

AGRICULTURAL MARKETS BEYOND LIBERALIZATION

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CONTENTS

Part 1 Introduction

- 1 Agricultural markets beyond liberalization: Issues, Analysis and Findings 3
Arie Kuyvenhoven, Henk A.J. Moll and Aad van Tilburg
- 2 Agricultural markets beyond liberalization: The role of the State 19
Erik Thorbecke

Part 2 Agricultural Markets in Transition Economies

- 3 'White gold' versus 'Food Self-sufficiency' in former Soviet Central Asia 57
Max Spoor
- 4 Russian grain markets 1991-1998: Transition without a functioning domestic market? 77
Michael Kopsidis
- 5 Rural land markets and economic reform in mainland China 95
Xianjin Huang, Nico Heerink, Ruerd Ruben and Futian Qu
- 6 Performance of markets in a context of liberalisation: The hog industry in Northern Vietnam 115
Katell Le Goulven

Part 3 Market Liberalization in Africa

- 7 The effects of liberalization on food markets in Africa 135
Ousmane Badiane
- 8 Price setting power among wholesalers and retailers: Maize in Benin and sorghum in Burkina Faso 159
W. Erno Kuiper, Clemens Lutz and Aad van Tilburg
- 9 Comparing liberalisation in agricultural input and draught animal markets in Benin 173
Houinsou Dedehouanou and Paul Quarles van Ufford
- 10 The puzzle of the absent rural formal financial institutions 191
J.G.M. (Hans) Hoogeveen

Part 4 Liberalization: Institutions and approaches		
11	Voluntary marketing institutions in food marketing systems <i>Matthew Meulenberg</i>	213
12	Taking gender: Social institutions as regulators of markets <i>Barbara Harriss-White</i>	235
13	Rice and corn, and the ASEAN Free Trade Area Agreement <i>Lilibeth A. Acosta</i>	253
14	Modeling public goods provision in agriculture <i>Ernst-August Nuppenau and Ousmane Badiane</i>	279
	About the contributors	299
	Author index	305

PART 1

INTRODUCTION

1 AGRICULTURAL MARKETS BEYOND LIBERALIZATION: ISSUES, ANALYSIS AND FINDINGS

Arie Kuyvenhoven, Henk A.J. Moll and Aad van Tilburg

1 INTRODUCTION

Liberalization of agricultural markets has been on the agenda of policy makers and international organizations since the beginning of the 1980's. To a large extent this reflected the growing recognition that widespread government intervention in markets was much less effective than previously expected, while negative side effects resulted in misallocation of resources, reduced economic growth and an often adverse impact on equity and the environment. As a result, policies in the industrialized world became increasingly oriented towards less government interference, and were characterized by a simultaneous shift from national to supra-national regulations. Developments in Eastern Europe, the former Soviet Union and China took a dramatic change towards more freedom for individual and communal market participants. In much of the developing world, policy reforms under structural adjustment programs led to a redefinition of the role of the government in relation to agricultural markets.

Internationally, the framework within which agricultural markets functioned was affected by the results of the Uruguay Round trade reforms. For the first time in the history of the GATT (now WTO), agriculture became an integral part of multilateral trade negotiations. The proper functioning of international agricultural markets was discussed, problems of export surpluses were frankly acknowledged, and market access of developing countries was accepted as a legitimate goal.

As a result of these national and international developments, agricultural markets world-wide have entered a long-term process of liberalization, with the aim of reducing imposed market imperfections such as monopolistic public trade, entry barriers and subsidies. As markets and market channels disseminate (dis)incentives to production, trade and consumption decisions, this process affects the entire agricultural chain from primary activities to processing to final consumption. The experience of more than a decade of agriculture liberalization offers a good opportunity to review and analyze (part of) the outcome of this process and to draw lessons for the future. This experience is necessarily multi-faceted as pre-liberalization conditions, timing and sequencing of reforms, as well as the wider economic and social context within which policy adjustment took place, differ by country and by type of market.

