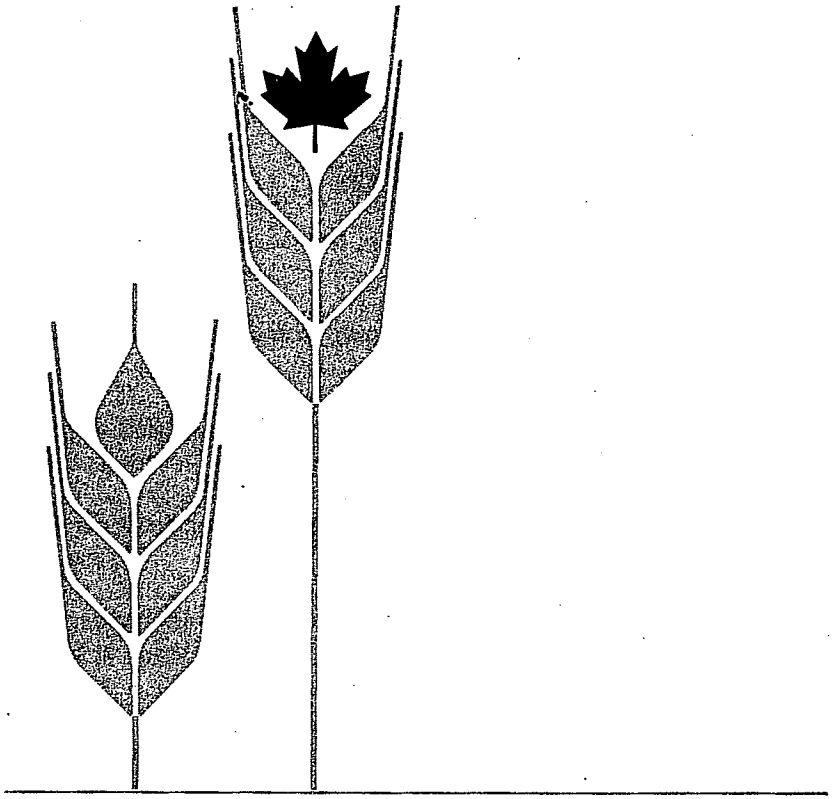
Canadian Agriculture in a Global Context:

Opportunities and Obligations

Edited by Irene Sage Knell and John R. English
Centre on Foreign Policy and Federalism



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Dedication

To
Steven
Mark
and
Jonathan

Preface

Canadian agriculture has been a major part of the nation's success, and that success has come in large part because of the international competitiveness of Canadian farmers. For this reason, the future of Canadian agriculture can best be understood if it is examined within a global context. Today, however, Canadian agriculture faces a crisis. Farmers have been receiving lower returns on their sales and on their equity. These conditions will inevitably affect the productivity and the international competitiveness of Canadian agriculture. Because of this present crisis and because of the challenges and opportunities which it creates, we have compiled this collection of papers by Canadian and other authorities on the international dimensions of Canadian agriculture. *Canadian Agriculture in a Global Context: Opportunities and Obligations* offers a perspective on Canadian agriculture which is too seldom taken. It contributes to the current debates about Canadian agricultural policy while placing these debates within a broader understanding of what Canadians could and should do.

The book has four sections. In the first section, Charles Weitz, the former director of the FAO office in New York, describes the international context. The noted agricultural economist, T.K. Warley, places Canada within that context. In the second section, the capabilities of, and constraints upon, Canadian agriculture are described. The agricultural economist J. Clay Gilson analyzes the possibilities for growth in agricultural production and markets. In the following article, Edward Manning of Environment Canada warns of limitations upon such growth arising from soil erosion and degradation. Andrew Cooper follows with a study of the diplomatic constraints upon Canada's search for new markets and upon the maintenance of traditional markets. Grace Skogstad then points to the difficulties which Canada's federal system imposes upon Canadian agricultural planning and production.

In the next section, the challenges of international markets where Canadian exporters have had considerable success in the past are explored. Three political scientists, Karen Minden, Michael Donnelly, and Lenard Cohen, try to predict what Canada's future export prospects might be in China, Japan, the Soviet Union and Eastern Europe. Theodore Cohn and Inge Bailey follow with a

discussion of the complex problems involved in trade with the Third World, where debt problems and competition with the United States greatly affect Canada's opportunities but certainly not its responsibilities. In the final section, Jozef M. van Brabant of the United Nations asks Canadians to take a broader vision of the international food system. As a non-Canadian, he sees opportunities which Canadians tend to overlook, but he also warns of dangers which Canadians would ignore at their own peril. In the final article, Robert Moore, the former High Commissioner for Guyana to Canada, suggests to Canadians and other Westerners that their paths are not necessarily the ones which developing nations should follow. He reminds us of the sanctity of the earth and of our responsibilities to all who dwell upon it.

The book's approach is unusually broad because the focus of too many works on Canadian agriculture is exceedingly narrow, the concern of technical or other specialists. Conversely, the broad approach reflects an attempt on the part of the authors and editors to integrate agriculture within broader policy considerations. As Theodore Cohn and Inge Bailey point out in their article, most studies of Canadian foreign policy mention agriculture briefly–if at all. This is astonishing considering the major role which Canada plays in world agricultural councils and the large contribution which agricultural trade makes to the nation's trade surplus–90 percent of the accumulated trade surplus between 1970 and 1981. Moreover, the agrifood sector accounts for a large percentage of Canadian employment, with estimates ranging from 15 percent in the recent Macdonald Commission to 25 percent in the calculations of T.K. Warley.

The contributors to this volume have diverse backgrounds and viewpoints, but there are five central themes which clearly emerge in their articles.

There is, first of all, agreement that agriculture faces a period of transition and uncertainty. Since the early 1970s, the patterns of agricultural trade and production have been severely disrupted. The initial tragic consequence of this breakdown was the world food crisis of the early 1970s, which prompted calls for a new commitment to a more rational and equitable world food system. Although commitments were made at the World Food Conference of 1974, few have been fulfilled by the mid-1980s. The crisis of the mid-1970s was one of scarcity and soaring prices for consumers both domestically and worldwide. As the crisis abated and surpluses appeared, producing nations once again moved towards nationalistic and protectionist

approaches to their agricultural policy-making. Competition and conflict among major producing nations has overwhelmed the impulses towards cooperation which had been present at the World Food Conference. This lack of cooperation has resulted in production levels and national subsidy programs which, in any long-run perspective, must be seen as irrational. The expensive agricultural program of the European Community threatens the existence of the Community. The United States, facing a dangerously large budget deficit, has recently passed a $52 billion dollar (U.S.) farm bill which sets farm support spending at the highest level in history.[1] Where does this leave Canada?

Canada, as one might expect, is in a dangerous middle position between the European Community and the United States. It lacks the economic resources to engage in a trade war with the Europeans and the Americans. In such a war, Canadian farms might become the most devastated battleground. At the beginning of 1986, Canadian grain industry leaders were gloomily examining their future. At a conference at Lake Louise, politicians warned that Canada lacked the financial resources and political clout at international meetings to fight the Americans and the Europeans. However, William Duke, the president of the Western Canadian Wheat Growers Association, indicated that some way must be found to preserve Canada's markets: "We are not going to just keep discussing these things for the sake of discussion. This industry is at risk, and policies have to be formulated to do something about it."[2]

This leads directly to the second major theme: the serious problems which Canadian producers face. Agricultural exports account for roughly 50 percent of gross farm income in Canada, and in Western Canada, the figure moves closer to 80 percent.[3] Price variability on international commodity markets is, therefore, the source of many of our producers' problems. These problems, the Macdonald Commission has declared, have created the worst recession for Canadian farmers since the bleak 1930s. In the wildly cyclical agricultural sector, farmers find it difficult to plan future production. During the boom period of the late 1970s and early 1980s, major investments in machinery and land were made. Because of unusually high commodity prices in the 1970s, farmers assumed a

1. *The Economist,* 21 December 1985, p. 21. The American support is over a three year period. The European program is estimated to cost $33 billion dollars (U.S.) per year.

2. *The Globe and Mail,* 10 January 1986.

3. Address by T.K. Warley at 1986 Southwestern Ontario Farmers' Week, Ridgetown College of Agricultural Technology, 7 January 1986.

high debt burden with the expectation of continuing high returns.[4] As T.K. Warley and Clay Gilson demonstrate, net farm income began to fall just after these investments were made. The result has been a series of farm bankruptcies and severe financial pressure on the agricultural sector. These financial problems have been exacerbated by low crop yields as a result of drought and pestilence. Governments responded to producers' appeals as best they could; however, due to the budgetary restraints of both federal and provincial governments, this response fell short of the need. The needs are now greater than ever because, as several authors illustrate, the traditional markets of Canadian farmers were being challenged, not only by the Europeans and the Americans but also by the Australians, the Argentinians, and others. Like Canada, many of these other competitors have small domestic markets for the commodities which they produce. They must export to survive and flourish.

A major sub-theme which emerges in this book is the importance of an awareness of the environmental constraints upon Canadian agriculture. In his article, Edward Manning warns us that Canada has serious problems relating to its resource base. Too little consideration has been given to the loss of agricultural land, to soil erosion, and to the planning and management of the resource base. He rightly reminds us that, in the longer term, both domestic and foreign sales are dependent upon the richness of the land. Since 1961 approximately 1.4 million hectares of agricultural land have been lost to agricultural use, and that which remains is used more intensively. This intensification of use often means that the agriculture is more fragile; that is, it is more dependent on the price of energy, money, fertilizer, and machinery. The resource is finite. Many demands are placed upon it by urban development, recreational needs, waste disposal, and a variety of other conflicting forces. We can now see that a multi-sectoral approach is badly needed, but, unfortunately, such an approach has not yet been taken.

This discussion of producers' problems leads directly to the third major theme of this book: the need for policymakers to make a long- rather than a short-term view. An integrated vision of what Canadian agriculture can and should be has been blocked by institutional fragmentation. Within the federal government, responsibilities are divided among various departments, such as External Affairs, Agriculture Canada, Regional Industrial Expansion, Transport,

4. *Royal Commission on the Economic Union and Development Prospects for Canada*, 2 (Ottawa, 1985):418-421.

Environment Canada, and the Wheat Board. Consultation does not always occur, and bureaucratic competition is all too common. Grace Skogstad points out in her paper that there are growing fears that the overall efficiency of Canadian agriculture is being seriously eroded by contradictory provincial and federal programs. Despite numerous federal-provincial meetings, joint goal definition remains elusive. She concludes that Canada's federal system with its strong degree of provincial autonomy has a negative effect on agricultural marketing. The differences in comparative advantage in different regions are reflected in protectionist provincial policies. In the short run, these may benefit a sector of the farm community. In the longer term, however, Canada's national interest and the interest of its farmers will not be served by such policies.

In taking the longer-term view, Canadians must recognize that domestic solutions to problems, whether these are undertaken by the federal or the provincial governments, are inadequate. Short-run approaches are narrow solutions which will not lead to the realization of the opportunities which exist for Canadian agriculture.

The fourth theme of the book points to the opportunities which exist for Canadian agriculture if there is an international and multilateral approach to agricultural policy. In T.K. Warley's view, multilateralism is Canada's best national policy as far as agriculture is concerned. This implies, of course, that the agricultural sector must be considered in the overall formation of Canadian foreign policy. That policy, at least in regard to agriculture, should be, in Professor Warley's view, expansionary and outward looking. Clay Gilson's paper also shows how real the opportunities for expansion are. This coincides with the view of the Macdonald Commission which concluded that, "The potential exists for continued expansion of Canada's exports of grains, oil-seeds and red meats, but there are major uncertainties in world markets."[5] The fact is that under present international conditions, Canada is losing ground.

The increased competition and bickering among the leading exporting nations is not only distorting world markets but also affecting political relations among states. Perhaps more than any other nation, Canada's interest lies in the strengthening of GATT rules affecting agriculture and in the renewal of the International Wheat Agreement. The highly-regarded skills of Canadian diplomats would be very well-employed in fashioning new schemes for international collaboration in the area of agriculture. In presenting the

5. *Royal Commission on the Economic Union and Development Prospects for Canada* 2:438.

Canadian point of view, however, Canadian diplomats must have the backing of an educated public which is aware of the costs as well as the opportunities which are present in all negotiations. In this education, politicians, the media, the academic community, and the agricultural organizations all have a part to play.

This brings us to the fifth and final major theme of the book: Canada's interest will be best served through the creation of a stable and secure international trading system, but this system cannot be stable unless it is fair. The unfairness of the present system became dramatically evident in the recent media reports of appalling starvation in Africa, and, in striking contrast, of surpluses, reduced production and falling prices in western producing nations. Clearly, the distribution of world agricultural production and trade is badly skewed. Some consuming nations, notably the developed countries, have been able to take advantage of the global surpluses and low prices of many commodities such as wheat. Developing countries, however, are caught in a major debt crisis and lack the funds to feed their own people.

Financing, however, may not be the developing countries' only problem in the future. The present surpluses in the international agricultural markets can quickly change given the highly cyclical nature of agricultural production and price levels. The approaches being followed today in response to surpluses and to low prices are similar to those taken in the late 1960s and early 1970s. Acreage reduction programs and surplus disposal schemes then left the world highly vulnerable to the effects of unusual market activity and climatic disturbances. By the mid-1970s, consumers worldwide were facing soaring prices as a result of scarce supplies. At that time, the developing countries were unable to buy essential food supplies–at any price.

It is with this background in mind that Jozef van Brabant appeals to developing countries to build up their stocks of grain now to anticipate future shortages. The establishment of either an internationally co-ordinated grain reserve program or a system of reserves held by developing nations is, unfortunately, on the international agendas only in times of scarcity. Little attention is given to such a proposal in periods of abundance which are, paradoxically, the optimal times to establish grain reserves. Dr. van Brabant further warns that the tendency to work out bilateral agreements, which is so marked today, is reducing developing nations to the position of residual importers–a position which is perilous in times of scarcity. Each crisis brings some opportunities, but if these opportunities are not grasped they move farther away.

It is over four decades since Canada hosted the founding conference of the Food and Agriculture Organization of the United Nations. Many hopes were expressed then, and some have been fully realized. Certainly the abundance of many parts of the world has exceeded the expectations of the founders. Some promises, however, were not kept, not least because the global perspective is too often lost. This book we hope, will recall those promises and provide that perspective.

Canadian Agriculture in a Global Context: Opportunities and Obligations derives from a conference of the same title which was sponsored by the Centre of Foreign Policy and Federalism at the University of Waterloo and Wilfrid Laurier University. The conference was held at St. Jerome's College at the University of Waterloo in May 1985. A second volume of papers given at the conference will be published later this year.

We would like to thank several organizations which supported the conference and this publication. The Donner Canadian Foundation has provided continuing support to the Centre on Foreign Policy and Federalism as has the Dean of Arts at the University of Waterloo. The conference was generously supported by Agriculture Canada, and we particularly appreciated the presence of the Hon. John Wise at the conference. We also received assistance from the Canadian International Development Agency, the Ministry of Agriculture and Food of the Province of Ontario, the Social Sciences and Humanities Research Council, and Wilfrid Laurier University.

We are most grateful to our colleagues, Professor Toivo Miljan, Director of the Centre on Foreign Policy and Federalism, and Andrew Cooper, Associate Director of the Centre, for their wise counsel and encouragement. Brian Bower, Suneeti Phadke, and Kathy Sage assisted us with typing, research, and a variety of other tasks. Grace Skogstad and Ted Cohn, who are authors in this book, were also advisors for the conference. Their expertise greatly shaped the way the conference took form. Charles Weitz always pushed us to do more than we intended to do, and we greatly appreciate that he did so. In the production of this book, Carol Kieswetter has been invaluable. Nancy Stade, David Bartholemew and Gloria Smith brought their great technical skills to the assistance of the two editors for whom much of the publishing terrain was unknown. Michael Sage helped us greatly not only with the content of the

book but also with proofreading. No-one recognizes errors so quickly and so kindly. Finally, a special debt of gratitude is owed to our families for their patience and understanding.

The Global Context

Charles H. Weitz

It is now four decades since the conclusion of the Second World War and the foundation of the peacetime United Nations. It is also forty years since the creation of the Food and Agriculture Organization of the United Nations which had its beginning on 16 October 1945 in Quebec City. What would those who gathered then at Quebec think today? What can we say has been achieved in four decades of international co-operation, four decades of striving to achieve global freedom from hunger?

Today's World. Dr. M.S. Swaminathan of India, now head of the International Rice Research Institute once observed, "...if agriculture goes wrong, nothing goes right."[1] How else are we to comment on the paradoxes of today's world? What are we to make of seemingly unutilizable stocks of grain in North America–a recent article in *Foreign Affairs* is titled "A World Awash in Grain"[2] –and mountains of dairy products both here and in Europe alongside the spectre of widespread famine, death and suffering affecting more than 30 million people in Africa? What are we to think when we hear the repetition of FAO's Statistics of Hunger which steadily repeat that some 400-500 million of our fellow beings continually suffer from undernutrition, and more than a billion people are afflicted with hunger and undernutrition sometime each year?

The stark lessons of history remain as true today as they have been throughout history: unless more food can be produced by the poor for the poor in the developing world, drought, refugee movements and conflicts will turn continents into flames.

We are faced today with the tragic paradox of severe food shortages in the midst of global abundance. We again see all around us pressure to reduce economic losses by curbing production of food, even at the cost of bankrupting farmers and disrupting generations-

1. M.S. Swaninathan in an address on receiving an Honorary Degree from the University of the Philippines, Los Banos, Philippines, quoted in "The Staffs of Life-IV-Everybody's Business," by E.J. Kahn, Jr., *The New Yorker,* 4 March 1985, p. 74.

2. Barbara Insel, "A World Awash in Grain," *Foreign Affairs* 63, no. 4 (Spring 1985):892-911.

old rural communities, while elsewhere in the world the landless, the destitute, the "non-persons," unable even to provide their sustenance, face at worst death by starvation or at best a life without hope. One thing is certain: Agricultural policy can no longer be only an agricultural or domestic issue.

At the time of the United Nations World Food Conference of 1974, Asia was projected to be on a disaster course with grain import needs estimated to reach levels of up to 35 million tons annually by 1985. Today, as we know, food production in the developing countries of Asia has increased to a surplus situation, an outstanding demonstration of appropriate policy, technical inputs and most of all, political will. India and China are the outstanding examples of the abrupt turnaround. China's food security is now such that it is believed it could withstand two successive poor harvests without serious malnutrition.

It must also be noted that overall population increase is at the level of 1.8 percent in Asia, with India projected at 1.9 percent, and China at 1.0 percent by the year 2000.

At the other extreme is Africa where for more than a decade food production has fallen and where today the worst drought of the century has brought food production rates to zero. One hundred and fifty million people are affected–30-40 million of them severely. It is a disaster unprecedented in the world since the Black Death of the fourteenth century.

Population growth for Africa is now 2.9 percent with projections which put rates much higher by the year 2000 for some countries; for example, 3.1 percent for Ethiopia, 3.5 percent for Tanzania and Nigeria, and 3.3 percent for Niger.

We are reminded by many authorities that there is no real evidence for Africa that either agricultural production or family planning will significantly reverse the sinking per capita food production equation. Some also argue that large parts of Africa are in the first stages of an even more catastrophic change where population growth is starting to cause climatic change.[3] The aridity and fragility of large parts of Africa, its denuding, the increasing numbers of humans and animals seeking to survive in what was already a marginal atmosphere, has begun a drying out of the continent. There is a suggested breakdown in the relationship between environment support systems and population numbers.

3. Lester R. Brown et al., *A World Watch Institute Report on Progress Toward a Sustainable Society* (New York, 1985), chap. 1.

As a footnote to Africa, both in the Harare Declaration of the recent FAO African Regional Conference[4] and in the World Bank's study *Toward Sustained Development in Sub-Saharan Africa*[5] there are encouraging critical analyses of past practices and performance and strong political declarations by governments for the future which indicate sharp change in policy and program. Against the bleak current assessments we can only hope governments mean what they say and donors will stand by to play their role in the development partnership.

On the demand side there remains persistently weak international activity. So overall world stocks have risen, commodity prices have failed to respond to whatever global recovery there has been and this response failure has further eroded the ability of the poor countries to pay for their food imports and has left them more dependent on food aid.

Nowhere is the paradox more evident than in our manifest concern with these basic issues and the attention devoted to them. Starting with John Boyd Orr's challenge to governments in 1946 as first Director General of the fledgling FAO, through the prescriptions of the First and Second World Food Congresses convened by FAO in 1963 and 1970, to the United Nations World Food Conference of 1974, the basic blueprints for a world free from hunger have remained unaltered except in detail. Prestigious national studies commanding technicians and politicians of the highest ranks have repeated the basic formulae. The World Bank's Independent Commission on World Development headed by Willy Brandt observed that while hunger rules peace cannot prevail; that he who wants to ban war must also ban mass poverty.[6]

In receiving the Third World Foundation's Peace and Development annual award for 1984, Mr. Brandt speaking at the United Nations repeated this thesis asking, "Can one rule out today that hunger and mass misery are conducive to the conditions from which new wars arise?"[7]

4. Harare Declaration, *Report of the Thirteenth FAO Regional Conference for Africa,* 16-25 July 1984, ARC/84/Rpt. Food and Agriculture Organization of the United Nations, Rome.

5. World Bank, *Toward Sustained Development in Sub-Saharan Africa–A Joint Programme of Action* (Washington, D.C., 1984).

6. Willy Brandt, North-South, *A Programme for Survival,* The Report of the Independent Commission on Internation Development Issues (Cambridge, MA: MIT Press, 1980), p. 16.

7. Willy Brandt, *Peace and Development,* text of the Third World Lecture 1985 (New York, 1985).

Thus we need spend little time here–or elsewhere–inquiring into what needs to be done. Library shelves groan under the weight of the volumes of largely complementary advice. We need to do what has been agreed should be done. In the introduction to FAO's comprehensive analysis *Agriculture: Toward 2000* it is said, "The World Food Conference target of mid-1985 (to abolish hunger) was not only ambitious; in practice it has been ignored."[8] But *Toward 2000* said it was possible for the world to set a target to abolish hunger which could be taken seriously.

Major Policy Issues. In examining Canada's agriculture within the international perspective it is useful to identify main elements in FAO's major analysis, *Agriculture: Toward 2000,* which directly apply. Post-war experience has shown that good progress of the economy as a whole will not be made if agriculture is allowed to lag. Thus the challenge for developing countries is to achieve acceleration in agricultural production and to ensure that the poor get enough income to acquire the food they need. The major challenge facing most developed countries is to follow an agricultural policy which while not neglecting domestic issues facilitates the agricultural trade of the developing countries. In the international context this means achieving a major relaxation of trade barriers for agricultural products (including processed goods), greater assurance as to the availability of supplies, and substantial increases in external assistance to developing countries. Leaving aside masses of detail, let me identify two specifics which appear to dominate.

Liberalization of trade in manufactured goods under GATT has progressed under successive rounds, but international cooperation to reduce barriers to trade in agricultural commodities has been less marked where there is a vast array of non-tariff measures, including national support policies which form the principal set of barriers to trade expansion. Governments are reluctant to negotiate elements of their national agricultural support policies. The issue of market access and expansion of trade in agricultural products has two major dimensions. First, a general relaxation of protective domestic support policies would give increased scope for efficient producers both developed and developing, to expand their shares of world markets. Second, enlarged market access into developed countries on a positive discriminatory basis in favour of developing countries would assist them in expanding exports at an accelerated rate. A general liberalization of agricultural trade would have a significant impact on

8. FAO, *Agriculture: Toward 2000,* Conference of the Food and Agriculture Organization of the United Nations, C79/24 (July 1979), Rome, Italy.

the export earnings of both developed and developing countries.

For its eleventh ministerial meeting this year in Paris the World Food Council's papers observe that for a majority of developing countries a one-way dependence on international markets is a reality. While twenty-five countries represent 80 percent of *both* supply and demand and thus effectively determine markets worldwide, all the major countries pursue *autonomous* agricultural policy objectives which pertain to their own economies. This inward-looking stance, the Council's paper observes, is detrimental to the performance of world markets for food.[9]

Unfortunately, the prevailing international mood of today seems to have retreated even further from cooperation and mutual interdependence into "an each country for itself" mode, with increasing evidence of unilateralism and worrisome signs of increasing protectionism. Any serious thoughts of Global Negotiations under the United Nations' umbrella are postponed; the Common Fund for the UNCTAD Integrated Programme for Commodities including twelve agricultural commodities remains agreed upon in principle but unsubscribed to in practice. The International Grains Agreement, essential to market stability and to ensuring a secure reserve, is at a negotiating impasse with no prospects for action by the major partners.

With respect to resources, a Pakistani Minister of Agriculture sadly observed not long ago that it is only when a disaster hits that people think of money for agriculture.[10] Nowhere has this been better illustrated than in the world's response to its fright at the time of the first Sahelian drought and three successive years of poor harvests–1971 to 1973–culminating in the hastily convened UN World Food Conference of 1974.

That Conference diagrammed massive increases in both national investment and external assistance to agriculture needed to achieve the multiple targets of the twenty-two Resolutions the Conference adopted. And for a few years there was response–a near doubling in real terms of the resources available to agriculture–never fully reaching the WFC goals but being comfortably close. All this fell apart rapidly as the world economic difficulties of 1979 set in. This resulted in falling bilateral aid flows and even more seriously in falling multilateral aid through the UN Development Programme,

9. World Food Council, *Eleventh Ministerial Session,* Paris 10/13 June 1985, WFC/1985/5 (New York, 1985).

10. E.J. Kahn, Jr., "The Staffs of Life-IV-Everybody's Business," *The New Yorker,* 4 March 1985, p. 51.

the World Bank, the IDA and the International Fund for Agricultural Development, which itself has only narrowly escaped complete collapse.

FAO's *Agriculture: Toward 2000,* which I must remind you is not a plan but a projection of three alternative growth scenarios, buttressed the World Food Conference's investment/aid figures and soberly said that the clear message of any of its three scenarios was that a significant acceleration of agricultural output by the year 2000 would require a "huge increase" in the use of material inputs.

While part of these inputs would have to derive from national budgets, external assistance would be required. The commitment of $4.3 billion made in 1977 (in 1977 dollars) would have to reach a level of $12.7 billion by 1990 and $16.8 billion by 2000. There is no need to dwell on how far bilateral and multilateral aid flows fall short from either WFC targets or *Toward 2000* projections. You will have to answer for yourselves whether Canada's response which places her in eighth rank out of 17 OECD countries, contributing only 0.47 percent of her GNP for official development assistance is either adequate or an appropriate response.

Future Concerns. Let me turn now to a few features of the world's agricultural landscape and the world's future. In my view, three features dominate the landscape and must have priority, for the rich and poor, for the North and South. These are soil erosion, water resources and genetic diversity. In no way does the selection of these three deny the importance of many others. But these three are, I feel, universal and in each case debate and programs of action fall far short of need.

The achievement of the past generation in more than doubling world food production has not been without cost, and nowhere is this more obvious than in threats to our most precious heritage, the world's soil. To achieve again a doubling of world food production in well under a generation (1980-2000) with a continuation of present cultivation practices and land use patterns would border on negligence. Agricultural scientists have warned that North America–the World's Bread Basket–is using its agricultural resources in a fashion verging on recklessness and is mining its soils to the detriment of productivity in the long run.[11] Canadian scientists have spoken clearly on the dimensions of Canada's problems and in the United States, which is the only major food producer to have undertaken a systematic survey of its top soil, conclusions show that

11. Lauren Soth, "The Grain Export Boom: Should It Be Tamed," *Foreign Affairs* 59, no. 4 (Spring 1981).

erosion is taking place on much of the nation's best cropland faster than replacement. About one-quarter of total cropland is eroding at above replacement rates and in many critical areas the rates are even higher. While few other parts of the world have undertaken such intense studies, evidence continues to mount in the USSR, China, India, portions of Latin America and of course in large parts of Africa, of alarming and excessive rates of topsoil loss. Desertification is on the increase in every section of the globe. By 1985 the total loss of topsoil from cropland was over 25 billion tons in excess of new soil formation.

Rising rates of topsoil loss are not the result of declining skills of cultivators–to the contrary–but rather from pressures on cultivators to produce more. Agricultural systems and practices, which were ecologically stable until fairly recently when the world's population was only 2 to 2.5 billion, appear to be breaking down as we move through the 4 billion level. Unless there are significant changes in both policies and investment, they will deteriorate even more rapidly as we become more than 6 billion people within the next fifteen years.[12]

Finally, it is not only cultivation practices and lack of investment in conservation practices which result in the loss of cropland and the reduction in its productivity but also shift of farmland to non-farm purposes. Urbanization, industrialization, recreation, and transportation are all withdrawing valuable cropland from cultivation. According to UN projections the urban share of population will increase from 29 percent in 1950 to 50 percent by the year 2000; more than 3 billion people will be living in urban areas. Unfortunately as urban sprawl continues in its unplanned ways, it is usually onto the best croplands. As the Science Council of Canada has reported, half of Canada's farmland lost to urban expansion is from the best (richest) 1/20th of Canada's farmland (see E. Manning's article in this book).

There have been feeble and uncoordinated efforts evident in many places to try to deal with these phenomena. Urban centers (selfishly perhaps?) try to limit growth; rural areas by tax policies or land use standards try to hold land for agricultural purposes. China's leaders are concerned with burial mounds taking up valuable cropland and so are campaigning to encourage cremation. But nowhere is there serious evidence of long-term land use strategy combining

12. United Nations Department of International Economic and Social Affairs, *Estimates and Projections of Urban, Rural and City Populations, 1950-2025: The 1980 Assessment* (United Nations, New York, 1982).

the consideration of all of these elements which has been adopted as state policy *and* which has been *budgeted.*

The issue parallel to soil is fresh water. Seemingly like all other resources of this earth, overall fresh water supplies are adequate for present and foreseeable use. But such an observation is a canard. As a renewable resource as far as we know, under existing climatic conditions the supply of fresh water is about the same each year and today's supply is about the same as at the dawn of civilization. Asia–where the greatest bulk of the world's population is concentrated, and Africa, are the continents facing the greatest water stress. Supplies for each Asian today are less than half the global average and the continent's run-off is the least stable of all the major land masses. In Africa two-thirds of the countries have annual run-off a third less than the global average, and one river–formerly the Congo–accounts for 30 percent of the entire continent's renewal supply but that river flows through sparsely-populated rain forest. Canada is the most water-wealthy nation in the world. But two-thirds of its river flow is northward while 80 percent of its people live within 200 km. of the U.S./Canadian border.

Worldwide, agriculture claims the bulk of water use–about 70 percent. One-third of current harvests come from the 17 percent of cropland which is irrigated, and to meet even minimum needed production increases, FAO has projected that this acreage should be increased by one-fourth by 1990. So far the schedule is far from being met; costs are enormous and are rising rapidly as most of the least costly areas are already developed.[13]

Before looking at the future of water competition, however, we must also examine a companion issue, salinity. Soil salinity is as old as agriculture and today is crippling production in North Africa, the Middle East, both North and South America, Australia and Asia. Estimates are hard to come by and do differ widely, but George Borgstrom of Michigan has said that at least 50 percent and possibly as much as 65 percent of all irrigated land will be destroyed by salt before the end of this century. The paradox of this is that salinity is, in theory, reversible.[14] But reversing it is very expensive and like so much else in the world food equation, politics and economics are the obstacles. Who pays? in what proportion? and what is the impact on the ultimate cost of food to the consumer?

13. Sandra Postal, "Managing Freshwater Supplies" in *A World Watch Institute Report on Progress Toward a Sustainable Society* (New York, 1985), chap. 3.

14. Janet Raloff, "Salt of the Earth," *Science News* 126, no. 19 (10 November 1984):298.

Industry is the second competitor for water, using about one-quarter of the supply world-wide; Canada uses 85 percent of her current withdrawal for industry, the USSR 30 percent and India 2 percent. But growth projections estimate industrial water use in Latin America, for example, will rise by 350 percent by 2000 while overall UN targets project an 8 percent annual growth–ambitious but a target which surely implies competition and rising costs in many areas.

Human use is a poor third, using less than 7 percent world-wide and in dry areas where walks to the well may mean many kilometers a day, human usage can be measured at as little as 2/5 litres per person per day. Except for the most affluent areas where little growth in personal water use is expected, in most of the world dramatic increases for human use are projected, both to account for 2 billion more people and to meet rising expectations. Human water use may well double in Third World countries.

Total use by 2000, even with optimistic growth scenarios, will account for only about half of the total stable renewable supply. *But* to meet demands in North Africa and the Middle East will require virtually full utilization of all supplies; usage in southern and eastern Europe and central and southern Asia will be uncomfortably close to the total the regions can tap. And these predictions assume no mismanagement or malutilization and waste–as well as no civil disorders to disrupt orderly development and utilization. No region, no matter how water abundant, can remain immune to the consequences of mismanagement and abuse, evidence of which can already be seen even in the most sophisticated and developed areas as neglect of pollutants and competing demand and cost escalate.

In a country which boasts of a Pat Roy Mooney, one should not speak of conserving biological diversity. I do so only briefly to underscore in this review of agriculture the critical nature of this issue and to urge action for a legally binding international convention on the exchange of plant genetic resources coupled with the creation of a system of internationally controlled gene banks. Gene banks and genetic engineering seem a far cry from issues of land reform, national self-reliance or protection of soil resources, but germ plasm is the raw material of seeds and seeds are the first link in the food chain. Germ plasm once gone cannot be recovered; the introduction of new plant varieties leads to the elimination of the older ones. Genetic erosion is a profound threat to world food security.

I am constrained in this study from going into issues of forestry

and fisheries which from the international–and technical–point of view are closely linked with agriculture. Forests and forest lands constitute one of the earth's main material resources; forestry is a major industrial giant with *exports* alone exceeding $55 billion annually. Even if one is to ignore its major employment, financial and trade implications, agro-forestry and forest and watershed management are intimately bound with soil preservation, water resources, recreation and wildlife management. Canada's forests are both a major part of its rural and industrial life and are major components in its foreign trade and international relations.

