaining the different liberalization paths

If one outstanding and surprising factor in the analysis of food policies is to be highlighted, it is the importance of the institutional mediation of reform. In this respect we can classify three different causes. The Tanzanian approach has been a path of *clear-cut liberalization* with government interference reduced decisively within a fairly short period of time. The sequencing of reforms has functioned. The past drought periods have not caused major shortages in food supply nor necessitated the need for a revision of policies. The 1997 drought, which is still unfolding, puts the policy to the test.

Malawi, in comparison, can be said to have taken the path of *hesitant liberalization*. Clearly external pressure has directed the government to implement marketing reforms but the governmental marketing agency continues to retain wide powers and a considerable market-share. The sequencing of reforms has been poor, causing concern to some stakeholders. State intervention has been so extensive that when private traders have had the opportunity to work, the institutional set-up has been unpredictable and restrictive. The hesitant policy line is partly the result of the severe droughts in 1992 and 1994.

Finally, in the case of Kenya, the liberalization approach to marketing can best be described as *reluctant liberalization*. Kenya harbours powerful stakeholders and high politics determine actual policies. Liberalization was implemented only after certain large farmers, traders and millers recognized its benefits and external pressure (i.e. aid conditionality) was sufficiently forceful. When liberalization was implemented, it was condemned by high-level politicians and denounced as an external – and harmful – interference in domestic affairs. The subsequent food crises were politicized in the extreme and handled through a number of policy changes. As a result, private traders were left totally unsure as to what was the policy line.

Searching for a causal explanation introduces another perspective into the comparison of food policies: what is the factor that explains the differences among these countries; or, what made it possible for Tanzania to liberalize maize marketing in a much more forceful manner than Kenya and Malawi? One explanation stems from the idea that, in Tanzania, the liberalization of food marketing constituted a shorter step than in Kenya or Malawi. Too poor to effectively collect maize, the Tanzanian cooperative system and NMC could not maintain market dominance. Hence, the relatively small market share of official maize marketing before reform could be one explanation. There were also

several important staple crops in addition to maize, making the Tanzanians less dependent on state marketed food than Kenyans or Malawians. In other words, the liberalization of maize marketing was a relatively short step in Tanzania.

While the difference in the pre-reform institutional set-up of the private-public axis may be a determining factor, one should also remember the additional complications in Kenya, where the private-public division is blurred by the 'straddling' of some individuals who are both state administrators and large-scale farmers/traders/millers. The division between public and private spheres is eroded and replaced with complex factional patronage-politics. In comparison, liberalization was easy in Tanzania because it lacked a strong group of estate farmers with high-level political connections.

Next we analyse the four research questions in the light of comparative evidence.

5.2 The reform process: evidence from the case-studies

5.2.1 Post-reform policies on food security: from welfare to charity

The commitment to food security during and after marketing reform constituted the first major research issue. Our primary concern is the commitment to long-term institution building that guarantees access to food in case of emergency. In this respect, Malawi seems to be most earnest. Wiser because of the 1992 and 1994 droughts, the government negotiated a supplemental inputs programme which boosted production in 1996 through seed and fertilizer subsidies. The government also initiated massive food security storage operations (and until recently, took a dominant position in the market) instead of exporting maize (EIU 1996/4 and 1997/1).

In Kenya, the marketing parastatal (NCPB) conducted massive export and import operations, albeit at a loss. The country generated deficits in trying to maintain a market position. The problem of declining food production in Kenya is compounded by the high rate of landlessness. Despite having the highest per capita income of all three countries, the government of Kenya has failed to guarantee food security for its citizens, as evidenced by the recent drought.

In comparison, Tanzania is rather puzzling. The government opted to establish a small food reserve and to minimize interference in food production and marketing. Although production figures are stagnant or slowly decreasing, there have been no major food security problems. A possible explanation for this puzzle is the higher commitment to food security at the local and household level. This may imply increased (and unrecorded) production of food crops other than maize. The critical test still ahead is the 1997 drought, at the start of which President Mkapa estimated that up to four million people could face serious food problems (EIU 1997/2:17). According to the first early warning estimate, total food production was estimated to be some 12 per cent below the self-sufficiency level. Given the generally low income levels, the question was whether people, when forced to become net consumers, would be able to afford food at suitable prices. The government placed hopes on commercial imports but these did not

materialize because the domestic price was, due to low purchasing power, below the import parity price. Fortunately, the following rains have been abundant and the worst-case scenario has been avoided.

Policy discussions show that the issue of food security can be raised in political slogans, especially during food insecurity. The fact that key policy papers are more interested in short-term macroeconomic indicators than in the long-term issue of institution building for food security is a cause for concern. The same short-sightedness is evident in speeches by politicians.