Liberalization of markets implies changing the way markets are organized, i.e. changing the presence and combination of institutions in a market that defines its

structure. It also means changing the rules and incentives governing the conduct of individual institutions in the market. Market structures have a spatial dimension, ranging from local to global, and a social, indicating those involved in the various institutions with a range from individuals engaged in a contract to world-wide parties to WTO agreements. The central topic in this volume is the relationship between market structure and how markets perform in a dynamic context during a liberalization process. The topic is studied from both a micro and macro viewpoint and refers to different types of agricultural markets. Market performance is not only measured against the classical yardsticks of effectiveness, efficiency and equity, but also against indicators such as food security, sustainability of resource use and people's live hood.

In this way, the present volume brings together the dynamics of agricultural markets in several parts of the world, with a special focus on transition economics and Africa. The different studies cover geographical areas as wide as a district as well as a group of countries, and institutions from individual contracts to multi-national organizations. The analysis of liberalization under different circumstances, and the different methods of analysis used by the authors provide a valuable foundation for the assessment of liberalization.

This book results from selected contributions to the international seminar "Agricultural Markets Beyond Liberalization", held at Wageningen University in September 1998. The seminar was organized as the 57th European Association of Agricultural Economists Seminar, the third of its kind dealing specifically with development issues (the first seminar took place in Montpellier, 1989, the second in Hohenheim, 1992). About 90 participants from all over the world attended the sessions and the papers selected for publication reflect this diversity. Especially encouraging has been the response of Ph.D. students affiliated with European universities and research institutes; several of their papers appear as contributions to this volume.

The remainder of this chapter is organized as follows. The next section discusses how agriculture has behaved under structural adjustment. Special attention is paid to macro and price policies, public goods and services provision, and food security. The impact of reforms on agricultural supply response, markets and institutions is briefly dealt with in section 3. Section 4 synthesizes the various contributions to this volume thematically, and attempts to characterize market structure and performance during and after liberalization. The final section brings together the main findings and identifies unresolved issues in a post-liberalization era.

2 AGRICULTURE UNDER STRUCTURAL ADJUSTMENT¹

In terms of income and employment, the agricultural chain from primary producers to final consumers makes up a substantial part of any economy, especially in developing countries (LDCs). The nature of agricultural policy is therefore highly relevant because it affects major markets and institutions. Historically, agricultural policies in many (developing) countries have been complex and contradictory because government interventions have sought to achieve many, often conflicting objectives. In the industrialized world, the concept of multi-functionality of agriculture has added to this complexity.

Agricultural and rural development objectives can be achieved by a wide variety of policy instruments, which can be imposed directly at the farm level (production subsidies, food procurement), the national border (trade instruments, exchange rate), or at some other point in the market (parastatals, price instruments, public investment) (Colman and Young, 1989). Each intervention is characterized by a multitude of intended and side effects on prices, efficiency in production and consumption, fiscal and foreign exchange balances, income distribution, nature and environment, and the overall structure of the sector. Careful analysis is, therefore, a necessity to establish the quantitative link between these interventions and their effects on agricultural resource allocation and farmers' welfare.

In probably no sector of the economy has policy intervention been more pervasive than in agriculture. Sadoulet and de Janvry (1995) provide an illustrative summary of the wide variety of policy measures related to the agricultural sector:

“... farm subsidies in [developed countries], usually through price support programs; taxation of agriculture in the LDCs through overvalued exchange rates, industrial protectionism, and export taxes; price stabilization interventions through food stocks and variable levies; food self-sufficiency and food security objectives; minimum acreage (cotton in Egypt) and maximum acreage planted (land set-asides in the United States and Europe); consumer food subsidies through cheap food policies, fair price shops, and food stamps; input subsidies, particularly to credit and fertilizers; monopolistic control of markets through parastatal agencies; regulation of competition on agricultural markets; direct income (decoupling) and assets (land reform) transfers; and public investment in agriculture such as infrastructure, irrigation, research, and extension.”

The reasons for these extensive policy interventions are related to a number of important characteristics of the sector and follow directly from the theory of public choice (Stiglitz, 1987). Agriculture not only produces strategic wage goods, depends crucially on the natural resource base and has a major spatial impact, it is also characterized by :

- a generally limited sensitivity of total demand for food to changes in real prices;
- a similarly modest short-term response of total agricultural output to changes in real prices (due to the comparative immobility of factors of production and the high proportion of fixed costs in family farms);
- a pronounced substitutability of individual agricultural products both on the demand side and in each farm's production plan; and
- the importance of physical infrastructure and institutional factors for agricultural production, processing and marketing, which is overwhelmingly characterized by public decision-making.