And a word about fish! As a Maine resident I am regularly reminded that a significant aspect of Canada's relations with the United States has to do with fisheries matters. Nutritionally and economically, domestically and internationally, Canada's fishing industry is not to be overlooked. New horizons and problems now arise from the Expanded Economic Zones of the United Nations Convention on the Law of the Sea as well as the Strategy for Fisheries Management and Development adopted at the FAO World Conference on Fisheries Management and Development held just a year ago. In the words of the Strategy, there is a need to respond to "...an opportunity for governments to review the contributions fisheries can make to national economic, social and nutritional goals, and to re-examine national and international objectives, policies and strategies for fisheries management and development."[15]

U.N. Perspectives. Let us turn to the other half of my charge, some remarks about the United Nations System, international multilateral cooperation and Canada's role. Canada has always played a significant role in the multilateral system and the Secretary General acknowledged this leadership and responsibility in his 1985 visit to Canada. Many Canadians have contributed much to the UN System and to mention the list of perhaps less well known Canadians who have served with distinction would require a small phone directory: Bill Hutton, Jean Steckle, David Hopper, for example, spring to mind. Lester Pearson must stand out for his pioneering, and both his direct and indirect contributions to the growth of the multilateral spirit and concepts of great balance and equity in the world economic and social order. Hugh Keenleyside gave significant impact to the development of the UN's capacity to deliver assistance to Third World Countries and Maurice Strong, now back assisting the Secretary General in the UN System's response to the grave crisis in Africa, was the pioneer who brought the world to grapple with issues of the environment culminating in the UN Conference on the Environment.

15. FAO, *Report of the FAO World Conference on Fisheries Management and Development* (United Nations, Rome, 1984).

Today, on the System's fortieth birthday, there are certainly signs of middle-age fatigue. Multilateralism seems to have lost much of the dynamism and inspired support which characterized its early years. But multilateral institutions do not exist in a vacuum. Their usefulness and effectiveness are the sum total of their governors' behaviours, together with the attitudes, interest and support of the people. To paraphrase the Pakistani Minister of Agriculture, nations today seem to think of the UN System only in times of stress or when they seek special privilege or advantage.

As science, technology, transportation and communications, banking and finance, indeed every aspect of life knits more strongly the webs which bind each of us into a global community–truly "One World"–we seem to act in every way *except* to use and strengthen international multilateral mechanisms for peaceful cooperation. Humans have moved in socio-political arrangements from the family to the clan, to the national state which today dominates the political landscape. Each move to a larger grouping with an equal surrender of individual freedom to the needs of a larger political sphere was taken, not on the basis of ideological considerations, but in response to practical day-to-day changes in the state of the arts. Each day we read a new statistic which confounds us again about the speed of change; yet we bind ourselves to systems of governance which DO NOT reflect the world in which we live nor which are capable of dealing with the forces which influence our daily life.

Our common sense tells us that our world, and the world of our children, is interdependent. Each day we are reminded again that the nation state cannot provide us with the necessities of life or assure our security acting by itself. We know that we cannot survive alone. We know that we are not secure behind the mountains of arms. Yet we ignore the need to fashion peaceful instruments of problem solving and resort instead to centuries-old, discredited defences of weapons, pacts and alliances. No matter how great Canada's contributions are to multilateral cooperation–and I applaud them both intellectually and financially, they are dwarfed into insignificance by her investment in arms. Canada's total annual investment in the multilateral system is about $300 million Canadian or about $220 million U.S. Expenditures on arms approximate $4.7 billion U.S. Thus Canada's investment in all forms of multilateral cooperation is less than 5 percent of her investment in arms.

I am indebted to Ambassador Douglas Roche, currently Canada's Ambassador for Disarmament for his elegant statement made recently to the Cross Cultural Learners Centre in London in the continuing debate on disarmament and development. Ambassador Roche–who, incidentally, has also contributed a splendid handbook worthy of attention titled *United Nations: Divided World*–said *inter alia*, that the earth's carrying capacity was well able to provide for the basic needs of the world's population so we could progress to a more equitable economic order, "But the arms race itself has become a threat to security."[16]

Rather than get into the arms question or the disarmament-development debate, let me turn back to the UN System and suggest a number of things I think could be done to restore vitality to the System and to make it a more viable instrument for settlement of international issues and negotiation of peaceful solutions to major problems, including agriculture.

First, several observations: the UN System is not ideally fashioned to deal with today's problems. The founding nations of 1945 did not clearly foresee a world of 160 sovereign states, the rapid integration of the world's economic and technical systems nor the explosion of world population. Therefore the polycentric system of 1945 has built-in difficulties in coping with today's interrelated issues. For all its handicaps, my judgment is that it has an outstanding record of achievement in the economic, social, and humanitarian fields; that record is open for examination.

A second observation follows: whatever might be its deficiencies, the System is better than anything which could be devised in today's divisive and fractured atmosphere. Therefore it is folly to spend precious time or energy belabouring it, since the present universal multilateral system can be made to work (better) and within the framework of the Charter and the constitutions of the various Agencies.

A third and final observation is that the superpowers are paralyzed. They are incapable of moving forward or backward. No significant leadership toward the reconciliation of the world's social, economic or humanitarian problems can be expected from them. Therefore, and I have said this before in Canada, and Canadians of all walks of life have said it too and better, steps to get us off dead center and to return the world to negotiated problem solving must come from a coalition of "middle powers" or the so-called

16. Douglas Roche, "Guns vs. Butter: A Canadian Approach," an address to the Cross Cultural Learners Centre, London, Ontario, 14 March 1985.

"like-minded" powers. There are greater areas in common between the middle and smaller powers (defined in economic terms and military authority, not in terms of physical or population size) than there are areas of division. As they can define these areas and return to the multilateral fora for negotiation, so they will force the superpowers to recognize this movement and change to join the dialogue.

How can performance be improved? First, the multilateral approach must become an integral part of 'foreign affairs.' Few if any countries have a single screen over which all external issues are passed. Foreign policy is traditionally and still today bi-lateral or multi-nation oriented. United Nations, that is, international multilateral approaches, are seen as a unit or bureau with 'foreign affairs.' The twain seldom meet. There is no training for multilateral diplomacy; there is no honour within foreign services for multilateral service. I have been told by foreign service officers that service on UN delegations or missions is regarded still today as a diversion, as an interruption in "foreign service" career development. Nowhere, in any government, as far as I know, is there training, preparation or career opportunity for technical officers within governments for service with major specialized agencies–except as temporary loans for technical assistance missions. I was disturbed recently in a talk to students at a Canadian university engaged in a year-long course on Canadian 'international relations' to find that the course dealt with Canada's relations with the rest of the world by country, by region, by issues, and by legal systems, but nowhere with Canada's multilateral relations through the UN System!

Second, the major issues which dominate the agenda(s) of the UN System transcend sectoral lines. Yet neither within the System nor within governments does this find proper reflection. The UN itself remains the exclusive domain of foreign ministries, the FAO usually the "Turf" of the agriculture minister. Yet domestically, foreign ministries have a small, a lesser role, in issues which broadly affect the economic, social and humanitarian affairs of the country. In representation and responsibility governments must move to ensure the multilateral system more accurately reflects the actual way governments are fashioned and behave politically. In representation, the System must not be kept in artificial sectoral compartments. Issues do not stop at the theoretical jurisdictional limits of a sectoral agency, nor should political representation of governments. The technical work of the Specialized Agencies would be strengthened, not weakened, by being drawn politically into the mainstream of the General Assembly. Equally the General Assembly would become

more realistic, and accurately reflective of the genuine inputs of the rest of the System, if representation was shared by foreign ministries according to the nature of issues being debated and decided.

Third, it is time governments–all governments–started scaling rhetoric to reality. One of the most disturbing features of the System is the distance between the lofty sentiments of its resolutions and the paucity of its means and the performance of states which have voted the resolutions. Nowhere was this clearer than in the twenty-two Resolutions and Declaration of the World Food Conference. Certainly, many things were done (A World Food Council was created–we always seem to be able to create more machinery–the FAO Early Warning System was upgraded, etc.) but the basics remain undone a decade later. Are we to criticize the Conference delegates for their lack of competence? Or do we conclude that governments did not fulfill the commitments they entered into when they cast their sovereign votes?

Fourth, there is a need for a better and more developed system of permanent representation to the System. Canada's Mission to the UN is a well-fleshed out bureau staffed with officers of exceptional competence and dedication. But where is this bureau duplicated? Are Canada's interests only in New York? Rome is called 'the world food capital.' There FAO, the World Food Council, the World Food Programme and the IFAD all have their headquarters. Surely Canada's stake and role in food, nutrition, agriculture, fisheries, forestry, etc., deserve a substantial bureau of permanent representatives combining political, technical, trade and economic competences?

And back to the issues of training for multilateral service, it must be kept in mind that a national civil servant no matter how technically competent he or she may be is operating less as a technician than as a political representative when he/she sits behind a sign which says 'Canada' and speaks, one would hope, on behalf of all of Canada's 25 million people and the whole cross-section of the technical sectors of the Canadian economy. Thus a government representative who speaks 'for Canada' should be as politically accountable for statements as if these were spoken in a political forum within Canada.

Fifth, there must be greater consistency in the words and deeds of this–and all other–governments in each international forum. I am not naive enough to believe that total consistency is achievable–that would be political unreality–but a large measure of the cacaphony of the UN System arises not from its Directors General, that is, the international secretariats, but from government representatives saying different and even contradictory things in the different UN fora.

Don't we have two examples in the disintegration of the System in agriculture and in development assistance? We do not have space to go into the issues here but the breakup of the System into at least four different world agricultural authorities, including taking agricultural research outside of FAO is one example. The dismemberment of the central funding theory for UN technical assistance of the UNDP–to the point where today an agency like FAO receives as much technical assistance money from its own regular budget and from bilateral funds deposited with it directly by governments, as it does via the central funds of the UNDP–is another outstanding example of governments saying and voting for contradictory policies in New York, Rome and elsewhere. Then, governments criticize the System for its contradictions, confusions and overlapping.

Finally and perhaps most important, steps need to be taken within the country and in modifying the rules of association within the UN organizations to strengthen and take more serious account of the non-governmental world including business and industry. A national parliament and the method by which national legislators are chosen and work provide for full interplay of all elements within a society. The UN System is artificially sealed off from meaningful association with these forces except in as yet superficial ways.

Through your excellent Council for International Cooperation, the North-South Institute and many strong Canadian NGO's there is a good basis for even more positive relationships; yet I would suspect that if you were to ask, most major NGO's here would find it hard to define how their concerns are reflected by civil servants who represent Canada and how they see the issues they devote time and effort on in fund raising and development education are reflected in debate and interaction at the international level. One exception to this generalization is UNICEF but UNICEF is a unique part of the System.

For example, the excellent interplay between Canadian community groups and the World Food Conference in Rome was not a planned, structured interdependence, and many civil servants would observe they were upset and even embarrassed by an NGO activity which moved outside 'official' channels. Equally, the international community did not make any meaningful arrangements for citizens' involvement; indeed, what small privileges were gained were forced from a reluctant conference administration.

Nowhere is the gap wider than for business and industry. FAO

was over-bold in experimenting two decades ago in establishing a working relationship formed by an association of a large number of the multinationals, in the food, forestry, and fisheries industries. Neither side was entirely satisfied with the way the experiment was working but it was killed not for the inadequacy of its results but by extraneous political charges. It was too short lived to permit conclusions to be drawn either about the form of cooperation which had been devised or the basic efficiency of a direct relationship between an international organization and the industrial megagiants in its field of competence.

The Industry Cooperative Programme, as it was called, has been revived in a different form by the Secretary General and the Administrator of the UNDP in an Industry Council for Development. Other experiments are to be encouraged. After forty years, it is time the UN System ceased to be the exclusive preserve of governments (that is, their civil servants). Both nationally and internationally steps need to be taken to strengthen and enrich the UN governance system through more meaningful association with the non-governmental world–and Canada with its already healthy, vital and aggressive non-government community with its strong interrelations with government can help lead the way.

Conclusion. There is more, much more, which needs to be examined and explored in moving forward toward a more effective UN System but I can say no more here.

We are concerned here with mankind's first and most fundamental right–the right to be free from hunger. Our welfare and the welfare of many billions will depend on how we see the world in which we live and which we wish to fashion for our children. We must think clearly about the quality and equity of the relationships we foster. We must be clear about the dilemmas of today and the dilemmas facing agriculture. Problems and choices are universal. The widespread changes facing the world ensure that agriculture must be treated on a world policy basis and no longer as primarily a domestic political issue.

Canadian Agriculture in a Global Context: An Overview

T.K. Warley

The purpose of this introductory essay is to identify briefly some of the topics that will be examined in detail in subsequent papers, and to set them in the contexts of Canada's policy for the food and agricultural sector and of our international economic policy. This task is addressed in four ways. A review of the facts of Canada's agri-food trade is given first. This is followed by the identification of the salient features of Canada's agricultural trade relationships with the developing countries, the centrally planned economies and with our major trading partners and competitors in the developed world. Thirdly, a sketch is provided of the agenda for reforming the conduct of agricultural trade among the developed countries. Some of the generic national policy issues that arise from Canada's involvement in an interdependent world food system are identified in the final section of the paper.

1.0 *Canada's Agricultural Trade.*

Canada has a large area of cultivable land relative to its population, possesses a well-structured, well-managed and technologically advanced agri-food sector (farming, input supply and food marketing, processing and distribution industries) and highly developed private and public ancillary infrastructures (transport, credit, research, education, and the like). These are the foundations of Canada's position as a net exporter of agricultural products.

The value of Canada's agricultural exports and inputs over the last five years is shown in Table 1. The surplus on agricultural trade represented 90 percent of the country's merchandise trade surplus in the 10 year period 1971-1980; in recent years the positive agricultural trade balance has been 20 to 50 percent of the overall surplus.

Closer examination of the trade data (Table 2) reveals that agricultural exports are rather narrowly based. Grains and oilseeds account for almost three-quarters of all farm and food exports, with

Table 1

CANADA'S AGRICULTURAL TRADE 1980-1984

Year	Exports ($ Billion)	Imports	Balance
1980	7.8	5.1	2.7
1981	8.8	5.6	3.2
1982	9.3	5.1	4.2
1983	9.5	5.2	4.3
1984	10.3	6.1	4.2

Source: Agriculture Canada, Handbook of Selected Agricultural Statistics 1984, Supply and Services, Ottawa, 1984, Table 59.

wheat and flour alone representing a half of total agricultural exports. The surplus on trade in live animals and red meats is of relatively recent origin. The positive trade balance in dairy products–the third largest component–has nothing to do with comparative advantage; it results from policies of subsidizing national milk production, restricting imports and dumping skim milk powder on world markets.

About a half of agricultural imports are of products that are either not produced in Canada (e.g., plantation crops and fibres) or are produced only seasonally. Fruits and vegetables are the most important competitive imports and offer the best prospects for import substitution.

The present direction of Canada's trade in agricultural products is shown in Tables 3 and 4. Other developed countries are still the largest outlet for agricultural exports though they have become relatively less important over time. The centrally planned economies take about a third of all agricultural exports; shipments of grains account for almost all this trade. Developing countries together take about a fifth of all exports and this share has recently stagnated at this level. In 1983 and 1984, the U.S.A. was the largest single outlet for Canada's agricultural exports, taking over that position from the U.S.S.R.

The direction of agricultural imports is quite stable. The U.S. is by far the largest supplier, with 40 percent of the value of shipments to Canada from that country being fruits and vegetables.

Table 2

CANADA'S TRADE IN AGRICULTURAL PRODUCTS, 1983
(in millions of dollars)

	Exports	Imports	Balance of Trade
All goods	88,506	75,587	+12,919
Agricultural and food products	9,505	5,185	+ 4,320
Grains, grain products and animal feeds (except oilseeds)	6,114	343	+ 5,771
Oilseeds and oilseed products	816	453	+ 363
Live animals	310	96	+ 214
Meats	697	321	+ 376
Other animal products	360	301	+ 59
Dairy products	239	102	+ 137
Poultry and eggs	40	78	- 38
Fruits and nuts	105	1,231	- 1,126
Vegetables (except potatoes)	209	624	- 415
Potatoes and products	80	36	+ 44
Seeds for sowing	50	53	- 3
Sugar	41	228	- 187
Tobacco, raw	104	25	+ 79
Vegetable fibres	21	110	- 89
Plantation crops	20	688	- 668
Other	299	495	- 196

Source: Agriculture Canada, Canada's Trade in Agricultural Products, 1981, 1982 and 1983, Pubn. #84/2, October 1984, Tables 3 and 31.

In a global perspective, Canada is not a major player in world agricultural markets. World agricultural trade is small relative to world food consumption, and Canada's shares of world agricultural exports and imports are not large (Table 5). To be sure, Canada has a significant position in world exports of wheat, barley and rapeseed, but these are small relative to world production and trade in all grains and all fats and oils. For all practical purposes, Canada is a price-taker in the agricultural commodity markets in which she trades.

The above data emphasize that the Canadian agri-food system is–in a very tangible way–internationalized. About a third of

Table 3

DESTINATIONS OF CANADIAN AGRICULTURAL EXPORTS, 1979-83
(percentage of total agricultural exports)

	1979	1980	1981	1982	1983
Developed of which:	66.9	46.7	48.2	47.2	46.8
U.S.A.	16.7	14.3	14.3	17.3	18.3
Japan	18.0	13.2	15.3	13.4	13.6
EEC-10	22.2	16.5	15.7	13.3	12.2
Other	3.5	2.7	2.7	3.2	2.7
Centrally Planned of which:	21.8	31.9	36.0	35.3	33.0
U.S.S.R.	7.3	16.7	20.0	20.6	17.3
China (mainland)	6.8	6.8	8.1	8.0	9.9
Others	7.7	8.4	7.9	6.7	5.8
Developing	17.8	21.4	15.8	17.5	20.2

Source: Agriculture Canada, Handbook of Selected Agricultural Statistics, 1984, Supply and Services Canada, Ottawa, 1984, Tables 59 and 60.

Table 4

ORIGINS OF CANADA'S AGRICULTURAL IMPORTS, 1979-1983
(percentage of total agricultural imports)

Imported From	1979	1980	1981	1982	1983
Developed of which:	77.0	78.5	77.7	79.7	78.8
U.S.A.	57.2	56.9	58.2	60.5	60.4
Australia	5.1	6.6	5.0	4.6	3.5
New Zealand	2.7	2.6	2.3	2.4	2.7
EEC-10	7.1	6.6	6.9	7.5	8.2
Other	4.9	5.9	5.4	4.7	4.5
Centrally planned	2.6	3.5	4.5	2.4	1.8
Developing	20.4	18.0	17.7	17.9	19.4

Source: Agriculture Canada, Handbook of Selected Agricultural Statistics 1984, Supply and Services Canada, Ottawa, 1984, Tables 59 and 60.

Table 5

SHARE IN WORLD AGRICULTURAL TRADE, CANADA,
1979-1981 AVERAGE

	% Share	
Commodity	Exports	Imports
Agriculture, fish and food	3.5	1.7
Wheat and flour	16.7	-
Barley	18.1	-
Rapeseed	59.2	0.1
Beef and veal	1.2	1.8
Pigmeat	7.2	1.2
Sugar	-	3.6

Source: OECD Trade Database.

Canadian agricultural output is exported. The value of agricultural exports is numerically equal to 50 percent of gross farm income. Though the degree of self-sufficiency varies between commodities (Table 6), fully two-thirds of agricultural output (grains, oilseeds and red meats) is effectively priced in world markets, and only the 20 percent of output represented by the dairy and poultry sectors is insulated from world market conditions. Moreover, the degree of dependence of the Canadian food system on world markets will grow in the future rather than diminish. This is for two reasons. First, successful exporting of the agricultural products in which Canada has a comparative advantage will make important contributions to the balance of payments and to national income. Second, because the national market has a very limited absorbtive capacity and because farmers cannot rely on income transfer policies to provide them with rising economic returns and standards of living, the level of farmers' income and asset values–now and in the future–is crucially dependent upon the sale abroad of growing volumes of farm products.

It follows that the economic well-being of the Canadian agri-food system is directly dependent upon general economic conditions elsewhere in the world; the conditions of supply and demand in world commodity markets; conditions of access to and competition in these

Table 6

SELF-SUFFICIENCY RATIOS, CANADA, 1981

Commodity	Percentage
Wheat	479
Barley	203
Oats	104
Corn	126
Canola	162
Soybeans	63
Beef	99
Pork	121
Sheepmeat	43
Poultry meats	96
Milk and milk products	103
Butter	105
Cheddar cheese	143
Other cheese	81
Skim milk powder	280
Eggs	109
All fresh fruit	36
All canned fruit	29
All frozen fruit	115
Fruit juices	28
All fresh vegetables	72
All canned vegetables	75
All frozen vegetables	103
Potatoes	110

Source: Agriculture Canada, Self-Sufficiency Trends in Canadian Agriculture: 1960-1980 Trends and Future Prospects, Working Paper 5/85, Ottawa, March 1985.

markets; and the productivity, reliability and commercial agility of Canadian suppliers relative to their competitors.

2.0 *Regional Aspects of Canada's Agricultural Trade Relations.*

2.1 *The Developing Countries.* In the context of food and agriculture, the over-arching obligations of Canada to the developing countries are to foster accelerated economic development, to alleviate

hunger and malnutrition and to enhance world food security.

In respect of the world food problem, three specific constructive Canadian contributions can be noted. Canada has designated agricultural and rural development as a priority in our programs of development cooperation. We are the second largest supplier (after the U.S.) of food aid. Thirdly, we have been active proponents of the food security features of attempts to organize world grain pricing and stocking through an intergovernmental commodity agreement for grains.

The trade relationship is less satisfactory. Hopes generated in the 1970s that the developing countries would provide rapidly expanding markets for Canada's agri-food exports have been dimmed in the 1980s by the less developed countries' slowing economic growth rates and the burdens of servicing their accumulated debts. Nonetheless, because of continuing difficulties in agricultural development, high population growth rates, large income elasticities of demand for food and changing food preferences, the third world offers promising long-term agricultural export markets for countries like Canada which have a comparative advantage in agricultural production, and particularly in the supply of food and feed grains. Servicing this market requires, inter alia, appropriate export marketing institutions, credit schemes and product mixes. While the Canadian Wheat Board is an agency well-suited to the successful merchandising of grains to developing countries, there are questions about whether Canada can match the credit arrangements provided by other suppliers and whether Canada has an appropriate mix of utility and "cadillac" types and grades of wheat in its export supply.

Development of commercial sales of agricultural products to developing countries also requires that attention be paid to methods by which the foreign exchange earnings of these countries can be stabilized and raised. Here Canada's record is mixed. On the positive side we have consistently supported such stabilization measures as international commodity agreements and expanded International Monetary Fund resources and special facilities. Furthermore, we have zero or low duties on many tariff line items of export interest to developing countries and a (rather niggardly) generalized preference system is in place. On the other hand, several features of Canada's trade policy restrict access to Canada for developing country exports. Thus, some developing country exports of manufactures face quantitative import barriers (e.g., textiles, apparel and footwear); some Canadian production of raw and processed agricultural products that could be supplied by developing countries is

provided with high degrees of effective protection (e.g., tobacco, vegetable oils and some horticultural products); and, two rich-country suppliers of sugar (Australia and South Africa) have preferred access to the Canadian market over low-income shippers.

2.2 *Centrally Planned Economies.* Since 1972, these countries have come to provide large markets for world and Canadian exports of grains (and, to a lesser extent, livestock products). Together, these countries bought 33 and 17 percent of 1983-1984 world wheat and coarse grain exports. Their importance to Canada was even greater for in 1983-1984 they took 50 and 33 percent of Canada's wheat and barley exports respectively. The development of this component of world and Canadian grain trade results from the decisions of the authorities of the centrally planned economies to provide larger supplies of livestock products to their citizens and to rely on grain imports from the West to make up for short-falls in indigenous supplies that are attributable either to sporadically poor harvests or to chronic failures in socialist agriculture policies and systems.

This trade engendered some uncertainties when it began in the first half of the 1970s. These included uncertainty about asymmetries in the distribution of benefits from commerce between open and planned economies; fears for the destabilizing upward pressures on prices caused by the large food purchases of the U.S.S.R.; resentments over the socialist countries' free-rider status in the world food system; and concerns about the need for political direction of trade that is not covered by the norms of international commerce that are enshrined in the articles of the General Agreement on Tariffs and Trade. However, a decade later these concerns seem to have dissipated with the reemergence of abundance in world grain markets, the improvement of market intelligence about food supplies in the Eastern bloc countries and the proliferation of bilateral framework trade agreements governing grain purchases.

At present the major problem facing grain exporters such as Canada in servicing markets in the centrally planned countries is that of knowing how best to cope with the year to year instability in the grain import demands of these countries. Bilateral framework agreements seem to be the preferred solution. However, these have their limitations and it is now unclear whether the importers will be willing to enter into such agreements in the future. Over the longer term the main worry is that this trade will diminish with the improved performance in the socialist countries' grain sectors that can be expected with the end of a succession of years of atypically poor growing conditions and, more importantly, with the expected response of agricultural production to new policies that emphasize economic incentives and decentralization of decision making. Canadian agriculture is now quite vulnerable to short-run variation and long-run diminution in the centrally planned economies' grain import demands and to continued erosion of the status of preferred supplier which we enjoyed in earlier years.

2.3 *Other Developed Countries.* Same weight as Less Developed Countries and Centrally Planned Economics.

2.3.1 *European Community.* Historically, Europe was Canada's largest agricultural market. Recently this market has shrunk in absolute and relative terms, the major reason for this decline being the suppression of import demand attributable to the European Community's common agricultural policy (CAP). Indeed, the high and absolute protection provided to European agriculture by the CAP has stimulated output of many products to the point where the region is more than self-sufficient. Consequently, Canadian farm and food products now face competition in world markets from Europe's subsidized exports of wheat, barley, wine, beef, pork, poultry, and other products. Internal budgetary and political pressures are forcing the Community to effect various reforms in the CAP. These include pricing disciplines, limits on the amount of product eligible for support and other forms of agricultural supply management. Whilst these changes may reduce the rate of growth of Europe's farm output and thereby attenuate the pace of accumulation of the CAP's adverse external effects, there is no expectation that the reforms will be sufficiently far-reaching as to roll back from current levels the volume of subsidized European agricultural output and exports. From the viewpoint of Canada's agri-food system, agricultural trade relations with Europe will, at best, continue to deteriorate though at a somewhat slower rate.

2.3.2 *Japan.* The salient feature of Japan's food system is that this country has a cultivable land base smaller than that of Ontario's (13.5 v 14.9 million acres) from which to feed a population of over 100 million. With such a limited arable land supply, Japan is able to produce only half its people's food requirement on a calorie basis. The corollary is that Japan is–and is destined to remain–a huge importer of farm and food products. Furthermore, Japanese authorities have deliberately opted to rely on world markets to provide almost the entire Japanese demand for selected commodities including wheat, feedgrains, and oilseeds. Consequently, Japan is a large, open and stable–though intensely competitive–market for the wheat, barley, and canola that are Canada's leading agricultural

exports.

However, low-cost agricultural exporters such as Canada face restricted access and autarky-encouraging farm support programs for commodities that Japanese authorities have decided should be produced entirely or largely from domestic resources. Hence, a major task of Canada's commercial diplomacy is to secure improved access to the Japanese market for such products as beef, pork, fruits and vegetables, processed products, and packaged foods. Canada also faces the additional challenge of preventing a deterioration of the conditions of its access to available Japanese markets relative to more influential, more heavily subsidized or more proximate suppliers such as the U.S., the EC and Australia.

2.3.3 *United States.* In agricultural trade the United States is at once Canada's largest supplier, outlet and competitor.

Inter-trade is relatively unimpeded for a wide range of raw and processed agricultural products. Where trade is restricted, this is sometimes a non-contentious feature of the two countries' separate national farm programs; mutual restrictions on intertrade in grains (other than corn) and manufactured dairy products are examples. Canada's quota restrictions on U.S. exports of eggs and poultry meats are not a source of dispute since the U.S. has retained its historic shares of the Canadian market for these products. Likewise the U.S. was accorded appropriate compensation when Canada raised its tariffs on some fresh and processed fruits and vegetables in 1979. The U.S. has few complaints about its access to the Canadian food market. Canadian access to the U.S. market is however vulnerable to the parameters of U.S. farm support programs for some products (e.g., sugar and tobacco) and to the contingent protection that can be imposed on exports from Canada to countervail what is deemed to be unfairly subsidized competition. Pork, hogs, raspberries, blueberries, and potatoes are examples of products that have been the subject of recent U.S. countervail actions.

Complete bilateral free trade in farm and food products might not be an objective of either country given the extent to which the authorities in both countries regulate and support various components of their agri-food industries and pursue different objectives with different policy instruments and institutional arrangements. Selective trade liberalization might be more feasible however. On the Canadian side the priority would be to secure assured access to the U.S. market; the U.S. would likely aim for freer access for its exports of fruits and vegetables, wines, and processed agricultural products, and for limits on the unfair subsidization of some Canadian

production. Both countries would be concerned to reduce the host of technical barriers that presently impede agricultural trade, in both directions.

In facing the rest of the world, the dominant features of the relationship between Canada and the U.S. are the mutuality of their interest in agricultural trade policy reform and their intense commercial rivalry. Both share the trade policy objectives of reducing the level of agricultural protection in other countries and of bringing more discipline to agricultural trade. Their commercial rivalry to secure available markets will likely intensify in the future–particularly in the all-important grain sector–as a result of the U.S. lowering its grain support prices, pursuing more aggressive export market development programs and ending the over-valuation of its currency.

3.0 *Trade Policy Reform.*

Trade in farm products is greatly affected by national agricultural support programs. In general, the national agricultural policies pursued by the developed countries stimulate agricultural production and curtail consumption, thereby increasing net export availabilities and lowering net import requirements. Thus, international trade in farm and food products is shaped by the interactive effects of national agricultural policies. International prices, traded volumes and direction of trade flows are distorted and destabilized, and the competitive position between producers of each country are changed in national and international markets. The general effects of this situation include waste in the use of the world's agricultural resources; large (and often regressive) international redistributions of income; exacerbation of commodity market instability; progressive erosion of the integrity of the General Agreement on Tariffs and Trade (GATT); and politically damaging and economically dangerous conflicts between otherwise friendly states.

Given the importance of its agricultural trade, no country has a greater stake than Canada in a better functioning world agricultural production and trading system. Specifically, Canada and the Canadian agri-food system need: a reduction world-wide in the support given to high-cost agricultural production; improved and assured access to import markets; effective curbs on the use of subsidies to agricultural exports; equitable sharing of the burdens of adjusting production, stocks and consumption to changing conditions in world commodity markets; and an extension of the domain, the authority and the effectiveness of the GATT as it applies to agricul-

tural trade. For these reasons Canada welcomes–and will participate prominently in–the further attempt to improve the conditions of agricultural trade that will be made in the multilateral trade negotiations that will occur in the latter part of this decade.

However, it must be acknowledged that some of Canada's agricultural support policies and associated trade arrangements are regarded as trade-distorting by other countries. Canadian commodity policy measures with direct and indirect trade effects are identified in Table 7. It is certain that Canada will be asked to make changes in some of these programs by our trading partners. Leading candidates for requests for change are:

- national dairy policy which involves a high degree of subsidization of domestic production, restrictive import regimes and the dumping of surplus products on world markets
- the tariffs that provide high degrees of effective protection to the horticultural, tobacco and food processing industries
- the wine procurement and pricing policies of provincial liquor monopolies that discriminate against foreign suppliers
- the transportation subsidies to grains (and other regulated products) that effectively act as export subsidies
- the subsidy component in federal and provincial commodity "stablilization" schemes.

Little is known about the nature and dimensions of the adjustments that would result from changes in these national farm support programs and the trade arrangements that would accompany them.

4.0 *Concluding Observations.*

Food and agricultural matters permeate the economic and political relations between and among the members of the international community. They involve some major issues of global society and are addressed in a varied set of multilateral institutions. This wide canvas is suggested by Figure 1. Canada, as a leading member of the family of nations and as a significant producer, exporter, and purchaser of agricultural products is deeply and inextricably involved in the global food system.