In the introduction, we noted that donors pressed for food marketing reforms because subsidies drained government finances. Following this, we should expect food marketing operations to be currently cheaper for governments because they need not fund expensive price subsidies. Here the evidence is disturbing. In Kenya, recent NCPB operations are estimated to cost KSh 2.1 billion (EIU 1996/3:18). Malawi has continued to invest in food security operations but, interestingly, has retained an active involvement also in alleviating supply side problems. In Tanzania, on the other hand, total government expenditure on food policies has declined considerably with the discontinuation of the NMC and cooperative subsidies. Still, the recent domestic food aid distribution totalled TSh 3.5 billion in costs to the government (Mkapa 1997). The examples show that although the costs of 'preventive' food security policies may have decreased, governments are still continuing to fund key institutions and, what is more significant, they need to pay for 'curative' food security operations. In other words, governments have withdrawn from broad-based control over the food production chain but when, as a consequence, production hazards are amplified, governments still need to rectify the situation.

The same shift of focus can be located at the level of policy frameworks. The three case studies show that the meaning of the term 'food security' has changed dramatically over the past ten years. Earlier, the concept was used to imply broad accessibility to food which was achieved through a combination of strong domestic production basis and regulated prices, and could be compared to general *welfare provisioning* such as taxation or social security payments used in western countries. Food policies had a number of intervention mechanisms which in concert had considerable impact. Lately, however, the term food security has been given a much narrower meaning of simply providing food for those who cannot do it themselves. This is comparable to charity in the western world.[1]

Naturally, maintaining food security through a scheme resembling the western-type welfare provisioning system is more expensive for a country than the *charity* type system. But, one should also note that a welfare provisioning system nourishes existing potentials, so that it has a positive development impact. The broad-based food security

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[1] Focusing on semi-academic food security debate rather than domestic policy motivations, Maxwell (1996) has noted remarkable shifts in the definition of food security during the past two decades. He notes shifts from national to household level, from a food-first perspective to a livelihood perspective and, from objective indicators towards subjective perception. Maxwell's analysis is analytically different from our argumentation but substantively the two are parallel and support each other.

system increased the stability of food prices, boosted production at peripheral regions and, in these respects, increased equality. By contrast, the food security system based on charity merely alleviates the harsh effects of the existing situation. The governments investment in charity (i.e. 'curative' food aid during drought) does not have any multiplier effects.

5.2.2 The private trader – is small beautiful?

The dominance of small-scale traders in private trade is evident in all three case study countries. According to Seppälä (Chapter 2), the small-scale traders are able to compete because they have other income sources at the household level. Traders may be working seasonally and/or part-time and for this reason they are very adaptive to changes in local market situation. Easy entry and exit from trading keeps fixed costs to a minimum. Ikiara (Chapter 4) maintains that food trading is a competitive field and that marketing margins are low.

Small-scale traders are spread widely and both producers and consumers appreciate the work done by traders. Thus the earlier ambivalent and occasionally even hostile attitude towards the traders (induced especially by official ideology in Tanzania) has given way to a pragmatic attitude. The private trader has become an accepted partner in eastern Africa.

Still, all case studies point out that private grain traders may offer very low prices in the peripheral areas due to high transport costs. Thus the utility of a private marketing system is restricted to areas near major roads and major consumption areas. This is a serious shortcoming because it has wide impacts on regional/locational equality.

The large-scale traders mainly deal with imports, and supply the millers and other institutional buyers. In Kenya there is a more developed market segment of large-scale actors where producers, traders, importers and millers are involved. Their interests have a decisive impact on the existing policies.

5.2.3 Enabling environment: small steps and a big task

Enabling environment is a qualitative term which is difficult to measure in a concrete manner. In practise the term refers to active policy initiatives that the government implements in order to help the traders. There are several ways in which government can practically help the traders. Chirwa notes that the government provides training and loans to private traders in Malawi. At the same time the state marketing board has continued to dominate food marketing in many regions. Ikiara argues that private trade has not developed as expected because of the uncertainties surrounding the actual role of state marketing boards, and because these have continued to maintain a high position in the market. In Tanzania, the impoverished government has not been able to offer much help to individual traders. However, it has managed to construct an impressive system to collect market information and to upgrade some market places.

As mentioned above, the most important aspect of marketing environment in peripheral rural areas is the lack of a decent road network and transport services. It is unlikely that

the problem will disappear soon as the costs for constructing and maintaining a decent rural road network are very high. For the same reason it is difficult for the government to rectify the situation through minor interventions like constructing market places or providing loans to traders in peripheral areas.

Credit is another patent solution for professionalizing private marketing, dampening seasonal price fluctuations and thus increasing the efficiency of private trade. Providing credit is a component of the enabling environment, but care is needed in identifying the right provider of credit. Governments have earlier relied upon cooperatives, but these were dissolved in many countries because of inefficiency. Currently banking services are being privatized and restructured in most SSA countries, including the case study countries. The private banks appear to be town-based banks involved in financing external trade and currency speculations. The donor-supported micro-credit schemes still need to prove their financial viability. Thus the institutional mediation for providing credit is yet to be solved. From a client (i.e. a trader) perspective, on the other hand, it is obvious that the risks in investing loan-funded crop storage are considerable.

