



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

AGRICULTURAL COMPETITIVENESS: MARKET FORCES AND POLICY CHOICE

PROCEEDINGS
OF THE
TWENTY-SECOND
INTERNATIONAL CONFERENCE
OF AGRICULTURAL ECONOMISTS

*Held at Harare, Zimbabwe
22–29 August 1994*

Edited by
G.H. Peters, International Development Centre,
Queen Elizabeth House, University of Oxford, England
and
Douglas D. Hedley, Agriculture and Agri-Food, Canada

INTERNATIONAL ASSOCIATION OF
AGRICULTURAL ECONOMISTS
QUEEN ELIZABETH HOUSE
UNIVERSITY OF OXFORD

1995

Dartmouth

*Agricultural Competitiveness and Global Trade:
Looking at the Future of Agriculture Through a Crystal Ball*

INTRODUCTION

When we think of competitive agricultural trade, we usually think in terms of a few key commodities, and generally of disputes between a few of the largest trading nations. The neoclassical trade theorists have long influenced us to define competition in terms of comparative advantage, a notion that lends itself especially well to agriculture, with the relatively simplistic division of factor endowments among land, natural and human resources, and capital. The industrialization of the Western world coincided with the tremendous expansion in world trade in primary commodities. Partly because of the precedent set by the colonialist fashion of importing raw commodities from less developed countries in order to fuel the industrial economies at home, and partly because of the desire of the less developed countries to emulate this pattern of development, it was long held that resources generated by agriculture were to be used to promote industrialization. This pervasive theory of development is one reason why developing countries often fail to consider competitive agricultural exports as a viable development strategy.

Today we recognize that, in fact, agriculture has the potential for generating growth in real incomes, significant multiplier effects into other sectors of society and competitive advantage in global markets. Nevertheless, in the absence of true competition in the world market for many of the traditional agricultural products, how can this occur? The highly protectionist policies of the United States, the European Community and Japan make trade in cereals, sugar, livestock and dairy products highly unstable and politically determined. This is not a very promising climate into which the newly emerging or less developed market economies are anxious to commit either precious resources or their own uncertain futures.

The protectionist trade environment of the 1990s is, however, undergoing significant structural change and, in the face of the recently agreed GATT reforms, will continue to do so. Certainly one of the compelling reasons for adopting a competitive trade strategy is that fiscal budgets of both more- and less-developed countries have been strained to the limits of the public's ability

*World Bank, Washington, DC. The interpretations and conclusions in the paper are the authors' own and should not be attributed to the World Bank, its Board of Directors, its management or any of its member countries.

or willingness to pay, and governments are taking dramatic steps, including a reordering of national priorities, in order to relieve fiscal pressures. Perhaps the key message of this paper is that the climate for agricultural trade in the future, as with all trade, will demand a competitive strategy. Countries or regional blocks that remain protectionist and inward-focused will do so at greater and greater costs that will eventually become politically unsustainable.

This paper will therefore begin with a brief exposition of competitiveness and competitive advantage, specifying what we believe to be the factors contributing positively to national competitive advantage. An overview of the likely direction and character of trade over the next decade will follow, along with an examination of the evolving trading environment, generally as might be anticipated in the wake of the GATT agreements, and more specifically through a look at regional trading arrangements, both those that exist and those that might emerge. We shall then identify a few countries that have successfully met the criteria of competitive exporters, extrapolating from their examples the conditions required of countries in gearing up for world trade in agricultural products in the future. We conclude with a general discussion of governments as actors or enablers in promoting competitive agricultural trade.

NATIONAL COMPETITIVE ADVANTAGE AND THE FEAR OF THE UNKNOWN

New developments in competitive trade theory have revealed certain limitations in the static concept of comparative advantage, and therefore a language change is required so as to make us think in terms of dynamic and expanded factors affecting trade. Trade theory has been revised as the world has evolved into a dramatically different community from what it was even 20 years ago (Vernon, 1966; Krugman, 1983; Zysman and Tyson, 1983; Scott, 1985). The manner in which businesses combine their resources, the distribution channels through which they choose to distribute their products to the consumer, and the use of strategic alliances with government, customers or even suppliers, all now contribute to making the world environment intensely more competitive.

In respect of natural resources, and even skilled labour, firms and enterprises have 'internationalized', rendering the Ricardian notion that fixed national endowments of such resources determine competitiveness somewhat obsolete. Huge multinationals are purchasing their raw agricultural products in one country, shipping these to another for intermediate processing and shipping their semi-processed product to a third country for manufacture of a final food product, from whence it will likely be shipped all around the world for retail. High value-added production of food products in certain less developed countries is occurring in spite of unfavourable growing conditions or a lack of domestic demand. Some countries are excelling in increasing the productivity of capital through technological innovation in production and processing, in utilizing energy resources more efficiently, and in training and tapping the relatively highly skilled human resources required to continue to innovate. Clearly, we are not arguing that the nation as an entity is no longer relevant to determining competitiveness, only that we must expand greatly our notion of

what determines competitive advantage, well beyond the notion of national factor endowments.