Theoretical reasons for intervention include such market failures as imperfect competition, public goods (infrastructure, technological innovations), externalities (pollution, erosion, common property), risk, high transaction costs and imperfect information. The last three phenomena play an important role in explaining agrarian institutions that try to cope with market failures to supply credit, insurance,

management and supervision. Among the interventions to serve "non-economic" goals, improvements in the distribution of income (including poverty reduction), sustainability in resource use and food security prevail. Government's role is severely constrained, however, by information, implementation and motivation failures, especially in many LDC administrations. Complex side effects of interventions pose serious problems in predicting overall effects.²

Macro-economic policies

In many LDCs, in particular in Africa and Latin America, an implicit and explicit burden has been placed on the agricultural sector. The implicit burden is the outcome of macro-economic policies geared to the promotion of industrial activities (by means of tariff protection, quotas, subsidies, government investment, etc.), and of the resulting overvalued exchange rate. The explicit burden on agriculture consists, for example, of taxes on agricultural exports and major price disparities where marketing boards are responsible for buying and selling. These and other price interventions have resulted in an unfavorable internal terms of trade between agriculture and other sectors. Rather than sectoral policies, exchange rate, trade and tariff policies can be considered the major determinants of agricultural prices. Protection of the industrial sector has raised the prices of inputs used in agricultural production and of consumer goods. Regulation of agricultural markets, taxation and currency overvaluation have led to low prices for farm products.

The anti-agricultural bias in macro-policy in most of the developing world has left a clear mark on the sector's performance. Advances in productivity growth slowed down in much of the 1970s and 1980's, particularly in Latin America and Africa, and the gap between agricultural and other income continued to widen. The policies to counteract this phenomenon have mainly relied on instruments with a significant bearing on the budget (input subsidies, subsidized grain marketing). The down-turn in agriculture commodity prices starting in the late 1970s, the debt crisis following the two oil shocks and the reluctance to reduce public expenditures to balance lower revenues, revealed the unsustainable consequences of those policies. Fundamental macro-economic balances needed to be restored and new sectoral policy orientations to be formulated. For agriculture, this meant a change from a controlled but unprotected sector to a more free but moderately protected sector, without major claims on the budget (Norton, 1992).

Structural adjustment³ programs sought to achieve this ambitious turnaround toward restoring equilibrium and enhancing efficient supply response. Most reforms, therefore, stressed the need for sustained growth and net export of agricultural products. To this end, efforts were made to improve the internal terms of trade for agricultural products, to adjust the real exchange rate and to increase productivity and efficiency in agriculture. While the measures taken differ among countries, a number of common features can be detected in most adjustment programs:

- Price liberalization: abolition of direct price controls of agricultural products; adjustment of guaranteed prices, commodity taxes, interest rates, and the exchange rate; reduction or better targeting of subsidies (on food consumption, fertilizers and other agricultural inputs).

- Redefining the role of government: privatization of public enterprises; increasing the effectiveness of support services; better cost-recovery.
- Stimulating the private sector: selective public expenditure measures to improve access to credit, the provision of information, transport, storage facilities.
- Removal of quantitative and administrative trade barriers and tariff structure reform: abolition of quotas and licensing, and the introduction of a more uniform system of (modest) tariffs to ensure comparable effective protection in industry and agriculture.

In many Latin American and Asian countries, reforms have worked out positively (Corbo and Fisher, 1995). The 'East Asian miracle' in agriculture has been sustained by avoiding overvalued exchange rates, targeting of subsidies, concessional credit - usually tied to prescribed input packages for high-yielding varieties, and sensible output support packages - if necessary with protective trade provisions. African countries have shown mixed results. Among the reasons are incomplete price reforms, insufficient abandoning of negative protection of agriculture due to falling world market prices and fiscal constraints, and the failure of governments to make complementary investments in infrastructure, technology, human capital, and to initiate specific support programs.