National policy-making for a trade-driven agri-food system in an economically and politically interdependent world is no small task. It requires the internationalization of national farm and food policies and the domestication of international economic and world food system policies. As such it requires that the narrow sectoral policies

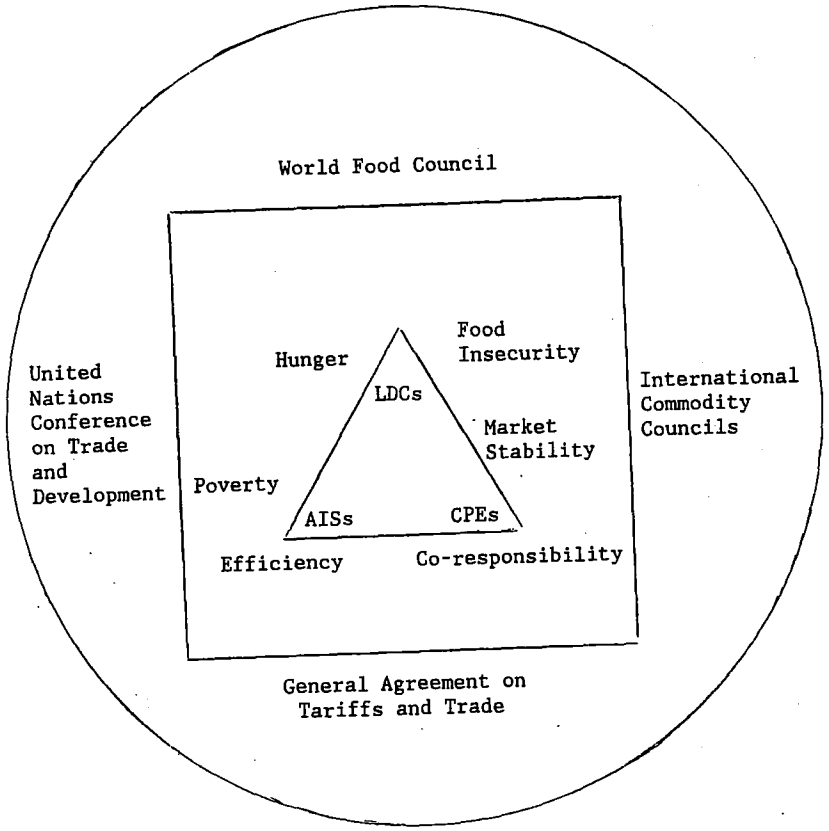
Table 7

MAJOR COMMODITY SPECIFIC POLICY INSTRUMENTS AFFECTING OUTPUT, CONSUMPTION AND TRADE, CANADA, 1985

	Wheat	Barley	Corn	Soybeans	Canola Products	Cattle	Hogs	Beef and Veal	Pork	Sheepmeat	Chicken	Turkey	Eggs	Fluid Milk	Industrial Milk	Butter	Cheese	Powdered Milk	Sugar	Potatoes	Fruits and Vegetables	Tobacco	Grapes/Wine
Product Support																							
Price & margin support																							
Full cost pricing																							
Floor pricing	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Margin support	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Two prices	*																						
Supply control																							
Trade controls																							
Tariffs	*	*	*				*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*
Quotas		*						*			*	*	*			*							
Licensing		*						*			*	*	*			*							
State trading	*	*																					
Export subsidies	*																						
Food aid																							
Input subsidies																							
Transport	*	*			*																		
Storage																							
Crop insurance	*	*	*	*	*																		

Figure 1

AGRICULTURE AS A PLANETARY PROBLEM:
ACTORS, ISSUES AND INSTITUTIONS



LDCs = Less Developed Countries
AISs = Advanced Industrial Societies
CPEs = Centrally Planned Economies

that are the domain of Ministers of Agriculture and the stuff of farm programs be integrated with broader national economic policies and with international diplomacy on such matters as trade, payments, exchange rate regimes, debt management and development cooperation.

The difficulties of successfully integrating diverse food system related policy elements into a synergistic policy set in a compartmentalized structure of government with ill-defined, shifting and conflicting objectives are familiar enough. These difficulties are compounded in a federal state like Canada where the different levels of government have distinctive food sector development strategies and autonomous agricultural programs, and where there may be conflicts between national obligations and regional ambitions.

Freedom of action in policy making for the Canadian agri-food sector is also materially constrained by the economic and agricultural policies of the United States. In this regard, the resolve of the U.S. to follow more market-oriented domestic farm programs and to attempt to substitute government payments with increased export earnings (secured by a combination of commercial diplomacy to open markets, expanded foreign market development programs and vigorous counters to the unfair competitive practices of other countries) has the greatest significance for Canada, for there seems to be no alternative but to meet this competition head to head.

In a wider sense it would seem that attainment of the Canadian agri-food system's full potential and of satisfactory returns for its participants can only be achieved by an expansionary philosophy and an outward-looking posture. The small size of the Canadian market and severe limits on public expenditures rule out the option of insulating the Canadian agri-food system as a whole–or additional parts of it–from world markets and from the need to compete in them. Government policies increasingly acknowledge this reality and are giving greater emphasis to public programs that enhance productivity, share down-side market risks with producers, conserve the resource base, identify market opportunities and support private international merchandising efforts. These are all constructive contributions. What is still missing, however, is an acknowledgement that–in both a national and a global context–Canada needs to become a better importer of the farm and food products which at the margin can be produced more cheaply elsewhere. This requires a reduction in the degree of internal subsidization and border protection provided to cosseted segments of the Canadian agri-food system, and the provision of adjustment assistance to the commodity subsections, firms and regions that would have to adapt in a more competitive environment.

Canadian Agricultural Export Capabilities

J.C. Gilson

Introduction. There is little doubt that Canada has a substantial capability insofar as its agricultural export sector is concerned. Not only is Canada a very large exporter of agricultural products at the present time but the potentiality exists for a considerable expansion in that trade.

Canada has a large and productive agricultural land base (93.2 million acres of improved farmland) relative to its 25 million domestic food consumers. The managerial competence, the financial resources and the technological capacity of Canadian agricultural producers rank favourably with producers in any other nation of the world. Canadian farmers are supported by a vast agri-industrial system on both the input and output side of their operations and the entire agricultural system is reinforced by a comprehensive set of public programs relating to marketing, credit, research, and extension activities.

The capacity is there for a very substantial expansion in Canada's agricultural production and export trade. Whether, of course, the opportunities are available for such an expansion and how Canada can best take advantage of these opportunities are questions which we will examine later in this paper.

Developments 1970-1985. With a few notable exceptions, Canada's agricultural production capacity far exceeds its domestic food consumption requirements (Table 1). For example, in the case of wheat, feed grains, oilseeds, skim milk powder, potatoes, pork and cheddar cheese, a significant proportion of the domestic production is sold in the export markets of the world. With respect to eggs, milk and poultry meat, production is approximately equal to domestic consumption requirements, but this has occurred as a matter of deliberate policy under Canada's supply management programs for these commodities. A detailed examination of the scope and regional distribution of these programs is found in Grace Skogstad, "Federalism and Agricultural Marketing" in this book. While Canada

Table 1

SELF-SUFFICIENCY RATIOS FOR SELECTED COMMODITIES

	All Wheat	Barley	Corn	Canola	Soy Beans	All Fresh Fruit	Apples	Peaches	Frozen Fruit	Apple Juice	Asparagus	Potatoes
0-71	199	141	88	400	41	48	99	73	85	97	38	100
5-76	356	146	91	362	51	45	100	69	61	93	32	94
1-82	479	203	126	162	63	36	81	52	115	106	23	115

	Tomatoes	Canned Carrots	Canned Corn	Frozen Corn	Frozen Peas	Beef	Pork	Turkey Meat	Chicken Meat	S.M. Powder	Cheddar Cheese
0-71	81	58	127	135	82	97	106	101	100	280	158
5-76	78	67	123	362	124	94	99	88	95	297	138
1-82	79	95	118	171	110	99	121	94	96	280	143

Note: A ratio below 100 means a deficit relative to domestic consumption; a ratio in excess of 100 means that there is a surplus relative to domestic consumption.

Source: Agriculture Canada: International Trade Policy Division, Self-Sufficiency Trends in Canadian Agriculture, Working Paper 5/85, March 1985, Ottawa.

is in a substantial deficit position with respect to fresh fruits and vegetables (mainly during the winter season), there has been a remarkable expansion in the supply of domestically produced canned and frozen fruits and vegetables. To some degree, these canned and frozen products have substituted for the imported fresh commodities.

In a general sense, there can be no question about the importance of the export market for Canadian agricultural producers. Since 1980, nearly one-half of the gross farm income in Canada has been derived from the export market (Table 2). In other words, nearly 50 cents of every dollar received by Canadian farmers comes from the sale of their products to other countries.

Nearly 70 percent of Canada's $10 billion agricultural export business goes to the E.C., the U.S.A., Japan, the U.S.S.R., and China[1] (Table 3). Although these areas have been the main recipients of Canada's agricultural exports since 1970, there have been major shifts in the relative importance of these markets.

Through intensive domestic support programs, the E.C. has been able to give up gradually its reliance on agricultural imports from North America and has actually become a major competitor in the grain sectors. The American market has perhaps been the most stable for Canadian agricultural exports. The current free-trade negotiations and American proposals to reduce or eliminate agricultural subsidies may affect this situation.

By far the most important component of Canada's overall agricultural export trade relates to the grain sector. Grains, oilseeds and oilseed products accounted for nearly 70 percent of that trade (Table 4). This has been a strong growth sector during the past 15 years. Since 1970, Canadian grain and grain product exports increased by 250 percent. During that same period, barley exports nearly tripled and rapeseed/canola exports increased by nearly 400 percent.

This tremendous increase in production has been the result of both international and national influences. In the international market, the mid-1970s was a period of relative scarcity of supply and high prices for grain. These conditions led to greatly increased

1. Changes in agricultural import requirements in Japan and China have been dealt with by Michael Donnelly in "Canadian Agricultural Exports: The Challenge of Japan" and Karen Minden in "Politics and Business: The Canada-China Wheat Trade 1960-1984," respectively. The U.S.S.R. has, since 1970, been of critical importance to Canada's agricultural export trade. Its imports have declined however since 1982. For further information on Soviet agriculture see Lenard Cohen, "Closely Watched Grains: The Political Economy of Soviet and East European Agriculture".

Table 2

AGRICULTURAL EXPORTS AS A PROPORTION OF GROSS FARM INCOME

	Agriculture			Agricultural Exports	
Year	Gross Income $000,000	Operating & Depreciation Charges $000,000	Total Net Income $000,000	Total Exports $000,000	Exports as % of Gross Income
1970	4,433	3,157	1.276	1.684	38.0
1971	4,837	3,414	1,423	1,993	41.2
1972	5,387	3,757	1.629	2,135	39.6
1973	7,726	4,558	3,168	3,004	38.9
1974	9,139	5,618	3,521	3,860	42.2
1975	10,558	6,524	4,035	3,924	37.2
1976	10,558	7,296	3,259	3,952	37.4
1977	10,554	7,800	2,754	4,260	40.4
1978	12,421	9,102	3,320	4,712	37.9
1979	14,520	10,976	3,545	6,047	41.6
1980	15,830	12,673	3,157	7.786	49.2
1981	19,744	14,784	4,959	8.783	44.5
1982	19,056	15,583	3,472	9,304	48.8
1983	18,323	15,671	2,652	9,505	51.9

Source: D. L. Aubé, Canada's Trade in Agricultural Products 1981, 1982 and 1983, Publ. 84/2 (Ottawa: Agriculture Canada, October 1984).

production and export targets for all major producers.

These developments were particularly significant for Canada, since wheat is the single most important agricultural export commodity. Indeed, nearly one-half of all Canadian agricultural exports is based on wheat (Table 5). What is equally significant, nearly 82 percent of all wheat produced in Canada is sold abroad (Table 6). This underlines the importance of international developments in agriculture to the Canadian economy. Policy developments in Washington, Brussels, and Moscow can therefore have profound effects on wheat producers

Table 3

RELATIVE IMPORTANCE OF MAJOR IMPORTERS OF CANADIAN AGRICULTURAL PRODUCTS

Year	Total Agricultural Exports Canada $000,000	Percent Distribution of Canadian Agricultural Products				
		E.E.C.	U.S.A.	Japan	U.S.S.R.	China
		percent				
1970	1,684	30.3	20.4	11.5	5.3	7.2
1971	1,993	31.7	16.6	11.6	5.8	9.7
1972	2,135	26.6	16.9	12.9	12.6	10.8
1973	3,004	23.5	18.3	17.9	9.5	6.4
1974	3,860	24.2	13.7	17.8	--	8.8
1975	3,924	21.4	12.5	18.8	9.6	7.9
1976	3,952	22.8	14.5	19.7	11.9	3.6
1977	4,260	21.2	16.3	17.8	6.8	7.4
1978	4,712	19.4	16.6	17.1	7.3	7.4
1979	6,047	22.2	16.6	17.9	7.3	6.8
1980	7.786	16.5	14.3	13.2	16.6	6.8
1981	8,783	15.7	14.3	15.3	20.1	8.1
1982	9,304	13.3	17.3	13.4	20.6	8.0
1983	9,505	12.2	18.3	13.6	17.3	9.9

Source: Aubé, D. L., Canada's Trade in Agricultural Products 1981, 1982 and 1983, Publ. 84/2, Agriculture Canada, Ottawa, October 1984.

in Canada. Such developments, particularly those which affect price or availability of supply, also greatly affect the 90 other nations which purchase Canadian grain. Few other sectors of the Canadian economy have this type of exposure in the international market place.

Relative to the other major wheat exporting countries, Canada has managed (until the current crop year when a major drought occurred in the Prairies) to maintain a share of close to 22 percent of the world wheat export market. Canada's ability to maintain its share of the world market has in part been a result of international political considerations as well as domestic economic policy decisions.

Table 4

RELATIVE IMPORTANCE OF VARIOUS CANADIAN AGRICULTURAL PRODUCT EXPORTS

Year	Total Canadian Exports	Canadian Agri-Cultural Exports		Grains and Grain Products		Oilseeds and Oilseed products		Live Animals		Red Meats	
		Total	Agric. as % of Total	Total	As % of Total Agric. Exports	Total	As % of Total Agric. Exports	Total	As % of Total Agric. Exports	Total	As % of Total Agric. Exports
	$000,000	$000,000		$000,000		$000,000		$000,000		$000,000	
average 1974-78	39,616	4,144	10.5	2,543	61.4	465	11.2	120	2.9	208	5.0
1979	64,317	6,047	9.4	2,992	49.5	1,004	16.6	224	3.7	428	7.1
1980	74,446	7,786	10.4	4,724	60.7	848	10.9	229	2.9	514	6.6
1981	81,337	8,783	10.8	5,202	59.2	1,004	11.4	201	2.3	620	7.0
1982	81,824	9,304	11.4	5,580	60.0	805	8.6	298	3.2	776	8.3
1983	88,506	9,505	10.7	5,864	61.7	816	8.6	310	3.3	697	7.3

Source: D. L. Aubé, Canada's Trade in Agricultural Products, Agriculture Canada, October 1984.

Table 5

WHEAT EXPORTS RELATIVE TO TOTAL CANADIAN AGRICULTURAL EXPORTS

Year	Total Agricultural Exports	Total Wheat Exports	Wheat Exports as % of Total Agricultural Exports
	$000,000	$000,000	%
average 1974-78	4,144	1,992	48.1
1979	6,047	2,179	36.0
1980	7,786	3,861	49.6
1981	8,783	3,727	42.4
1982	9,304	4,288	46.1
1983	9,505	4,648	48.9

Source: Aubé, D. L., Canada's Trade in Agricultural Products, Agriculture Canada, October 1984.

One example of such considerations is the Soviet grain embargo imposed by President Jimmy Carter in 1980. In retaliation to the embargo, the Soviet Union contracted its wheat purchases from the other major producers, particularly Canada, and thus reduced the United States to the status of a residual supplier. As a result, during the following 3 years, the United States share of the world export market declined while that of the other major producers remained constant or actually increased. In terms of domestic economic policy, the extent to which the governments of major producers are able to subsidize their agricultural sector through price supports and concessionally credit schemes has also affected their competitiveness on the world market.

These shifts in market shares have been a source of continuing provocation to the United States and could very well lead to aggressive and disruptive export policy measures by the United States.

While we will examine in more detail later the emerging policy developments at both the domestic and international level, it is worth noting that the growing conflicts among the major agricultural trading nations of the world have created enormous uncer-

Table 6

CANADIAN WHEAT PRODUCTION AND EXPORTS

Year	Production '000 tonnes	Exports Wheat and Flour '000 tonnes	Exports as % of Production %
1969-70	18,267	9,430	51.6
1970-71	9,024	11,846	131.3
1971-72	14,412	13,700	95.0
1972-73	14,515	15,692	108.1
1973-74	16,162	11,446	70.8
1974-75	13,304	10,779	81.0
1975-76	17,081	12,336	72.2
1976-77	23,587	13,436	57.0
1977-78	19,858	16,040	80.8
1978-79	21,136	13,084	61.9
1970-80	17,196	15,889	92.4
1980-81	19,292	16,262	84.3
1981-82	24,803	18,447	74.4
1982-83	26,735	21,368	79.9
1983-84	26,588	21,765	81.9
Average 1969-1984		=	81.5%

tainty for agricultural producers in Canada. The conflicts between the United States and Canada over the Canadian export of hogs to the United States was evident in a recent ruling by the United States Department of Commerce to increase customs duty on Canadian hog and pork imports. This decision followed the Department's "preliminary finding that the Canadian industry is unfairly subsidized by federal and provincial income stabilization programs."[2] The Canadian cattle industry has been similarly angered by the subsidized export of E.C. beef to Canada. The growing conflict between the E.C. and the United States over a variety of agricultural domestic and trade issues, further emphasizes growing uncertainty which hangs ominously over the Canadian agricultural industry at the

2. *Kitchener-Waterloo Record*, 4 April 1985.

present time.

These policy conflicts among the major agricultural trading nations have been compounded by the enormous external debts which have been accumulated by several nations, many of which have been significant importers of Canadian agricultural products during the past 15 years.

Canada's Agricultural Production Capacity. As indicated in the previous section, the tight market conditions of the mid-1970s necessitated a general re-evaluation of Canada's agricultural production capacity. As a result several major studies have been conducted to determine the potential production capacity of Canada's agricultural industry. Most of these studies have concluded that the potentiality for further expansion is considerable.

A major document, *Challenge for Growth: An Agri-Food Strategy for Canada,* published by Agriculture Canada in 1981, indicated that overall agricultural production in Canada could increase (given the appropriate incentives for producers) from 79 to 90 percent between 1975 and 2000.[3] The projected increase of between 86 to 107 percent in the production of grains and oilseeds would be made possible through genetic improvements, more purchased production inputs, better management and a shift of 12 million acres from summerfallow to annual crop production. Between 1975 and 1990, the Agriculture Canada study projected that beef production could increase by anywhere from 114 to 133 percent and pork production by 94 to 102 percent.

Agriculture Canada's study recognized, however, that a number of critical factors would have an important influence on the outcome of these projected possibilities–commodity price variability, natural hazards, levels of research, and development programs in both the production and processing sectors of the agricultural industry, input costs, market promotion initiatives, transportation and handling costs, availability of capital and international trade barriers.

A study completed by the Canada Grains Council in 1982 indicated that grain production in the three prairie provinces, for the period 1981-1990, could be increased by approximately 8.8 million tonnes, or an increase of 22 percent over the 1981 base period[4] (Table 7). This study concluded that nearly 50 percent of the projected increase would come from reduced summerfallow, about

3. Agriculture Canada, *Challenge for Growth: An Agri-Food Strategy for Canada,* Ottawa, 1981.

4. G. Weaver, M.J. Nilsson, and R.E. Turney, *Prospects for the Prairie Grain Industry 1990,* Canada Grains Council, Winnipeg, November 1982.

Table 7

PRINCIPAL IMPORTERS OF CANADIAN WHEAT EXPORTS
('000 tonnes)

ır	Total Canadian Wheat Exports	E.E.C.		U.S.S.R.		China		Japan		Brazil	
		Total	%	Total	%	Total	%	Total	%	Total	%
'8-79	12,302	2,032	16.5	1,429	11.6	3,102	25.2	1,226	10.0	948	7.7
'9-80	15,215	2,183	14.3	2,579	17.0	2,516	16.5	1,336	8.8	1,270	8.3
30-81	15,659	2,209	14.1	3,971	25.4	3,879	18.4	1,381	8.8	1,284	8.2
31-82	17,973	2,042	11.4	5,019	27.9	3,101	17.2	1,367	7.6	1,314	7.3
32-83	20,957	1,881	9.0	6,959	33.2	4,424	21.1	1,341	6.4	1,503	7.2
33-84	21,285	2,037	9.6	6,761	31.8	3,428	16.1	1,527	7.2	1,362	6.4

ırce: Canada Wheat Board, Annual Report 1983-84.

30 percent from improved yields, and the remaining 20 percent

Table 8

TOTAL POTENTIAL PRODUCTION INCREASES TO 1990
BY SOURCE OF INCREASE[1]

Source of Increase	Manitoba	Saskatchewan	Alberta	Total
	(000 tonnes)			
New Land	257.6	833.1	781.5	1872.2
Reduced Fallow	376.8	3075.2	823.0	4275.0
Improved Yields	459.0	1224.3	977.1	2660.4
TOTAL	1093.4	5132.6	2581.6	8807.6

[1] Increase over production levels recorded in 1981.

Source: Canada Grains Council, Prospects for the Prairie Grain Industry 1990, November 1982, p. 62.

Table 9

PROJECTED PRODUCTION OF MAJOR GRAINS IN 1990

Crop	Manitoba	Saskatchewan	Alberta	Total
	(000 tonnes)			
Wheat	3479.5	17105.5	6371.3	26956.3
Oats	493.0	747.7	1103.2	2343.9
Barley	2648.6	4256.7	8076.6	14981.9
Flaxseed	392.5	233.8	100.0	726.3
Canola	746.5	1521.3	1559.0	3826.8
TOTAL	7760.1	23865.0	17210.1	48835.2

Source: Canada Grains Council, Prospects for the Prairie Grain Industry 1990, November 1982, p. 114.

from new land brought into production (Tables 8 and 9).

While there are differences among the various projections on Canada's agricultural production capacity, the general conclusion is obvious: Canada has considerable scope for expansion in its agricultural production if the appropriate incentives are provided to the

agricultural producers of the nation.

Although these studies have established Canada's potential for agricultural expansion, they have done so with a rather short-term view of our resource base. The proposed reduction in summerfallow acreage and the intensification of production would undoubtedly have profound effects on soil quality if sustained over a period of time. A comprehensive study of Canada's land base conducted by the Senate has noted the increasing degradation of the agricultural soils and the loss of farmland to urban and industrial uses.[5] This report estimates that Canadian farmers are losing $1 billion per year due to soil degradation.

Edward Manning, Chief of the Land Use Analysis Division in Environment Canada, has also detailed the potential hazards to our resource base of a production maximization approach in the following article, "Planning Canada's Land Resource Base for Sustainable Production."

In addition to land degradation, other environmental considerations would include warnings which have been issued by wildlife groups who have noted the rapid disappearance of the natural habitat for various birds and animals. The Manitoba Naturalists' Society noted recently:

> Only 276,000 hectares of the original 2.3 million hectares (12 percent) of natural wetlands in southern Ontario exist today, and on the prairies, intensive agricultural practices have resulted in the loss of nearly 1.2 million hectares. Marsh, swamp, and bog are the habitat of many birds and other wild life.[6]

Agricultural Export Possibilities. One of the more interesting projections made on agricultural export possibilities was done by the Canadian Wheat Board in 1979 and updated in 1980. The Canadian Wheat Board export targets for western grain and oilseed products were set at 30 million tonnes for 1985 and 36 million tonnes by 1990 (Table 10). These targets were regarded by some sceptics as unduly optimistic given the fact that only 20 to 22 million tonnes were being exported when the projections were announced by the Wheat Board in the latter part of the 1970s.

It is interesting to note that the 30 million tonne export target was met in August 1984, one year ahead of the projected schedule.

5. Senate of Canada, *Soil at Risk,* Ottawa, Ontario, June 1984.
6. Manitoba Naturalists' Society, *Bulletin* 8, no. 3 (February 1985).

Table 10

THE CANADIAN WHEAT BOARD EXPORT TARGETS, 1990
(million tonnes)

Exports, Canada	Range, 1990	Target, 1990	1978-79
Wheat	20-24	22.0	13.0
Coarse Grains	7-10	8.5	4.1
Oilseeds	4-7	6.5	2.8
TOTAL		36.0	19.9

Source: W. E. Jarvis, "Market Demand and Production Requirements for Prairie Grain," in Canada Wheat Board Advisory Committee, Prairie Wheat Symposium, October 1980; T. Veeman and M. Veeman, The Future of Grain, Canadian Institute for Public Policy, Ottawa, 1984, p. 39.

Subsequent to the Canadian Wheat Board projections, the Canada Grains Council undertook a more detailed study of the projected export targets for western grains and oilseeds. The Grains Council estimated that an export target of 34 million tonnes (compared to the 36 million tonne target set by the Wheat Board) for western grains and oilseeds would be feasible by 1990. The production required to meet the 1990 export target was estimated to be approximately 50 million tonnes (Table 11). The Grains Council study concluded that the required level of production was technically possible.

Further estimates of target exports for other commodities were made by the Grains Council (Table 12). The Council anticipated reasonably favourable export opportunities for wheat flour, barley malt, canola oil and meal, and pork. It should be noted that the export projections by the Canada Grains Council were considerably less ambitious than those projected by Agriculture Canada in its *Challenge for Growth* study in 1981.

In addition to the export possibilities, another area of possible expansion relates to import replacements in Canada. The total agricultural import bill in Canada has risen from an average of $4.6 billion in the period 1978-1980, to $5.6 billion in 1983 and to $6.1 billion in 1984.[7] In 1983, approximately $3.6 billion worth of those

7. Agriculture Canada, *Marketing and Economics Branch Monthly Summary,* 7 March

Table 11

CURRENT AND PROJECTED PRAIRIE PRODUCTION OF MAJOR GRAINS AND OILSEEDS
(million tonnes)

	1977-81 Average	1990 Projection	Projected Increase
Wheat	19.5	27.0	7.5
Oats	2.6	2.3	-0.3
Barley	10.2	15.0	4.8
Flaxseed	0.6	0.7	0.1
Canola	2.6	3.8	1.2
TOTAL	35.5	48.8	13.3

Notes: Since the five major grains and oilseeds constitute 97 percent of total grain production, total grains and oilseeds productions is projected to be 50.3 million tonnes in 1990.

This production target of 50 million tonnes (which includes the impact of a minor crop mix allocation shift towards oilseeds) is consistent with an export target of 34 million tonnes of grains, oilseeds and derived products from the prairies.

Source: Adapted from Canada Grains Council, Prospects for the Prairie Grain Industry 1990 (1982), p. 114; T. Veeman and M Veeman, The Future of Grain, Canadian Institute for Public Policy, Ottawa, 1984, p. 43.

imports could be described as "supplementary" (Table 13). We define "supplementary" imports in this context to include those commodities which are produced in Canada but not in sufficient quantities to meet domestic consumption requirements of such products as sugar, horticultural products, animal feeds, and vegetable cooking oils. .

Another small but important outlet for Canadian farm products relates to foreign food aid. In 1983, it is estimated that approximately 17 percent (approximately $327 million) of total agricultural exports to developing countries was in the form of food aid (Table 14).

Constraints on the Possibilities. Canada's agricultural production and export trade record during the past 15 years has been remarkable. The Canadian agricultural industry has had a relatively large and continuing surplus on its annual trade account. As we have already

1985.

Table 12

TRENDS IN WORLD AND CANADIAN EXPORTS OF MAJOR GRAIN AND ANIMAL PRODUCTS - 1990

Commodity and Region	Actual Exports 1976	Actual Exports 1980	1990 Projection (Chapter 4)	1990 Trend[1]	Potential 1990 Volumes Achieved by Maintaining Market Share[2]
	(000 tonnes)				
Wheat Flour					
World	4536	6685	-	7733	--
Canada	507	432	500		693 (9.0%)
Barley Malt					
World	2156	2725	-	3980	--
Canada	113	315	500	363	341 (8.6%)
Canola Meal					
World	414	632	-	946	--
Canada	52	207	180	401	228 (24.1%)
Canola Oil					
World	413	686	-	1003	--
Canada	42	172	300	312	178 (17.7%)
Beef					
World	2623	3378	-	4556	--
Canada	40	46	67	44	57 (1.26%)
Pork					
World	1116	1490	-	2110	--
Canada	36	114	130	115	104 (4.9%)
Poultry Meat					
World	821	1452	-	1776	--
Canada	4	6	7	6	7 (0.4%)

[1] Trend established from 1965 to 1980.

[2] Average market share 1976 to 1980. Potential 1990 volume refers to the Canadian market share of the trend in world exports to 1990.

Source: Exports: F.A.O. Trade Yearbook, F.A.O. Rome; Canada Grains Council, Prospects for the Prairie Grain Industry 1990, Winnipeg, November 1982, p. 268.

indicated, there are considerable possibilities for even further expansion in the production and export trade of the Canadian agricultural industry.

Whether, however, these possibilities can and will be realized during the next decade will depend on a number of critical factors.

Table 13

CANADA'S COMPLEMENTARY AND SUPPLEMENTARY AGRICULTURAL IMPORTS, 1974-1983

Year	Total Agricultural Imports	Complementary Agricultural Imports[a]	Supplementary Agricultural Imports[b]
	.....thousand dollars.....		
1974	2,831,050	638,777	2,192,273
1975	2,891,955	686,406	2,205,549
1976	3,132,741	846,569	2,286,172
1977	3,557,292	1,214,442	2,342,850
1978	4,016,385	1,366,385	2,650,000
1979	4,682,342	1,542,377	3,139,965
1980	5,128,247	1,606,129	3,522,118
1981	5,609,840	1,645,987	3,963,853
1982	5,055,695	1,538,757	3,516,938
1983	5,185,455	1,584,323	3,601,132

[a] Complementary imports refer to products which cannot be grown in Canada, such as citrus fruits, bananas, coffee, tea, etc.

[b] Supplementary imports include commodities which are produced in Canada but not in sufficient quantities to meet domestic consumption requirements, such as sugar, seasonal horticultural products, etc.

Source: D. L. Aubé, Canada's Trade in Agricultural Products 1981, 1982 and 1983, Agriculture Canada, Ottawa, October 1984, p. 106.

Several of these factors are a matter of international policy. Other factors are a matter of domestic concern.

Some recent studies have indicated that the rate of growth of the export opportunities during the 1970s will not likely be repeated during the remainder of the 1980s and the 1990s. A sign of this slowdown may be found in China where there has been a remarkable and somewhat unexpected increase in the productivity of its own

Table 14

ESTIMATED VALUE OF CANADIAN FOOD AID AND COMMERCIAL SALES TO DEVELOPING COUNTRIES, 1980-1983

Calendar Year	Total Agricultural Exports to Developing Countries	Estimated Total Food Aid to Developing Countries[a]	Estimated Commercial Sales	Commercial Sales as a percentage of Total Agricultural Exports
	.....million dollars.....			%
1980	1668	194	1474	88
1981	1389	174	1215	87
1982	1627	244	1383	85
1983	1916	327	1589	83

[a] Data are for the calendar year, and food aid includes transportation costs on bilateral shipments.

Sources: Statistics Canada's Trade of Canada series for total agricultural exports to developing countries and the Food Aid Coordination and Evaluation Centre of the Canadian International Development Agency's Annual Food Aid Data for total food aid to developing countries; D. L. Aubé, Canada's Trade in Agricultural Products 1981, 1982 and 1983, October 1984, p. 106.

agricultural industry during recent years.[8] Between 1979-1980 and 1984-1985, China's imports of grain declined from 10.0 to 4.9 million metric tonnes (Table 15).

The U.S.S.R., which has imported close to one-third of Canada's wheat exports, will likely remain an important customer for imports of grain during the short run but the long run prospects for this market are extremely difficult to predict.[9]

The emergence of the E.C. as a major exporter of cereals and red meat products not only means that the E.C. will be a dwindling market for Canadian farm products in the future, but what is probably even more important, the E.C. will become an increasingly

8. C. Carter, *International Trade Opportunities for Canadian Agriculture,* unpublished paper, Department of Agricultural Economics, University of Manitoba, 5 July 1984. See Minden paper in this volume.

9. P.R. Gregory and R.C. Stuart, *Soviet Economic Structure and Performance,* 2d ed. (New York: Harper and Row, 1981); Joint Economic Committee of Congress of the United States, *Soviet Economy in the 1980s: Problems and Prospects,* pt. I, II (Washington, 31 December 1982). See Cohen paper in this volume.

Table 15

WORLD GRAIN PICTURE
MAJOR GRAIN EXPORTERS AND IMPORTERS

Exporters	1979-80	1984-85	% Change	Importers	1979-80	1984-85	% Change
	millions metric tonnes						
U.S.	103.8	97.3	- 6.3	U.S.S.R.	25.4	51.0	+101.0
Australia	19.0	20.9	+10.0	Japan	23.8	25.9	+ 8.8
Canada	17.7	21.1	+19.2	China	10.0	4.9	- 51.0
Argentina	10.1	19.5	+93.1	Mexico	7.3	5.3	- 27.4
E.C.	--	18.0		Egypt	6.1	8.5	+ 39.3
Thailand	2.0	3.2	+60.2	S. Korea	3.9	5.9	+ 51.3

Note: Almost 35% of Canada's wheat exports go the U.S.S.R. About 20% went to China, until recently.

Source: Wall Street Journal, New York, March 25, 1985.

formidable competitor with Canada for agricultural exports to other importing countries. In 1984, the E.C. had major production increases in its crop and livestock sectors. With few exceptions, the E.C. finds itself in a surplus position with respect to major agricultural products. The large production increases in 1984 were added to an already large inventory of surplus stocks which have resulted from the relatively high and open-ended nature of farm price supports provided under its Common Agriculture Policy (C.A.P.). What is even more serious, the C.A.P. is such that there will likely be little reduction in price supports and little effective control over further production increases in 1985.

Three major consequences are likely to follow in 1985:
1. the surplus production in the E.C. will lead to further decrease in agricultural exports to the E.C. by countries such as Canada;
2. the expanded agricultural surplus in the E.C. is certain to lead to an attempt by the E.C. to capture an even larger share of international agricultural markets in 1985 and 1986; and
3. the more aggressive action by the E.C. in the international markets, coupled with the reduction of agricultural imports into the E.C., are almost certain to provoke countervailing actions by the U.S. with respect to its domestic and international policies.

Perhaps the most important concern of all has to be the likely outcome of the current debate on the United States 1985 Farm Bill. The present Reagan Administration has proposed a major shift in United States farm policy. The United States government has been far from happy about the cost of its farm program and the build-up of surplus farm stocks. There is a widespread belief in the United States that it has held a protective umbrella over other agricultural exporting nations (including Canada) through its production control programs and its relatively high loan and target prices. While there are differences of opinion among the various farm lobby groups as to what shape the 1985 Farm Bill should take, we should not be surprised if the following actions are taken:

1. lower loan rates and target prices for major grain products;
2. greater emphasis on export aids of various types; and
3. a concerted effort to capture a larger share of the global export market for wheat, corn, and soybeans.