Competitiveness in agricultural trade is certainly not a new concept but, until recently, much of the literature has focused mainly on the largest, most resource-rich countries that could afford to take risks and hedge markets in commodity and processed food trade. Many countries, including most less developed countries, still adhere to the national objective of food self-sufficiency. This objective in turn informs and determines policies relating to agricultural trade and pricing. This objective of self-sufficiency has been achieved through, or, in more cases, has failed in spite of, a completely distorted system of incentives, administered through a complex bureaucratic structure, unresponsive to market forces and leading to not only distorted, but also inefficient, resource allocation. Other nations, primarily those more developed, holding to the belief that the agricultural lifestyle or ethic should be preserved at any cost, are willing to incur tremendous fiscal and consumer expense in providing protection to enterprises that are inefficient and unproductive. In any case, clearly, competitiveness is not the objective, and the obvious question arises, should it be?

While there are many definitions of competitiveness, we shall work with the following, that is, our own, albeit owing its many parts to many authors: competitiveness is the ability to produce and provide products and services for international markets while ensuring rising levels of real income, at least some portion of which is used to further the development of the economy. This development should occur in whatever ways are appropriate to ensure that future productive processes are capable of responding to changing technologies, market demand, and input and output prices.

Ul Haque (1991) suggests that competitiveness depends on three factors considered simultaneously: macroeconomic environment; an ability to absorb, use and develop technology to reduce production costs, to improve product quality and innovate new products; and marketing strategies and arrangements which include, in the case of agricultural products, post-harvest processing and packaging, health and sanitary standards and the product delivery infrastructure. We would add a fourth factor, natural endowments, which in the case of agriculture are not insignificant. However, by far the most neglected of these four is the macroeconomic environment, for without attention to the essential elements of policy that affect it (in particular exchange rate imbalances and debt problems) the other factors can be in good order, yet the country will not find a competitive edge in the world market.

An interesting question arises regarding the extent to which the ideology of a nation, or group of nations, will affect the ability to compete. The reason for its importance is that cultural or societal beliefs can have a direct influence on the kinds of decisions regarding production, marketing and trade that must be made. We are talking about attitudes towards change and risk, the concept of institutional guarantees, the manifestations of institutional relationships, property rights and the role of the state, if any, in the control of various processes. True global competitiveness causes very different societies with varying attitudes to come up directly against each other, thereby bringing great pressures to bear on business and labour quite possibly to act or react in ways at variance

with their own beliefs. The likelihood and possibility of overcoming these barriers and restrictions on competitive trade warrant further investigation by serious trade analysts.

The uncertainties of liberalized markets are enough to make any government official with a strong aversion to risk anxious and fearful of competitive policies. One way of addressing some of the risks faced by commodity-exporting countries might be resorting to some method of hedging via market-based, over-the-counter contracts such as commodity swaps and commodity-linked debt (World Bank, 1994). Such schemes are being suggested as possible alternatives to traditional stabilization measures, with the advantage that they can be tailored to each country's risk situation. At present, many nations that might be good candidates for such programmes have domestic regulations that restrict exporters from participating in such schemes, and these private exporters, as well as the governments themselves, may lack the credit-worthiness necessary to do so. Thus, while competitive trade policies may still be desirable on balance, government intervention may be desirable in instances where transitional assistance or compensation might be required. We shall discuss this point in detail in a later section on government's role in competition.

THE GLOBAL TRADING ENVIRONMENT

The fact that global economics, trade issues, related policy challenges and business opportunities are dominating geopolitics, perhaps for the first time in modern history, is indicative of great changes taking place in the global trading arena. While there are many factors that influence the nature of global trade, we will discuss three that we believe to be the most important: the outcome of the recent GATT round; the actions, in particular, of the more developed agricultural exporters and the potential for increased bilateral or regional trading agreements; and the transformation process taking place in the emerging market economies. Other influences, such as the role of international institutions in policy reform, and the effect of the environmental movement on protectionist policies regarding agriculture, forestry or fisheries, are not considered in detail in this paper but merit more in-depth discussion elsewhere.

Past and current trends and prospects for the future

A look at recent trade data (Table 1) reveals certain patterns in regional markets that are of particular interest when discussing competitive agricultural trade. Most notable is the substantial increase in overall trade between 1981 and 1991. Not only have the absolute increases of both exports and imports been substantial, it is also clear that, in general, exports of the major producing countries grew at a faster pace than their imports. The orders of magnitude are also notable, in particular the weight of trade by OECD countries and, within that group, the predominance of the European Community.