Price policies

Agricultural price policies have been largely insufficient to compensate for the strong price-depressing effect of macro-policies. Other compensating interventions (i.e. input subsidies) have often been regressive and discriminating against the poor. The high costs in terms of efficiency and distribution of price distorting interventions in agriculture, insufficient targeting and under investment in overhead provisions are by now well documented (World Bank, 1986a, b; Timmer, 1988, Norton, 1992; Sadoulet and de Janvry, 1995). Sectoral policies heavily relied on fiscal measures, price stabilization, market policy and the subsidization of consumers and producers. These policies mostly resulted in adverse effects on agriculture and, consequently, on the incomes of those who depend on this sector for a living.⁴

Compensating policies to support input acquisition through price subsidies and/or subsidized credit supply are commonly used in developing countries. Taking into account suppressed farm-gate prices, these instruments fulfilled an important role in stimulating market supply of agricultural products. Institutional arrangements through marketing boards, parastatal trading agencies and state-managed rural development banks, have been used to link up input or credit subsidies with compulsory delivery contracts.

Allocational consequences of input and interest rate subsidies have been widely analyzed. Adams et al. (1984) demonstrate how subsidized credit provisions tend to undermine rural development due to perverse incentives for efficient resource use, and a tendency of high default as screening of reliable clients becomes impossible (Hoff and Stiglitz, 1993). Similarly, input subsidies on fertilizers, seed and the purchase of equipment distort information on marginal costs and may lead to substitution of locally available resources by externally purchased inputs. Both instruments have a clear regressive influence on rural income distribution. Price

control for industrial consumer goods is sometimes used as an additional incentive to enhance the trade ability of agricultural commodities. The effects may be limited if government price control or export taxation result in rationing peasants' demands for consumer goods and eventually lead to reduced supply response (Bevan et al., 1987).

Public goods and services

In many LDCs the price- and income-depressing effect of a decline in the internal terms of trade of agricultural products has not been the only factor influencing rural development. The limited importance attached to agriculture for many years – certain Asian countries aside – has also been disadvantageous for agricultural structural policy. Investment in research, services, rural infrastructure, training and extension, and the creation of institutions and other facilities that can be regarded as public goods, has often been insufficient to promote the development and adjustment of the agricultural sector.

Access to public goods and services is usually considered an important condition to improve supply response in agriculture. Antle (1983) and Binswanger and Kandler (1993) demonstrate the positive effects of investment in infrastructure for transport and communication on agricultural productivity and on the functioning of commodity markets. Similarly, Hayami and Ruttan (1985) relate public investment in agricultural research to agricultural growth. Whereas their approach relies on induced innovation, de Janvry *et al.* (1989) refer to the explicit state biases in budget allocation and in the delivery of public goods. Technology development is conditional on the distribution of assets and is highly influenced by collective action of farmers' groups, occasioning a fairly regressive distribution of welfare gains. Without structural policies aiming at a reduction in transaction costs for access to market and information, the allocative role of prices tends to be restricted and supply response and input-intensity will remain low.

The explanation for the decline of public outlays for agricultural development is complex. A classical argument of Lipton (1977) refers to the political power structure, which is characterized by 'urban bias' and so imposes limits on price and structural policy in agriculture. Little (1982) and Timmer (1988) stress the lack of understanding in policy-making bodies of the specific factors that characterize agriculture. Rent-seeking government behavior explains much of the limited attention for raising agricultural efficiency and addressing rural poverty.

Food security

Depending on pre-adjustment distortions in agriculture, the implementation of structural adjustment programs can be progressive in terms of income distribution. Producers and traders stand to gain from better price incentives, whereas urban consumers' welfare declines. Rural workers are hit by higher food prices in the short run, but face better employment prospects if supply response is forthcoming. Food security is, therefore, likely to increase on balance in the rural areas; urban areas face immediate declines. The disappearance of black markets and the elimination of rents result in an almost immediate reduction in income disparities (Azam, 1996).

Production increases – the major objective of agricultural policy – are a means to improved food and nutritional security, although neither a necessary nor a sufficient one. Efficient (implying favorable) producer prices serve both production and rural incomes.⁵ Many would agree that rural welfare is best served by improved nutritional status of the rural population. Higher rural incomes are a major condition for improved nutritional conditions, provided basic staple foods are sufficiently available. With land fully utilized, higher production can only be realized through productivity increases per hectare, i.e. higher yields and an economically more attractive crop mix.