In addition to the emerging international commercial conflicts, the enormous external debts now carried by many countries, many of which have been traditionally large importers of agricultural products, create tremendous uncertainty with respect to future prospects for the Canadian agricultural industry. In 1982, for example, the combined external debt for Mexico, Brazil, and Argentina amounted to something in excess of $200 billion. The debt service obligations on these external debts represent a tremendous burden on the countries concerned. In 1982, for example, the debt service as a percentage of exports amounted to 87 percent for Argentina and 58 percent for Mexico.[10]

From the domestic policy point of view, several factors will have a major influence on Canada's ability to maintain and to enhance its exports of agricultural products.

For a significant part of the agricultural industry, the supply management programs have been geared primarily to the goal of national self-sufficiency. National, provincial, and individual producer quotas have been set for fluid and industrial milk, eggs, chickens and turkeys. While the national quotas for these commodities do make provisions for some export and import transactions, most of the production is geared to national consumption requirements.[11]

10. W.R. Cline, *Systemic Risk and Policy Response* (Washington: Institute for International Economics, 1984).

11. B. Sadler, ed., *Transforming Western Canada's Food Industry* (Banff, Alberta:

For other commodities such as wheat, feed grains, oilseeds and oilseed products, pork and beef, the major policy approach has been the competitive trade option. This option calls for some complementary domestic policies if producers are to survive within the competitive trade framework:

1. continuing improvement in productivity and efficiency in all sectors of the agri-industrial system;
2. sustained and vigorous market development programs; and
3. adequate domestic stabilization policies to protect producers against extreme fluctuations and unexpected events in the international marketplace.

Canada faces a number of possible alternatives from the standpoint of its domestic and agricultural trade policies. It can withdraw toward policies aimed at greater protectionism and greater national self-sufficiency in food production. It can move toward policies encouraging special sectoral or bilateral trading arrangements. It can push vigorously for greater liberalization of trade under the framework of the G.A.T.T. multilateral free trade negotiations.

Only the last alternative appears to offer any real opportunities for expansion and growth of the agricultural industry in the longer run. Of course, this option also has its difficulties. After three major rounds of the G.A.T.T. multilateral trade negotiations relatively little progress has been made on the liberalization of agricultural trade. Indeed, the recent growth in agricultural trade protectionism and the growing conflicts among major agricultural trading nations of the world, does not bode well for the future. But Canada does not have the national resources to win a "shoot-out" in a war of greater protectionism, more non-tariff barriers, increased export subsidies and trade credit concessions. Above all, one cannot imagine the contraction that would have to take place in the Canadian agricultural industry if the industry had to shrink to a size just sufficient to meet its domestic food requirements.

Canada has little choice but to take whatever initiatives are possible in encouraging the major agricultural trading nations of the world to engage successfully in a further round of the G.A.T.T. multilateral trade negotiations, past failures notwithstanding.

Banff Centre, School of Management, 1984).

Planning Canada's Resource Base for Sustainable Production

Edward W. Manning

Our ability to satisfy both domestic and international demands for our products is contingent upon how well we manage the allocation and maintenance of our land resource base. Yet Canadians continue to make decisions as if the resource base was not a factor to be considered–as if that resource base was infinite and its finite capacity could not affect the achievement of "economic" goals. In fact, the resource base is perhaps the single most important factor, both in terms of constraints and opportunities, in determining the success of our development plans. This is especially true for our agricultural sector. Canada has great natural resource opportunities when compared to other nations, but such opportunities can be lost if we fail to respect the natural limits of the resource base.

The world view of Canada is as a huge storehouse of resources. This is not a total picture. While Canada is indeed rich with respect to most of the world's nations and is one of the world's major food exporters, Canada has significantly less resources than foreigners or Canadians commonly perceive. Less than a quarter of Canada can support commercial timber production but much less than this is capable of economic access and harvest, and Canada's high capability forest lands (Canada Land Inventory capability 1-3) comprise only 4 percent of Canada's area. Only 11 percent of Canada has any capability for agriculture and only 5 percent of Canada's area is capable of crop production. Because of climate and topography, agricultural land with no serious limitations to production constitutes only one-half of 1 percent of Canada and is located along the southern borders in small nodes of favourable climate. From the top of Toronto's CN tower on a clear day you can see 37 percent of this prime land. In terms of settlement, Canada is a long thin country stretching 6,000 kilometres from coast to coast. In only a few areas does the renewable resource production base extend more than a short distance north of the U.S. border. And this is a common

resource base for most of man's activities in Canada, not just agriculture but forestry, aggregate extraction, recreation and of course our cities and industries.

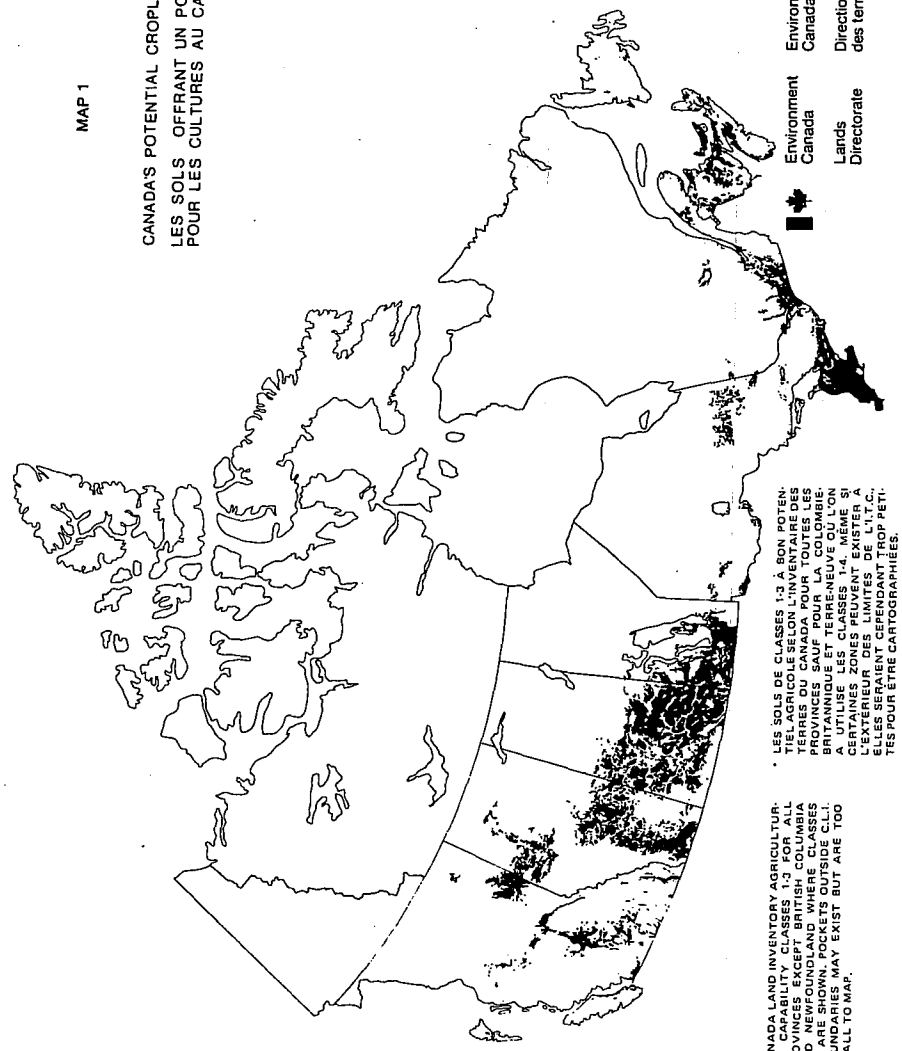
Forty percent of Canada's gross national product and 25 percent of its jobs are directly related to the land resource–the extraction, harvest and processing of raw materials. The land base is the common denominator where the resource demands encounter the constraints of the environment. The land resource, like that of other nations on earth, is exhaustible and provides very real limits to what is practical in terms of sustainable development. Yet ours is a history of failure to consider the long term maintenance of the resource in our decisions, and where we do consider land resources, of a complacency bred of our frontier past.

Canada's production of renewable resources depends directly upon the sustainable management of the production base. It is hard to imagine anything more important in the medium term than the land resource. Despite restrictions of climate and topography Canada does have a good and productive renewable resource base. We often worry about being hewers of wood and drawers of water, but it is these resources which bring us our true comparative advantage. Most of the Canadian economy is built directly upon raw materials, and particularly upon the renewable resources of forestry and agriculture.

Canada has long had the luxury of ignoring the planning and the management of its land resource. We have been a nation of exploiters and explorers, not builders. With a small population, natural regrowth and environmental resilience could accommodate the depredations of colonization and early settlement. Over the next hill there was indeed another resource to which one could move, having harvested or degraded the current holding. Old attitudes die hard. A country of a frontier mentality, Canada still carries with it the myth of plenty–the myth that nature is abundant and will provide. But through extensive soil surveys, the Canada Land Inventory, and the experience of those who have tried to farm in unsuitable areas, we have clearly established where the limits are. There is no longer suitable land just over the hill to replace that which we degrade (see Map 1). Yet we continue to build on the very best land (nearly all major Canadian cities are surrounded by class 1 agricultural land–Montreal, Toronto, London, Winnipeg, Edmonton) and to manage the land as if it was easily replaceable. But the resilience is no longer there. We ignore the limits at our own peril, and already some of the consequences are becoming apparent in higher costs of

MAP 1

CANADA'S POTENTIAL CROPLAND
LES SOLS OFFRANT UN POTENTIEL POUR LES CULTURES AU CANADA.



* CANADA LAND INVENTORY AGRICULTURAL CAPABILITY CLASSES 1-3 FOR ALL PROVINCES EXCEPT BRITISH COLUMBIA AND NEWFOUNDLAND WHERE CLASSES 1-4 ARE SHOWN. POCKETS OUTSIDE C.L.I. BOUNDARIES MAY EXIST BUT ARE TOO SMALL TO MAP.

* LES SOLS DE CLASSES 1-3 À BON POTENTIEL AGRICOLE SELON L'INVENTAIRE DES TERRES DU CANADA POUR TOUTES LES PROVINCES SAUF POUR LA COLOMBIE BRITANNIQUE ET TERRE-NEUVE OU L'ON A UTILISE LES CLASSES 1-4. MÊME SI CERTAINES ZONES PEUVENT EXISTER À L'EXTÉRIEUR DES LIMITES DE L'I.T.C., ELLES SERAIENT CEPENDANT TROP PETITES POUR ÊTRE CARTOGRAPHIÉES.

production and in serious degradation of farm and forest land.

As a consequence of our past mistakes, Canada now has very significant problems relating to its resource base. These derive directly from our attitudes toward the resource base and our failures to take it into account in our decision making. In ignoring the inherent carrying capacity of the resource and in ignoring the capability of land in allocating it to different uses we are consistently reducing the available high capability land resource base available to us for present and for future agricultural production. At the same time we are placing increased stress on those remaining areas of land with renewable resource productive capability.[1] A few examples focussed on the agricultural sector will serve to show the real dimensions of the limits and some of the direct implications of what we are doing to our lands.

Conflicts are evident with respect to the use of our most productive lands. While there are large areas of high capability lands on the Canadian prairies, prairie lands are limited by climate primarily to the production of grains. Lands like the lower Fraser Valley and Okanagan Valley of British Columbia, the Niagara Peninsula, Essex and Kent counties in the southern extremities of Ontario, the Annapolis Valley of Nova Scotia, and the area south of Montreal constitute a unique soil and climatic resource. These irreplaceable areas are capable of significant commercial fruit and vegetable production. Removal of these lands from production constitutes a permanent loss of Canada's capability to produce these foods. All these areas are under pressures of urbanization, with continuing subdivision and use of the land for urban-related purposes such as recreation, aggregate extraction, waste disposal, and rural non-farm residences. Much of Ontario's best agricultural land lies atop land designated for sand and gravel extraction. On the prairies, some of the best wheatlands of Alberta and Saskatchewan are underlain by major coal seams and potash deposits. As a result, Canadians are bringing continuing pressures on their most productive agricultural resource.

Canada has no vast agricultural reserves remaining. In fact, it can be said that virtually all of the land amenable to modern agricultural production is in that use. Some small areas remain, particularly in northern Ontario's clay belt, parts of New Brunswick, and the northern fringes of Alberta, but these are climatically less desirable and physically less productive than the lands presently in use.[2] The

1. W. Simpson-Lewis et al., *Stress on Land in Canada* (Ottawa: Lands Directorate, Environment Canada, 1983), p. 5.

2. C.F. Bentley, *Agricultural Land and Canada's Future* (Agricultural Institute of Canada, Klinck Lecture, 1981-1982), pp. 7, 8.

mobilization of these lands into agriculture will involve far greater investments in infrastructure, in drainage and in farm management. At the same time, these areas are more climatically risky, prone to more crop failures, and more energy-dependent.

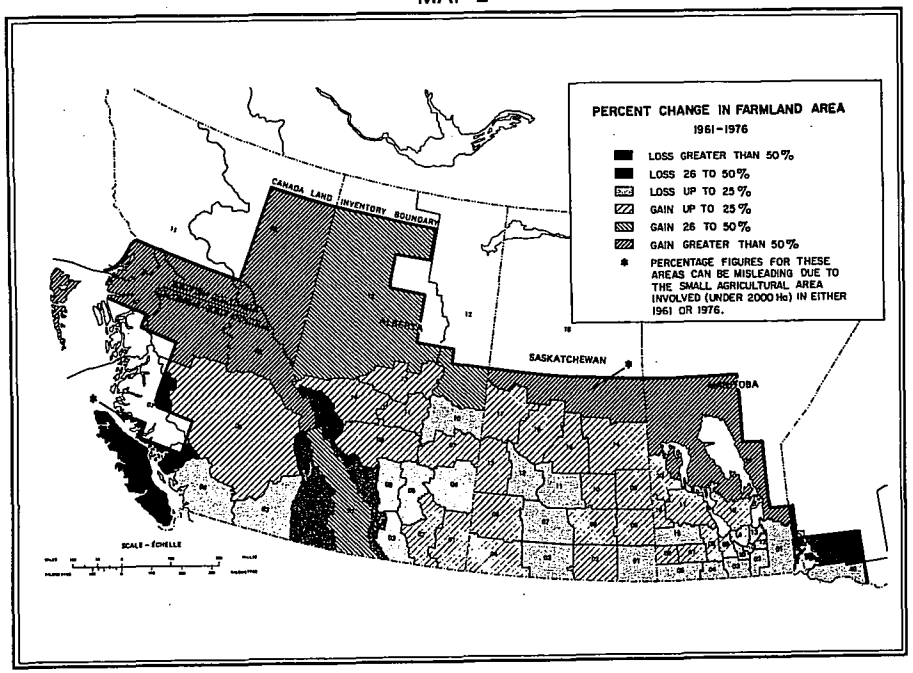
During the past two decades, there has been considerable abandonment of farmland on the margins. Areas such as eastern New Brunswick, the Gaspé Region of Quebec, Cape Breton Island and northern Ontario have had major abandonment of agricultural land (see Map 2). In the case of the Gaspé and eastern New Brunswick, well over half of the land farmed in 1961 is no longer in farms. This land was abandoned due to a combination of disadvantages associated with climate, distance from market, fragmentation of landholdings and soil limitations. What has occurred has been a period of adjustment–one which has adjusted the limits of agricultural use to the technological, economic and social realities of modern farming. To again mobilize these areas for agriculture would require much higher prices for the food products than are presently paid, or continuous high subsidies for those who would practise agriculture in these regions.[3] Much of this marginal land should probably never have been put into agricultural use in the first place, given today's standards of agricultural production.

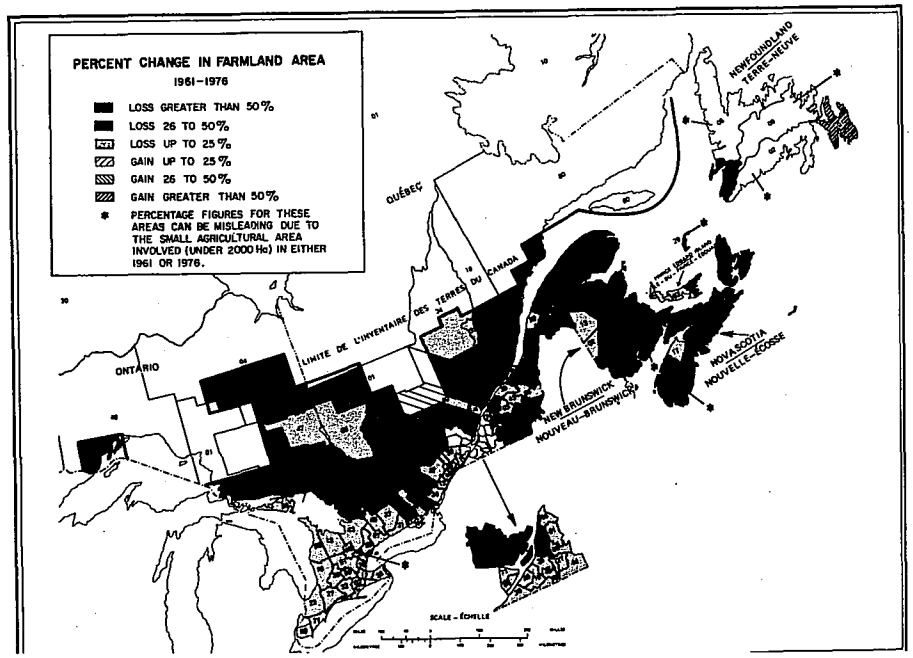
Canada is intensifying its use of the land remaining in agriculture. Since 1961, there has been an overall net abandonment of 1.4 million hectares of Canada's agricultural land, particularly in eastern Canada.[4] During that same period, there has been a nationwide trend toward the use of land remaining in agriculture for crops and improved pasture. Overall, there has been an intensification of the use of Canada's agricultural land resource–an increasing dependence on the best land, that land most amenable to improvement and most responsive to increased inputs of money in the form of mechanization, fertilizers, irrigation and drainage (see Map 3). This intensification has produced significantly greater values and volumes of product from the reduced agricultural land base. This phenomenon is particularly pronounced in Ontario where, in contrast to losses in total agricultural land in nearly all counties, virtually all areas showed significant increases in the land under crops and in improved pasture.

3. K. Beattie, W. Bond, and E. Manning, *The Agricultural Use of Marginal Lands* (Ottawa: Lands Directorate, Environment Canada, 1981), p. 36.

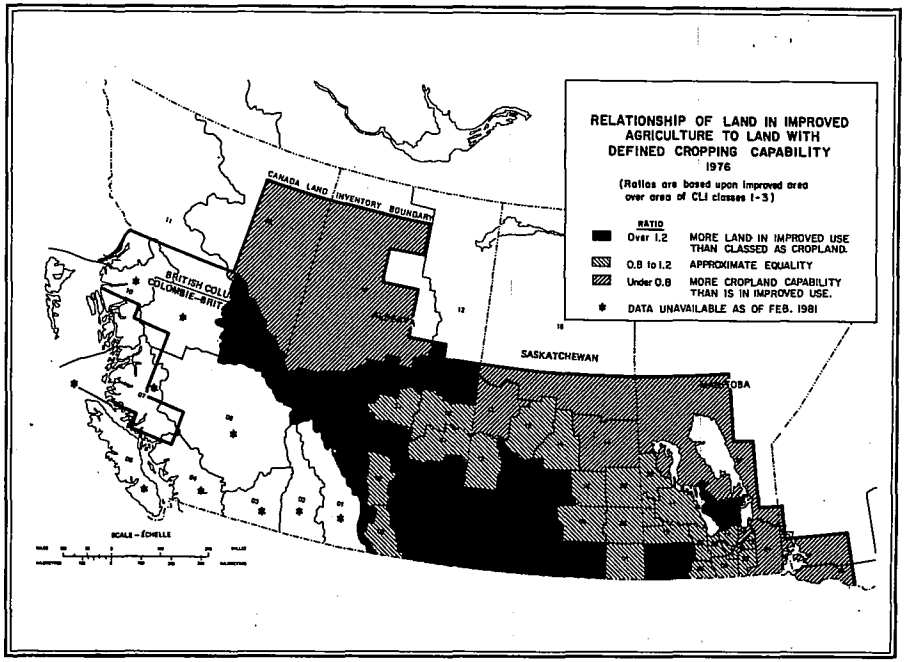
4. J.D. McCuaig and E.W. Manning, *Agricultural Land Use Change in Canada: Process and Consequences* (Ottawa: Lands Directorate, Environment Canada, 1982), p. 5.

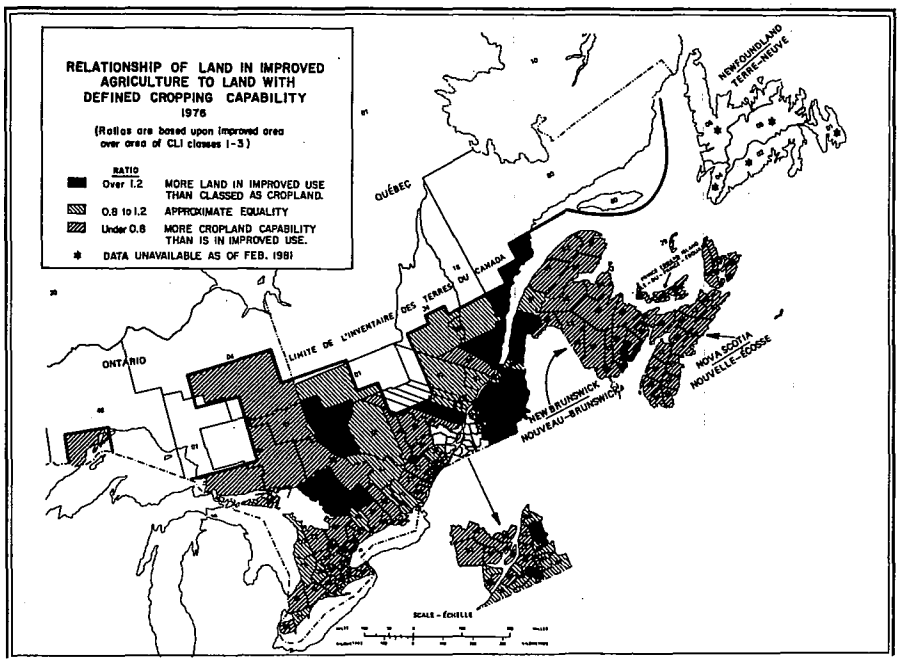
MAP 2


PERCENT CHANGE IN FARMLAND AREA
1961–1976
LOSS GREATER THAN 50%
LOSS 26 TO 50%
LOSS UP TO 25%
GAIN UP TO 25%
GAIN 26 TO 50%
GAIN GREATER THAN 50%
* PERCENTAGE FIGURES FOR THESE AREAS CAN BE MISLEADING DUE TO THE SMALL AGRICULTURAL AREA INVOLVED (UNDER 2000 Ha) IN EITHER 1961 OR 1976.
CANADA LAND INVENTORY BOUNDARY
SASKATCHEWAN
SCALE – ÉCHELLE


PERCENT CHANGE IN FARMLAND AREA
1961–1976
LOSS GREATER THAN 50%
LOSS 26 TO 50%
LOSS UP TO 25%
GAIN UP TO 25%
GAIN 26 TO 50%
GAIN GREATER THAN 50%
* PERCENTAGE FIGURES FOR THESE AREAS CAN BE MISLEADING DUE TO THE SMALL AGRICULTURAL AREA INVOLVED (UNDER 2000 Ha) IN EITHER 1961 OR 1976.
NEWFOUNDLAND
TERRE-NEUVE
QUÉBEC
ONTARIO
LIMITE DE L'INVENTAIRE DES TERRES DU CANADA
NEW BRUNSWICK
NOUVEAU-BRUNSWICK
NOVA SCOTIA
NOUVELLE-ÉCOSSE
SCALE – ÉCHELLE

MAP 3


RELATIONSHIP OF LAND IN IMPROVED AGRICULTURE TO LAND WITH DEFINED CROPPING CAPABILITY
1976
(Ratios are based upon improved area over area of CLI classes 1-3)
RATIO
Over 1.2 MORE LAND IN IMPROVED USE THAN CLASSED AS CROPLAND.
0.8 to 1.2 APPROXIMATE EQUALITY
Under 0.8 MORE CROPLAND CAPABILITY THAN IS IN IMPROVED USE.
* DATA UNAVAILABLE AS OF FEB. 1981
CANADA LAND INVENTORY BOUNDARY
SASKATCHEWAN
SCALE – ÉCHELLE


RELATIONSHIP OF LAND IN IMPROVED AGRICULTURE TO LAND WITH DEFINED CROPPING CAPABILITY
1976
(Ratios are based upon improved area over area of CLI classes 1-3)
RATIO
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NEWFOUNDLAND
TERRE-NEUVE
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SCALE – ÉCHELLE

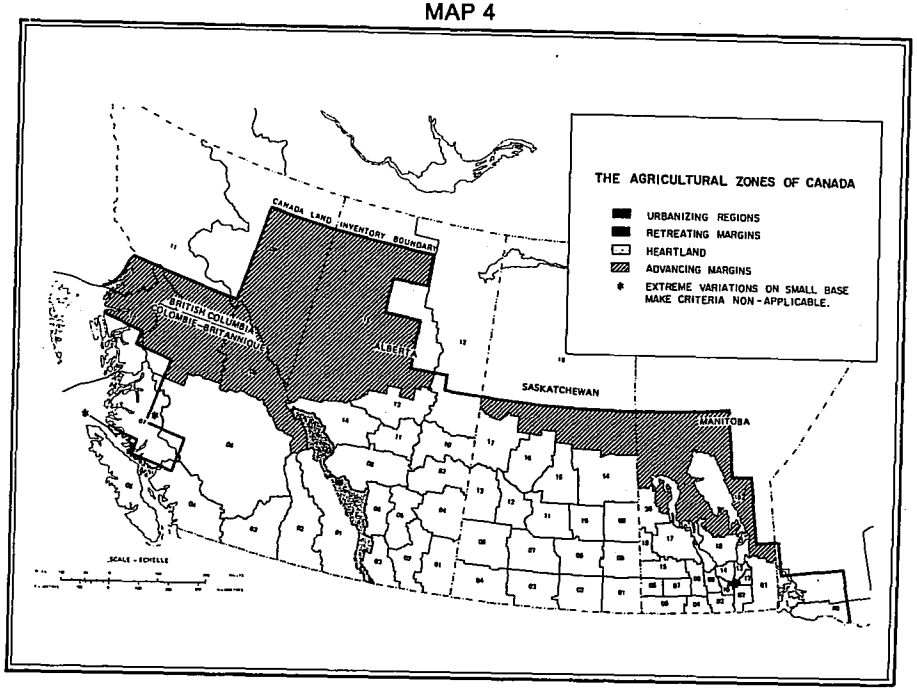
Canada's farm production depends upon continuing intensification of use of its best land. In Canada, the productive agricultural heartland constitutes southern Ontario and parts of the Prairie Provinces of Alberta, Saskatchewan and Manitoba (Map 4). Yet, even in these areas, farmland is under some stress. Increased economic pressures have meant that farmers must obtain more from each parcel of land, or find a way to get out of farming. The measures they have taken have usually involved more intensive farming, mono-culture, row cropping, more mechanization, more drainage, increased use of herbicides and pesticides, reduction of rotation, and increased use of irrigation. While in the short- and even medium-term, these practices have produced greater yields and allowed Canada to maintain a good position as a food exporter; in the longer term there is much enhanced risk of soil degradation.[5] Intensive farming practices require far more sophisticated management and more sustained investment in long-term soil conservation practices. Yet, in times of economic constraint, farmers are far less able to make the long-term investments necessary for sustained agricultural production even if they wish to do so. Particularly in areas where farming is near the economic margins, the amount of capital necessary is simply unavailable.

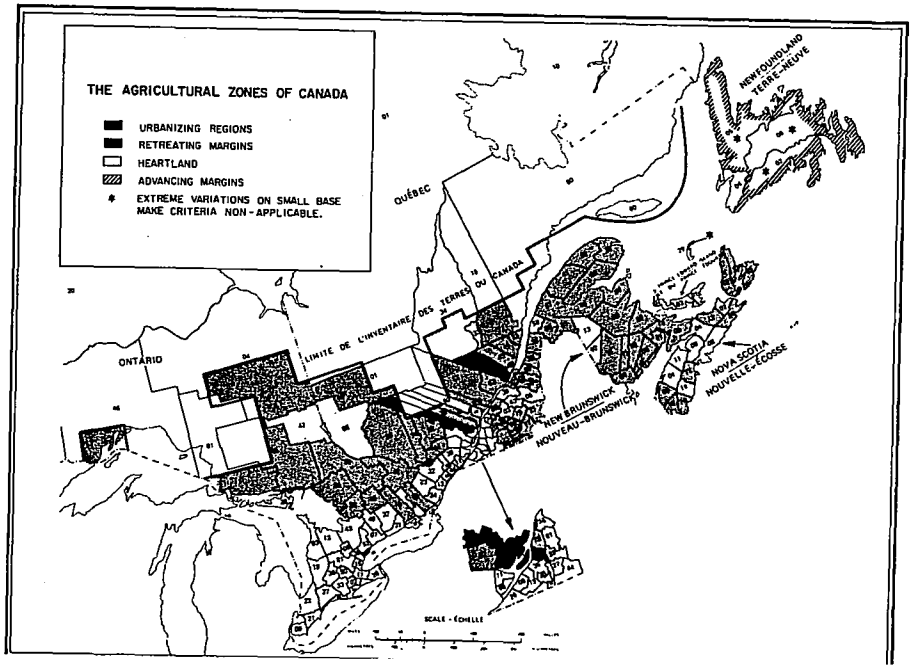
More intensive agriculture is often more fragile–more dependent on the price of energy, the price of fertilizer, and the price of money due to interest rates. The last five years have shown this to be particularly true, as very heavily capitalized commercial farms have been faced with high interest rates at a time when farm product prices have not kept pace. Thus, many heavily-indebted farmers have found themselves unable to generate the cash-flow necessary even to maintain payments. A lack of farm credit at low interest rates, and a surplus of farmers who are anxious to sell and get their own capital investment out, may account for the recently experienced downturn in prices for farmland reported from parts of the prairie region and central Canada. This is in stark contrast to the longer-term trend, which has seen a constant increase in farmland prices well in excess of the rate of inflation. From 1961 to 1976, the price per acre of farmland rose an average of 417 percent nationwide, while during the same period the consumer price index rose only 98 percent.[6]

5. Standing Senate Committee on Agriculture, Fisheries and Forestry, *Soil at Risk, Canada's Eroding Future* (Ottawa, 1984), p. 5.

6. E.W. Manning and J.D. McCuaig, "Planning Operational Research," *Operational Geographer* (Ottawa, 1985), p. 10.

MAP 4





While more intensive agriculture is more productive, it also requires increased investment in management to permit sustained yield. Because more intensive agriculture is more fragile environmentally, it is also more fragile economically. Without proper management practices, the soil itself can be degraded. The results of such degradation are already widely felt in the wheatlands of the prairies.[7] Such damage can be permanent. In difficult economic times good management is increasingly difficult for a farmer to afford; he is more worried about next month's mortgage payment than he is about the long-term soil conservation of his farmland.

The degradation of agricultural land is widespread. Serious concern has been raised regarding land degradation in many parts of the Prairies. Nationwide, salinization, loss of organic matter, compaction, acidification, (exacerbated by acid rain), wind and water erosion are all of serious concern.[8] Too little is known about the extent and the long-term implications of these problems for farming. But it is known that yields are significantly reduced on land so affected (Map 5). In the longer term, our ability to produce for export may be affected if our land management systems are not improved. In Ontario, the Eastern Townships of Quebec, and New Brunswick, serious concern is being expressed over water erosion, the removal of shelter belts and the overall depletion of fertility. In recognition of this nationwide concern, increased emphasis has been placed on research into soil degradation, both by the Federal Government and by the provinces concerned. Nevertheless, major gaps still exist in terms of our knowledge of how extensive the land degradation is, how it is related to the practices (row cropping, summerfallow, monoculture) farmers use, what rehabilitation and long-term conservation practices really work, and finally, how it can be made economically viable for farmers to undertake long-term conservation practices.

The urbanization of the very best land is continuing. The increasing dependence that Canadians are placing on their best farmland highlights even more the impact of the continuing trend toward the urbanization of prime farmlands. In 1981, over 46 percent of the value of farm production came from the commutersheds of major urban centres. From 1971 to 1976, over 60 percent of the urban expansion of Canada's 82 largest urban centres occurred on agricul-

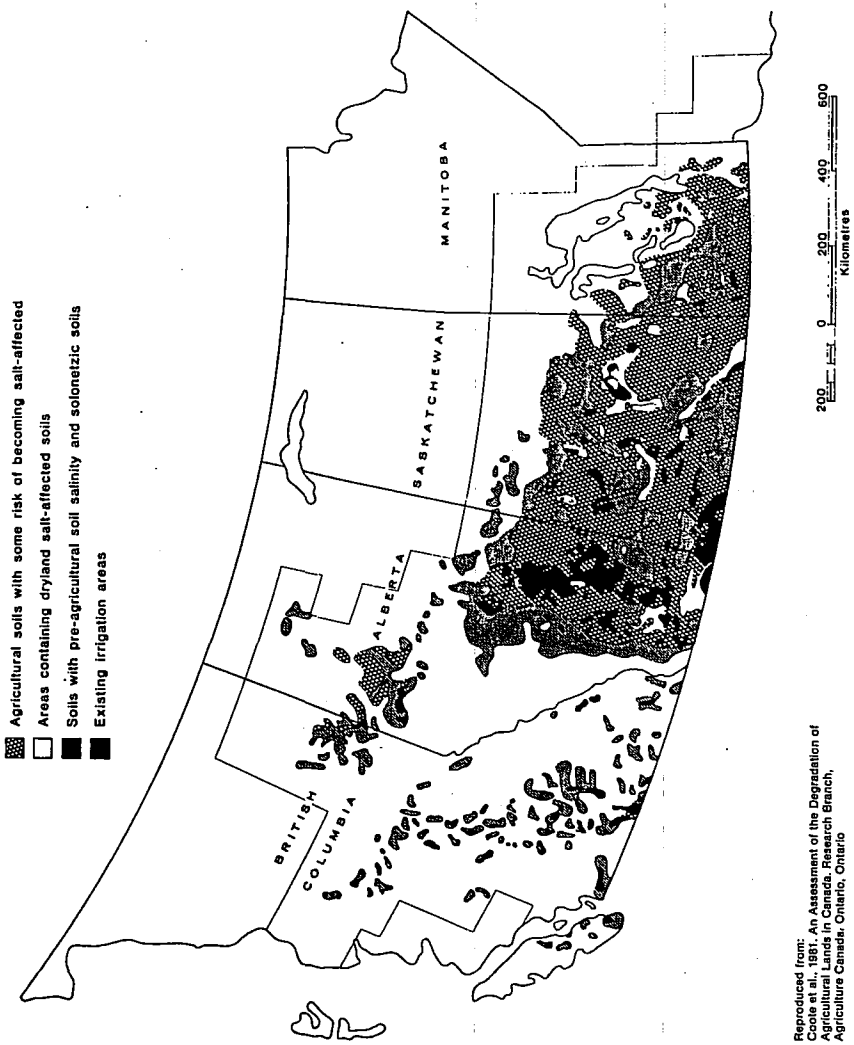
7. Standing Senate Committee on Agriculture, Fisheries and Forestry, *Soil at Risk, Canada's Eroding Future,* p. 45.