In the introduction we initiated a discussion of the cooperation and complementarity of the public and private sector actors. The terms for such a division of labour, while initially negotiable, should be, once negotiated, clearly defined and backed with exact stipulations. One can hardly exaggerate the importance of clear and well-publicized rules for government action in the food sector. Cooperation can work only when both sides recognize the value of the work done on the other side of the fence. Cooperation can prosper only when the basic positions are demarcated.

In this respect, there is still much to be done. Case studies on Kenya and Malawi voice the concern of traders that the rules of food marketing are not fixed and that traders are not able to trust the government. In this situation, the traders are not primarily interested in government support in terms of training and market information. What they first and foremost need, is *reliable* government policies: pre-announced rules for food security policies, rules for food released from government stores, future taxation and licensing requirements and other similar government actions. Thus our verdict is that there is much to be done to construct an enabling environment, and that action should concentrate on what government itself is doing.

The reliability of government policies requires the existence of explicit food marketing policies with a time-frame of at least 2-3 years forward. This is mostly lacking at present. Food policy is a field which is at the low end of policy issues. Government can show commitment to it in post-hoc manner, and the commitment in words is not always matched with deeds. The unpredictability of policies hampers private sector initiatives. Particularly large-scale investments in food trade are missing for this reason.

The lack of governmental interest in constructing a reliable policy environment may indicate that food marketing is liberalized and then – as hypothesized in the title of this report – neglected. Our evidence shows this to be the case.

5.2.4 *Prices and production: hard evidence on the benefits and disadvantages of private marketing*

The best indicator for the success of marketing reform is the producer/consumer price ratio. However, the generation of comparable data sets would necessitate sophisticated control and precise timing of the data collection exercise. This can only be done by national surveys conducted by the government itself. Given the lack of such data, we have substituted the next best indicators available –real consumer price, seasonal price volatility and spatial price correlation.

When it comes to changes in prices between seasons and locations, Chirwa maintains that 'the private marketing system in Malawi is not fully integrated for the elimination of both seasonal and spatial variations of prices'. Malawi has had very high oscillations in maize supply and this has certainly increased price fluctuations. However, full elimination of price differentials is an unrealistic aim. Ikiara regards the reduced price differences between various locations as an indicator of an increased market integration in Kenya. Also, Seppälä notes that prices in Tanzania vary in unison more in the 1990s than in the 1980s, indicating that spatial market integration has increased. He also shows that the seasonal price variation has been very high during the lean years, particularly during the failure of short rains, indicating that traders are unable or unwilling to store grain.

At first glance, the development of real consumer prices seems an ideal indicator for analysing the benefits of marketing reform but it is actually affected by far too many factors to provide any clear evidence. After all, it is not possible to estimate what the price level would have been, had other factors been equal but *without* reform (unless a sector model is used, for which data are not available). In any event, low consumer prices have a definite welfare implication for net consumers. Seppälä, based on his analysis of the development of real consumer prices for maize, shows that in Tanzania the consumer price has decreased in the 1990s. He has also calculated the consumer/producer price ratio (with direct selling and after lags). Although the producer prices are not farm-gate prices, they can still be used as an approximate indicator of regional prices relative to those in Dar es Salaam. The data shows that the price ratio has been fairly stable from 1989 until 1995 when it suddenly increased. Chirwa maintains that the consumer price for maize has increased in Malawi. Ikiara argues that consumers in Kenya have benefited from the emergence of competitive milling, which has resulted in a noticeable drop in the price of maize flour.

Supply response is the final test for marketing reform. However, it was argued in the introduction that individual reform measures have so complex and contradictory impacts that we cannot formulate a clear hypothesis as to the overall impact of liberalization on supply response. Furthermore, the production of maize is determined by many factors and factors logically unrelated to reform (like the amount of rains, situation in neighbouring countries or land tenure reforms) are among the most important for determining food supply. In the comparison of supply trends, Kenya is most alarming because the degree of food self-sufficiency has clearly dropped during the 1990s and wheat imports have correspondingly increased steadily. Using a long time perspective we can note that per capita production of maize has also decreased in Tanzania.

Increased volatility is evident in Malawi but so is high production during good years of the 1990s.

In reviewing the supply response of the case study countries, the gender issue should not be overlooked. Food crop production is largely undertaken by uneducated women who are likely to continue as in the past, maintaining, if possible, a household level self-sufficiency, and producing surplus food only occasionally.[2] Increasingly men regard agriculture as dirty and unproductive work in the traditional sector. In addition to better prices or subsidized input prices, a cultural change of gender roles is needed for both women and men in order to develop food production in eastern Africa.