The table also shows a rapid growth in trade in food in China, a reflection of the overall growth in the import-purchasing power of that country. The stark

TABLE 1 *Imports and exports of food (in millions of 1985 \$US)*

	Imports		Exports	
	1981	1991	1981	1991
USA	12 340.7	26 886.2	12 115.9	33 375.9
EC-10 ¹	43 585.2	139 549.3	27 808.1	128 582.4
of which: France	5 488.0	21 161.7	6 732.5	30 313.7
Netherlands	4 028.6	14 734.5	5 891.2	23 410.6
Japan	6 596.6	32 614.5	1 354.3	1 620.8
Canada	2 309.3	6 993.8	4 337.5	10 335.3
Australia	431.8	1 778.2	3 571.3	6 304.9
New Zealand	169.1	603.8	1 534.8	4 139.9
China	273.7	3 492.4	719.1	7 933.3
Argentina	174.2	270.6	2 513.3	6 567.1
Brazil	622.6	2 059.8	3 222.4	6 594.7
Mexico	298.0	5 078.7	934.0	3 133.0
Eastern Europe ²	2 798.3	2 737.8	2 366.7	4 155.9
Former Soviet Union ²	2 384.8	11 276.4	1 790.2	492.7

Notes: ¹Includes EC-10 trade with other EC-10 countries.

²Data not precisely comparable with rest of table.

Sources: FAO Trade data tapes, 'Food excluding Fish'; World Bank (IEC) *Foreign Trade Statistics*.

TABLE 2 *Import-purchasing power of exports (1971 = 100)*

	1981	1991
USA	137	270
France	143	237
Netherlands	142	236
Japan	129	245
Australia	130	258
China	317	744
India	149	312
Argentina	223	229
Brazil	197	303
Chile	116	243
Mexico	358	455
Uruguay	145	218

Note: Value of exports of goods and non-factor services deflated by the import price index.

Source: *World Tables 1993*, Washington, DC. World Bank, 1993.

declines in food exports, combined with the precipitous increase in imports of the former Soviet Union, can be contrasted with the stagnation of imports and the rise of exports in Eastern Europe. However, these figures must be seen in the context of more than just their absolute amounts, as they are quite small compared to OECD country trade. This highlights the fact that, while demographics play a small part in determining trade, much more important are the indicators of rising levels of income and economic growth.

The calculation of the import-purchasing power of exports (value of exports of goods and non-factor services deflated by the import price index, Table 2) confirms the importance of income growth in improving trade. Not only China, but also India and Mexico, show rapid rates of growth in this index, which provides concrete examples of countries that are clearly not only experiencing income growth but also making rapid inroads in competitive global markets.

In respect of specific commodities, analysis reveals that, while certain classes, foremost of which are grains, are important because of their total value on world markets, there are other commodities that may be equally interesting in terms of their potential for future competitive trade in agriculture (Table 3). While cereals trade, for instance, has experienced some levelling off over the last ten years, livestock and related products have taken on much more interesting dimensions, for example in comparing the EC export market to that of its next biggest competitor, the United States. The market for fruits and vegetables also evidences much stronger dynamism as, to a slightly lesser degree, does that for oilseeds.

Although the less developed countries are not major exporters of any of these commodity groups, there are a few notable exceptions, and there is an expectation of increased competition from others. Latin America, the Caribbean, the Middle East, North Africa and China all exhibit rapid increases in exports, particularly in fruits and vegetables and livestock and related products. In its latest report, the FAO notes that an expansion of agricultural exports from less developed countries can be attributed mainly to export-promotion measures linked to stabilization and structural adjustment programmes, and improvements in factor productivity (FAO, 1993).

Unfortunately, the recent growth rates experienced by less developed countries may be jeopardized by the reduction of aid, trade and investments from the more developed countries. The current recession in the more developed countries has severely affected these essential transactions and, indirectly, the demand for agricultural products, the prices of capital and of inputs, and the behaviour of agricultural commodity prices. Nevertheless, these unfavourable effects may well be offset by four, more promising, developments forecast over the next decade: the suppression of real interest rates due to the continued fiscal consolidation within major industrial countries; the continued inflow of private capital to credit-worthy middle-income countries; a higher rate of growth in world trade, resulting from the conclusion of the Uruguay Round and other regional trading agreements; and a relative stabilization of real commodity prices (World Bank, 1994).