8. D. Coote, J. Dumanski, and J. Ramsay, *An Assessment of the Degradation of Agricultural Lands in Canada* (Agriculture Canada, Land Resource Research Institute, 1981), p. 75.

MAP 5

Salt-affected soils and relative risk of soil salinization

- Agricultural soils unlikely to become salt-affected
- Agricultural soils with some risk of becoming salt-affected
- Areas containing dryland salt-affected soils
- Soils with pre-agricultural soil salinity and solonetzic soils
- Existing irrigation areas



Reproduced from:
Coote et al., 1981. An Assessment of the Degradation of Agricultural Lands in Canada. Research Branch, Agriculture Canada, Ontario, Ontario

tural land classed 1 through 3–Canada's cropland.[9] Nationally, from 1971 to 1976, 58 percent of the total land absorbed by urban centres was previously in improved agriculture. In Alberta, over 72 percent of the land urbanized from 1971 to 1976 was agricultural classes 1, 2, and 3. The Alberta centres of Red Deer and Edmonton grew primarily on high capability agricultural land, the figures being 88 percent and 85 percent respectively. Growth of such western cities as Regina, Moose Jaw, Kelowna, Winnipeg, and Ontario centres like Hamilton, London, St. Catharines-Niagara, Toronto and Windsor all occurred predominantly at the expense of class 1, 2, and 3 agricultural land (in excess of 80 percent of land developed). Similarly, such Quebec centres as St. Jean, Valleyfield and Montreal as well as Moncton, New Brunswick, all grew predominantly on high capability agricultural land. The total amount of rural land urbanized has been somewhat reduced since 1976 due to an economic downturn which has reduced the building rate, but the rate of land conversion per 1,000 population growth has not significantly diminished. While farmland zoning has been put in place in some regions, it is too early to tell the real effect of such zoning, relative to the overall economic downturn. But it remains safe to say that much of Canada's urbanization continues to take place at the expense of some of Canada's most intensive, most productive farms, and on top of some of the climatically irreplaceable prime foodlands.

The same lands which now grow agricultural produce are often the prime lands for forest products, yet forestry, too, is paying the price for poor past management practices. Poor land management practices not only jeopardize the future use of renewable resource production lands for forestry, but may also degrade the land beyond the point where it can be rehabilitated for forestry or farming use. Very little of Canada's forest land is under active management. "Of the 8 000 hectares cut annually, less than one-third receives any treatment, and unstocked or poorly regenerated areas are accumulating at an alarming rate at the same time that timber shortages are forecast."[10] We do not even know the precise dimensions of the problem because we do not nationally collect adequate information to determine how well we are managing or mismanaging forest lands. What is clear is that the amount of land which is harvested far exceeds the amount of land being reforested. In addition, we rely almost exclusively on

9. C.L. Warren and P.C. Rump, *The Urbanization of Rural Land in Canada 1966-1971 and 1971-1976* (Ottawa: Lands Directorate, Environment Canada, 1981), p. 27.

10. W. Simpson-Lewis et al., *Stress on Land in Canada* (Ottawa: Lands Directorate, Environment Canada, 1983), p. 263.

natural processes for forest regeneration with very little ongoing management like that common in Europe. Thus our productivity is diminished. Our cutting, particularly clear-cutting practices, have often allowed soil erosion to the point where little is left but bare rock. This can have serious implications not only for future forestry or agricultural use, but also for those residents or farmers unfortunate enough to find themselves downslope when the soil decides to depart.

Increasingly complex problems require increasingly sophisticated solutions. With more intensive settlement and modernization we have an increasingly complex system dependent upon the resource base for a wide variety of functions. Reuben Nelson, a Canadian futurist, has suggested that with growing complexity in a society it becomes increasingly essential to expand the way in which we both conceptualize and deal with problems.[11] He has identified a need to assess problems from an enlarged perspective in three different dimensions. He notes 1) the need to broaden our perspective to take in factors which are outside traditional sectoral limits. The trend toward cross-impact analysis, environmental assessment, or social impact assessment can be seen as examples of expansion of this dimension; 2) a need to look further ahead or to lengthen timeframes; and 3) a need to look deeper, particularly through causal linkages involving not only immediate causation but longer causal trains, involving the querying of the root assumptions of theory on society, economy or environment.

Canada's demands on its resource base are becoming increasingly complex, intersectoral and involving externalities. Yet we have failed to expand our horizons in dealing with this important fundamental part of our economy and society–we have failed to develop a planning perspective which either defines our collective goals or develops strategic means to achieve them. We have often failed even to recognize the resource base as an important dimension in our planning process, preferring to leave it as a residual in our econometric models. We have also left the care of the resource base in the hands of individual user sectors, who often have very short planning timeframes, and whose reaction is, understandably, to the immediate economic necessities. As we have shown, this has serious consequences for the resource itself and for the future dependents upon that resource.

11. R. Nelson, *Preparing for a Changing Future: A Catalogue and Analysis of "Futures Oriented" Work Undertaken by Canadian Governments* (Ottawa: Square I Management, 1984).

Canada has no national plan. As a confederation (and indeed like most other federal states) Canada has found it difficult to develop a consensus national plan which is multi-sectoral and involves the interplay between different demands and capacities.[12] Sectoral strategies or goal statements developed to promote particular areas (production, jobs, exports, regional growth, etc.) have frequently been developed without reference whatsoever to the constraints and opportunities afforded by the natural resource base. Because of institutional fragmentation, it becomes easy to ignore the limits of the common resource and to plan individual sectors, individual demands without reference to each other. Given the newly appreciated constraints of a known resource base, research into the basis of production is still in its infancy in Canada; inventories of what constitutes the resource base have only recently been completed and very little work has been done to examine carefully the responses of production under different types of management. Thus we are groping toward fragmentary solutions to a problem which we have only recently begun to appreciate–one which Europe has had to deal with for many decades, and from whose experience we may have a great deal to learn.

The policy response is growing. There is increasing but still limited appreciation in Canada that the sustained production of our resource base is an essential element in our own economic, social and environmental future.[13] The most direct response has been the development, by virtually all senior governments, of integrated policies dealing with the land resource. In the past five years, every province in Canada has either developed or begun to develop a land based policy looking at the allocation of the land resource among different users each with their own specific goals. This parallels the federal effort to develop the *Federal Policy on Land Use.* This federal policy is a multi-sectoral policy, designed to ensure consideration of the needs and demands of each sector as they affect the management of the federal government's own lands and to control the federal government's activities which impact on private and provincial land resource use. This constitutes, according to Reuben Nelson's model, a form of broadening of the view–looking at the inter-sectoral linkages and integrating the different demands that sectors have upon a common resource base. This too can be seen as a response to

12. C. Weaver and P. Richards, "Planning Canada's Role in the New Global Economy," *Journal of American Planning Association* 51, no. 1 (1985):42.

13. R.D. Voyer and M.G. Murphy, *Global 2000: Canada* (Toronto: Pergannon, 1984), pp. 134-144.

Nelson's suggestions that timeframes must be lengthened, for the development of a policy planning framework of this sort is, in itself, the recognition of futures in the decision process. It is with respect to Nelson's third concern–that of dealing with the abilities of the resource base to satisfy society's concerns and dealing with the trade-offs in quantity and quality between what we demand from the resource base that we lack severely. Yet these questions are critical to our decisions regarding how we use and manage that base, for what products, for what sectors, for whose consumption, and whose benefit. Initial efforts to build methods to address the relationships between overall demand and resource constraints are in their infancy and not part of the normal policy-making process.

While there are broad policy actions taking place in most jurisdictions, what we have is policy, not strategic plans with respect to the allocation of resources and with respect to the strategies for their sustained management. We also have discrete policies (which are not tiered) from different government levels and which, apart from informal coordination through such bodies as the Canada Committee on Land Use and the Canada Committee on Resource and Environment Ministers, operate by and large independently. If we are to adopt particular production strategies designed to satisfy our domestic and foreign needs we will have to take much more concrete steps to ensure joint goal definition and to ensure that the actions of each level of government dealing with these are supportive both of each others' actions and of the goals in general.[14] It should also be noted that accords which appear to satisfy everyone's needs in terms of jobs, production or exports may be easier to obtain if they ignore completely the constraints of the land resource base and agree to produce to satisfy all. This indeed has been done, with costly consequences in the past where joint action to establish, for example, pulp and paper mills without adequately considering the timber supply area and its sustainability.

Real costs are being incurred by our failure to adequately include resource-base limits in our planning. We do not know if the resource will support the production goals set forth in the Agri-food Strategy, although the results of stress due to over-use are already apparent in large areas of the prairies.[15] We do not know if the new agreements to support both agricultural and forest expansion in Prince Edward

14. C. Weaver and P. Richards, "Planning Canada's Role in the New Global Economy," *Journal of American Planning Association* 51, no. 1 (1985):52.

15. Standing Senate Committee on Agriculture, Fisheries and Forestry, *Soil at Risk, Canada's Eroding Future,* p. 45.

Island can be carried out simultaneously: they both involve the same resource in a zero-sum game. We *do* however know that the mills put in place with government funding in New Brunswick will soon run out of timber supply–closing not only mills, but entire towns.

Actions to promote increased production, if not tied to a knowledge of production response constraints of the land resource and proper management methods to deal with different types of land resource use in different intensities, can have devastating consequences which may preclude future production of those crops or products on those lands.

Despite its apparent bounty, Canada is on the fragile edge of the world's ecumene. Canada clearly has a good productive capacity, providing we respect its very real environmental limits. We cannot afford to operate without a fundamental knowledge of our resource base–where there remain unused opportunities and where we must be very careful to respect the natural constraints. In the long-term, nature is self-rectifying. If we wish to avoid the chance of the very real economic and human costs incurred in some other parts of the world (e.g., Africa), we must apply judiciously the knowledge and skills we have to the planning and management of our resource base. It is not enough to protect and set aside resources, they must be actively planned, mobilized and managed in terms of their sustainability. In the discussion of opportunities and obligations, the opportunity is to develop our resources for Canadian and world use to their sustainable maximum, commensurate with their natural limits; the obligation is to use the knowledge we have to ensure that those limits are not exceeded.

Agricultural Relations Between Western Nations: Canadian Approaches

Andrew Fenton Cooper

A framework for the analysis of international relations of food has been put forward by Hopkins and Puchala in *The Global Political Economy of Food.*[1] This work suggests that agricultural and food issues in the post-1945 period must be understood in terms of a distinctive system or regime, a regime in which different actors, including nation states, submit themselves to certain clearly delineated rules and norms of behaviour.

This framework has considerable attraction. It allows us to make sense of a whole range of formal and informal relationships within the international relations of food. It also imposes a degree of order on the various global transactions of food commodities, encompassing not only transactions made in the commercial marketplace but concessional transactions in the form of food aid as well. Any interpretation of the international relations of food that places so much weight on stability and continuity, however, must be examined more closely to take into account the new complexities of the 1970s and 1980s. If the regime portrayed by Hopkins and Puchala was operative in the 1950s and early 1960s (strains notwithstanding), it seems clear that this is no longer the case.

What has emerged in the old regime's place appears not to be a new system, with a new set of universally accepted rules and a new set of coherent relationships, but confusion and conflict. Far from conformity, a new set of fragmented and adversarial relationships has been built up among actors, with the behaviour of nations and groups of nations increasingly based on narrow self-interest.

What appears necessary before Canada's own approaches *vis-à-vis* the international relations of food can be adequately discussed is some analysis of this process of breakdown and (attempted)

1. Raymond F. Hopkins and Donald J. Puchala, "Perspectives on the International Relations of Food," in *The Global Political Economy of Food* (Special Issue), *International Organization* 32 (Summer 1978):581-616.

re-negotiation in the food regime. Such an on-going treatment must take into account not only the changing international context or contexts but the evolving national approaches of the leading actors, and the interplay between these international and domestic forces.

The starting point of this analysis must be the changing role of the United States. Without question the United States was the dominant actor in the post-war regime. By virtue of its willingness to take on the burdens of the role as global food manager, and specifically to perform the role of stockholder of last resort in grains, the United States was instrumental in shaping the nature of the regime itself. The rules and norms of the regime–adherence to the principles of the free market, qualified acceptance of extra-market channels of food distribution, low priority for national food self-reliance, and national sovereignty and the illegitimacy of external penetration–accordingly reflected its own values.

Signs of a weakening of the American commitment to the formal as well as the informal foundations of the regime came in the 1960s. There were, for example, signs that the United States was willing to countenance the end of the International Wheat Agreement, one of the pillars of an orderly international market. The decisive break with the past, however, came during the Nixon/Butz years. For a mixture of political, economic and strategic reasons (and above all because of its massive balance of trade deficit), the United States moved decisively away from the role of regime leader toward a more unilateral role in the international relations of food. American food transactions were increasingly designed to exploit that nation's continuing competitive edge in agricultural production, and so compensate for its comparative decline in other sectors. Food was a trump card that could be utilized in American foreign economic policy.

This decline in American support for the regime led to a considerable spill-over effect. Most dramatically, the withdrawal of the United States from its long-standing commitments in terms of emergency food aid compounded the mounting crisis in the early 1970s for the chronic food-deficit nations in the Third World. The unwillingness of the United States to increase (or even maintain) its safety net of PL480 food aid transactions, at a time when these food-deficit Less Developed Countries (LDCs) were being buffeted by disastrous climactic changes and mounting energy costs, left a legacy of distrust in US/LDC relations. It also contributed to the desire in the LDCs for a reformed global food system as part of a New International Economic Order. Such a reformed system would be based on the values of equity and re-distribution, with a greater emphasis on alleviating poverty.

The East/West context also became highly politicized by the shift in the American approach. One target of the new, more aggressive, commercially-minded orientation was to expand the trade of food commodities with the USSR. The change to substantial Soviet participation in international food transactions, symbolized by the US-USSR grain "robbery" of 1972, again had a spill-over effect. Despite the contradictions between the concept of "food power" and the principle of the free market, the question about how food transactions could be turned to the American's diplomatic as well as economic advantage was soon raised. That is to say, increasing consideration was given in the 1970s to the possibility of using American food as a strategic tool, not in the passive sense of the 1950s (when a blanket embargo was in place), but in a more active sense so as to allow the United States to exert leverage over the USSR through access and denial, or threatened denial, of food.

Where the North/South and East/West contexts merged is also on this issue of access and denial. The use of an activated food diplomacy was not confined to US/USSR or US/Eastern bloc relations. It also was utilized by the United States to prop up unstable (but pro-US) LDC governments and to bring into line other LDC governments which appeared to be drifting away from the United States. It remained highly questionable during the time of the food crisis whether the neediest nations in the Third World, in contrast to the most politically sensitive, received a proportionate share of aid.

These contexts, North/South and East/West, have remained highly controversial in the international relations of food throughout the 1970s and 1980s. The inability of many LDCs to meet their own requirements kept the issue in the forefront of North/South relations by a variety of factors including the disastrous situation in Africa and the debt crisis. Likewise, the concept of "food power" brought a new element into East/West relations, culminating in the 1980 grain embargo directed at the USSR.

North/South and East/West should not be treated as the only contexts of importance. The West/West context has become a focus for heightened tension as well.[2] Indeed it may be argued that it was the changing relationships in this context which have contributed most to the systemic disorders of the food regime and have imposed the most serious obstacles to the re-negotiation of a new order in the

2. See, for example, Nicholas Butler, "The Ploughshares War Between Europe and America," *Foreign Affairs* 62 (Fall 1983):105-122.

1970s and 1980s.

The core of this West/West conflict in international food relations again goes back to the Nixon administration's attempt to force its industrial partners, and particularly the European Community (EC), to buy more American produce. Notwithstanding the potential of the USSR and even the LDCs for commercial transactions, the main thrust of the approach was directed at those nations which not only had the hard currency to "buy American" but had done the most (in the American view) to prevent the United States from maximizing its competitive advantage. They had done this through the establishment of the Common Agricultural Policy (CAP).

Nor did the United States ease up on this approach when the European Community and Japan were themselves hard hit by the food crisis. On the contrary, the United States appeared to be using the crisis to impose new conditions of trade upon its allies. One of the most traumatic episodes in West/West relations in the 1970s was the US's imposition of a sixty day embargo in June 1973 on exports of soybeans. To the importers of soybeans in Western Europe and Japan, who had built up a dependency on this commodity for animal feed and vegetable oil, the American action was considered a betrayal of trust.

Unlike the LDCs, though, the industrial nations had the political and economic capabilities to adopt adequate coping strategies to endure the shocks of the early 1970s; and so adapt to, and even take advantage of, changing international conditions. If the United States was unwilling to continue to hold up an umbrella to provide international food security, the industrial nations would look to immunize themselves from unreliability of supplies.

Japan provides one fascinating study of adaptability in the international relations of food, especially in the search for alternative supplies of soybeans and other commodities. The most dramatic response to the food shocks of the early 1970s, nevertheless, came from the EC. The effect of the brief period of panic associated with the rise of prices in animal feed requirements was a strengthening of CAP, on the grounds of "national security." The West German Agricultural Minister, Josef Ertl, expressed the European mood when he telegrammed Butz after the embargo was imposed: "Your Government's measures could cause increased efforts here to reach a high level of self-sufficiency in the European Community."[3]

By striving to boost EC farm production through the continuation (and expansion) of high prices and open-ended intervention guarantees, CAP exacerbated the "surplus" problem when the crisis abated. The result has been a globalization of CAP, with the surpluses exported outside the EC through an aggressive subsidy system. EC officials justified this approach by arguing that it was better to subsidize consumers outside the EC at a low cost than to subsidize the storage and preservation of stockpiles inside the EC at a high cost. To the traditional supporters of CAP, the French government and the powerful farm organizations, an export strategy based on a network of long-term agreements for food commodities also had the advantage of institutionalizing the EC's surpluses (and having them viewed in a more positive light).

3. Quoted in "Germany Scorns Action," *The New York Times*, 4 July 1973, p. 29.

The inevitable consequence of the EC's outward-looking approach was that it posed a direct challenge to American leadership in the international relations of food. In overall commercial food transactions, the United States has continued to lead, selling $41.7 billion (US) in produce overseas in 1982, 70 percent more than in 1976. But the EC has moved into second place, its food exports being valued at $27 billion in 1982, a 156 percent rise during the same six year period.[4] In terms of specific commodities, the EC had become not only a net exporter of grain by the 1980s but also the world's largest exporter of poultry, the supplier of three-fifths of the international market in butter and dried milk, the second largest exporter of beef (after Australia).

Geographically, the EC's export subsidies have been carefully focussed on what it considers its "traditional" markets. Whereas, for instance, the EC increased its food exports to the Middle East and Africa by 60 percent in the 1976-1980 period, the increase of EC farm exports to Asia was outpaced by that of the United States over the same period.[5] American farmers and their political representatives, though, do not accept as realistic the division of international markets along these lines. For their part, EC officials are under pressure to adjust the level of subsidies so as not to hinder exports to traditional American markets in Asia.

The significance of this challenge cannot be underestimated. At the level of values, there remain fundamental differences between the American's emphasis on strengthening the code of commercial conduct and of improved access to markets and the EC's emphasis on management and stability in the international marketplace. As

4. United States Department of Agriculture and United Nations figures, given in Paul Lewis, "Europe's Farm Policies Clash with American Export Goals," *The New York Times*, 22 February 1983, 11.

5. Agra Europe, Special Report No. 19, *The Common Agricultural Policy's Role in International Trade* (London: Agra Europe 1983), 73.

witnessed during the GATT Ministerial in November 1982,[6] these differences have resulted in a continuous dialogue of the deaf. While American officials repeatedly criticize the EC for its "unfair trading practices," the defenders of the CAP have been scornful of the "utopian" and "dogmatic" liberalism of the United States.

At the level of action, the EC challenge has prompted an American backlash. Under pressure from its own farmers and frustrated by the pace of the workings of international dispute-settling machinery, the Reagan administration has moved (albeit intermittently) to "fighting fire with fire." Retaliatory devices have included schemes that reduce interest rates on commodity loans, "blended" credits, and in the highly publicized case of the sale of wheat flour to Egypt in January 1983, the use of surplus stocks from government warehouses. The two-billion-dollar bonus program announced in May 1985 was also specifically aimed at the EC.

Various scenarios about how international food relations will develop in the 1980s may be mooted. These scenarios range from an escalation of conflict between the United States and the EC, culminating in an all-out trade war (a scenario perhaps strengthened by the US-French differences at the Bonn Summit) to the renegotiation of a new (or modified) food regime through multilateral procedures, and especially the GATT and the Organization for Economic Cooperation and Development (OECD). While worthy of greater attention, this paper cannot explore these scenarios in any greater depth, but rather examines Canada's own options against the background of the systemic breakdown of the post-1945 food regime and the new fragmentation in the international relations of agriculture and food associated with the US-EC tensions. In doing so, the paper will attempt to place Canada's international relations of agriculture and food in the context of overall Canadian foreign policy.[7]

Most of the attention paid to Canada by regime analysts concentrates on Canada's "common interests" with the United States in supporting the post-1945 regime.[8] Particular emphasis has been

6. For an overview of the Ministerial see C. Fred Bergsten and William R. Cline, "Conclusion and Policy Implications," in William R. Cline, ed., *Trade Policy in the 1980s* (Washington, D.C.: Institute for International Economics, 1983), 760-763.

7. For a good analysis of theoretical perspectives on Canadian foreign policy see David D. Dewitt and John Kirton, *Canada as a Principal Power: A Study in Foreign Policy and International Relations* (Toronto, 1983).

8. Hopkins and Puchala, "Perspectives on the International Relations of Food," 591. See also Jon McLin, "Surrogate International Organization and the Case of World Food Security, 1949-1969," *International Organization* 33 (Winter 1979), pp. 35-55.

given to Canada's willingness to co-operate with the United States in maintaining reserves of wheat and coarse grain in times of abundance and in releasing these reserves in times of scarcity (the United States with Canada held over 90 percent of all surplus stocks of these commodities during the 1960s). Certainly, the Canadian government acted throughout the 1950s and 1960s in accordance with the view that it was "almost inevitable that we in North America will hold some kind of blanket over the smaller exporting countries."[9]

This accordance to Canada of first-follower status in the regime may be elaborated upon, however, to capture the Canadian role as rule-keeper of the regime. Throughout the 1950s and 1960s, Canada did its best to see that neither of its Atlantic partners, the United States and the West European nations, broke the norms or values of the regime. Considerable effort was made to monitor (and modify) the behaviour of these other nations.

In this activity Canada was careful to appear fair and not one-sided; that is to say, as an "honest broker," "bridge builder," or mediator. Breaches of the rules by both the United States and the emergent EC were pointed out. On one side, Canada worked hard to try to constrain practices in the EC's agricultural policy which were at odds with the norms of the free market, particularly those restrictions on free access of farm products into the West European market. On the other side, Canada criticized the American's own violations of the norms of the regime, the main target being the American methods of disposing of their surplus agricultural products.[10] These methods included the sale of produce for soft local currency, straight gifts, barter, and tied sales, whereby the United States gave some foodstuffs in return for promises that the recipient nation would buy more at a later date or purchase manufactured goods instead. All of these methods were outside the normal market methods and were well beyond the "qualified" acceptance of extra-market channels for food distribution.

This is not to say that Canada's disapproval of these practices was translated into retaliatory action against the offending parties. Even when Canadian interests were seriously threatened, Canada believed this course of action would be counterproductive. It would only rein-

9. C.D. Howe, House of Commons *Debates*, 9 June 1954, 5748.

10. See for example, House of Commons *Debates*, 10 March 1954, 2849; 9 June 1954, 5748; 8 January 1957, 29-30; 30 January 1958, 3535. The demand by the United States for a waiver from its GATT obligations, in order to restrict agricultural products under section 22 of the Agricultural Adjustment Act, was also objected to by Canada. C.D. Howe, House of Commons *Debates*, 22 March 1955, 2250. See also "Can U.S. Be Persuaded To Change Farm Policy," *Financial Post*, 8 January 1955, 1.

force unilateralism to the detriment of global stability. If international rulings were sought, this was done in concert with other nations. Rather, Canada relied heavily on confidence-building measures. Crucial to this approach was the utilization of a wide variety of forums, formal and informal, for achieving rule compliance, an approach perfectly in keeping with Canada's traditional institution-building approach in international affairs.

This pattern of confidence-building through continuous consultation is visible in Canada's dealings with both the United States and the Western European nations. In regard to the issue of maintaining adequate access to the EC markets for its farm products, Canada joined with the United States to mediate EC-importer differences. Initiatives included the formation of a special committee of the Organization for European Economic Co-operation (OEEC) to examine the problem, and consultations in May 1960 between the EC and representatives of the major agricultural exporting nations for the purpose of discussing the proposed CAP.[11] In regard to the issue of the American's surplus disposal practices, a variety of existing forums were utilized. Canadian complaints were laid before the Joint Canada-United States Committee on Trade and Economic Affairs, the North American Committee of the Food and Agriculture Organization, the International Federation of Agricultural Producers, the Investment Bankers Association, and the GATT meetings.[12]

The device of reputation-building was also employed by Canada. If Canada was to have any success in constraining the activities of other nations, its own activities had to be aboveboard. Canada, therefore, continuously presented itself as a responsible participant in international agricultural and food transactions. Its relatively liberal trade practices were emphasized. Its relief efforts during crises in the Indian subcontinent and elsewhere were compared to the "firesale" practices of the United States. This reputation-building was enhanced further by Canadian efforts to reinforce international collaboration in food transactions. Canada was influential in the

11. The Department of External Affairs, *Report of the Department of External Affairs 1960* (Ottawa: The Queen's Printer, 1961), p. 30.

12. See, for example, William M. Blair, "Canadians Score U.S. Crops Policy," *The New York Times,* 23 May 1957, p. 24; "Canada Tells F.A.O. U.S. Sales Hurt Her," *The New York Times,* 13 October 1957, p. 20; "Canada's Airs Worry Over Dumping by U.S.," *The New York Times,* 3 December 1957, p. 53; "GATT Nations Criticize U.S. Methods in Program on Farm Surplus Disposal," *The New York Times,* 26 November 1957, p. 49; "Canada Assails U.S. On Linking of Trade to Gifts of Wheat," *The New York Times,* 7 July 1957, p. 1.

globalization of commercial transactions in food commodities throughout the 1950s and 1960s, the most significant case being of course in reference to the Communist bloc (where Trading With The Enemy legislation was an obstacle to United States transactions). Canada also took initiatives with respect to concessional transactions. The Food Bank concept, pioneered by Lord Boyd-Orr, was taken up by Prime Minister Diefenbaker in the late 1950s. At first conceived as a NATO Food Bank to help member nations of the Alliance by way of the distribution of surplus wheat and other foodstuffs,[13] the idea was soon turned into a more ambitious (and equitable) distributive scheme for LDCs. Again, institution-building was a vital element in this approach. The outgrowth of this initiative, the successful UN/FAO World Food Program, further reinforced Canada's internationalist reputation.

Later, when serious cracks appeared in the food regime, Canada tried its best to ward off collapse. Canada assumed a leadership role, for instance, by observing the pricing agreement established under the International Grains Agreement even after the United States had broken the floor in July 1969 in an effort to increase sales of its own commodities.[14] Conforming to its role as the rule-keeper of the regime, Canada chose not to engage in competitive undercutting but rather to continue working toward rebuilding confidence in international solutions, an approach reinforced by its on-going emphasis on the GATT as a forum for dispute resolution.

Even after the shocks of the global food crisis in the early 1970s, considerable attention has been paid in Canada to how the food regime (or more precisely a somewhat modified regime to take into account the changing North/South context) could be restored. One finds a strong element of continuity in the Canadian approach throughout the 1970s in terms of a search for co-operation and co-ordination in the international relations of food. The active Canadian participation (and generous pledge) at the 1974 Rome World Food Conference may be viewed in this fashion. So too can the Canadian efforts throughout the 1970s to build a new confidence-building international arrangement governing grain marketing (in the interests, it may be added, of both importers and exporters). So too can the lingering admiration Canada has had for the concept of international grain reserves. Conversely, Canada has

13. Bill Becker, "Diefenbaker Asks U.S. Co-operation," *The New York Times,* 9 June 1958, p. 1.

14. The Industry, Trade and Commerce Minister, Jean-Luc Pepin, told Parliament that even if in the process of trying to save the IGA "we may have lost a number of sales...it was worth the effort." House of Commons *Debates,* 21 July 1969, 11398.

been firm in disassociating itself from any schemes that run contrary to multilateralism, such as cartelism.[15]

A number of reasons may be put forward to explain Canada's continued faith in these internationalist solutions. One explanation is the "sunken costs" concept. Canada, it might be argued, had invested so much of its reputation (and had accumulated such a large reservoir of good will) through its role as regime rule-keeper that it found it difficult to reorient its approach in transformed conditions.

Another explanation that may be offered links Canadian regime support to a Canadian-satisfying (not maximizing) strategy. The emphasis here would be on some rational calculation of Canadian self-interest in terms of its own competitive strength vis-à-vis United States food transactions. By continually stressing constraint and continuity in both commercial and concessional transactions, Canada was merely attempting to prevent a "free-for-all" from which it could not hope to benefit.

The problem with this latter explanation appears to be the very ambiguity as to Canada's motives for supporting the post-1945 regime. If there was an element of economic calculation (Canada did not want to pit its own treasury against that of the United States), there was a moral and idealistic element in Canada's liberal internationalism. Its distributive efforts and its mediatory activity between the two pillars of the Western Alliance cannot be ignored.

By the 1970s, though, Canada had choices before it other than a defence of the post-1945 food regime. One alternative was to fit Canada's international food relations into the so-called Third Option, the pursuit of a long-term, comprehensive strategy to strengthen the economy so as to enhance Canada's independence.[16] Indeed, it is apparent that some attempt at least was made by Prime Minister Trudeau's government in the aftermath of the food crisis to move toward a more autonomous, bilateral and diversified approach to international food transactions based on a maximizing, not a satisfying, strategy.[17] This approach was continued (as exemplified by

15. Allan J. MacEachen, House of Commons *Debates*, 12 November 1974, 1222. Ministers continually distinguished between a cartel and co-operation among exporting nations to stabilize the market. See, for example, "Argue pushes for new wheat trade pact," *Globe and Mail*, 28 December 1981, B.1.

16. Mitchell Sharp, "Canada-US Relations: Options for the Future," *International Perspectives* (Special Issue), Autumn 1972. For a stimulating retrospective look at The Third Option, see C.C. Pentland, "Domestic and External Dimensions of Economic Policy; Canada's Third Option," in Wolfram F. Hanrieder, ed., *Economic Issues and the Atlantic Community* (New York: Praeger, 1982), 139-162.

17. For an interesting analysis of Canadian export promotion and foreign market development programs, see Omero Sabatini, *Canada's Export Market Development for*

Canagrex) when the Liberals were swept into office again in 1980.

This approach reflected a new perception of Canada's external environment. On the one hand, the United States' leadership appeared to be on the decline in an increasingly multipolar world (as evidenced by the Nixon shocks). On the other hand, Canada's own capabilities were being assessed in a more positive light. A shift in power was assumed to be taking place that favoured those nations which "control raw materials, minerals and food."[18]

This approach also reflected the preference of domestic concerns, which, after being held in check by the confines of the regime, had an intensified interest in the food policy-agenda in Canada in the 1970s. These concerns included those of foreign policy, domestic economics, and global welfare. Provincial governments, and especially the Lougheed government in Alberta, enhanced this pressure for a more aggressive and diversified approach to international food transactions. The Alberta government not only took unilateral action to open up new markets (especially in the Pacific Rim) for a wide range of products (including rapeseed, soybeans, and pork) but also pushed the federal government into adopting further dynamic instruments for increasing these transactions. One official, for instance, informed the House of Commons' Standing Committee on Agriculture in 1977 that: "There has been some talk about an agricultural-export corporation...We looked in some detail at a proposal which I believe originated in the Province of Alberta."[19]

Still, "some measures adopted in the short term have been in conflict with longer-term objectives."[20] Certainly, one can agree that this appears to have been the case in terms of Canada's food policy in the 1970s. Just as food was being seen as increasingly important in the international context, domestic constraints were placed on international transactions in food. Adequate assured supplies of protein were required by the Canadian poultry and livestock industries. Canada, in a fashion similar to the United States, accordingly placed a temporary embargo on the movement of forty-one categories of commodities, including edible oils, animal fats and livestock protein

Agricultural Products, Foreign Agricultural Economic Report No. 107 (Washington, D.C.: U.S. Department of Agriculture, May 1975).