5.2.5 Other studies, other observations

The overwhelming majority of studies on food marketing in SSA have been conducted before the reform period or during the early stages of reform. The case studies presented in this volume up-date the picture on the advancement of the food marketing reform in eastern Africa. The case-studies show the impact of the policy response at the grassroots level. Although reform measures have largely been implemented, there is still scope for rethinking, revision and adjustment. In the following discussion, we open the floor for evidence from other recent studies.

The recent studies presenting comparative evidence on food marketing reform in Sub-Saharan Africa include Jayne and Jones (1997), Coulter (1994) and Elbadawi (1996). Sensitive to 'high politics' both at international level and over the different domestic filieres/production chains, Jayne and Jones (1997) provide the most comprehensive and analytically interesting analysis of food marketing reform in SSA. They point out the possibilities of market segmentation, the importance of the milling industry, the practical constraints on petty traders, the problem of increasing domestic food supply and the heavy costs incurred to governments due to continued food security operations. Having noted the problems of private marketing, they recognize that high price fluctuations may trigger political pressure for government to revert to market interventions. In seeking solutions to the problem, they first and foremost recommend investments in agricultural production to increase food supply, strengthening of the 'enabling environment' through investments in transport infrastructure, market information, the legal foundations of marketing systems and the like. Thus they carefully avoid spelling out any direct interventions in prices. Although private marketing works fairly well during the good harvest years, there is still a need to address its capacities and functioning during lean years. According to Jayne and Jones, there are always ways to make marketing system more efficient and to improve its coverage and reliability without disturbing the basic structure.

Coulter (1994) has also constructed a balanced view of food production and marketing problems in SSA. His analysis, because it is dated a few years earlier, covers the process

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[2] Gender sensitive perspective shows that the major problem of female food producers is the time constraint during the peak agricultural seasons. If this problem is to be taken seriously, the major device for increasing agricultural production might be to indirectly increase productivity in food processing and fetching water by introducing better stoves, kitchen tools and water wells.

of liberalization still at hand and provides detailed advice on the best procedures for marketing liberalization. Although Coulter advocates liberalization measures, he puts a great emphasis on the calibration of reform through government support to create an enabling trading environment. He emphasizes issues like improving the transport network and storage capacities. In the same way, Pinckney (1993) argues that price fluctuations of staple food crops are a legitimate source of concern for the SSA governments because oscillating prices cause major welfare costs. He proposes a close follow-up of the market (in order to spot food shortage in advance) and small grain reserves to be supplemented with quick imports as necessary.

Elbadawi (1996) has studied the more specific issue of the relationship between structural adjustment and droughts in Sub-Saharan Africa. He shows that the relationship works in both direction, arguing that the drought situation forced some countries to implement SAPs while in others, the drought made it more difficult to tackle the adverse effects of SAP. Since droughts are inevitable, the economic machinery and food policies in particular need to be prepared for the hardship. One could put this argument more strongly and argue that the structural adjustment programmes were planned *as if* African countries had a stable economic environment, fully established (i.e. low cost) institutional setting, an authoritarian government (without any need to consider regional/ethnic/class constituencies) and no possibility of natural resources – in sum, a predictable and low-risk economic environment. Such premises were faulty and thus dangerous.

5.3 Unresolved questions and future policy options

5.3.1 Food marketing debate: agreement or hegemony?

In this final section, questions – both answerable and speculative – are presented for further research on food marketing. It is not our intention to offer self-evident questions but to introduce issues which inspire research towards new tracks. After all, the research on structural adjustment tends to reproduce a definite way of telling a story (i.e. a narrative structure) whereby the historical incidents are interpreted as if they were self-evident steps in the process to an undisputed end. The understanding of reforms as inevitable, limits the furtherance of research.

The debate on food marketing reform seems to follow a similar pattern to most of the discussion on structural adjustment: first there was a high amount of speculation on the possible impacts of reform. Once the reform was in process, it was accepted as fact and the discussion shifted towards issues like legitimating reforms in the local political arenas, correcting some problems in the operational level and trying to reduce the unintended negative consequences of reform. Academic discussants express fairly similar views on the major issues of food marketing. The question to be asked is, whether the advancement of discussion into the minor issues reflects achieved agreement or merely the acceptance of liberalized marketing as a fact.

It is tempting to say that the current food policy debate reflects shared ideological assumptions – the hegemony of mainstream thinking. One can seriously ask, whether

the main policy issues regarding marketing structures, which encourage domestic food production and provide affordable food to both rural and urban net consumers, are solved? Since the answer is negative, one needs to look for stronger policy instruments than those which are currently used. The policy alternatives need to be sought with a realistic framework on commitment/resources and without ideological biases.