3 IMPACT OF REFORMS

The recognition of both market and policy failures has led to a more balanced view of the effectiveness of policy intervention in agricultural markets. At the micro level, this view is supported by a growing understanding (and relearning) of farm households' behavior and their potential supply response to relative prices. Interventions are considered to be most effective if they create an enabling (i.e. improving access and correcting for classical market failures) environment for basically private decision-making, and focus on structural and competition policy rather than direct price and market interventions. The latter can be confined to policies to stabilize prices, restricted to a few strategic crops or inputs, and to make better use of international (or large national) markets.

Has this change in policy stand, triggered by structural adjustment, liberalization and privatization worked? Given the concern of the reformers with adverse agricultural incentives, this question is basically one of supply response. A second area regarding the impact of reforms relates to the question how markets and institutions themselves have been affected. Both types of impact are discussed below.

Supply response

Two remarkably candid studies by the World Bank (Umali-Deininger and Maguire, 1995; Meerman, 1997), both supported by a wealth of country experiences, have attempted to come up with an overall assessment of recent liberalization efforts. Meerman (1997) concludes that for a large number of LDCs the impact of agricultural adjustment on supply has been significant and positive, though small. Forceful reformers like Chile, China and New Zealand have shown a much more dramatic impact.

Three more findings are interesting. First, supply response is “symmetrical”. Where there has been heavy agricultural protection, as in the former Soviet bloc, liberalization leads to output contraction and resource outflow as well as reallocation of resources within the sector towards more attractive crops. Second, supply response is synergistic. Where adequate rural infrastructure and support services are deficient, getting prices right, even in an enabling macro environment, will not suffice. Third, supply response depends on the credibility of reforms. Where reforms are not sustained over longer periods, private investment will not be forthcoming.

These findings by the Bank's Operation Evaluation Department in fact quietly close a fierce debate during the late 1980's and early 1990's prompted by the alleged “pricist” and “state-minimalist” approach adopted in the 1986 World Development

Report on world agriculture and subsequently associated with adjustment policies (Lipton, 1987 and 1988). In a Bank reply to this criticism, Ray (1988) emphasizes that "It is not a question of whether the government should intervene in agriculture: rather, it is a question of how it should intervene, in what forms, and in what areas. Our review of the past experience suggests the need for a fairly significant qualitative change in the role of the government. This does not mean that public spending in agriculture should necessarily be reduced. In fact large increases may well be warranted in many cases. The point concerns allocation priorities, not total size."

Lipton's critical analysis points, among other things, to the political decision-making process, which makes it difficult for many governments to undertake price reforms to agriculture's advantage while increasing investment in rural services and infrastructure. In the absence of a consensus on the feasibility of simultaneous action in both spheres, Lipton chooses to place the emphasis on structural policy. Ray, on the other hand, refers to the empirical finding that rural development, particularly in Africa, is doomed to failure unless accompanied by an effective macro-economic policy and sectoral market incentives.

Supply response analyses are not unambiguous about price elasticities of agricultural production. Individual commodity studies show considerable short-term response to higher real prices, but short-term aggregate supply effects are mostly fairly small (Binswanger, 1989). The results of supply response models are strongly influenced by aggregation procedures (countries, regions or crops do not necessarily face the same binding constraints), and by the use of market prices instead of subjective reservation prices. For locally grown, non-tradeable food crops, demand depends on purchasing power, which in turn is determined by supply, giving rise to a simultaneity problems. While recorded values for short-run price elasticities are low, elasticities for other factors influencing supply response (rainfall, land quality, road density, rural finance, literacy and population density) are higher and their inclusion strongly improves the explanation of supply response.

Further methodological problems arise if aspects of technological change (usually captured by a time trend) and substitution between crops are addressed. Supply response is expressed in terms of adjustment of factor demand, production and cultivated area. Implications for changes within the farm household cropping systems can, however, not be directly derived. Since price changes give rise to both income and substitution effects, choices between labor and leisure, substitution of internal by external inputs, and fine-tuning of decisions related to changes in cropping frequency and cropping density deserve additional attention, the more so as these aspects have a decisive impact on the sustainability of resource use.

A lack of synchronization in input and output price adjustment has often been observed to retard a positive supply response. Even if both prices rise proportionally, higher input costs inevitably precede higher output revenues. Credit-constrained farmers may, therefore, refrain from adjusting their current production plans. This effect is reinforced if adjustments in input prices are stronger than in output prices, moderating the real increase in producer's margins. When inputs are imported and

subsidies are simultaneously eliminated with exchange rate adjustment, such developments are not unlikely for non-export crops.