TABLE 3 *Exports of selected commodities (in millions of 1985 \$US)*

	Cereals		Livestock		Fruits & vegetables		Oils & oilseeds	
	1971	1991	1971	1991	1971	1991	1971	1991
USA	4 638.4	10 386.1	841.0	4 368.8	1 160.1	4 883.9	3 290.9	4 584.1
EC-10	2 322.7	9 993.3	7 375.2	28 265.8	343.5	15 751.4	767.6	3 262.5
Japan	274.9	233.3	48.1	20.5	156.4	128.8	38.4	25.5
Other OECD	3 765.4	6 862.8	3 900.0	9 176.7	1 154.5	4 834.7	559.3	1 279.7
Eastern Europe	131.6	445.0	1 228.2	2 304.7	555.7	1 105.4	71.0	327.5
China	72.1	1 091.2	114.5	1 332.7	162.8	1 817.2	73.0	826.4
Other East Asia	517.8	1 604.6	31.4	779.7	394.9	2 735.7	924.8	2 634.6
South Asia	212.1	933.9	4.8	104.2	250.8	591.2	93.7	111.1
Sub-Saharan Africa	54.7	267.0	206.1	228.1	216.8	337.7	737.2	507.5
Latin America/Caribbean	1 353.6	1 484.4	1 752.3	2 741.4	1 414.0	6 465.0	391.5	3 136.2
Middle East and North Africa	328.7	247.3	59.7	250.3	1 796.0	5 199.4	123.4	169.2
Former Soviet Union	1 269.5	78.5	133.9	101.9	64.4	120.7	290.3	1 111.8

Source: World Bank (IEC) *Foreign Trade Statistics*.

Outcome of the Uruguay Round

The recent conclusion of the GATT Uruguay Round has resulted in agreement to undergo quite significant reductions in the level of protection in agriculture over the next six to ten years, mainly through the reduction of export subsidies, both in terms of volume (21 per cent) and expenditure value (36 per cent), through reductions in domestic price support levels, and in the cuts of allowable internal support and border protection measures. Other areas of agreement include measures regarding harmonization of phytosanitary standards and guidelines, anti-dumping rules, and customs valuation and pre-shipment inspection.

While the full impact of these changes is difficult to foresee at this stage, there are a few tentative conclusions we might make. First, there will be limited price increases in certain commodities, in particular of grains. However, we can expect there to be less uncertainty about world trade in general, and that the conditions for access to OECD markets will improve for those seeking to make inroads into them. As a result of reduced uncertainty in world markets, farmers' incomes will become more stable, as will food security prospects; thus less developed countries will be able to free savings and increase investments, thereby improving prospects for income growth. All of this will, however, take time, not only the time granted through the agreement that allows countries to institute the changes specified in the GATT, but also the time required for the lag effects of the changes themselves to take place (FAO, 1994).

There are still a great number of unknowns that lurk in the shadows of the recent GATT negotiations. It is not yet certain which commodities will be most effected, since the various countries will have some latitude in determining both the speed and degree of reductions in protective measures that will satisfy the overall levels required. Also, no agreement or commitment was made regarding the continuation of measures such as voluntary export restraints. Because they contribute to collusion among both nations and firms, these will continue to distort international trade, but at the present time it is difficult to predict what their impact will be. There are many other trade-related policies that affect the situation which are not explicitly covered by GATT rules. These include government procurement practices, and public subsidies for research and development. Both are likely to become the subject of further talks, probably initially among OECD members. It will also be instructive to observe how various interests will seek to circumvent the rules and intent of the Uruguay Round.

In the meantime, the Committee on Agriculture of the World Trade Organization (WTO) will become the watchdog for multilateralism in the sector, and will have to monitor closely the use or abuse of such measures as the safeguard clause, which allows for the imposition of import duties in the case where import prices fall significantly below a 'base year' level. The tendency for countries to return to highly protective measures will at times be great, but the Uruguay Round, and further trade negotiations which will be based on it, will make it increasingly difficult for reversion to occur. The result is that pressures are being applied globally, not just on a few countries, for the adoption of competitive trade strategies over the long run.

Regional trading blocks

In general, limited-partner trading arrangements are inferior to worldwide liberalization and can be as costly in terms of welfare as more explicit protective measures. Politically, however, trading agreements tend to sell to the domestic public very well, although they can quickly turn into a liability if a particularly sensitive interest group is injured, or if politicians decide to use the national trading position as leverage over foreign policy choices and alliances. Recent disagreements between Canada and the United States over trade of wheat, poultry, livestock and dairy products illustrate this point all too well. The protectionist rhetoric used to incite the uninformed public shows that sustained commitment to these agreements is subject to manipulation by politicians, often wholly unrelated to economic realities. A practical side of regional trading arrangements is that they are often used as stepping-stones towards complete liberalization on a global scale.

Nevertheless, the emergence of both regional trading blocks and an increase in the number of bilateral trading agreements over the next decade is more than likely. For many years countries desiring to benefit from cooperative, usually geographically based, alliances have created regional trading blocks. Countries such as those of ASEAN, of the Andean Pact or of MERCOSUR have all aspired to improve regional economic stability. Whether these, and other more recently formed trading blocks, will become more antagonistic towards outsiders, or remain relatively benign, will depend to a great extent on global perceptions of real progress in freeing agricultural trade as a result of the Uruguay Round. On the basis of recent developments, it would seem that free trade within blocks is increasing, but managed trade between blocks, although actually prohibited by GATT from becoming more restrictive, has become somewhat more contentious. For those countries not included in a regional block, the future is indeed uncertain and, in fact, many countries are even now adjusting their economies as required in order to gain membership of one or another block.