In the following discussion on policy alternatives we raise three issues. First, what can be realistically expect from a government in the field of food policies and projects? Second, in what direction is the domestic policy debate on food advancing, given the emergence of a new configuration (i.e. private market dominance) and stakeholders (e.g. opposition parties)? Third, to what extent can we look at food marketing as a national level issue and how far can local and global perspectives be integrated into the formulation of food policies?

5.3.2 What we can expect from government's food policies and projects

A basic question in food policy is whether government should treat food differently from other commodities or should it allow the market, following neoclassical economic theory, to decide which items – food or non-food – are produced.

Neoclassical economist say that 'food' should not have special status. They argue that government interventions merely increase costs because they tend to dislocate production to unproductive lands, to distort competition between various crops and to create unnecessary administrative costs. If this line of argumentation is accepted, food policies can be minimized. In contrast, classifying food as a distinctive category implies a certain essentialist approach in which 'food' is equalized with basic needs. The essentialist approach then combines the political responsibility of the government to guaranteed access to food.

The debate is usually conducted in terms of analysing how markets work. The arguments for and against liberalization are made in relation to what we can expect from the market. However, one might as well turn the tables around and ask what we can expect from government.

While shifting the focus on government it is immediately obvious that the tools of analysis and the utilized data are different in kind. Government, when studied closely, appears to be a complex and internally contradictory actor. It incorporates private actors (administrators and politicians) which occasionally work against the stated aims of government. These contradictions are difficult to place within an analysis. To put it simply, the discussants in food policy debates show an amazing variation in how they conceptualize government and what they expect a government is capable of doing.

The 1990s have witnessed a lively discussion on the capacity of state as a responsible actor. African state formations are alternatively described as centralized and strong, weak, clientilist, elitist or even predatory. Each analyst chooses a matter to focus upon and finds evidence for his or her perspective. This confusion merely underlines the multi-layered character of the African (and, with some reflection, any) state apparatus. When the government's food policies and projects are to be discussed, the main

questions are, first, what resources the state has available for food-related operations, second, where does it have a comparative advantage over the private actors, third, which operations can be justified on political grounds (equality, domestic stability) and, fourth, which operations create rent-seeking behaviour.

When it comes to resources that government has available for food-related operations, there is large agreement that fiscal pressures put a limit on food-related expenses. Debt payments (and related conditionalities) form a serious fiscal constraint but one should also note the requirements of security -related expenditure (all the case study countries are bordering countries with internal wars) and the social sector (which has been forgotten and requires a boost of resources). Meanwhile, liberalization of the economy has not generated high increased taxes from cash crops and minerals. Thus the fiscal constraints are clear and overspending is likely to occur.

Governments still have a significant resource in the form of an educated workforce which has experience in evaluating agricultural production trends, their causes and consequences. Food policies require a back-stopping of institutions which cover a whole country and which can, within a relatively short-time, transfer information and material from the periphery to centre and the other way round. So far, only the government has such stable nationwide institutional structures.

When government is assisted by donors, it also has the capacity to launch large-scale investments in food-related operations when these are deemed important. If a large amount of capital is needed for a short-time external trade operation or for long-term storage construction, the government-donor alliance is operational.

The comparative advantage of the state can be evaluated through a historical assessment of the past record. It shows that when drought and starvation have occurred, governments have had the capacity to mobilize food from external sources. Thus government is, and will be, a more capable actor than the private sector in conducting large-scale international food security operations. It is likely that the same holds also in relation to large-scale food storage and external trade during bumper harvest. Briefly, nations will lose a lot of resources if they are unable to cope with inter-seasonal and inter-yearly price fluctuations of external food prices because of their liquidity problems. The private sector actors are usually unable to accumulate adequate capital and/or unwilling to take risks in food trade. The government has a role to play here.

The domestic marketing of food is generally conducted competitively by private traders. However, they are incapable of providing a fair price for net-producers in peripheral areas. A market-based solution is the migration of losers to more productive areas. However, given the rootedness of rural population and given the ethnic/parochial tensions that labour/land migration induces, there are sound political reasons for the government to intervene and provide special backstopping for peripheral areas. In this issue, the palate of policy options is not necessarily limited to direct food marketing support but more indirect support measures may be more feasible.

In the field of domestic food marketing, one serious bottleneck is the high cost of long-distance transport. Thus a large country can face simultaneously regional pockets of over-supply and deficit. The cost of transport may rule out long-distance haul as economically non-viable. Government may be needed in organizing long-distance transport because it can operate with the necessary capital-intensity and/or it can use sound political reasoning to justify some losses. However, a public long-distance marketing operation is very difficult to organize without creating possibilities for rent-seeking activities.