18. James Eayrs, "Canada's Emergence as a Foremost Nation," *International Perspectives*, May/June, 1975, 24.

19. W.E. Jarvis, House of Commons, *Minutes of Proceedings and Evidence of the Standing Committee on Agriculture*, 19 May 1977, 26:16.

20. T.K. Warley, *Agriculture in an Interdependent World: U.S. and Canadian Perspectives* (Washington, D.C. and Montreal: Canadian-American Committee 1977), p. 16.

feeds, at the height of the food crisis in July 1973. More generally, Canadian consumers could not be ignored at a time of spiralling inflation. As the Chairman of the Standing Committee on Agriculture put it: "While we are interested in Iran, Chile, or Brazil about wheat, we are really more concerned with the consumers in Montreal."[21]

This conflict led to a significant time-lag in the development and implementation of a long-term, comprehensive strategy in terms of Canada's international agricultural and food transactions. Whereas in the midst of the global food crisis, Canadian opportunities (and responsibilities) in international food transactions were widely believed to be considerable, by the early 1980s, many observers felt that there was less room for optimism about Canada's role. Nevertheless, the optimistic rhetoric of earlier years continued in a more sophisticated form. The 1981 *Challenge for Growth* discussion paper, echoing the views of *Global 2000: Implications for Canada,* stated that: "The Canadian agri-food sector has a unique opportunity for growth from now until the end of the century, and beyond. World food requirements are growing at a rate that will put unprecedented pressure on its ability to produce food."[22]

Leaving aside the difficulties of domestic agreement and co-ordination, the external constraints on such an approach were imposing.[23] The Third Option in the early 1970s was identified largely with an expansion of trade with the EC. Yet the EC market remained highly restrictive in regard to Canadian farm products (a problem compounded by the entry of Britain into the EC), with an array of non-tariff barriers including health restrictions in operation on top of import levies. As one MP graphically phrased it, "you can't get in there with a shoehorn."[24] Japan, another target of the Third Option, offered far greater potential for expansion. But Japan, of course, has also utilized both tariff and non-tariff barriers against farm products.

There were problems too in an approach to international food transactions based on a new bilateralism. Many nations which were

21. House of Commons, *Minutes of Proceedings and Evidence of the Standing Committee on Agriculture,* 2 April 1974, 7:4.

22. Agriculture Canada, *Challenge for Growth: An Agri-Food Strategy for Canada* (Ottawa: 9 July 1981), 4.

23. See, for example, Elmer L. Menzie and George L. Brinkman, "Canada's Agri-Food Strategy: An Appraisal," *Canadian Journal of Agricultural Economics* 30 (July 1982), 98-100.

24. House of Commons, *Minutes of Proceedings and Evidence of the Standing Committee on Agriculture,* 20 May 1982, 70:10.

potentially attractive targets for Canadian food transactions (and to which Canagrex was perhaps more suited for, entailing as transactions with these nations often did, state-to-state negotiations). Some have been hard-hit by the decline in oil prices or by an accumulation of debt. Others have suffered from unstable political situations.[25] Most are increasingly adamant that trade with Canada be a two-way street.

The supply side of the equation was no less problematic. The scarcity crisis of the early 1970s turned to a "surplus" crisis a decade later. The continual rise in the international supply of grain, dairy products, and other farm commodities, combined with a greater number of exporters, not only depressed the market but led to intensified competition. As the Minister of Agriculture, Eugene Whelan, told the Canadian Outlook Conference in 1982: "Trading is a tough game, and it's getting tougher. The number of players is increasing and so is the volume of products."[26]

Above all, Canada was afraid of being caught in the middle between an intransigent EC (with its export subsidies) and a resurgent United States (with its "blended" credits, its Export Trading Act and other programs designed to facilitate exports), thus facing a "cross-fire" effect from both sides of the Atlantic. Even the normally buoyant Eugene Whelan could tell an American audience in 1983 that Canada: "could not afford to spend as much on subsidies as the U.S. government is doing now. That explains why we are absolutely terrified of an all-out trade war breaking out between the U.S. and the European Economic Community. We would be the first casualty."[27]

Given the external constraints in the way of an autonomous and diversified approach,[28] it is understandable why another approach more appropriate in dealing with immediate concerns has been

25. See, for example, Oliver Bertin, "Debt Woes Limiting Food Sales," *Globe and Mail* 15 August 1983, B2.

26. "Notes for an Address at the Opening of the Canadian Agricultural Outlook Conference," Ottawa, Ontario, 6 December 1982, p. 2.

27. "Notes for an Address to the Dallas Agricultural Club," 10 October 1983, p. 5.

28. This is not to suggest that Canada's agricultural exports are not still globalized. In 1982 the United States, the EC and Japan took half of Canada's exports (25.2 percent, 12.5 percent and 13.3 percent respectively) the USSR and China accounted for another quarter, and LDCs most of the rest. Figures given in T.K. Warley, "Canada's Agricultural and Food Trade Policies: A Synoptic View," A working paper for a project of the Trilateral Commission, Agricultural Policy and Trade: Adjusting Domestic Regimes in an International Framework, 1 February 1985, 8. In 1984 agricultural exports amounted to approximately $10.3 billion.

ascendant during the brief period of time that Prime Minister Mulroney's government has been in power. This approach in international food relations, as in foreign economic policy generally, emphasizes Canada's "special relationship" with the United States. This approach is apparent both in style and substance. If Canada-United States agricultural and food relations were often marked by an adversarial tone during the period of Liberal government (the Whelan/Enders argument in respect to free trade, the fallout over the lifting of the grain embargo, various disputes over aid levels, to give just a few examples),[29] there was an atmosphere of "sweetness and light" at the Canada-United States ministerial talks after the Conservative victory.[30] In terms of substance, the Conservative government has shown itself much more willing to support the United States position in international food relations. Charles Mayer, the minister responsible for the Canadian Wheat Board (CWB), for example, said in an interview in January 1985 that: "I think it's important that we go where we can as a North American trading bloc."[31] The corollary to this support for the United States is the concept of exemptionism. After the meeting with John Block, the United States Agriculture Secretary, in October 1984, Mayer could tell reporters that he was "satisfied" with the United States program of "blended" credit because they were directed at the EC and not Canada.[32]

The motivations behind this shift toward the special relationship are not too difficult to understand. At the multilateral level, the fragmentation and competitiveness of international food transactions have reinforced the fact that Canada and the United States share the same broad objectives–trade liberalization and greater access to markets for a similar list of products.[33] Even before the change in

29. A brief discussion of some of the other irritants in Canadian-U.S. agricultural relations in the 1970s is given in Harald von Riekhoff, John H. Sigler, Brian W. Tomlin, *Canadian-U.S. Relations: Policy Environments, Issues and Prospects* (Montreal: C.D. Howe Research Institute, 1979), 79-82.

30. David Stewart-Patterson, "Sweetness and Light Prevail in Canada-U.S. Wheat Talks," *Globe and Mail* 19 October 1984, B4.

31. "Closer Farm Ties with U.S. Planned," *Winnipeg Free Press,* 5 January 1985, p. 32.

32. Stewart-Patterson, "Sweetness and Light," B4. Again, in regard to the U.S. bonus program, Mayer stated that "the Americans recognize that we are not the major problem as far as export markets and subsidies are concerned." House of Commons, Minutes of Proceedings and Evidence of the Standing Committee on Agriculture, 22 May 1985, 19:10.

33. See, for example, Economic Council of Canada, *Looking Outward: A New Trade Strategy for Canada* (Ottawa: Supply and Services Canada, 1975), p. 150.

government, a senior Department of External Affairs official told the House of Commons Standing Committee on Foreign Affairs and National Defence that Canadian and American views on agricultural trade were "very close."[34] Canada has been able to negotiate reductions and the harmonization of its agricultural trade with the United States in past GATT negotiations. In contrast, the results of tariff negotiations with the EC have been "much less significant."[35] Canada did not even get a share of the United States quota for duty-free beef sales to the EC in 1979.

At the bilateral level, the motivation for a special relationship stems from a growing concern about the protectionist mood in Congress, and the actual or threatened translation of this mood into action aimed either directly at Canada or indirectly through action directed at the EC or Japan. This concern has been heightened by recent controversies over such issues as the use of the antibiotic, chloramphenicol, in Canadian livestock production, and the imposition of a stiff countervailing duty on Canadian hogs and pork exports by the United States Department of Commerce following a preliminary finding that the Canadian industry was unfairly subsidized by federal and provincial income stabilization programs. "Buy American" legislation can also have an impact on Canadian commercial interests, as evidenced by bills designed to prohibit procurement by the United States military of rations from outside the country.

The Canada/United States bilateral situation is complicated further by the movement of highly subsidized EC agricultural products, most notably low-grade Irish beef, into Canada. These imports have a displacement effect in the North American market, with Canadian beef moving into the United States (a movement, as with other commodities, made more attractive by current exchange rates). The Canadian government, therefore, faced not only domestic but external pressure to hold back the EC shipments, pressure it responded to in December 1984 by invoking a global quota under the Meat Import Act with an allocation to the EC in 1985 of a quota equal to the average level of shipments over the previous five years. It may be added that even though the EC seems to have effectively forced Canada to back down on quotas in the face of retaliatory threats to Canadian exports on this particular issue, tensions in all

34. Robert Johnstone, *Minutes of Proceedings and Evidence of the Standing Committee on External Affairs and National Defence,* 2 December 1982, 81:20.

35. External Affairs Canada, *A Review of Canadian Trade Policy: A Background Document to Canadian Trade Policy in the 1980s* (Ottawa: Supply and Services Canada, August 1983), p. 65. See also J.S. Lohoar, "The Multilateral Trade Negotiations and Canadian Agriculture," *Canadian Farm Economics* 14 (October 1979), 1-8.

likelihood will continue to mount in Canada/EC international food relations.

This special relationship does not necessarily mean that Canada is moving toward generalized free trade in agricultural products. Some domestic sectors with a natural trading pattern with the United States (red meats especially) would theoretically favour such a move. There would be massive adjustment problems, though, in the dairy and poultry sectors as well as some of the fruit and vegetable sector–problems that are complicated by the large trade surplus the United States enjoys with Canada. John Wise, the Minister of Agriculture, has also pointed to external constraints (for instance, because of the American's own stabilization programs): "We hear a lot of talk about free trade and so on. That is fine. But it appears that certain people are not always as free in their trading as they would like to lead people to believe they are."[36]

Nor does having a coincidence of interest with the United States mean that Canada has a common interest with the Americans in the international relations of food. Just as Canada's faith in international norms and values, based on multilateralism, has lingered, so too one can expect to see Canada competing aggressively in global markets. One indication of this continuous effort is the CWB's record export sales in 1984 despite the highly competitive international market. Others include the establishment of a new Office for the International Marketing of Agriculture, Fisheries and Food Products in External Affairs, the strengthening of the Marketing and Economics Branch of Agriculture Canada, various new trade missions, and the Export Expansion Activities Funds to help alleviate technical/non-tariff barriers in regard to trade.

One thing is clear though. While the attempts by Canada to search for a balance between its allies in international food relations may continue, the perception of Canada as having tilted over to the United States is widespread. Indeed, a major problem with Prime Minister Mulroney's admirable and useful efforts to mediate on agricultural and food trade at the Bonn Summit is that Canada is not in a particularly comfortable position to act as a "bridge builder" or "honest broker." As one EC Commissioner bluntly told a Canadian reporter prior to the Summit, "Canada is on the same wavelength as the United States. The result is that in multilateral relations, Canada will be on the side of the United States."[37] The broader implications

36. House of Commons, *Minutes of Proceedings and Evidence of the Standing Committee on Agriculture*, 4 February 1985, 5:16.

37. Willy de Clercq, quoted in Jeffrey Simpson, "A Steady Corrosion," *Globe and*

of what this tilt (perceived or real) will mean in terms of Canada's overall manoeuvrability in the international relations of food, however, must be left to more detailed work in the future.

Mail, 27 April 1985, p. 10. President Mitterand of France is reported to have reiterated these views after the meetings, stating that Canada in the end returned to its "own interests."

Federalism and Agricultural Marketing

Grace Skogstad

The chief concern in this inquiry into "Agricultural Policy Making in a Federal State" is to assess the impact of the constitutional and political framework of federalism on the capacity of governments in Canada to make coordinated and consistent domestic and export agricultural marketing policies. The inquiry demonstrates that the Canadian federal system poses problems to developing a coordinated and effective national marketing policy with respect to commodities traded both domestically and abroad. And it does so because the Canadian federal system is both a legal and a political arrangement. That is, the roles of the national and provincial governments with respect to agriculture are prescribed not only by our constitutional law but also by political expectations. Specifically, there is an expectation on the part of the provinces that national agricultural policy will be made following intergovernmental consultation. This expectation is not new, rooted as it is in a history of federal-provincial consultation both at the level of agriculture ministers in annual meetings, and in the continuous intergovernmental bureaucratic contact. But what is new is the expectation that provinces will have a say on matters where the government of Canada enjoys exclusive legal authority, such as the negotiation of export trade agreements.

The growing provincial perception that provincial input should be the norm arises out of an increasing activism and heightened sense of responsibility for agriculture in several provincial capitals in the past decade. The greater priority some provinces have given to agriculture in the 1970s and 1980s is itself the result of a perceived lack of federal leadership in addressing producer income problems and aggressively seeking market outlets. As the newly-elected Progressive Conservative government seeks to implement its own strategy with respect to marketing agricultural and food products, it will need to overcome the legal hurdles and abide by the political norms of contemporary federalism.

Does the federal system help or hinder Canada's ability to maximize agricultural exports and export opportunities? On the whole, its effect is negative. Federalism poses roadblocks to one national coordinated policy with respect to export marketing. But the federal system of government is not itself the genesis of this problem. Rather, its roots lie in the structure of Canada's agricultural economy.

Three features of Canada's agricultural industry in particular create problems for agricultural policy makers and build in interregional tensions. First, the major sectors of western Canadian agriculture are highly reliant upon export markets and must be price-competitive internationally, while most of the key central Canadian agricultural commodities find their major outlet domestically and are insulated from international competition. Grains, oilseeds and oilseed products, and cattle–the principal commodities produced on the prairies–are traded largely in export markets where Canadian producers are price-takers rather than price-setters. The prices of the centrally based dairy and poultry industries, by contrast, are set domestically and are immune to international competition. Second, Canada's agricultural industry is characterized by a disparity in comparative advantage of producers in different regions who are competing for the same market outlets. This is true of the supply-managed commodities–industrial milk, eggs, poultry–but more importantly, in terms of its ramifications for export-oriented policies, it is the case for livestock and hogs. In the absence of government subsidies, western Canadian cattle and hog producers enjoy a competitive advantage over their Quebec counterparts because of the availability of lower-cost feed. Quebec, Saskatchewan, and Alberta hog producers, nonetheless, compete for virtually the same domestic and external markets. Third, Canada's agricultural industry is characterized by intersectoral competition. The most obvious example is that between grain and livestock producers; the latter depend on grain as a foodstuff for their animals and hence are interested in cheap feed grain supplies–an undesirable market situation for the grain seller.

These three structural features–the cleavage between export- and market-oriented producers versus market-insulated growers, intersectoral competition over low input costs versus high output prices, and intrasectoral rivalry between producers across provinces for markets–create conflicts and necessitate tradeoffs and compromises in agricultural policy formulation. This would be true even if the national government were solely responsible for agricultural policy. But the

problem is compounded in the Canadian federal system of shared jurisdiction for agriculture. With both provincial and federal governments able to make policies for agriculture, and with as many as eleven governments responding to different pressures and interests, not only does the probability of inconsistencies in agricultural policies from province to province increase, but the level of competition and conflict among producers in different regions grows accordingly. The result, in turn, is a paralysis in national policymaking that hampers Canada's ability to pursue with vigour external market opportunities. This can be illustrated by looking at Canada's domestic marketing policies which, in turn, affect our export marketing strategy.

Domestic Marketing: A Dual Strategy. The Canadian constitutional system divides jurisdiction with respect to marketing between the national and provincial governments. The government of Canada enjoys exclusive authority with respect to external trade; within Canada, it alone can regulate trade across provincial borders. Provincial governments enjoy sole authority to regulate marketing within their boundaries. Provinces are therefore handicapped in being unable to prevent legally commodities from other provinces from moving into their own and are thus unable to avoid out-of-province dumping that could cause local prices to drop. The only way around this constitutional impasse to national orderly marketing schemes is for governments to cooperate and to delegate their authority to agencies of the other level of government.[1]

This cooperation has been forthcoming and has enabled the implementation of national supply management plans for industrial milk, eggs, chickens, and turkeys. The jurisdictional hurdles posed by the Canadian federal system have thus been overcome by intergovernmental cooperation and mutual agreement to protect Canadian producers from international competitors.

1. The relevant judicial decisions revolve around interpretation of Sections 91.2 and 92.10, 92.13, and 92.16 of the British North America Act. The *Natural Products Marketing Reference* case, 1937; the *Manitoba Egg Reference* case, 1971, and the *Ontario Egg Reference* case, 1978, define the respective spheres of marketing authority of the government of Canada and of the provinces. The *Ontario Egg Reference* case determined that a federal "price fixing scheme, designed to stabilize the marketing of products in interprovincial trade...paying due regard to provincial production experience" could establish quota without being in violation of Section 121 of the British North America Act. See *Reference Re The Agricultural Products Marketing Act*, 1978:Para. 107. The principle of intergovernmental delegation was enunciated in *P.E.I. Potato Marketing Board v H.B. Willis*, 1952. For an account of the legal authority of provincial and federal governments with regard to marketing, see A.E. Safarian, *Canadian Federalism and Economic Integration* (Ottawa, 1974), pp. 48-57.

Domestic market regulation and import controls constitute one prong to Canada's domestic marketing framework. The other prong is unregulated trade across provincial borders for other commodities like hogs, live cattle, and fruits and horticultural products. There are no provincial or national supply management programs for red meats, and only one horticultural product, flue-cured tobacco (almost the entire production of which occurs in Ontario), is subject to a provincial supply management scheme. The absence of federal-provincial agreements to regulate the interprovincial movement of beef, hogs, potatoes, fruits and vegetables is accompanied by few import barriers. The exceptions are some quantitative restrictions on beef and seasonal tariffs on fruits and vegetables. Thus, Canadian producers of these commodities face competition at home and abroad.

Canada's dual domestic marketing approach has a number of consequences for its export marketing policies and opportunities. First, the policy of domestic self-sufficiency for industrial milk and poultry has effectively closed off these sectors as areas of growth for provinces wishing to expand their agricultural industry. While there have been some changes in provincial shares of national poultry and industrial milk quotas, these have been relatively modest.[2] Consensus on interprovincial quota re-allocation, necessary if a province is to be able to increase its production of a nationally supply-managed commodity given the relative inelasticity of national demand for these commodities, is difficult because a gain in one province's share of the national quota is likely only possible if another province reduces its quota share. Here the federal system rears its head again. Provincial jurisdiction over intraprovincial marketing gives each province a delegate on the national marketing agency. The fact that provincial delegates are generally representatives of the provincial producer marketing board means that they have a proclivity to promote their province's interest in obtaining a maximal slice of the national quota pie. The federal government's failure to force discipline and sharing on the provincial delegates on the national marketing agencies has led to quota allocation policies which are perceived in some provinces to be discriminatory and viewed by many to be deleterious in their balkanizing effects and in undermining economic efficiency.[3]

2. B. Sadler, ed. *Transforming Western Canada's Food Industry* (Banff, 1984), Table 20.

3. For an expression of Ontario's discontent see Dennis R. Timbrell, *Ontario Signatories' Position on the Allocation of Overbase Quota for Chicken, Eggs and Turkey* (Toronto, April 1983), p. 6; Dennis R. Timbrell, "National Poultry Marketing Plans,"

Even while they are philosophically strongly opposed to supply management and government involvement in their own sector, western Canadian cattlemen, and to a large degree, western Canadian pork producers, are not averse to pointing to the national supply management plans as an example of preferential treatment of central Canadian producers.[4] If one determines the beneficiaries of these schemes in terms of proportion of quota held and importance to farm income of sales of regulated commodities, it is central Canadian producers who benefit especially from the import controls and guaranteed prices afforded by supply management.[5] In 1983, Ontario had 32 percent of industrial milk quota, 39 percent of egg quota, 44 percent of turkey quota, and 34 percent of chicken quota.[6] Quebec's shares were 48 percent, 16 percent, 24 percent, and 32 percent of industrial milk, egg, turkey, and chicken production, respectively.[7] Aggregating these figures reveals that Ontario and Quebec together held 80 percent of industrial milk quota, 55 percent of egg production, 68 percent of turkey quota, and 66 percent of chicken production. With their own interests best served by trade liberalization and the dismantling of trade barriers and the removal of protectionism, western Canadian red meat and grain

Special Meeting of Signatories Re: Overbase Quota, 27 May 1983, p. 5; Stan Oziewicz, "Milk Industry Growth Stemmed by Ottawa, Newman Charges," *Globe and Mail*, 16 November 1978, p. 5. With regard to the question of supply management leading to inefficiency in the national economy, see J.D. Forbes et al., *Economic Intervention and Regulation in Canadian Agriculture* (Ottawa, 1982), pp. 100, 113; Kenneth F. Harling and Robert L. Thompson, "The Economic Effects of Intervention in Canadian Agriculture," *Canadian Journal of Agricultural Economics* 31 (July 1983):16-24. For a contrary point of view see Andrew Schmitz, "Supply Management in Canadian Agriculture: Assessment of the Economic Effects," Ibid., which argues that marketing boards have not led to misallocation of resources or a loss of economic efficiency. Nonetheless, whatever the economic realities, the mentality of balkanization seems to be encouraged by divying up the national market "into a set of provincial submarkets." Forbes et al., p. 113.

4. See C.A. Gracey's presentation at Conference on Canadian Agriculture in a Global Context, Waterloo, 1985, "That Spade is a Shovel."

5. Notwithstanding the generality of this statement, Schmitz argues that British Columbia has benefitted the most from the egg board and Ontario from the broiler agency. Manitoba egg and broiler producers are judged to have benefitted the least. But the perceptions of British Columbia and Ontario are quite different. British Columbia, whose consumer markets, along with Alberta's, grew in the 1970s, sees itself as having been penalized by supply management. And Ontario's dissatisfaction is noted above. In terms of beneficiaries of marketing boards in terms of importance for farm cash income, Canadian Dairy Commission receipts show that Quebec benefits the most.

6. B. Sadler, *Transforming Western Canada's Food Industry*, Tables 20-23.

7. Ibid.

farmers sometimes argue that Canada's ability to convince other nations and trading communities to give greater access to Canadian cattle, hogs, and grains is undermined by domestic self-sufficiency schemes at home. Whether their complaints are justified is debatable insofar as GATT rules do allow import controls when national supply management prevails.

Because of the limited opportunity for growth in the supply-managed sectors, provinces wishing to expand their agricultural sectors have two choices: to bolster production of other commodities and/or to seek out export outlets. The federal system aids provincial governments wishing to pursue the first course of action. Because they have authority to spend on behalf of agriculture, to pass laws and to make regulations, provinces can subsidize local agricultural producers–to the extent their treasuries allow–and assist them to overcome whatever disadvantages they face vis-à-vis their more competitive counterparts at home or abroad. This has occurred to an appreciable degree and is currently creating problems with Canada's major trading partner, the United States.

Provincial Spending and Interprovincial Competition. Until the 1970s, the federal government assumed most of the responsibility for spending programs to stimulate agricultural production, for extension of credit to farmers, and for stabilizing commodity prices and producer incomes. While the provinces always had the legal authority to legislate and spend on behalf of agriculture, most of them were content to let the national government exercise the predominant responsibility. Indeed, they argued that the government of Canada had the duty to do so. But in the wake of the extreme market turbulence of the early 1970s and pressured by producers caught in a cost-price squeeze from which national programs offered inadequate relief, the governments of British Columbia, Ontario and Quebec moved in a significant way into the area of farm income and commodity price stabilization. British Columbia implemented a comprehensive Farm Income Assurance Act in October 1973, the Quebec National Assembly passed the Farm Stabilization Insurance Act in June 1975, and Ontario brought in the General Farm Income Act in 1977. Other provinces, like Alberta, Saskatchewan and the Maritimes, established less comprehensive commodity support programs that were geared at bolstering the prices of selected commodities that were either–or both–especially depressed and locally significant. Thus, the Maritimes introduced support measures for hogs, and the prairie provinces assisted depressed cow-calf producers by offering short-term loans and one-shot grants.

The provincial actions were taken largely to fill a policy vacuum created by perceived federal inaction. With the possible exception of Quebec, most provinces assumed responsibility for stabilizing producer incomes reluctantly and only when they and their producer groups had failed to persuade Ottawa to address the compelling cost-price squeeze problem and broaden its commodity support.[8] And then the provinces acted primarily for economic reasons, believing they had no recourse but to take responsibility themselves if they were to avoid further damage to their local economies.

Provincial spending on behalf of local producers occurs in virtually every province,[9] but in Quebec, and to a slightly less extent in British Columbia, it is of sufficient magnitude to have stimulated local production and caused production shifts from other provinces. The growth of Quebec's agricultural sector has been a deliberate policy of the provincial government since the early 1970s. Recognizing that its hog and cattle producers, for example, were not "naturally" competitive with their Ontario and Alberta counterparts, the Quebec government over the past decade-and-a-half has introduced income support whereby the province finances two-thirds of stabilization payments which return production costs, credit at subsidized rates, subsidies for the production of specific commodities and other measures aimed at replacing food imports into the province with locally produced goods.[10] Menzie has calculated that in 1980-1981, the government of Quebec was second only to that of Newfoundland–not a significant agricultural province–in its spending for agriculture. Provincial spending per farm was $6,841 in Quebec; $2,280 in Ontario; $4,398 in Alberta; and $3,028 in British Columbia.[11] Provincial expenditures were highest in the provinces with the least developed agricultural sectors: British Columbia, Quebec and the Atlantic Provinces. The British Columbia and Quebec agricultural industries have expanded accordingly. Between 1975 and 1978, the number of farms in British Columbia increased 3 percent against a nation-wide decline of 5 percent, cultivated

8. A Communique of the Western Premiers Conference in 1976 declared: "The fact that provincial governments have had to develop individual and provincial support programs...is in the view of the Western Premiers a reflection of an obvious abdication by the federal government of their national responsibility."

9. Elmer L. Menzie, "Free Interprovincial Trade or Provincial Self-Sufficiency in Agricultural Products," in *Proceedings of the Annual Meeting of the Canadian Agricultural Economics Society 1982* (1983), pp. 108-123; especially Table 1, 119.

10. Foodwest Resource Consultants, *Pork Industry in the Alberta Economy* (Edmonton, 1980), pp. 77-93.

11. Menzie, Table 1.

acreage increased by 5 percent while it remained constant in Canada as a whole, egg production rose 7 percent versus a national drop of 1 percent, and milk production grew by 4 percent.[12] Quebec's spending has had its most dramatic impact on the hog industry. The shift in hog production from western Canada to Quebec has left Alberta's pork industry reeling. Quebec doubled its hog production in the past decade to become the largest hog producing province and has not only become self-sufficient in pork production but now enjoys a surplus.[13] Alberta's share of national pork production, by contrast, declined from 20 percent to 12 percent between 1971 and 1980.[14]

Fears that natural market forces are being upset, that the national agricultural economy is being distorted as production is stimulated in less "naturally" competitive regions, and that the overall efficiency of Canadian agriculture is being eroded by the contradictory and competing provincial programs have reached a new intensity. Since 1977, provincial and federal officials have been engaged in almost continuous efforts to harmonize provincial schemes with the national Agricultural Stabilization Act (ASA).

These discussions have repeatedly bogged down over the issue of "top loading." This is the right of a province to subsidize local producers over and above the mandatory federal support. The cleavage is between British Columbia, Quebec, and the Maritimes, on the one hand, and the prairie provinces and Ontario, on the other. For cattle and hog producers in the prairie provinces and Ontario, one national stabilization program that prohibits additional provincial subsidies is the only way to ensure their comparative advantage in red meat production and prevent a further erosion of their market share to producers elsewhere receiving provincial subsidies. But producers in Quebec, British Columbia and the Maritimes disagree, pointing out that a national program based upon national production costs is discriminatory in ignoring their higher input costs and the reality that their competitiveness is contingent upon assistance to offset that disadvantage.

The most recent effort to harmonize provincial stabilization measures with the national ASA ended in the passage of amendments to the latter in late June 1985. An eleventh-hour amendment at third reading overturned the intent of the original amendments: the elimination of the right to top load for federally supported commodities. The legislation allows top-loading with the approval of the federal Agriculture Minister. The concession to pressure from the Quebec farm lobby and the Canadian Federation of Agriculture has left Alberta cattle and hog producers fuming, and the Alberta Agriculture Minister threatening to draw upon the extensive coffers at his disposal to wrest the cattle and hog industries back to his province.[15]

12. Richard R. Barichello, "An Economic Analysis of the Dairy Farm Assurance Program," Unpublished Document, n.d., pp. 8-10.

13. Foodwest Resource Consultants, p. 79.

14. Carlyle Ross, *Economics of Hog Production in Alberta* (Edmonton, 1982), Table 1.

The resentment of Alberta at other provinces' efforts "to steal" Alberta's pork and cattle industries[16] has been exacerbated by similar protectionism on the part of Canada's trading partners. Frustrated with the loss of markets at home, western Canadian and Ontario red meat producers are meeting new obstacles in maintaining access to the key American market and encountering fierce competition at home and abroad from subsidized EC exports. The recent American retaliatory export tariffs on live hogs and fresh and frozen pork only further intensify interprovincial tensions as the tariffs penalize producers in provinces without provincial subsidies and not only those receiving such support.[17]

Export Trade Promotion: Joint Governmental Activity. The government of Canada alone possesses jurisdictional authority to pass laws and make regulations with respect to imports and exports. In addition, in 1935 it assumed permanent responsibility for the export of wheat, oats and barley when it took this task away from the private grain traders and gave it to its agency, the Canadian Wheat Board. Over the years, provinces have chronically complained about the inadequacy of federal efforts in export promotion. In the face of such criticisms and mindful of the potential export expansion offered with limited growth in the domestic market,[18] the government of Canada took a number of initiatives in the early 1980s which were designed to give a higher priority to trade considerations, including agricultural trade. The 1981 Agri-food Strategy of Agriculture Canada,

15. Paul McLouglin, "Alberta Treasury Keys Jingle as Fjordbotten Goes to Ottawa," *Western Producer*, 9 May 1985, p. A25.

16. Bob Beaty, "Fjordbotten Speech Attacked," *Calgary Herald*, 11 February 1984.

17. Robert Lewis, "Pork Duties Early Test of Protectionist Mood," *Western Producer*, 25 April 1985, p. B1; Oliver Bertin, "U.S. Hog Tariff Seen Despite Past Failure to Benefit Producers," *Globe and Mail*, 10 June 1985, p. B1; and Barry Wilson, "One More Try to Get Duties on Hogs Erased," *Western Producer*, 20 June 1985, p. 3.

18. See presentation by Dennis Browne, Director General, Agriculture Fish and Food Products Branch, External Affairs, Conference on Canadian Agricultural in the Global Context, Waterloo, 1985; *Canagrex: Responding to a Need*, Introduction by The Honorable Eugene F. Whelan, Minister of Agriculture, Ottawa, n.d.; and *Canagrex Summary Report to the Standing Committee on Agriculture*, p. i.

with its emphasis on export markets, was to be the blueprint for the future. The Crow grain freight rates were abandoned and the Western Grain Transportation Act passed for the purpose of removing domestic transportation barriers to the penetration of overseas markets. In 1983 the Liberal government created CANAGREX, the Canadian Agriculture Exporting Agency. And beginning in early 1982, the trade development and export promotion sectors of Industry, Trade and Commerce began to be integrated into the Department of External Affairs (DEA) so as to allow the full consideration of agricultural matters by trade officers. Their number was increased to 400 in 120 offices, and some of these were mandated to deal with agri-food products exlusively.[19]

But the national government's trade development strategy has not realized its promise. The crown corporation created specifically "to promote, facilitate and engage...in the export of agricultural and food products from Canada" was terminated by the Mulroney government. The apparent motives behind the cancellation of Canagrex betray the constraints on the government of Canada in formulating marketing policy. The Mulroney government's decision was a response to the bitter opposition to Canagrex from outside the government by the Canadian Cattlemen's Association and the private exporters (who saw CANAGREX as a threat to their own export activities), and from within the government by the departments of Regional Industrial Expansion and Finance.[20] The reality is that there is a pervasive suspicion on the part of western Canadian commodity groups toward the government of Canada,[21] and, in addition, considerable inter-bureaucratic competition within the national government with respect to trade responsibility. It is the latter which has also prevented an integrated approach by the government of Canada to international trade.

19. Information made available by Dennis Browne, External Affairs.

20. *Canagrex Summary Report to the Standing Committee on Agriculture,* pp. iv, 57-59. Barry K. Wilson, "Death of a Salesman: The Life and Times of Canagrex," Research Essay, Institute of Canadian Studies, Carleton University, Ottawa, 1985, chap. 5 and 6.

21. Deborah Sproat, "Cattlemen Say Conservatives Betrayed Them," *Western Producer,* 13 June 1985, p. 10; Barry Wilson, "Farmers' Biggest Lobby Group Unhappy with Federal Inaction," *Western Producer,* 11 July 1985 quotes the president of the Canadian Federation of Agriculture, Don Knoerr, as saying "Farmers across Canada are deeply concerned about what they fear is an inadequate appreciation by the federal government of both the depressed situation and outlook for Canadian agriculture at the present time as well as a lack of fundamental commitment to the industry;" Paul McLaughlin, "Easter Sees Ag Department as Family Farm's Enemy," *Western Producer,* 4 July 1984, p. A5.