The North American Free Trade Agreement (NAFTA) and the USA–Canada FTA are both good examples of how regional partners can team up to exploit the political, as well as economic, mentality of ‘us versus them’. Unlike the GATT, where the aim is to establish a global, or unified, trading system, bilateral trade agreements have been reached for the mutual benefit of close neighbours, with the potential gains to the signatories being substantial. For example, the United States is likely to benefit from lower prices for sugar, fruits and vegetables, and cut flowers as imports of these products from Mexico increase. The removal of the high level of protection of maize in Mexico is likely to result in a decline in maize output and, over the long run, will result in major labour shifts, probably to labour-intensive exports, both industrial and agricultural. In addition, while liberalization is likely to bring with it depressed returns for Mexican maize-producing smallholders, it is conceivable that the Mexican government, having at its disposal substantial savings in fiscal outlays to previously inefficient protection measures, can compensate the losers through investment in irrigation, by development of a competitive export industry in fruits and vegetables, and by assisting industry in the reallocation of labour from rural to urban areas (Levy and van Wijnbergen, 1992).

The United States and the 'new Europe' (an area that might include Eastern Europe and the Baltic states), as it is being called, have the potential for developing special trading relations provided levels of protection are greatly reduced in both the United States and the EU. Aho and Stokes (1991) provide surprising statistics showing the 'new Europe', rather than East Asia, to be the region with the greatest promise as a market for free global trade. Simply by adding to the EU's 340 million people the 32 million in the EFTA countries, and an additional 120 million from Eastern Europe (the Czech and Slovak Republics, Hungary, Poland, Bulgaria, Romania and what is left of the former Yugoslavia) and taking into account the fact that the total GNP of these countries in 1988 was \$6 trillion, growing at about 3 per cent per year, it can be guessed that the implications for the region's trading partners are very exciting indeed.

We wish to add a brief mention of the circumstances foreseen regarding foreign aid, in particular food aid. Whatever the result of the recently concluded GATT round, there is, in the face of increased liberalization of agricultural markets, also increased uncertainty about food aid availability. The freeing of world cereal trade is likely to result in a decline in government stockholding, but it is unknown whether and to what extent the private sector will fill the gap. What is certain is that there will be a substantial decline in certain types of food aid, notably processed dairy and oilseed products. There is a reasonable possibility that the WTO Committee on Agriculture will eventually assume an important food security function, in the sense that, during any time of global food shortages, it will be closely scrutinizing the food security implications of any export restrictions that exist. It remains to be seen, although intuition would suggest it to be so, whether or not the reduction of levels of protection in such sectors as textiles and agriculture will actually do more to benefit less developed countries than all the foreign aid could ever do.

Emerging market economies

Much of the uncertainty in world trade results from doubts about the prospects of countries that once made up the Council for Mutual Economic Assistance (CMEA), namely Central and Eastern Europe and the Commonwealth of Independent States (CIS). The whole region was a very significant participant in global trade in agricultural products. At present, the severe reduction in exports, and the precipitous declines in agricultural incomes, are hurting all of the former members of the trading block. Countries now have much more at stake in establishing trade with the West, not only to avail themselves of the opportunity to improve their own economies, but also to establish the necessary relations that may lead to inflows of Western aid and investment.

The key question, as yet difficult to answer with any quantifiable data, is when there will be a shift towards economic growth at sustainable levels. We can expect that when agricultural production increases there will be some lag before demand also increases. The implication is that the global economy is probably going to experience a radical change in terms of the net exports coming from the region. No one, to our knowledge, is predicting when this

might happen. While this is perhaps the most immediate cause of uncertainty regarding future prospects, a second source of uncertainty is the nature of the economic relationship that some countries (most particularly those of Eastern and Central Europe) will develop with the European Union.

Eastern and Central European countries have a great deal to lose from the impending entry into the EU of new members (Sweden, Finland and Austria) whose level of development and industrialization approximates that of their own. This is especially true in the case of agricultural and food products, the traditional exports of both Eastern Europe and the newest members. Although the EU has extended some, albeit limited, export credits to Eastern Europe, what the newly emerging market economies need most is freer access to competitive markets. The EU has recently concluded the so-called 'Europe Agreements' with six countries of Eastern and Central Europe, but, because the agreements were designed on the basis of exports of the previous three years, it is unlikely that the trade patterns of that period reflect longer-term competitive advantages (Koester, 1994). As the EU grows stronger, it may in fact choose to create bilateral or regional agreements with more dynamic regions and countries that are currently competing globally in price, quality and marketing. As for the CIS countries, we know they have great potential to become significant traders in the global agricultural sphere, but there, too, the uncertainty regarding the speed and efficiency with which they are able to develop suggests that we must be cautious in our forecasts of their future prospects.