It is generally understood that supply response structurally increases with the level of development. However, two important observations can be made (Binswanger, 1989). The first concerns price versus structural policy. Empirical research has shown that for a given technology, production increases in response to sustained price increases are limited. Almost all growth in agricultural production is due to investment in capacity expansion and to technological advances. Price policy is important in this context, but primarily as a means of supporting favorable expectations by producers regarding the future profitability of their private (investment) activities. Other forms of price policy may also be important in the context of structural adjustment. For example, where price controls lead to the rationing of consumer goods in rural areas, their abolition may be followed by a sharp increase in agricultural production.

A second issue refers to the choice between government and on-farm investment. Both types feature a high level of complementarity. In most societies, decision-making at the level of the individual farm is a highly decentralized and private activity. At the same time, this decision-making takes place in an environment that is heavily dependent on government activities in the areas of research, infrastructure and the regulatory framework. These activities are vital to the promotion of private investment in agriculture, as are satisfactorily functioning rural financial markets, with forms of security accessible to as many farmers as possible.

Markets and institutions

After the discussion of supply response, we can be brief about the impact of liberalization on markets and institutions. Agricultural markets in developing countries can easily fail: inadequate price information; problems with product quality, non-standardized weights and measures; access barriers; price collusion; poorly defined contract laws and rights. Structural adjustment offers, according to Meerman (1997), good opportunities to improve market performance. Examples are better collection and dissemination of domestic prices and supplies; better analytical surveillance of patterns of (international) agricultural price and trade interventions (Valdés, 1996); analysis of transaction costs and of spatial and temporal co-integration of markets; improved standards and legal systems; removal of trading constraints; and accompanying investment in infrastructure and support services. Efforts to reform agricultural parastatals have on the whole been disappointing and have led to a strong preference (by donors) for privatization. Although not always explicitly mentioned, this raises the question of competition in those markets. Not unexpectedly, improving agricultural public expenditure and investment programs can be shown to have large pay-offs.

Reviewing extensive World Bank experience, Knudsen and Lindert (1995) confirm the widespread domestic pricing and subsidy reforms, but emphasize their often incomplete nature. Many governments have been reluctant to fully liberalize prices for fiscal reasons and out of fear to destabilize food prices. Strengthening rural institutions and modifying the regulatory framework has reportedly progressed, but encouraging competition has remained difficult to implement. Despite the

substantial literature on the complementary role of non-price factors, little attention has been paid to those factors in adjustment lending. Both Knudsen and Lindert (1995) and Meerman (1997) conclude that the impact of agricultural adjustment and reforms on food security, poverty, and the natural resource base has largely been ignored in agricultural sector lending.⁶

4 AGRICULTURAL MARKETS BEYOND LIBERALIZATION

Having analyzed the major issues and indicated the likely impact of structural adjustment and liberalization, the obvious question arises how markets (and institutions) actually perform in liberalizing economies. What do we know about the functioning of these markets, can we establish their performance, which lessons can be learned, can we formulate clear results and identify remaining weaknesses? These are among the questions addressed in the contributions to this volume reflecting the 1998 seminar on agricultural markets beyond liberalization.

Two issues need to be emphasized from the outset. First, as the various contributions show, country and policy experiences vary widely, and these differences in outcome are confounded by differences in initial conditions, timing and sequencing of reforms, and concurrent external developments. Generalizing and clarifying post-liberalization experiences is therefore inherently difficult. Secondly, it is essential to have an operationally useful definition of agricultural markets. For this purpose, Thorbecke proposes the concept of *exchange configuration*, which is characterized by the commodity traded, the actors involved, and the institutional environment in which exchange takes place. Exchange configurations include both market and (informal) non-market transactions, and can be conceived as nodes in a commodity-cum-marketing chain.

In many countries the impact of liberalization in the 1990's can be characterized by the partial nature of the reforms, an often long transition period, and hence benefits that are far from fully realized (Badiane). Resistance from vested interests and uncertainty about which institutions are needed to enable the functioning of efficient markets (and how to realize them) play a major role here. Evidence from Africa shows that liberalization has been largely of the pricist type aiming at a rise in real prices of agricultural commodities. However, commodity taxation has in many cases remained high, so that discrimination against agriculture has been reduced but not eliminated. Depending on the type of commodity and developments on the world market, liberalization is in reality accompanied by both declines and increases in real prices (Thorbecke, Acosta).