The goal to create one focal point in the national government to assist and support the private sector in developing international trade (the focal point being the International Trade Branch of External Affairs and, with respect to agri-food trade, the Agriculture, Fish, and Food Products Bureau) has not been realized. Trade development remains "highly fragmented"[22] as a large number of departments and agencies continue to be responsible for delivering various elements of trade development programs. In addition to External Affairs, Agriculture Canada, Regional Industrial Expansion (responsible for liaisons at the provincial level) and the Department of Fisheries and Oceans all claim an expertise and role in agri-food trade promotion. By way of illustration, Agriculture Canada lists among the services of its Marketing and Economics Branch the following: foreign market intelligence; foreign market expertise in the form of international marketing offices and contacts; and trade missions. A brochure of the Agriculture, Fish, and Food Products Bureau of the Department of External Affairs (DEA) describes its three divisions as responsible respectively for promoting the export development of unprocessed farm products (except grains and oilseeds); for coordinating Canada's foreign market development for fish and seafood products; and for helping to find international markets for processed food products. And finally, the deputy minister of DRIE, in a speech to the Canadian Meat Council in Quebec City on 3 February 1984 declared: "In the field of export assistance, let me emphasize that we are your main contact and will interface with other government departments and agencies to help you achieve your objectives." Until a more integrated approach is forthcoming, and the apparent interdepartmental jousting for primary responsibility for agri-food export promotion is resolved, the impression of a lack of national leadership will continue to prevail in provincial capitals.

It is that very perception, longstanding and chronic, of the inadequacy of the government of Canada's marketing efforts, especially with respect to commodities that are locally significant but not large in the overall Canadian trade picture, that has, in part, prompted some provinces to venture into the area of agri-food export promotion.[23] The priority which Alberta, Ontario, Quebec and British

22. DRIE, Working Paper, "More Effective Trade Promotion," 24 November 1984, p. 5.

23. At the federal-provincial Agriculture Ministers' Meeting in St. Andrews, New Brunswick in July 1979, OMAF Minister William Newman charged that Ottawa was too slow and too inactive in securing export opportunities for Canada's food products and that Ontario was doing "what the federal government should be doing." *Ottawa*

Columbia are giving to external marketing of local commodities is a new phenomenon in provincial-federal relations. The increasing provincial activism in this area reflects the view in a number of provincial capitals that larger volumes of exports, rather than government expenditures, are the appropriate instrument to expand the local agricultural sector and allow for increased producer incomes.

Compared to the modest increase in federal trade officers (from 395 to 407 between 1974-1975 and 1984-1985), provincial resources applied to trade and international development programs have grown exponentially: over 250 percent in the ten years between 1974-1975 and 1984-1985: from 45 to 118 Canada-based and local trade officers.[24] Provincial trade missions have been opened abroad and new branches of government departments created to deal explicitly with export trade development. Most of these resources are not, of course, devoted to agri-food products but in the past few years, the governments of Ontario, British Columbia and Quebec and Alberta have buoyed up their personnel and financial capability to assist the private sector in promoting raw and processed foodstuffs abroad.

Only Alberta and Ontario have an international marketing emphasis within their agriculture departments and the two provinces also share the distinction of being the first to post agri-food trade officers overseas. Other provinces rely on officials in their industry departments to promote agri-food exports. The activities of Ontario and Alberta are similar, although the geographical regions and commodities targetted for growth differ.

Ontario's Ministry of Agriculture and Food (OMAF) began to expand its export promotion resources in 1981 and Alberta Agriculture did so in late 1982. Personnel have grown five-fold since then, but still number fewer than 20 trade officers in the OMAF and about 15 individuals in Alberta Agriculture. The growth of the international trade branches in the two governments is a response to several factors, of which recognition of the vital role of export earnings in total farm cash income is a major consideration, as is the belief that officials in provincial and federal industry departments do not give sufficient priority to agricultural and food trade.[25] The

Journal, 26 July 1979.

24. Data made available by Dennis Browne, External Affairs.

25. See Alberta, Budget Address, *Hansard*, 18 March 1982, p. 213; Speech from the Throne, 2nd Session 20th Legislature, *Hansard*, 15 March 1984, p. 4; Budget Address, *Hansard*, 27 March 1984, p. 179; and Lasha Morningstar, "Fjordbotten Sets Course for the Pacific Rim," *Edmonton Journal*, 18 May 1984. The description here of

major activity of provincial trade officials is to aid the private food export industry to promote local foodstuffs abroad and to assist them in capturing export opportunities. Accordingly, financial assistance parallels that offered by DRIE's PEMD[26] program and includes aid for seminars and exhibits in foreign countries and for missions of potential buyers into the province. While Alberta's focus is on the Pacific Rim countries (Japan being a major target) and the American north-west, Ontario is placing increasing attention on the United States, where it is currently expanding its local trade offices in recognition of the fact that the USA absorbs 60 percent of Ontario agri-food exports.

Officials in both provinces express satisfaction with the cooperation they receive domestically from DRIE officials and abroad from DEA's trade officers.[27] The latter are seen as vital linchpins upon whom provincial officials rely to make necessary contacts for private agri-food exporters with local potential customers. Provinces also work with one another, reporting minimal interprovincial conflict since the products each province is promoting tend not to overlap.

Provincial initiatives in export promotion of local foodstuffs do have ramifications for a coherent Canadian international marketing strategy. First, there is some evidence that Ottawa officials see the joint federal and provincial activism as leading to fragmentation, interprovincial competition, and an undermining of efforts to capture export markets. In the words of a DRIE Working Paper:

> One of the major problems besetting the current system of trade development is, in fact, increasing competition between provinces which leads to a fragmentation of federal and provincial effort, creates the impression among foreign governments that Canadian policy is not well-defined or coherent, and may allow for the "playing off" of provincial and federal interests.[28]

Alberta's activities is based on interviews with Alberta Agriculture officials responsible for trade. See as well Alberta, *Agriculture: Alberta's Advantage, A Strategy to Support the Development and Marketing of Alberta's Agricultural and Food Products 1984-1989*. Ontario's activities are described in OMAF, *Annual Report Fiscal 1982-1983*, p. 16; and *Annual Report Fiscal 1983-1984*, p. 14.

26. PEMD is the External Affairs' funded Program for Export Market Development, certain sections of which DRIE delivers to the industry. Through this program, the government of Canada shares industry's costs of export market development by making available repayable loans, assistance for travel to potential new markets, trade fairs and exhibits, and funds to bring potential buyers to Canada.

27. This satisfaction was expressed to the author during interviews with senior personnel responsible for international trade in the OMAF and Alberta Agriculture in spring 1985.

Second, having built up some expertise in international marketing and staked a claim to this area of governmental activity, provincial officials and ministers are asking for, and receiving the right to be included in trade negotiations, including overseas bilateral missions.[29] At the annual provincial-federal agriculture ministers' meeting in Winnipeg in July 1984, a committee of federal-provincial senior officials was created at the request of the Alberta minister to give provinces input into Canada's agricultural trade policies.[30] Given provincial disgruntlement in the past, with their lack of input into the last round of GATT, for example, the recognition of the government of Canada of a role for provincial officials in international trade negotiations bodes well for harmony among first ministers and signifies a new era in federal-provincial relations in agriculture.

Federalism and Future Export Marketing Options. The contemporary state of Canadian federalism, wherein provincial governments and the national government are both actively involved in programs that affect domestic and export marketing policies presages difficulties in arriving at a consensus on a future export marketing strategy. On the one hand, the Mulroney Conservative government has indicated its interest in international trade liberalization and closer and freer economic ties with the United States.[31] The western provinces are inclined to agree with the Prime Minister, as evidenced by their endorsement in May 1985 of a comprehensive free trade arrangement with the United States.[32] On the other hand, unlike the western provinces, whose agricultural commodities are largely absorbed by external markets, provinces like Ontario and Quebec will not find the abandonment of provincial and national protectionist measures to be in their interest.[33] Given the pivotal role

28. DRIE Working Paper, p. 6.

29. Provinces were invited to partake in the Mixed Economic Commission for the first time in June 1985. Alberta, Ontario and Quebec accepted the invitation and their agricultural officials participated in the Mixed Agricultural Commission tour to the USSR.

30. Paul McLouglin, "Agriculture Elbows Forward," *Western Producer,* 13 September 1984, p. A18.

31. "Free Trade with U.S. to be Looked At," *Western Producer,* 21 February 1985, p. A5 reports the results of the first ministers meeting on the economy in Regina, Saskatchewan in February 1985 at which Prime Minister Mulroney expressed his desire to "explore" the concept of free trade with the United States.

32. See Ibid. for the western premiers' view and Paul McLouglin, "Fjordbotten Wants Free Trade–and the Sooner the Better," *Western Producer,* 28 February 1985, p. A4.

33. See comments at Conference on Canadaian Agriculture in the Global Context, Waterloo, 1985, by Clay Switzer, Deputy Minister, Ontario Ministry of Agriculture and Food, and those by Harry Pelissero, President of the Ontario Federation of Agriculture. See also Larry Johnsrude, "How the Provinces Stand on Key Economic Issues," *Saskatoon Star-Phoenix,* 14 February 1985.

these provinces' voters play in determining the partisan makeup of the government in Ottawa, one can expect considerable pressure upon the government of Canada to retain domestic supply management plans and not to abandon Canadian producers (and manufacturers) to unfair competition from foreign competitors who are themselves often highly subsidized. Whether the historical legacy of federal-provincial consultation and cooperation in agricultural matters, and the goodwill of the present Prime Minister in striving for harmony among first ministers will suffice to overcome the regional and sectoral conflicts endemic to Canada's agricultural economy remains to be seen.

Politics and Business: The Canada-China Wheat Trade 1960-1984

Karen Minden

The buying and selling of wheat is a business transaction. Commercial variables including supply and demand, price, and ability to deliver and receive grain shipments, are important considerations. However, the evidence of the last twenty-five years suggests that the politics of China's food policy, and China's relations with Canada, play a major role in the Canada-China wheat trade.[1]

China's wheat import policy is an integral part of two policy systems: food policy, and foreign policy. This paper analyzes the trends in Canadian wheat sales to China from 1961 to the present in the context of these two policy arenas. Based on the evidence of the past quarter-century, some explanation of these trends, as well as predictions about future trade prospects, are offered.

Grain import policy is an integral part of a nation's food policy. "Food policy" provides a macroanalytical focus for the interaction of policies affecting agriculture, nutrition and food distribution.[2] The decision to import grain, in this case wheat, depends on the state's capacity and priorities in production, procurement, storage, and distribution. Since 1961, China's annual wheat imports have fluctuated between 2.3 and 13 million tonnes. The question addressed by this analysis is: what are the major causes for fluctuations in wheat imports?

The first aspect of this analysis focuses on whether there is a pattern in the relationship between domestic food policy and wheat

This paper was first presented at the Conference on "Canadian-Chinese Relations since 1949," Montebello, Quebec, May 9-10, 1985.

1. See K. Minden, "The Politics of Cerealism," Canada and the Pacific Working Paper No. 27, for a more general discussion of the role of the wheat trade in Canadian-Chinese relations.

2. Referred to by C.P. Timmer et al. as food producers, food consumers and food marketing agents. *Food Policy Analysis* (Baltimore: Johns Hopkins University Press, 1983).

imports. The second aspect is specifically concerned with Canada's share of the China wheat market. Two hypotheses are suggested: (1) Canada's market share reflects both China's general foreign policy orientations and Canadian-Chinese relations; or (2) it reflects strictly pragmatic decision-making–Canada has what China wants, and can deliver it.

An initial survey of the political context of wheat imports to the People's Republic of China suggested that there are definite links between politics and the wheat trade. However a more precise analysis failed to find any predictable patterns. In spite of the CCP's professed preference for long-term planning, Chinese import policy seems to respond to demands on an ad hoc basis.[3] An important observation, however, is that wheat imports have been a constant feature of China's food policy since 1961. Although Canada's share of the China market has fluctuated from a low of 21 percent to a high of 100 percent, the actual amount of wheat exported has been fairly stable, ranging from 1.1 to 4.4 million tonnes. This assessment of fluctuations in the wheat trade will consider a) the role of wheat in China's food policy; b) general development policy, including the impact of significant political events; (3) the impact of natural occurrences salient to agricultural production and consumption; and d) Canadian-Chinese relations within a general foreign policy context.

Wheat and China's Food Policy. The fact that the Southern Chinese slang for a Northerner is *mantou*–steamed bread–indicates the importance of this staple in the Northern diet. Wheat has been an important food crop since around 500 A.D., and is a major cereal crop in North China. Historically, the effectiveness of the Imperial government was measured in part by its ability to provide grain during periods of distress. The ancient granaries of the Han dynasty, unearthed during the 1960s, illustrate the continuity in the importance of what contemporary Chinese peasants call "peace of mind" grain. Food security–the guarantee of grain supplies in time of war or famine–is an important political asset, and one that the Communist regime holds as an enormous achievement since it took power in 1949.

China's food security system is based on state procurement of grain, urban grain rationing, and extensive storage systems. The goals of this system are to maintain adequate supply, national distribution, and stable uniform prices.[4] To ensure this, the state assigns

3. What this means is that Canadian Wheat Board analysts should continue perched on the edge of their seats, to watch for subtle clues as to which way the market will go.

production quotas to the various agricultural units, and procures the state grain supply through taxes, quota purchases,[5] and above-quota purchases at negotiated prices. Total annual procurement averages about 50 million tonnes, about 15 percent of total foodgrain production.[6] Since this 15 percent is slated primarily for the 15 to 20 percent of China's population which lives in the urban centres, the state's food security system is geared toward their needs, and also toward the possibility of emergency relief.

Since the disastrous post-Great Leap famine, the state's policy has been to import grain in order to augment urban grain supplies and stored reserve grain. Thus, while grain imports amount to only 5 percent of total domestic grain production,[7] they provide essential food security and urban supplies. An examination of rural patterns of wheat production, distribution and storage elucidates this close relationship between urban disposition and rural production, and further emphasizes the increasinng importance of wheat in the Chinese food system.

Agricultural policy has always emphasized local self-sufficiency in grain production. This resulted in the proliferation of grain over industrial crops, and coarse grains over lower-yielding wheat. The process of readjusting agricultural land use has to take into consideration the problem of food supply. Although industrial crops are more lucrative than grain, industrial crop regions tend to suffer from higher grain prices and unreliable availability of supplies. In a survey of peasant households in Jiangsu province in 1979, peasants noted that their income was adversely affected if they switched from grain to cotton production: "It comes overtly (that is, the price hike for cotton) and goes covertly (that is, the soaring price of food at the county fair)."[8] In Jiangsu's Nantong prefecture, peasants who shifted from traditional grain crops to industrial crops indicated that food grain shipped to the region was frequently the "wrong type" or mouldy due to "long-distance shipping and lengthy storage."[9] The ideal situation advocated by Zuo Mu in this survey is a balance between local food self-sufficiency and industrial crop production, to reduce the need for government food subsidies, transportation and

4. World Bank, *China: Socialist Economic Development* (1983), V II, p. 42.

5. In 1979, total grain production reached 332.2 mmt.; 25 mmt. went to quota purchase; 10 mmt. toward agricultural tax. Ibid., pp. 10, 41.

6. Ibid., p. 41.

7. World Bank, *Socialist Economic Development,* V II, p. 25.

8. Zuo Mu, "Price Ratios Among Agricultural Products Must be Well Adjusted," *Jinqji Vanjiu* 3 (1982):16-19, in *Chinese Economic Studies,* XVIII:1 (Fall 1984):40.

9. Ibid.

storage.[10]

To encourage the production of local food grain, particularly wheat, State procurement prices have been increased. The Jiangsu survey showed that by 1978 wheat had surpassed rice as the most

Table 1

PER MU NET GAINS IN GRAIN PRODUCTION, JIANGSU PROVINCE, 1979
(in Yuan)

	Wheat	Rice	Kaoliang
1965	-1.25	17.46	- 3.15
1978	13.67	7.54	- 9.40
1979	38.37	24.34	-34.04

Source:

Zuo Mu, op. cit., p. 35. Survey covered 133 production teams in 56 counties. This province is particularly important as the hinterland of Shanghai, where wheat is in great demand to feed the urban population.

Table 2

WHEAT PRODUCTION COMPARED WITH RICE, CORN AND TOTAL GRAIN, IN %

	5 yr. av. 1953-57(a)	1965(b)	1978	1982	1983
Wheat: Rice	29	19	39	42	48
Wheat: Corn	n/a	107	96	113	119
Wheat: Total Grain	13	13	18	19	21
Rice: Total Grain	45	45	45	46	44

Sources:

(a) Calculated from "Mainland China as a Wheat Importer," Table 1, p. 3 (WR(63)2 Restricted PCO document).

(b) 1965-1983 calculated from State Statistical Bureau, China Statistics in Brief, 1984, Beijing (1984), p. 10.

lucrative grain crop. (See Table 1). The evidence suggests that kaoliang, a high-yielding but less palatable coarse food grain has

10. Ibid.

been steadily replaced by rice and wheat. Although wheat yields less per unit of cultivated land than the coarse grains, it quickly became the dominant crop as procurement prices increased. Wheat has become the most popular food grain in North China.[11] According to the survey:

> Having scored the largest price hikes, wheat became the most lucrative crop. A *mu* of wheat crop now earns 57.6 percent more than a *mu* of rice, and net output value per standard work day is 32 percent higher.[12]

The trends in Jiangsu reflect the national trends for grain production in China. Table 2 shows that the ratio of wheat production to both rice and coarse grain production has increased since 1965.[13] While encouraging the production of much-needed industrial crops such as cotton, state policy encourages a shift in grain production to meet consumer demands. As the bumper crop of 1984 was about to be harvested, *Xinhua* reported that the "adjustment policy" reflected the needs of the country and the demands of the people:

> In grain production, the acreage of coarse grain [grain excluding rice and wheat] has decreased, while acreage of fine grains [wheat and rice crops] has increased. The entire structure of grain crops is developing in a way conducive to satisfying the various needs of the people in cities and towns, and improving the people's livelihood. Summer grain, with wheat as its main crop, has been increasing continuously in acreage and output in recent years.[14]

While "rationalization of the field cultivation layout" involves a shift away from grain production to industrial crops, the reduction is in coarse grain, not wheat.[15] The significance of this trend is that the steady increase in wheat production reflects consumer demands and their impact on recent government policy.

11. Elizabeth Croll, *The Family Rice Bowl: Food and the Domestic Economy in China*, United Nations Research Institute for Social Development (London: Zed Press, 1983), pp. 70, 71.

12. Zuo Mu, "Price Ratios," p. 35.

13. At the same time, rice production has remained stable at about 45 percent of total grain production.

14. "Bumper Harvest Expected Again This Year," in *Xinhua*, Beijing, 27 September 1984 in *FBIS* 1:192, 2 October 1984, p. K22.

15. "Sichuan County to Act on Central Document No. 1," Chengdu Sichuan Provincial Service, 25 January 1985, in *FBIS* 1:018, 28 January 1983, p. Q1.

An examination of the distribution and storage of wheat indicates that increased production is largely for local consumption. Agricultural production has increased dramatically since the introduction of rural reforms in 1978. But a 1984 *Xinhua* editorial warned optimists that the bumper harvests of grain are sitting in overstocked granaries because of poor transportation and circulation.[16] Furthermore, with a billion people to share it, the per capita quantity of agricultural produce is below world average.[17] In addition, grain-producing areas are frequently threatened by natural calamities such as floods or droughts. China's problem has always been to move grain to where it is needed, and to balance the supply with the demand. State policy has consistently encouraged the maintenance of grain reserves in preparation for war and natural disasters. But there has recently been even greater emphasis on improving local storage capabilities to ensure local self-sufficiency and the maximization of increased grain yields. A report from Shanxi Province states that 2,000 specialized "grain storage households" are storing 25 percent of that province's total grain output on behalf of the State.[18] A *Xinhua* commentary reports that "households specialized in grain storage have developed at a relatively fast pace in rural areas in recent years" to meet the demands of storing successive bumper crops.[19] At the December 1984 National Rural Work Conference in Beijing, Vice-Premier Wan Li stressed the need for "good housewives" to restructure the rural economy and effectively utilize the current surpluses in food grain supplies.[20] Through the development of local infrastructures to store and process grain in the area where it is grown, peasants are encouraged to address the paramount problem of food supply by striving for self-sufficiency.[21] This emphasis on local infrastructure development points to the conclusion that the central procurement and redistribution of grain are unwieldy. The transportation system

16. "No More 'Lord Ye's Love of Dragons'," *Xinhua*, Beijing, 11 October 1984, in *FBIS* 1:202, 17 October 1984, p. K15.

17. Ibid., p. K16.

18. *SWB* FE/W1320, 9 January 1985, p. A2.

19. "In Grain Storage, Lay the Stress on the Rural Areas," *Xinhua*, Beijing, 13 October 1984, in *FBIS* 16 October 1984, p. K19. See also 17 October 1984, p. K16, on the "storage crisis."

20. *FBIS*, 2 January 1985, p. K25.

21. "Several Problems Involving the Current Rural Economic Policy," *RMRB* 10 April 1983, p. 1, in *Chinese Economic Studies*, XVII:4, p. 43. Further evidence of this trend is the Chinese interest in transferring small-scale milling technology from Canada, to be used in rural areas. (Interviews, Canadian International Grains Institute, Winnipeg, 17 April 1985).

is inadequate to transfer large amounts of grain from one area to another, and central storage facilities are woefully inadequate. Furthermore, recent agricultural policies which allow peasants to keep surplus grain or sell it at above-quota and free market prices have resulted in enormous production increases. In conclusion, the increased production of wheat, the stress on local storage and processing, and the policy to respond to peasant consumer demands will result in more wheat staying in the countryside. As agricultural production increases under the responsibility system, "the peasants will put forward many new demands concerning what they eat, use, and live in."[22]

The State's policy has been to encourage production by allowing increased consumption.[23] This is where grain import policy fits in. Wheat imports to the cities relieve the need to redistribute grain, and allow the State greater flexibility in responding to peasant demands. These trends in grain distribution and consumption do not indicate a radical shift in China's food policy. The agricultural tax is still collected in grain, and the State continues to set quotas for central purchase at fixed prices. As recently as February 1985, Premier Zhao Ziyang stated that urban rations of essentials–grain, edible oil and pork–would be maintained, and that these supplies would be subsidized.[24] However, Zhao suggested that market prices of "grain of different qualities and varieties" would be allowed to fluctuate.[25] These attempts to respond to market demands require a close look at end uses of wheat, especially imported wheat.

During certain periods in the past twenty-five years, imported wheat was essential to meet urban food requirements. After the agricultural disasters of the Great Leap Forward, China desperately needed imported wheat to feed a population living at the starvation level. Severe dislocation of the food supply followed the Tangshan earthquake in 1976, and widespread drought led to famine conditions in Hebei and Hubei provinces in 1980 which prompted the PRC government to request food aid from the United Nations. Even in years where there has been no large-scale crisis in grain production, localized food shortages have plagued at least some of China's many regions. Wheat imports therefore play an important role in

22. "Rural Market Thriving After Autumn Harvest," *RMRB* 27 October 1984, p. 1, in *FBIS* 1:211, 30 October 1984, p. K6.

23. Ibid., p. K8 and Yue Ping, "Stress the Effect of Consumption on Production," *RMRB* 26 July 1982, p. 5 in *Chinese Economic Studies*, XVII:4, p. 4.

24. *China Daily*, 1 February 1985, in Canada-China Trade Council, *China Trade News Review*, 6 February 1985, p. 20.

25. Ibid.

supplementing subsistence-level production and providing a margin of food security.

Beyond the emergency rations provided by imports are the wheat imports during a bumper harvest year. A graph of the correlation between China's wheat imports and wheat production (Figure 1) reveals that, contrary to what might be expected, wheat imports do not decline with an increase in production. One of the factors that must be taken into account is the urban consumption of wheat. In addition to the policy which allows peasants to keep more grain, China's modernization policy encourages and provides for increased consumption by urban workers as well. The State is committed to increasing per capita food consumption,[26] and is moreover increasingly concerned with quality. Presently, the availability of premium grade "patent flour" is restricted. Supplies are available to urban restaurants (presumably those serving foreigners), and private citizens are allowed to purchase only 1.5 kilograms per month.[27] Lower grade "standard flour" is readily available but is not as suitable for making noodles and dumplings *(jiaozi)*. The priority of China's food policy is to provide the maximum quantity of flour to meet urban demand; however there is some evidence that premium flour, milled from imported Canadian, Australian and American wheats, (either alone or in combination with domestic wheat) will be increasingly available. Currently, Canadian and Australian wheats are blended with lower-protein domestic wheat for use in the production of noodles, dumplings, steamed bread, pancakes *(bing)* and some pan bread.[28]

An interesting development in urban consumption is the popularity of bread and instant noodles, particularly in the populous cities of Shanghai and Beijing. The U.S.-China Model Bakery in Beijing, (established by the U.S. Wheat Associates in 1982)[29] produces eight tonnes of bread per day, and the Bakery's manager claims that this amount is "well below market demand."[30] Although pan bread and

26. Per capita consumption of major food commodities (grain, oil, pork) increased by 18 percent between 1978 and 1981. State Statistical Bureau, *op. cit.*, p. 25.

27. Paul W. Brennan, "Report on Technical Mission to People's Republic of China Involving Milling and Baking...22 October to 30 November 1980," Canadian International Grains Institute, Winnipeg, p. 32.

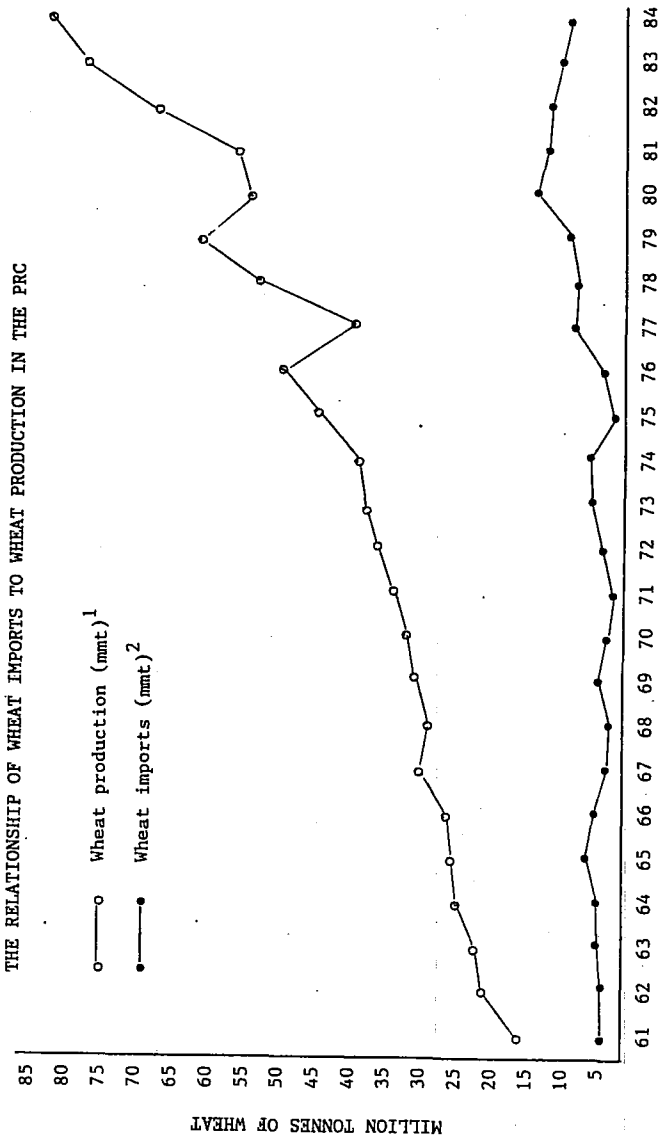
28. Interview with Engineers from Liaoning and Shanghai Commodity Inspection Bureaux, CIGI, Winnipeg, 17 April 1985.

29. E.J. Kahn, Jr., "The Staffs of Life III: Fiat Panis," *New Yorker*, 17 December 1984, p. 71.

30. J.E. Kruger, B.A. Marchylo, E. Bass, "Technical Report on Visit to PRC, October 1984," Canadian Grain Commission and Canadian International Grains Institute, Winnipeg, p. 10.

Figure 1

THE RELATIONSHIP OF WHEAT IMPORTS TO WHEAT PRODUCTION IN THE PRC



Sources: (1) 1961-82: International Wheat Council, World Wheat Statistics 1983, Table 2d; 1983: Ibid., 1984, Table 2c.
(2) 1961-78: International Wheat Council, Review of the World Wheat Situation 1976-77, 1984, Table 43, p. 84; 1983: IWC, Market Report, 19 January 1984, 2:15.

instant noodles require a more finely milled, stronger gluten flour than is generally available, both millers and bakers "take what they can get."[31] Although there is some indication that higher quality, more convenient and more nutritious wheat products are being introduced to the urban Chinese consumer, the overwhelming consideration in food supply continues to be quantity. This means that the least expensive foreign wheats available will be the preferred import product.[32]

Although "North American Pan Bread" may not be the hottest item to sweep urban China in the immediate future, the demand for wheat imports will likely emanate from the Special Economic Zones[33] and fourteen coastal cities opened to development and foreign trade in 1984.[34] Some analysts have suggested that tourism will increase the demand for wheat imports; however, a breakdown of the figures shows that the number of bread eaters is probably insignificant. Of the 12.85 million tourists to visit China in 1984, only 1.13 million were "foreigners," the rest being overseas Chinese,[35] mostly from Hong Kong, and mostly consumers of rice. The demand for wheat is more likely to result from the radical change in land use around the zones and coastal cities. Descriptions of two of these cities give a glimpse of future trends. A *Beijing Review* profile of Zhanjiang reads as follows:

> The plane from Guangzhou to Zhanjiang seems to descend into an endless sugarcane field....Before 1979 much of the 310,000 cultivated hectares in Zhanjiang were sown to grain...."During his inspection tour of Guangdong Province last year, Premier Zhao Ziyang suggested that we should make best use of land in this subtropical region and need not consider grain production in our agricultural development plans...."[36]

31. Interview with Mr. Paul Brennan, Senior Milling Technologist, CIGI, Winnipeg, 17 April 1985.

32. Interview with CIGI staff, Dr. E. Bass, Messrs. P. Brennan and D. Tulley.

33. Shanghai, Zhuhai, Xiamen, Shantou.

34. Qinghuangdao, Tianjin, Dalian, Yantai, Qingdao, Lianyangang, Nantong, Shanghai, Ningbo, Wenzhou, Fuzhou, Guangzhou, Zhanjiang, Beihai.

35. State Statistical Bureau, "Communique," 9 March 1985, in *Beijing Review* 28:12 (25 March 1985), p. VII. These figures are higher than the Far Eastern Economic Review *Asia Yearbook 1985*, which cites 9.5 million as total number of visitors, p. 8.

36. Han Baocheng, "Zhanjiang–Planning for Prosperity," *Beijing Review* 28:12, pp. 21-22.

The Guardian Weekly paints a similar picture of Dalian, the northern port city:

> From the top of the hill overlooking Dalian, one can see orchards, fields....But after the harvest, I was told by a spokesman for the Development and Construction Company for the Dalian economic development zone, "all that will be bulldozed away...." He went on to describe the highways...the station, the harbour, the factories...which would mushroom all over this once predominantly rural area within a few years.[37]

The increased urbanization of the coastal city hinterlands, and the shift to industrial and non-grain food crops will doubtless have a great effect on China's food disposition policy. It seems reasonable to predict that wheat imports will make an important contribution to the food supply of China's rapidly developing coastal cities.

Domestic Politics and Wheat Imports. Innumerable variables influence the rise and fall in wheat imports, and the correlation between production and imports. With this analysis of domestic food policy in rural and urban China as background, one can contemplate the effects of more remote political events on wheat import policy. While there is no clear account of the decision-making process to import wheat, we have a general idea of each department's responsibilities. The State Planning Commission sets general guidelines for import policy; the Ministry of Commerce establishes financial policy based on the availability of domestic currency and foreign credit; the Ministry of Foreign Economic Relations and Trade (Mofert) presents general import-export plans in the context of political relations with foreign countries, existing contracts, world markets and domestic requirements. The Trading Corporations under Mofert, of which China National Cereals Oils and Foodstuffs (Ceroilfoods) is one, carry out the actual investigations of the specific market, calculate the costs, and negotiate the purchase.[38] Members of the various departments consult with each other informally, and confer in "enlarged meetings"[39] or integrated policy committees. Policies regarding interprovincial transportation, grain production, procurement and disposition, will all affect wheat import policy. Foreign

37. Patrice de Beer, "Ports Hold Key to China's Economic Future," *Manchester Guardian Weekly*, 2 December 1984, p. 14.

38. Gene T. Hsiao, *The Foreign Trade of China–Policy, Law and Practice* (Berkeley: University of California Press, 1977), pp. 74-75 and 141 fn.

39. Kenneth Lieberthal, *A Research Guide to Central Party and Government Meetings in China, 1949-1975 (New York: IASP, 1976), p. 13.*

policy may also affect import decisions.

If one examines a graph showing the fluctuations in wheat imports (see Figure 2), elite conflict is a possible explanation for the decline. The 1968 disruptions in the Party and Government caused by the Cultural Revolution are a plausible reason for the decrease in import quantities, even though the decrease in production would indicate the opposite trend. While decreases in imports may result directly from increased domestic production or price variables, it is possible that elite conflict over development policy, including the disposition of food grain, has a negative impact on the decision-making process. Imports decreased steadily during the "high tide" of the Cultural Revolution (1966-1968), and increased when order was restored in 1969. In 1971, Lin Biao attempted a coup d'état, preceded by two years of conflict between Lin's military faction and the Party-State power base of Mao Zedong and Zhou Enlai. In 1973, the Anti-Confucius campaign reflected conflict between Wang Hung-wen and other Cultural Revolution radicals, and Zhou and the recently rehabilitated Deng Xiaoping; again, imports decreased and reached a low ebb just prior to the critical turning point in 1976, marked by the death of Mao Zedong, Zhou En-lai and Zhu De, and the devastating Tangshan earthquake. At this juncture, imports increased, and continued to do so under the "Four Modernizations" policy announced in 1977. The Readjustment policy of 1979 again reflected disputes among the political elite, resulting in Premier Hua Guofeng's resignation. While economic factors are important to the fall in imports, elite conflict should not be ruled out as an influence.