GEARING UP FOR GLOBAL TRADE: FOLLOW THE LEADERS!

There are numerous examples of countries whose own economic, technical, institutional and policy circumstances might provide us with indicators of potential success in competitive agricultural exports. Our difficulty was in narrowing these down to just a few examples which provide some variety in natural endowments, in historical development and in levels of government intervention during the crucial period of export development. Much has been written about the countries that we have chosen, and thus we do not purport to provide an exhaustive summary of the relevant details of their success but rather to highlight what are held to be the reasons for it, and to touch on a few likely constraints on their future development.

Chile

Chilean agriculture blossomed in the early part of this century with the advent of advanced technological inputs in irrigation, transport and storage (Jarvis, 1992). However, in the 1960s and early 1970s, government policies turned against agriculture, with negative implicit taxation of the sector, nationalization of most industries and restrictions on exports, combined with international blockades imposed by other nations. These factors, together with strangulating internal controls on wages, prices, interest and exchange rates, resulted in low

rates of agricultural and overall economic growth. In the mid-1970s, with a change in government, many of these policies were simply eliminated, providing instant relief and a renaissance of innovation and investment in agriculture in Chile.

Capital markets were freed and allowed to find international parities that would make them competitive, and regulations governing investments were, in turn, eliminated or simplified. Land rights became more secure as the government released its grip on, and provided assurances concerning, the holding of private property. As the provision of key services such as communications and transport were privatized, their costs became comparable with international costs that better enabled producers to weigh the potential profit of their goods on the world market. These things, combined with a highly educated workforce (Wylie, 1990), allowed Chile to take the lead in the production for export of high-value fruits and vegetables.

In this case, it is quite clear that the reduction, and in some cases elimination, of government intervention is itself the primary reason for the dramatic success of agriculture in Chile. What few government programmes or regulations that do exist have been established strictly to provide incentives to the industry. An example is the export rebate, or 'drawback', programme for newly introduced varieties of high-value fruits and vegetables (as exports of the new varieties increase in value, the rebates are scaled down and eventually eliminated). For its part, the industry itself takes primary responsibility for its needs, from voluntary quality compliance, through concerted lobbying efforts at establishing free-trade agreements, even to financing a highway between a main producing area and a major port of embarkation.

Morocco

Citrus fruits and vegetables have traditionally constituted a major part of Morocco's foreign trade. However, in the mid-1970s, exports began a slow decline as a result of new EEC restrictions on imports, and of the inability of Moroccan producers to adapt to these restrictions, to changing consumer demands and to new, more dynamic marketing practices (World Bank, 1990). The government marketing board, the Office de Commercialisation et d'Exportation (OCE), had a monopoly on all agricultural exports, supervising packing houses, the quality control of exports and shipment and sales to foreign markets. Import duties were charged on the agricultural inputs required to produce agricultural exports, though probably the greatest obstacle to increased trade during OCE's control was its insistence on dockside sales (as opposed to pre-programmed sales to importers and distributors), a strategy that resulted in unreliable supplies to trading partners, and little quality control.

Only after nearly ten years of foundering with stagnant or declining exports did the government finally decide to abolish the OCE monopoly in 1986. Since that time, export companies and related enterprise have blossomed in the private sector. Some of the larger export firms have entered into contract with larger, more efficient vegetable producers, as well as with large importers in key trading nations. A transport company, the Atlas Fruit Board, has also been

established cooperatively by a number of the large exporters, to coordinate and standardize exports to Europe. At the same time, crop diversification has been taking place, as has export market diversification away from France.

Problems still remain, however, which are common pitfalls that can prevent or diminish the achievements of countries such as Morocco. Successive structural adjustment programmes have substantially improved the macroeconomic and trade environment, but these achievements are dampened considerably by a continued failure to attend to downstream activities and domestic market liberalization. Weaknesses in the finance and banking services, in logistical and related infrastructure, in the management of product quality and in the linkages and effectiveness of management services and interprofessional organizations all undermine the ability of the agroindustrial enterprises to be cost-competitive (World Bank, 1993). Not uncommonly, classic forms of protection are merely being replaced with new distortions and in Morocco this has meant that quantitative restrictions and strict government control of domestic marketing have been replaced by reference prices based on moving averages of world prices and equivalent tariffs.

Kenya

Among sub-Saharan African countries, Kenya stands out as having developed a progressive and diversified fresh vegetable export trade, primarily with Western Europe (Jaffee, 1990). Initiated by the Horticultural Cooperative Union (HCU) in the late 1950s, this trade remained relatively small through the 1960s, but in the 1970s, with major increases in air freight capacity and in private investments in irrigation infrastructure, and with the development of more sophisticated market linkages between suppliers and distributors, export trade in fresh, speciality and 'off-season' vegetables flourished, and continues to do so.