A major problem in the various structural adjustment programs for Africa is the lack of complementary policy measures in rural infrastructure and support services, the state-minimalist problem. The disappointing supply response in much of the private sector is likely to be closely related to failing to provide the necessary public goods in agriculture. As a result, marketing and transaction costs have remained high, and farmers may have rationally decided to continue producing for subsistence, rather than attempting to enter the market. By contrast, the experience of China shows how a sensible combination of price reforms, public goods provision and institutional changes has triggered a remarkable performance in food production and a striking increase in the integration of agricultural markets. With the gradual deregulation of

factor and commodity markets, market functions also gain importance in the allocation of rural land in mainland China, emphasizing the need for further institutional development of the land market (Huang *et al.*). At a more theoretical level, Nuppenau and Badiane demonstrate the essential role of public goods provision for attaining sustainable intensification in the process of increasing agricultural productivity.

Thorbecke addresses the dilemma of how to reconcile fiscal austerity with the need for public expenditures to improve infrastructure and support services. His suggestion to increase the share of agricultural sector adjustment loans at the expense of general program loans accords well with the recent World Bank findings and experiences discussed in the previous section. Periodic public expenditure and investment reviews of agricultural budgets may help to weed out (or at least identify) less cost-effective items of public outlays. At the micro level, Hoogeveen cautions against supposed but unfounded market failures in the area of rural financial markets. Zimbabwean rural households successfully apply a buffer stock strategy to stabilize consumption, thereby reducing the need to diversify consumption risk through financial markets.

As several case studies included in this volume indicate (Badiane, Kuiper *et al.*, Dedehouanou and Quarles van Ufford), many local agricultural markets have markedly improved their performance after liberalization. Price instability has decreased, price spreads across markets have become lower in both spatial and seasonal terms, and costs of intermediation have gone down. However, due to the various constraints discussed above, private sector response has been mixed and has not always been able to effectively replace previous state activities. Private traders apparently find it difficult to cover wider areas because of market segmentation and thinness. Hence, with few private market entrants, not oligopoly as often feared, but a regional breakdown in the marketing system has emerged as a new risk.

The relevance of exchange configurations is clearly brought about by Kuiper *et al.* for staple foods in West Africa. Retailers in two major towns, who can still directly buy from farmers, do not allow wholesalers to behave as vertical price leaders. However, wholesalers in two larger rural centers, involved in arbitrage among urban markets, are able to influence price formation. Elsewhere in West Africa, Dedehouanou and Quarles van Ufford show how farmers themselves provided the conditions for a successful withdrawal of the state from the draught animal market, while most agricultural input markets remained spatially fragmented and thin in demand. Only the provision of an appropriate institutional environment could improve market performance in the cases reported. Two contributions deal explicitly with the approach to such institutions. The organization of private sector provision through voluntary marketing institutions is discussed by Meulenbergh. He reviews the literature, proposes a classification scheme and analyses the evolution of voluntary marketing institutions in food markets. Problems related to the institutionalized strong pro-male bias in many integrated grain marketing systems, leading to constraints upon female commercial accumulation and endangering female livelihoods, are analyzed by Harriss-White.

In his conclusion on improved market performance, Badiane lists three success factors: (1) the extent of private trading before the reforms, (2) the sustainability of reforms, and (3) the absence of partial liberalization (with parastatals operating alongside private traders). The experience of agricultural markets in transition economies adds an interesting dimension to these findings. Kopsidis argues that the growing supply of imports to the Russian grain market, following the desintegration within the Federation that halved domestic grain trade, has done little to develop domestic market structures. A return to rigorous state control of agricultural marketing is no option as it would probably decrease production even further. Similar problems are analyzed by Spoor for two newly independent Central Asian states, where minimal market-oriented and political reforms prohibit agricultural diversification based on comparative advantages. Missing markets now threaten to force the two countries into costly and inefficient self-sufficiency of food following a previous overspecialization in export cotton.