Government has a legitimate task to guard political stability and equality through food-related price subsidy policies. However, there is a very thin line between equalizing subsidy policies, clientilist political structures and rent-seeking activities. It is quite possible that a single operation (say, a relief operation in a peripheral area) serves all these three motivations simultaneously.[3] The negative effects of direct food price subsidies are well-documented.

Government has proved to be a more reliable partner in input supply than the private sector. Government has more capacity to take risks and engage in large-scale operations in this field than private actors. Government has also the option of making non-economic subsidies in input supply and calculate that it will receive returns indirectly, through increased production and reduced need for food security operations. A private sector actor cannot calculate these indirect impacts into his equation.

The government has a definite non-economic obligation to provide food during periods of starvation. At the same time one should note the vulnerability of food security operations to rent-seeking activities. Thus the government's openness and transparency should be greatly increased in these fields. While government has a mandate (over the private sector) in food security operations, this mandate should be strictly limited and closely controlled. Furthermore, its linkage to government's 'normal' food marketing operations should be clearly defined.

At the heart of the government-private sector debate is the extent and type of the government's 'normal' food marketing operations. Should government be involved in price stabilization through market interventions? How can price stabilizing purchases and crop releases be managed without reducing the interest of large-scale private traders to invest in food marketing? If government has to circulate its grain reserve stock and thus sell large amounts of food to private traders/institutional consumers, the motivation may be different to price stabilization but the effect is the same: large stocks of food coming onto the market. For the development of private investments in food marketing it is important that the government's crop purchases and releases (whatever is the reason for operation) are started only when pre-announced conditions are reached, they are

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[3] The tricky issue here is the relation between the two: do the poor really want the government to supply them with food, or does the government need to flaunt its importance by controlling food allocations? A Foucaultian sociologist might say that the food security dialogue is based on the governments' determination to govern people who would otherwise be only too happy to mind their own business. In other words, *governments* need the food issue and food crises for the legitimization of their governance and taxation.

conducted through transparent procedures (preferably with open rather than secret tendering), taking into account regional and inter-regional differentiation. If purchases and releases are to deviate from market-based operations, one needs to consider further, what crops are self-targeting (i.e. consumed mainly by the poor) and whether the deviation from market-principle can be reached through concentrating subsidies on these crops.

This discussion shows that the government has many tasks to accomplish above the minimal tasks of providing a legal framework for private trade. The exact level of government involvement depends on two factors: its resources and its commitment to poverty eradication.

Although the neoclassical hands-off argument has its merits, one should critically ask whether its academic economic terminology serves the analysis as a tool or whether it guides the scope/direction of the analysis. The main problem with the neoclassical argumentation is not what it is able to analyse, but what it excludes from the analysis.

Neoclassical analytical tools have the greatest difficulties in including risks into the analysis in a meaningful way. One should remember that SSA agriculture is controlled by rains and generally poor soils. Agricultural production is extremely vulnerable and, during bad years, food shortages are a problem. These factors should be taken into the equation when food policies are formulated. Although a government can occasionally capitalize from these shortages, it still seems that SSA governments have previously been more responsible in their practical approach to the food issue than their counterparts, the neoclassically oriented international financial institutions. Governments have recognized the importance of food policies for regional and class-based equality. They have also been interested in the stability of prices. Governments can argue that the long-term stability of food prices is a key issue with implications for income distribution, domestic investments and overall economic growth.

Another factor which can be used to defend government interventions is the centrality of the issue. Since food items cover some 40-70 per cent of household expenditure (depending on region/class) in Eastern Africa, wide government interest on the issue is still justified. Thus, if the political systems allow for a responsible and future-oriented political discussion, active food policy should be on the agenda.

The difficult question is how to use food as a category under a predominantly liberalized marketing environment. How can policies modify markets without paralysing them? How can the creation of bureaucracies and vested interests be avoided? Clearly, more policy debate is needed.

5.3.3 Food as an issue in the domestic policy debate

In analysing policy options, it is useful to avoid reliance on a straightjacket approach that forces a discourse within strict predetermined parameters. It should not be taken for granted that the words 'food security' have a definite importance for food policies. Instead it should be asked, what questions does the government address when it formulates its food related policies. Is it responding to the question of food security for

the poor? Is it primarily interested in achieving fiscal balance? Is the government simply following the advise of the World Bank? Or is the government trying to span the welfare gap between the urban and the rural population? Does it try to balance between various regional constituencies? Once we introduce this level of questioning, the policy options are wide open.

When food is studied as an issue of domestic politics we soon notice that there is no right policy as such. Rather, policy is appropriate only in relation to a set of policy aims. If the universal access to cheap food (i.e. food security in the traditional sense) were given priority, the 'right' policy line is different to a situation where the advancement of a capitalist price mechanism (i.e. competitive market) is given priority. Now consider that the government is committed to advancing both agendas simultaneously. How can it strike a balance? There is no doubt that the various policy lines are mutually incompatible and some compromises need to be made.