Kenya clearly benefited initially from its comparative advantage in certain factor endowments: specifically, plentiful and cheap labour, a location straddling the equator, diverse agroecological conditions facilitating the development of a diverse product range, the ability to produce on a year-round basis, and the direction of the plentiful labour supply to tasks (such as harvesting) that ensure a relatively high-quality product (Jaffee, 1993). However, its competitive advantage was further enhanced by the rapid development of related infrastructure, in particular air transport, which itself led to rapid growth in the tourist trade, which strengthened domestic demand for the fresh vegetables produced in amounts beyond export requirements. This parallel development of related industries, or industries that boost demand and reduce investment costs, is a key feature in a number of countries that exhibit similar successes in competitive agricultural exports.

In addition, the fact that the key exporters in the beginning were South Asians gave Kenya an advantage in knowing the demand characteristics of, as well as trade contacts among, Europe's immigrant population. Trade in fresh vegetables also benefited from the development of Kenya's agroprocessing industry, which provided a buyer of sub-export standard produce. Infrastructure and trade contacts have enabled exporters to diversify into more lucrative

speciality exports in cut flowers and tropical fruits. Finally, the development of a broadly based export industry to include smallholders has resulted in increased income and employment for more people, with significant multiplier effects throughout the entire economy.

Although Kenya has dynamic firms in the agricultural exports sector, they are hampered to some extent by relatively high internal transport costs and inefficiencies, by excessive bureaucratic requirements and by far less political and popular consensus or support for the direction of development than in our first two examples. Although Kenya most certainly benefited in earlier years from the infusion of scientific and technical knowledge and equipment from more developed countries, its heavy reliance on imports of these factors, and in particular of pedigree seeds, threatens its ability to change and adapt rapidly from within (Aube, 1994). The problem is primarily technological, in that these resources are not well adapted to local circumstances and requirements. It may be that, at least initially, the government might need to assist in the dissemination of information to both production and distribution firms in the sector, as well as in financing, or participating in, the provision of extension services that are appropriate to the local farmers' or agricultural firms' requirements.

GOVERNMENT: ACTOR OR ENABLER?

Governments do not control national competitive advantage, they can only seek to influence it. Their central role in today's global economy is to ensure deployment of a nation's resources with the highest level of productivity possible, and to seek to increase that productivity at all times. In other words, the governmental task is to build on private initiatives, not invest further in public ownership and control. Governments play a critical role in developing competitiveness, but will be most effective if they govern better rather than govern more. Above all, it must be remembered that competition exists between industries, not between nations and, while governments can affect the context of these industries, as well as to some extent the inputs upon which they draw, it is the strength of the industry itself, in this case agriculture, that will determine its success or failure.

Although much of the activity traditionally associated with competitive advantage can and should be handled by the private sector, there is nevertheless a role for governments to play and, in fact, an imperative that they take an active interest in, and show commitment to, providing incentives of varying kinds to those sectors in which export crops are likely to be found. Governments can provide a regulatory structure, and ensure an incentive structure, that will stimulate and reward investments not only in the export crops themselves, but in the ancillary industries that support production, transport, processing and export of commodities. Governments will also probably need to provide the large infrastructure (dams and electric power generation, and information and communications networks) that, owing to economies of scale and their public-good nature, are unlikely to be provided by the private sector. Governments can also provide, or contribute greatly to, the dissemination of information.

It could be argued that government's role is much more compelling in the earlier stages of development, by employing temporary protection to foster entry into an activity, by channelling scarce capital into selected enterprises, and by providing time-limited guarantees against certain risks. The underlying conception is that a country should strive to break away from conditions in which 'national advantage' is derived solely from natural resources, growing conditions and an abundant and cheap source of labour. As an economy progresses into a more globally competitive position, government should reduce its level of intervention, and switch from being an actor to being an enabler, doing only those things necessary to ensure a competitive environment. Porter's discussion of the role of government and its effect on competitive advantage helps to illuminate and articulate the full scope of government activity in competitive markets (Porter, 1990). Government can have an effect on factor conditions, through support of education and training, research and development in science and technology, through the upgrading and maintenance of infrastructure, and through the dissemination of information about markets, technologies and the competition. Effects on demand conditions include policies regarding government procurement, the regulation of products and processes, and the use of foreign aid tied to political objectives.

Governments can also exert influence on related and supporting industries. Such measures include policies regarding freedom of information, or specific regional policies that help to cultivate the formation of what are known as 'clusters'. United States water resource policy, it has to be remembered, successfully developed the fertile valleys of California for the production of fruits and vegetables, and there is another example in the fostering of cattle production in Brazil. However, as can be seen in both of these examples as well as others, this may too often lead to tremendous welfare losses over the long run, if the government is indiscriminate or irrational in the continuation of subsidy programmes.