The opportunities for regional agricultural specialization are illustrated by Acosta for South-East Asia. Freeing trade in rice among ASEAN countries would reduce its real price, stimulate intra-trade at the expense of extra-ASEAN exports, and allow further specialization among member states. By contrast, freeing trade in maize would raise its price, but leave extra-ASEAN trade largely unaltered. Le Goulven shows how initial disparities in access can bring about the danger of dualism when markets are freed. Although after withdrawal of the state from hog marketing in Northern Vietnam the market appeared close to perfect, strong disparities between those having access to capital and those who lack it emerged. Lack of rural credit institutions and lack of income buffering possibilities among dissaving farmers threaten the long-run performance of the hog market.

5 UNFINISHED BUSINESS AND CONCLUSIONS

What can we learn from the post-liberalization experiences reported in this volume, and elsewhere? Although some of the findings are mixed and even contradictory, a number of results stand out. First, in view of the varying experiences of countries involved and policies applied, there is a clear need to define markets and liberalization in an operationally meaningful sense. The concept of exchange configurations, including both market and non-market (informal) transactions in the framework of the agricultural marketing chain, serves that purpose well. It clarifies the functioning and evolution of different agricultural markets in their institutional context, and easily accommodates other than economic considerations. Adjustment and liberalization policies need to be carefully specified in terms of instruments, rules of operation and institutions.

Second, although many domestic agricultural markets perform better after liberalization, their operation is often far from efficient because of weak or absent institutions and an improper regulatory framework. The necessary institutions are often known: better price information, uniform standards, better access, improved risk management, credit discipline in rural finance, decentralization of the delivery of support services, to mention a few. Third, to improve market structure and performance, a range of complementary public expenditure and investment measures to provide public goods is necessary. There is now ample evidence that

“adjustment had an anti-agricultural effect on expenditures” (Knudsen and Lindert, 1995). As a result, private investment has often not been crowded in or revitalized, transaction cost remained high (and markets thin), and supply response limited.

Fourth, combining these findings, the policy design of liberalization has often been weak. Sequencing of measures has been particularly neglected, and state withdrawal without strengthening existing institutions or the creation of new ones (property rights, risk management) has done little to improve the functioning of markets. Finally, whereas liberalization is primarily meant to improve efficiency, its effect on equity, including poverty, and food security has been largely ignored. In almost all agricultural World Bank programs no attention has been paid to food security and poverty (Meerman, 1997), and approaches to address it (through local governments, NGOs, voluntary participation) have been neglected.

Several issues remain therefore on the agenda as unfinished business and more can be added. Competition in thin markets and public versus private provision of support services remain areas of attention. How much public activities can be decentralized to gain efficiency but without losing fiscal control? Financing of public goods provision remains problematical, not in the least when political-economy considerations are taken into account. How to approach soil degradation and water management in a post-liberalization era deserves more attention. Price risk management in freer markets, insurance schemes and effective rural finance institutions can equally be seen as unfinished business. The post-liberalization agenda does not lack challenges.

NOTES

- ¹ This section relies heavily on parts of van Keulen, Kuyvenhoven and Ruben (1998).
- ² The effectiveness of government intervention depends on the ability and willingness to act according to shared objectives. Most problematic is the rent-seeking aspect of government behavior: while paying lip-service to efficiency and distributional objectives, many governments intervene for reasons of narrow self-interest and are responsive to discriminative lobbying activities (Ellis, 1992).
- ³ Corbo and Fisher (1995) define structural adjustment as “a process of market-oriented reform in policies and institutions”.
- ⁴ Knudsen and Lindert (1995) mention that “a modest estimate of the accumulated losses to the world of this unfavourable agricultural policy stand is conservatively estimated at \$ 6 trillion, or twice the aggregate annual GDP of developing countries The tragedy of these policies is ... [the] negative impact on the poor.” Krueger, Schiff and Valdés (1992) find over a period of 25 years that high taxation of agriculture in LDCs is correlated with low growth in both the sector and the economy as a whole, and *vice versa*.
- ⁵ Efficient prices also mean that prices are in line with the world market with a protective correction for EU-type budgetary price distortions.
- ⁶ Interestingly, food and agricultural policies under structural adjustment was the theme of the previous EAAE development seminar at the University of Hohenheim, 1992 (Heidhues and Knerr, 1994).