The domestic food policy discussion can be complicated still further. Besides the government, there are also other stakeholders, namely farmers, traders and consumers who also make their choices, depending on their individual aspirations. Again, it is not self-evident that the abstract aim of food security is at the top of their priority list. They may have totally different issues a stake. Let us go back to the basics. Food has numerous functions and a researcher should have a clear mind as to which meaning is important for each stakeholder. Food can be understood as:

- a means of survival,
- a commodity to be traded,
- a means for welfare provisioning,
- a means of increasing political power, and
- a budget line in government finances.

Food can serve all these functions simultaneously.

Studies of the liberalization of food marketing tend to take it for granted that food is primarily a commodity to be traded. When this assumption is made, we have seriously narrowed our policy analysis. There are good grounds to say that trading is not the main issue for several stakeholders. Among the farmers, for example, there is only a tiny minority who cultivate food primarily for sale. Politicians, on their side, have well understood the importance of food as a means of catching votes. And for donor agencies which have a number of (incompatible) food-related agendas, fiscal prudence is a value which they repeatedly emphasize above others. It is good to pause for a moment and think what kind of 'policy debate' we have when each party relates food to a different issue. Perhaps the food debate is calm simply because there is no common lead to follow.

The pre-reform domestic food policy debate was different in the sense that it institutionalized the setting for coherent argumentation. The setting was provided by the

government promising cheap domestically produced food and the urban customers (and rural voters) criticizing the government.[4] The views of producers and consumers were listened to simultaneously. The issue was well enough defined for political lines to develop and the argumentation to stay coherent. Apparently, the debate was often led into directions where populist policies led to adverse impacts (like when a promise for cheap urban staple food led to establishing a milling industry which provided a very expensive service). Nevertheless, the food debate was loud and clear.

The post-reform domestic policy debate lacks a similar keynote. The problems of production and marketing are separated from each other. The government is no longer responsible for prices and, if food prices escalate, it has a good selection of scapegoats (like IMF and traders) to blame. The other actors (notably traders, farmers, customers) are actually analytical labels for unorganized and unrepresented groups of people which, furthermore, have limited institutional means to address each other within a political forum. Consequently, there is no self-evident way to address the food issue. If we define politics as a field of institutionalized debates, then the food question is currently a non-issue.

What can be concluded from this perspective? The political scientists (who are in great demand nowadays) should discuss the food issue instead of leaving it only to economists and agriculturalists. Second, the political parties should try to formulate food related policies which are not populist, yet address the key issues of the stability of prices and the equality of beneficiaries. Third, government and donor support should be channelled to the representatives of new political actors, namely the associations representing the interests of traders and consumers. One group which certainly lacks representation in the debate is the rural net consumers, composed mainly of agricultural labourers and the landless.

5 3.4 Alternative levels of analysis – alternative voices

Is food a national level issue? We have used the national level of analysis as if it were a self-evident choice. During the pre-reform marketing period, there were indeed sound reasons to adhere to analysis at the national level. Many policy instruments (like pan-territorial prices and national marketing agencies) meant that all people were affected by the central government policies, at least to some extent. During the post-reform era, the national level is far less the self-evident level of analysis.

Location-specific marketing circles provide a challenge to national markets. As nationwide governmental marketing systems are dismantled, there is more opportunity

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[4] Jayne and Jones (1997:1522) aptly describe the pre-reform policy situation as a social contract. In their words,

> ... food grains, especially maize, became the cornerstone of an often explicit social contract made by the majority governments at independence in an attempt to redress the imbalances of the former colonial regimes. Where smallholder grain production expanded significantly since independence (Zimbabwe 1980-85; Zambia 1985-90; Tanzania 1975-79; and Kenya 1975-79), this growth has been associated with major investments in state marketing infrastructure and credit disbursement, and state coordination of credit, input delivery, and assured outlets for crop sale.

for agro-social areas to differentiate into distinctively profiled areas. Some peripheral areas may divert towards the exceptional local staple foods; food items which usually tend to be less transportable like root crops or bananas. Certain other locations may become the supply areas for high-cost food items destined for urban centres. Yet other districts may specialize in one food staple crop and trade this item to several locations. The distinctive marketing structures that emerge in each locality do not follow a common pattern; they are specific to crop, marketing infrastructure and demand structures.

Analysis of the marketing of less important food crops has always been rather unsystematic. Since governments have not provided statistical material on minor crops, their marketing systems are poorly recorded. If the minor crops had been fully recognized, the idea of the integration of private food marketing might be more cautiously presented.