Finally, government effects on firm strategy, structure and rivalry occur through policies adopted relating to internationalization (foreign investment, exchange controls and the communication of foreign competitive market information) and in particular through ensuring vigorous domestic rivalry by such means as assistance for new business creation, and antitrust legislation. Quite possibly its most direct means of effecting strategy and rivalry is through its trade policy, by which it can seek to open markets (through bilateral negotiations) and eliminate unfair practices (through resort to international arbitration).

Of course, there is always the risk that government involvement and activities will serve private interests more effectively than the public and it can be argued that, although government must always be aware of who it is serving, it cannot presage or prevent every possible abuse (or merely manipulation) of the regulations, organization and information by which the private sector might profit.

There are also some things that, no matter how hard outsiders might strive to effect (for instance the World Bank attempting to capitalize on its leverage in lending), are simply bounded by national interests and subject to the domestic political environment. Nations have certain political goals and *modus operandi*,

rooted usually in ideological positions and, in cases where this ideology conflicts with principles of economic efficiency or theories regarding free trade, governments can, and often do, exercise the right of first refusal. Nevertheless, in spite of the fact that competitiveness is elusive, not only as a concept but also as a practical objective, nations and governments must not ignore its imperative. To do so may, in the long run, entail great costs, for development and progress can be, and are likely to be, measured in terms of competition in the future global economy.

REFERENCES

- Aho, C.M. and Stokes, B. (1991), 'Year the World Economy Turned', *Foreign Policy*, 70 (1).
- Aube, T. (1994), 'Analysis of Competition in Vegetable Systems in Four Countries: Senegal, Morocco, Kenya and Thailand', unpublished draft, Washington, DC: AGR/World Bank.
- FAO (1994), 'Uruguay Round Agreements: A Preliminary Assessment', Commodities and Trade Division, Internal Working Document ESC/N/94/4, March, Rome: FAO.
- Food and Agriculture Organization (FAO) of the UN (1993), *The State of Food and Agriculture*, Agriculture Series No. 26, Rome: FAO.
- Jaffee, S. (1990), 'Alternative Marketing Institutions for Agricultural Exports in sub-Saharan Africa with Special Reference to Kenyan Horticulture', unpublished DPhil thesis, University of Oxford.
- Jaffee, S. (1993), *Exporting High-Value Food Commodities: Success Stories from Developing Countries*, Discussion Paper No. 198, Washington, DC: World Bank.
- Jarvis, L. (1992), 'The Role of Markets and Public Intervention in Chilean Fruit Development Since the 1960s: Lessons for Technological Policy', in N.C. Russell and C.R. Doswell (eds), *Policy Options for Agricultural Development in sub-Saharan Africa*, Workshop Proceedings, Airlee House, Virginia, Washington, DC: AGR/World Bank.
- Koester, U. (1994), 'EU Agricultural Policy Towards Central and Eastern Europe: Its Impact on Developing Countries', paper presented at workshop, Network EU-LDC Trade and Capital Relations, 16-17 May, Rotterdam.
- Krugman, P. (1983), 'New Theories of Trade Among Industrial Countries', *American Economic Review*, 73 (5).
- Levy, S. and van Wijnbergen, S. (1992), 'Maize and the Free Trade Agreement between Mexico and the United States', *World Bank Economic Review*, 6 (3).
- Porter, M. (1990), *The Competitive Advantage of Nations*, New York: Free Press.
- Scott, B.R. (1985), 'National Strategies: Key to International Competition', in B.R. Scott (ed.), *U.S. Competitiveness in the World Economy*, Boston: Harvard Business School Press.
- Ul Haque, I. (ed.) (1991), *International Competitiveness: Interaction of the Public and the Private Sectors*, EDI Seminar Series, Washington, DC: World Bank.
- Vernon, R. (1966), 'International Investment and International Trade in the Product Cycle', *Quarterly Journal of Economics*, 80 (2).
- World Bank (1990), 'Project Performance Audit Report: Morocco Vegetable Production and Marketing Project', Operations and Evaluation Department, Washington, DC (not for quotation).
- World Bank (1993), 'The Kingdom of Morocco: Agro-Industrial Development, Constraints and Opportunities', Agriculture Division, Country Department I, Middle East and North Africa Regional Office, Washington, DC (not for quotation).
- World Bank (1994), *Global Economic Prospects and the Developing Countries*, Washington, DC: World Bank.
- Wylie, A. (1990), 'Agricultural Development and Technology: The Growth of Chile's Fruit and Vegetable Export Industry', in N.G. Kotler (ed.), *Sharing Innovation: Global Perspectives on Food, Agriculture and Rural Development*, Washington, DC: Smithsonian Institution.
- Zysman, J. and Tyson, L. (1983), *American Industry in International Competition*, Ithaca: Cornell University Press.