Emphasizing local marketing circles combines together a set of previously unrelated discussions. First, it incorporates the 'farmer first' orientation which refers to contemporary farming systems research (a special type developed to deal with risk-prone smallholder agriculture in culture-sensitive manner) and which links subsistence farming together with surplus production. Second, it incorporates the analysis of local marketing networks which serve short-distance trading but which is a key element in the cost over the whole marketing chain. Third, it incorporated the lively discussion of local governments which are currently given increasing tasks, taxation rights and political roles. So far these three discussions have advanced largely on their own and they are only tangentially included in food policy debate. It would be interesting to see these elements combined together for serious local (district-wide) discussion of food security.

International trade of staple foods provides another source of criticism for limiting the analysis to the national level. Food policy before reform was built on an approximation of national self-sufficiency but in the post-reform period, it is part of the open economy where imported food competes with locally produced food. In an open economy, if imported food is cheaper than locally produced, rational traders resort to importation without concern for the welfare of the surplus farmers.

The three countries studied in this report are hovering around, and occasionally dropping below, the aggregate level of food security. In each country, the number of poor people with insecure access to food is vast. One could entertain the grand vision of globalization and the specialization into (primarily non-food) crops with comparative advantage as the solution to the food problem.[5] However, given the relative poverty of

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[5] Based on the argument presented by Ricardo for England and applied, for example, in Korea, one could visualise international grain trade as a source of cheap grain and therefore a source for decreased labour costs which foster increased competitiveness, industrial growth and increased capacity to pay the food bill. This vision, however, is based on false premises. The prospective 'late industrialising' countries (like our case study countries) are facing a different world to the one that existed during the past century or even during the 1950s. Requirements for the quality of labour needed by competitive industrial capital do not match those offered by the primary school leaver in Tanzania or secondary school leaver in Kenya. The argument of comparative advantage needs to be placed in the context of a political equation where the

the countries studied, it is likely that imported grain will remain a luxury item which can be bought by coastal urban consumers and others only when special circumstances so require.[6]

Managing the international food trade is still a skill that governments as well as private traders need to acquire. Globalization of the food market is not merely caused by the 'invisible hand' of the market because food itself is a commodity sold by the mighty. WTO has recently issued an ordnance for third world countries to abandon full food self-sufficiency in favour of importation.[7] Given the dominating role of a few multinational corporations in the world grain market, this advice is hard to understand. Governments need to consider carefully the extent to which they are prepared to rely on imported food.

For researchers the other levels of analysis provide new challenges. The local and global levels of analysis are complementary to the national level. When these levels are addressed, one needs to generate data which are generic to these levels. The aggregation/disaggregation of national level data is not an adequate solution.

5.3.5 The key policy issues

It has been established in this study that the range of food policy issues is wide and that international financial institutions do leave options for governments, farmers and traders to formulate their own policies. The most difficult task for analysis is to locate the key policy issues. The following discussion includes an attempt, albeit disputable and far from modest, to introduce such a set of issues.

First, the scenario of a benevolent government and obedient farmers willing to make sacrifices for the sake of the national good is not feasible. Food policy, for this reason, needs to be publicly debated. The institutional framework needs to provide adequate balances and checks to ensure proper political negotiations. A means to disseminate information on food policies, food supply and food prices is the minimum requirement. Information on food prices may currently be readily available, but information on other sets of facts is less well distributed. Negotiations can begin in earnest only after basic information is available.

Second, the enabling trading environment should be based on a degree of stability in food-related policies. Whatever the policy line may be, it must be clear, transparent and binding. This is a difficult task because circumstances with regard to food security and market situations change enormously from one year to the next. Still, the government has to define in advance definite policy parameters, which can then be supervised by the

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price trends of main cash crops and minerals and the distribution of benefits accrued from them, are closely studied.

[6] Cross-border trade is a special case here. It is based on competitive demand and thus it is difficult to control. Paradoxically, some of the exporting surplus regions have serious problems with malnutrition. These cases call for more local attention rather than blanket solutions on cross-border trade.

[7] This relates to tariff regulations. Countries are exempted from tariff reductions in major staple foods as imports are at least 4 per cent of consumption in 2005 (Hoekman and Kostecki 1995:206). Since wheat and rice are competitively imported into many countries now, this condition is likely to be easy to fulfil.

political opposition and other agencies. The reliability of all policies is crucial to both traders and farmers. At times, clarity of the policy line is more important than even the exact location of the line itself.

Third, governments need courage to tackle food issues at the different levels, addressing global challenges as well as local potentials. The time is over for a government to issue a 'policy paper' quantifying the tractors and fertilizers needed for a certain aggregate national food production. The national food situation is affected by global price trends and local potentials that will shape the food market into a new form. Recognizing these various levels of analysis does not imply a simple surrender to let the markets decide. There is still scope for active food policies.

Food policy issues are certainly not solved with the liberalization of marketing. The problems are just more difficult to observe and to tackle. If one expects that liberalization leads to a 'hands-off' situation which, for a government, is a low-cost option, one has misunderstood the functioning of private markets. Private food marketing systems need to be harnessed and guided, not neglected.

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