Wheat and Weather. The most obvious variable in the analysis of wheat production is the weather. In fact, for many years agricultural analysts focused on weather as an indicator of projected wheat yields. However, the methodology for establishing a useful weather index makes it a questionable measure. Agricultural analysts point out that weather station readings in China do not account for enormous regional variations, and therefore are not a useful indicator except in extraordinary circumstances.[40] In recent years, the significance of this factor has been reconsidered. An analysis of weather as an index for analyzing grain yield shows that weather indeed accounts for yield fluctuations, but since 1962, "policy and organizational tactics, rather than weather, probably count more in the present Chinese setting than formerly in shaping agricultural growth."[41] Increased

40. Personal communication, Dr. Vaclav Smil, University of Manitoba, and Y.Y. Kueh, "A Weather Index for Analyzing Grain Yield Instability in China, 1952-1981," *China Quarterly* 97 (March 1984):68.

mechanization, multiple cropping, use of fertilizers, irrigation, and incentives have modified the impact of weather disturbances on agricultural yield.

Having examined the possible influences on wheat import policy, it must be reiterated that since 1961, wheat imports have been a fact of life in China's food policy. The government of the PRC is highly motivated by a centuries-old fear of famine, and an understanding that political stability demands a food policy that can "feed the people". China's evolving food policy is attempting to find the best formula to achieve this goal.

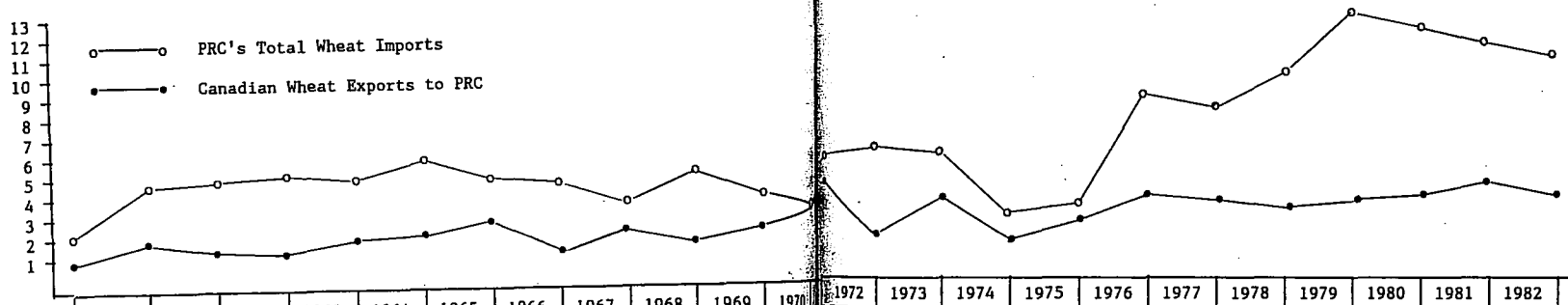
Canada's Share of the China Wheat Market. Having established that wheat imports are closely related to China's food policy, we have a clearer understanding of the politically influenced fluctuations in the market. We can now consider the variations in Canada's share of this import trade. Ceroilfood's negotiators maintain that politics has nothing to do with business; indeed, the Chinese negotiators are well-known for their pragmatic consideration of price, availability, and ability to deliver.[42] There is, unfortunately, no systematic way to evaluate the impact of price on the Chinese decision to purchase Canadian wheat. All information regarding Canadian Wheat Board negotiations with Ceroilfoods is completely restricted. Anecdotal information indicates that the Chinese prefer to buy the least expensive wheat available (that is, if No. 3 CWRS is available, they prefer it to the more expensive No. 1 and No. 2 grades). There is also some evidence that Ceroilfoods is cautious about the potential of "food politics," as in the U.S. embargo of grain shipments to the Soviet Union to protest the invasion of Afghanistan in 1979. For these reasons, (that is, availability and security), the Chinese maintain several suppliers including Canada, Australia, the European Economic Community, Argentina, and the United States.

The political variables influencing Canada's share of the market are determined by China's general foreign policy orientations and Canadian-Chinese relations in particular. When Canada and China established diplomatic relations in 1970, the Chinese made a point of emphasizing Canada's independent stance on foreign policy vis-à-vis the United States. An editorial in *People's Daily* referred to Canada's foreign policy orientations and China's interpretation of them:

41. Ibid., pp. 82-83.

42. For example, in 1978, Ceroilfoods sent a delegation to investigate the crisis in Canada's transport of wheat to the West Coast. *Globe and Mail,* 11 January 1979, p. 33.

Figure 2: WHEAT IMPORTS TO PRC IN HISTORICAL CONTEXT, 1960-1984



YEAR	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
PRC POLITICS	Post-GLF Depression 1959-1963	Retrenchment policies to 1965 →					Cultural "High Tide"	Revolution		PLA restores order	Admission to U.N.
			Elite conflict re: development policies →							Elite conflict →	
PRC FOREIGN POLICY	Sino-Soviet split	Militancy in 3rd World		Cooperation and coexistence: 3rd World			Period of Isolation →			Sino-Soviet border conflict	Conventional diplomacy
										PRC seeks broader relations	
CANADIAN-CHINESE RELATIONS	CWB extends credit to Cinha										Sino-Canadian recognition. Canada votes to seat PRC at U.N.
AGRICULTURAL EVENTS	Famine							Red Guards disrupt ports & transportation.			
WEATHER INDEX*	Poor (P)	P	Good (G)	Average (A)	G	A	A	G	A	A	G

YEAR	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
PRC POLITICS		Deng reappears Anti-Confucius campaign		Zhou's med'n policy. Elite Conflict	Death of Zhou, MAO, Zhu De. Arrest of Gang of 4 TANGSMAN	Deng rehab. "4 MODS." "One child" policy.	Responsibility System. Focus on Science & Technology.	Readjustment Policy. SEZ's	China enters IMF, World Bank.	"De-Maoization" under Zhao, Hu. Gang Of sentenced	6th FYP-decentralization.		14 port cities designated.
PRC FOREIGN POLICY	Nixon visit. Shanghai Communique.	PRC supports Paris Peace Agreement re: Vietnam "UNITED FRONT" &		2nd & 3rd Wrolds		"Open Door" →					"Independent Foreign Policy"		
CANADIAN-CHINESE RELATIONS	PRC Trade Mission to Canada	Trudeau visits PRC. Exchange of students Trade Agreement	Textile restraints negotiations. Family Reunification begins.	Numerous trade & technology delegations.	Bethune House opened	Otto Lang (CWB) visits PRC. Chinese rep. to CIGI.	Sino-American Recognition.	EDC extends $2 billion credit. Exchange visits of Ministers.	Preferential Tariff Extended to some PAC products. Trade	Minister MacGuigan (DEA) visits PRC.	Renewal of 1973 MFN Agreement	CIDA programs in technical assistance established	
AGRICULTURAL EVENTS					Tangshan Earthquakes	West Coast grain trans. crisis. Draught in Shandong, Henan.		CWB temporarily withdraws from market.	Famine in Hebei & Hubei. Food aid	Protocol from UN	Bumper harvests →		
WEATHER INDEX*	P	A	G	A	P	P	A	A	G	A	G	A	

*A. M. Tang, "Trend, Policy Cycle and Weather Disturbance in Chinese Agriculture, 1951-1978," Am. J. of Agric. Econ. 62:3:344 (May 1980), cf. M. Yeh, "China's agricultural policies since 1949," U. of Manitoba, unpublished senior paper. 1979-1983 from M. Yeh, op. cit.

Abbreviations:

GLF - Great Leap Forward
CWB - Canadian Wheat Board
PLA - People's Liberation Army
SEZ - Special Economic Zone
IMF - International Monetary Fund
DEA - Dept. of External Affairs
FYP - Five Year Plan

Deng - Deng Xiaoping
Zhou - Zhou Enlai
Zhao - Zhao Ziyang
Hu - Hu Yaobang
Mao - Mao Zedong
CIGI - Canadian Int'l Grains Institute
MFN - Most Favoured Nation

> Canada is a big country in the American continent. The white book [sic] on foreign policy issued by the Canadian Government last May reflects its desire and will to pursue an independent policy. This shows that the attempt of one or two "superpowers" to control the internal and external policies of other countries has become more and more unfeasible.[43]

Articles in the Vietnamese, Albanian, Korean, and Nepalese press, carried in Chinese newspapers, reiterated the importance of Canada's independent foreign policy in recognizing the PRC, thus standing up against the "U.S. plot to isolate China"[44] and dealing "a new heavy blow to the aggressive policy of the U.S. imperialists" to blockade China economically and diplomatically.[45] China's new relationship with Canada was part of an overall policy to ally with the "second" and "third" worlds against the hegemonic pressure of both the U.S. and the U.S.S.R. Canada's recognition also afforded the PRC the much-desired international prestige of being supported by an industrialized Western nation for admission to the United Nations.

Canadian-Chinese relations in the context of the wheat trade go back to 1961, when the Canadian Wheat Board recognized China as a legitimate trading partner by extending credit to the PRC for its first major wheat purchase from Canada. This trade relationship was important to both countries, supplying China with essential foodgrain supplies, and providing a major export market for Canadian wheat.[46]

In 1960, the most important aspect of the relationship was that Canada was ready and willing to sell wheat to China, (in spite of the fact that the Canadian government had decided not to recognize the PRC in 1950). The graph in Figure 2 illustrates Canada's share of the China wheat import market from 1960 to 1984. In 1960, the Canadian government made it possible for the desperate Chinese Communist Party to finance the purchase of Canadian wheat to help feed China's starving population. China after the Great Leap Forward suffered from low agricultural production, depleted grain reserves and inadequate currency supplies to buy foodgrain. By extending credit to China through the Canadian Wheat Board, the Canadian government contributed to the PRC's ability to provide for

43. *People's Daily* editorial, 15 October 1970, in *Hsinhua Selected News Items* 42 (19 October 1970):14.
44. *Hsinhua,* 19 October 1970; Ibid., 43 (26 October 1970):12.
45. *Hsinhua,* 16 October 1970; Ibid.
46. See Minden, "The Politics of Cerealism," pp. 14-15.

its population, an important asset to political stability.[47]

While there were no significant events in Canadian-Chinese relations until the Stockholm negotiations in 1969, the 1963 decline in Canada's share may be attributable to the fact that Chinese negotiating style had changed. No longer dealing with a famine situation, the Chinese became tougher in their bargaining with the CWB, "demanding everything from extremely generous credit terms to a semi-barter type of agreement which would guarantee imports of Chinese textiles."[48] It was in 1964 that an official from the Chinese Ministry of Foreign Trade declared the financial motivation for China's wheat import policy:

> "...if we import wheat, we can export soyabean and rice and other processed foodgrain–as the price for rice and soyabean is higher than for wheat. This is a good means, in other words, of making money."[49]

At this point the Chinese were confident enough to demand a more equitable relationship with their wheat trading partners.

From 1969 to 1971, Canada and China were involved in the Stockholm negotiations for mutual diplomatic recognition. Canada's share in the market rose steadily until 1971, when the two countries exchanged ambassadors and Canada provided 100 percent of China's total wheat imports. However, that share fell rapidly in 1973 after U.S. President Nixon's visit to the PRC, and the first American wheat sale to China. Prime Minister Trudeau's visit in 1973 was followed by the first exchange of students between Canada and China, and the Family Reunification program in 1974. These positive contacts between the two countries, as well as the negotiations to reduce Canadian tariffs on Chinese textiles, may have contributed to an increase in Canadian wheat exports in 1974. That share continued to escalate until 1976, when a Vice-Ministerial delegation from the PRC travelled to Gravenhurst, Ontario to open Bethune House, a symbol of the historic link of friendship between a Canadian doctor and the Chinese Communists in the Yenan days. However, between 1977 and 1979, Canadian grain shipments to the West Coast faced critical problems, and China looked to Australia for wheat. In 1977, Canada made a significant effort to augment the

47. "Agricultural Study Forecasts Another Hungry Spring for Communist China," *Current Scene* I:23 (22 January 1962):19.
48. *Financial Times,* 22 July 1965 (CIIA file).
49. *Financial Post,* 18 July 1964 (CIIA file).

commercial aspect of the wheat trade with technical and government liaisons. Otto Lang, then Minister responsible for the Wheat Board, visited the PRC. A Chinese delegate participated in the Canadian International Grains Institute management development course for the first time, and a Chinese Agricultural Machinery mission visited Canada. Canada's share of the market had slipped from 65 percent in 1976 to 40.8 percent in 1977. In spite of these attempts to foster China's confidence, the Canadian transportation crisis undermined Canada's reputation as a reliable supplier.

The decline in Canada's wheat exports to China was exacerbated in 1979 when China and the United States exchanged ambassadors. Although China did not purchase any U.S. wheat after the initial trade contacts in 1973,[50] in April 1978 they purchased 0.6 million tonnes, and in November, they informed the Americans that they intended to purchase five to six million tons from the U.S. annually for the next several years.[51] Less than one month later, on 15 December 1978, China and the U.S. announced their agreement to establish diplomatic relations on 1 January 1979.[52]

China's action in 1972, when they purchased their entire import quota from Canada, has been interpreted as a signal to the United States: recognition, exchange of ambassadors, and derecognition of Taiwan would be rewarded by lucrative trade contracts. More recently, China followed the same pattern in its relations with Australia. On 13 April 1985, Hu Yaobang arrived in Perth on his first visit to a Western nation. The occasion was the opening of a major mining venture between China and Australia (China is a 40 percent partner in an Australian iron-ore mine).[53] Two days after Hu's arrival, on April 15th, the Australian Wheat Board announced a major sale to the PRC. The message seems to be that recognition of the PRC as a viable business partner would result in trade benefits to the participating nation.

Canada's wheat exports to China increased in 1982 when the 1973 Most-Favoured-Nation Trade Agreement was renewed. Since 1983, CIDA has been involved in management training programs in China, and, most recently, in the development of a wheat farming project in Heilongjiang province.[54] In spite of these contacts, however, both wheat imports and Canada's share have declined since

50. International Wheat Council, *Review of the World Wheat Situation,* 1978, Appendix Table 1, p. 67.
51. Ibid., 1979, p. 88.
52. Ibid.
53. *Far Eastern Economic Review,* 4 April 1985, p. 48.
54. SWB/FE 1321, January 1985, several entries.

1982. Although wheat exports to China have decreased over the last three years, Chinese purchases have been reliable. The United States has not enjoyed as favourable a trading relationship with the PRC. As often as one reads of a Chinese contract for American wheat, one reads of its subsequent cancellation.[55] In 1983, in a reverse of the usual pressure of "food politics," China threatened to cancel major wheat purchase agreements with the U.S. unless the Americans liberalized their textile import restrictions.[56] Even more serious to the Chinese than U.S. textile tariffs was the U.S. grain embargo to the Soviet Union in 1979. Canada's refusal to support fully that policy must have impressed the Chinese with Canada's reliability as a food supplier, and Canada's ability to "prevail in a conflict of interests" with American foreign policy.[57]

The fluctuations in Canada's wheat imports to China can be explained in part by the PRC's perceptions of its relations with its trading partners. In addition to market factors, China is sensitive to the "recognition" issue. This issue goes beyond the exchange of ambassadors; it involves mutual respect and a continued demonstration of friendly intentions and goodwill. It is tempting to conclude that based on our wheat trade with China, Canadian-Chinese relations are far less spectacular but more stable than Sino-American relations. The result of this stable relationship of mutual respect and friendship, combined with China's need for grain imports, is likely to be a relatively steady share of the China wheat market.

Conclusions. The analysis of China's food policy indicates that, notwithstanding the current decline in imports, China is committed to maintaining grain reserves, increasing rural wheat consumption, and providing imported wheat to augment urban wheat consumption. China's needs for imported wheat are determined by food policy and her reactions to Canada; Canada's response to both the wheat market and to the broader political context is an integral factor in the wheat trade. The questions that arise concern the future course of China's food policy, particularly the supply and consumption of wheat in the coastal cities. Based on past trends, our trade with China will be stable. If it is to increase substantially, Canadian trade policy may have to allow China's entry into the Canadian market to redress the unfavourable balance of trade for China. The wheat trade is not an autonomous commercial relation-

55. IWC, *op. cit.,* 1979 to 1984, passim.
56. IWC, *Review of the World Wheat Situation 1983-1984,* Appendix Table 1, p. 75.
57. Kim Nossal, *The Politics of Canadian Foreign Policy* (Scarborough, Ont.: Prentice-Hall Canada, 1985), p. 17.

ship between Canada and China. It is intimately related to China's domestic policy and the politics of Canadian-Chinese relations.

Canadian Agricultural Exports: The Challenge of Japan

Michael W. Donnelly

Canadian-Japanese trade is the natural consequences of the differences between the two countries in resource endowments and comparative advantages. The contrast is stark. Japan is no larger than the combined area of Newfoundland and Labrador with a population of over 120 million. Only a little over 10 percent of Japan's rugged terrain is arable land and rapid, pell-mell industrialization has reduced total farm acreage even further. Agriculture holdings are tiny and, for most farm families, work on the land is a part-time occupation. Almost 40 percent of the agricultural labour force is over 60 years of age. While perceived as a "protected" economy that imposes high food prices on its consumers to support an inefficient agricultural sector, Japan's total food imports are also among the highest in the world.

Canada is sparsely settled yet relatively well-endowed with rich agricultural land and boasts a productive, well-managed and efficient farm sector. Despite some climatic constraints, the country is a net exporter of agricultural products although based narrowly on grains and oilseeds. In 1981 over half of all farm cash receipts came from exports. Japan is an important market for these exports.

A notable characteristic of general trade relations between the two countries, especially in contrast with Japan's travail with other major trading partners, is a lack of significant political conflict. The most nettlesome exception has been the controversy surrounding Japan's penetration of the Canadian automobile market and the employment threat thus posed to the industry in Ontario. Agricultural trade has been essentially free of headline-grabbing conflict, although it has been a part of the political and economic agenda whenever parties representing the two sides meet for important discussions.

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This paper focuses on the agricultural component of trade with Japan. It argues that the most suitable strategy for Canada to pursue is to continue a vigilant and persistent policy of "quiet diplomacy" in order to keep political and economic differences out of official rhetoric and more predictably encased in the routines of government consultations, private business negotiations and interest group discussions. What might work for the United States or perhaps Australia on barriers to trade will not necessarily be effective for Canada. The task of this paper is to show why such is the case by examining with special emphasis, the fundamental features of Japanese agriculture.

Bilateral Trade. Two-way trade between Canada and Japan has grown significantly in recent years, reaching a record level of a little over $11 billion in 1984.[1] Except for a slight decline in 1975 and 1982, the volume of trade has grown in almost every year. Even after being adjusted for changes in the Wholesale Price Index, the annual growth rate during the last decade was 6 percent.[2]

The trade balance has consistently been in favour of Canada, except for 1972. However, the surplus has diminished dramatically to the point that in 1984 it had all but disappeared. The Canadian government claims that Canada now has a deficit. The Japanese government disagrees. According to Canadian statistics Canada's total exports to Japan for last year were valued at $5,534.8 million, showing an increase of 19 percent over the previous year. Imports from Japan were worth $5,475.7, million up 26 percent from 1983.[3] Japanese statistics also show slight Canadian surplus. In any case, the gradual disappearance of Canada's advantage has been caused by a slow-down in the growth of exports of raw materials to Japan, fluctuations in exchange rates, and by a substantial increase in Canada's imports of Japanese automobiles.

Japan displaced Great Britain in 1972 as Canada's second largest supplier of imported goods and a year later became the second largest market for Canadian exports.[4] The country has been Canada's fastest growing export market in recent years and, with the arrival of the "Pacific Era", offers a promising alternative to trade

1. Current trade figures are drawn from Government of Canada, External Affairs, *A Review of Canadian Trade Policy,* 1983; Agriculture Canada: *Canada's Trade in Agricultural Products 1981, 1982 and 1983;* and Canada-Japan Trade Council, *Canada-Japan: The Export-Import Picture, 1982.*

2. Richard W. Wright, *Japanese Business in Canada* (Montreal: The Institute for Research on Public Policy, 1984), p. 5.

3. Canada-Japan Trade Council, *Newsletter,* February 1985.

4. For a historical overview see Frank Langdon, *The Politics of Canadian Japanese Economic Relations, 1952-1983* (Vancouver: University of British Columbia Press, 1983).

and political dependency on the United States. Canada is also an important supplier to Japan, especially if petroleum imports are excluded. On balance though, Canadian export earnings from Japan are probably more important than Canada is as a source of supply for Japan. For most commodities Japan can switch to another source if quality or price are not competitive. The significant trade deficit that the United States is running with Japan, when linked to Japan's overall political and military dependence on the American government, gives our neighbours to the south a much more effective leverage than Canadians can ever hope to develop.

Exports to Japan are mainly raw materials and semi-processed goods. According to Statistics Canada, fully manufactured goods account for no more than 3 percent of total exports. More than 80 percent of total exports originate in British Columbia, the Yukon and the Prairie Provinces, underscoring the overall strength of the resource-based trade. Still, the composition of trade has changed. In the beginning of the Seventies major exports to Japan were wheat, copper, logs and iron ore. At the end of the decade, our major exports were coal, oil seeds, woodpulp and lumber. There has also been an important trend toward upgrading the degree of processing of Canadian exports.

"Diversification" is a slogan of the federal government with regard to Japan–increasing the degree of processing of Canadian exports and developing more sales of manufactured goods. Nonetheless, on a sectoral basis, coal, petrochemicals, non-ferrous metals, forest products, agriculture and food products, continue to account for the major proportion of Canada's exports to Japan.

In recent years the composition of Canadian imports from Japan has changed perhaps more dramatically than that of exports. Textiles and clothing were still significant in the early 1970s. Now automobiles, trucks and motorcycles take up a large share. Cameras, stereos, colour televisions and tape decks have flowed into Canada so that nearly half of our total imports are consumer durable goods. Many of these goods are purchased in central Canada. Thus politicians and government officials in Ontario are frequently disgruntled by Japanese imports while their counterparts in Western Canada are eager to maintain tidy, productive and unfettered channels of trade with Japan.

Japan is one of the largest importers of food and agricultural commodities in the world. How has Canada fared?[5] Even as our

5. The single best account on Canadian agricultural trade with Japan and the most important source for this paper is Keith A.J. Hay and Masako Oashi Lovatt, *Canadian*

overall trade with Japan has climbed during the past few years, the importance of food and feedstuffs has not changed, remaining at about one-third. In some years, Japan has taken as much as one-fifth of our total food exports.

Table 1 is a breakdown of Canadian agricultural and fishery exports to Japan. Total food exports amounted to $1.53 billion in 1982. More recent figures show that the total value of agricultural products, exclusive of fisheries, was $1.295 billion in 1983. Japan is thus Canada's third largest customer, behind the United States and the USSR for agricultural commodities.

Exports of oilseeds and oilseed products have accounted for almost 10 percent of all agricultural products exported by Canada in recent years. Japan buys over 90 percent of Canada's rapeseed, both in terms of volume and value, making Canada virtually Japan's only supplier of the commodity. These sales have climbed since 1970 from 5 percent of Canada's sales by value to 8 percent in 1982. Only coal (18 percent) and perhaps softwood lumber (8 percent) occupy a larger share of trade earnings. Canada exports a number of other oilseeds including flax seed, soyabeans, sunflower and mustard seeds. The United States is Canada's major oilseed competitor.

Japan is one of the world's largest markets for imported food and feed grains. The United States is far and away the largest supplier with Canada occupying a distant second place. During the Seventies Canada sold between 1.2 and 1.5 million tonnes of wheat to Japan taking about 25 percent of the market. For the most part, this has been Canada Western Red Spring Wheat used for food purposes. While Japan has doubled its imports of food and feed grains during the Seventies, this was largely accounted for by a great increase of corn, a commodity sold in only minor quantities by Canada. Japan is thus Canada's fifth most important wheat customer after the USSR, China, Poland, and the UK. Canada is also the leading supplier of barley to Japan. The country is also Canada's largest export market for buckwheat.

Canada's meat sales to Japan are comprised mostly of pork. At the end of the 1970s Canadian pork sales held about a 25 percent share of the import market. Japan is the world's largest consumer of fish products. As indicated by Table 1, Canadian exports of fish are also an important food commodity. Canada is a significant supplier of fish roe, squid, salmon, herring, groundfish, and shellfish. Finally, a number of other commodities, including dairy products and livestock, are also sold to the Japanese market.

Food for Japan (Ottawa: Econolynx International Ltd., 1983).

Table 1

CANADIAN EXPORTS TO JAPAN
Food and Fish (Canadian $000 FOB)

	1975	1977	1978	1979	1980	1981	1982
Live Animals	1,257	3,371	4,649	5,498	6,374	5,069	4,891
Dairy cattle	580	1,450	3,199	4,287	3,932	2,757	1,967
Cattle	4	478	457	448	667	927	875
Baby chicks	652	1,088	830	680	1,113	1,351	1,825
Meat & Meat Preparations	71,994	103,949	141,434	154,205	145,982	207,036	227,155
Beef	1,491	3,310	5,139	9,440	11,294	14,019	12,720
Pork	67,860	98,866	129,696	134,913	125,144	179,528	201,242
Horse meat	1,534	3,125	4,395	7,443	8,088	11,107	10,954
Fancy meat	882	1,166	1,703	1,406	1,115	2,218	1,914
Fish & Fish Products	39,201	142,065	245,404	254,427	110,242	171,869	236,285
Fresh bluefin tuna	268	2,223	2,067	1,723	1,476	1,127	--
Salmon	2,153	12,193	58,245	26,844	12,226	26,593	59,222
Herring	3,360	10,257	1,196	5,405	6,039	17,144	10,811
Freshwater smelt		1,937	2,626	1,867	2,647	4,379	7,965
Sea fish		844	2,607	7,122	11,839	8,600	7,903
Clams		44	68	1,813	2,936	2,272	4,583
Squid	n/a	n/a	n/a	18,128	17,171	1,656	607
Shellfish (including squid to 1978)		7,702	28,552	881	571	2,990	2,076
Herring roe	24,273	87,296	115,723	167,667	36,268	73,870	75,513
Salmon roe		n/a	n/a	12,814	8,564	12,385	10,451
Fish roe - n.e.s. (mostly salmon roe up to 1978)	6,839	14,207	21,877	1,082	3,005	1,748	386
Dairy Products	534	7,973	10,053	5,470	4,614	3,778	21,641
Skim milk powder	500	7,345	7,084	3,853	2,655	694	16,706
Honey	250,780	362	81	380	292	166	99
Barley	125,462	94,285	90,215	104,035	97,397	191,577	136,066
Buckwheat	2,129	5,725	5,821	10,821	8,071	13,975	9,163
Rye	6,123	5,725	6,494	11,708	2,935	3,708	3,233
Wheat (including Durum)		174,399	190,950	287,784	303,075	354,442	290,529
Malt	17,490	22,740	27,330	26,688	31,906	37,155	43,126

Table 1 (continued)

	1975	1977	1978	1979	1980	1981	1982
Processed Food - n.e.s.	2,422	4,817	8,929	13,225	13,119	18,183	19,631
Vegetables frozen	184	735	1,221	3,942	3,900	4,479	4,995
Vegetables dried		1,468	2,214	2,289	3,161	6,342	2,767
Maple products	253	425	526	1,452	1,157	719	805
Edible gelatin	622	821	1,436	1,545	1,457	731	599
Alcoholic Beverages	715	869	1,090	1,687	1,449	4,119	3,400
Whiskey	695	824	847	1,515	1,296	4,000	3,227
Feeds and Feedings	17,240	41,327	39,613	48,212	43,206	47,821	54,986
Wheat bran	4,235	10,583	6,860	9,279	5,294	9,305	8,155
Alfalfa, dehydrated	6,937	18,404	19,038	23,894	23,883	20,998	28,657
Pelleted screening	5,203	9,946	9,342	12,669	10,777	13,310	12,559
Fur, Hide and Skin - raw	4,194	6,142	5,629	11,965	7,880	5,323	7,451
Cattle hides - raw	2,852	3,466	2,743	5,996	3,943	2,886	4,387
Forage Crop and Grass Seed	353	1,318	1,343	1,078	1,274	1,199	861
Flaxseed	23,470	22,784	25,006	31,814	35,504	37,773	33,944
Mustardseed	2,983	2,702	2,750	2,094	2,902	2,813	3,450
Rapeseed	193,587	227,623	240,908	369,044	311,582	389,356	382,374
Soybeans	934	3,625	9,473	2,083	7,328	16,966	14,854
Tallow	3,601	10,432	11,336	18,288	18,481	18,401	19,418
Rapeseed Oil	1,744	3,594	7,787	5,996	6,212	11,374	6,333
Total Agriculture, Fisheries and Food Products	767,080	901,226	1,080,207	1,371,611	1,168,646	1,558,456	1,531,020
TOtal Canadian Exports to Japan	2,115,093	3,503,005	3,051,210	4,089,491	4,370,465	4,485,375	4,571,228
	32.5%	36.0%	35.4%	33.6%	26.7%	34.7%	33.5%

*Includes corn meal and flour and wheat four, n.e.s.

Source: Hay and Lovatt, Canadian Food For Japan.

This level of bilateral trade has helped foster unprecedented Canadian interest in Japan. Some thirty-three official ministerial visits from federal and provincial governments crossed the Pacific to Japan in 1984. Chief and senior executives from both sides attend the annual Japan-Canada Businessmen's Conference. Agricultural trade is always an important part of the agenda. Many more executives arrive in Tokyo almost daily for trade fairs, financial talks and routine business. The Federal Government has also recently published an "export development plan" for Japan.[6]

Food Demand and Imports to Japan. Unparalleled economic growth in Japan since the mid-1950s and the rise of real per capita income has had a direct impact on the demand for food and other agricultural products. In many ways, the Japanese diet has become more "westernized" as traditional foods such as rice, barley, potatoes, vegetables, fish, and shellfish have been displaced or supplemented by a much larger amount of meats, fruits, eggs, fats and oils, milk and dairy products. The ratio of protein, fat and carbohydrates in caloric intake has also changed away from a heavy dose of carbohydrates. Total caloric intake per day has moved from 2,200 in 1955 to 2,500 in 1980. In recent years this figure has stayed about the same despite a continuing rise in the standard of living, indicating that the average level of nutrition and caloric consumption is probably at a level necessary for a balanced diet.

Japan has also conformed to Engle's law concerning the proportion of income spent on food. The share of expenditures on food as a total of expenditures for the average household has decreased from 47 percent in 1955 to about 30 percent in 1980. Rice now constitutes about 30 percent of the average diet, wheat and other grains about 14 percent, oils and fats some 13 percent, dairy products about 7 percent, wheat is 6 percent, and a variety of other items make up the rest.[7]

Some noteworthy differences remain in the pattern of food consumption between Japan and other western countries, confirming that physical need, taste, culture, tradition, prices, the food distribution system and simple government policy also shape the character of demand for food. Total caloric intake per day for an average Japanese (2,500) is still much lower than that, say, of an average Canadian (3,138). Although the level of consumption of cereals in

6. Government of Canada, Department of External Affairs, *Canada's Export Development Plan for Japan* (1982).

7. See Yoshimi Kuroda, "The Present State of Agriculture in Japan," in Emery N. Castle et al. *U.S.-Japanese Agricultural Trade Relations* (Baltimore: Resources for the Future, 1982), pp. 91-147 and Hay and Lovatt, *Canadian Food*, p. 6.

Japan has gone down, it is still high compared with other Western countries. Consumption of meat and livestock products has increased by 4 to 5 times since 1960 but remains considerably lower than that of North Americans, as is the consumption of milk and milk products. The level of vegetable consumption is also fairly high, while fruit consumption is still low compared with that in most Western countries.

The emphasis, then, on less meat and dairy products and with more on vegetables, grain and fisheries products provides a diet seemingly appropriate for the good health of the Japanese. The government has mapped out the prospects for demand of various food commodities in the 1980s including the predictions that rice consumption will fall, demand for food wheat will remain fairly steady, consumption of soybeans, fruit and vegetables will rise slightly, meat, milk, and milk products will grow even more in importance, and consumption in fats and oils will grow, especially in light of demands in the food processing industry and restaurants. All this has prompted our most informed observers of Japanese-Canadian trade to write that "The Japanese market for meat, dairy products, rapeseed oil, and other oil and fats could expand at an annual rate well in excess of the growth of the Japanese population."[8]

Japan is one of the world's largest net importers of food and agricultural products, reaching a value of $16.7 billion (US) in 1983.[9] According to the Japanese Government, this makes Japan the world's leading importer by value.[10] The United States supplies 40 percent of Japan's needs by selling about 15 percent of its agricultural exports. Australia is in second place with about 10 percent of the market. Canada is in third place, taking a little over 7 percent in 1982. Table 2 shows major agricultural imports in 1983.

The country was about 80 percent self-sufficient in food as recently as 1960 but by the middle Seventies had become dependent on imports for 73 percent of its total food requirements, mainly as a result of a growing demand for animal products. Domestic production was simply unable to keep up with the rise and change in demand during the country's period of rapid economic growth. Production of corn, barley and naked barley almost disappeared while self-sufficiency in wheat and soybeans drastically declined. A

8. Hay and Lovatt, *Canadian Food*, p. 6.

9. Japan Economic Institute of America, *Yearbook of U.S.-Japan Economic Relations in 1983*.

10. Government of Japan, MAFF, *Agriculture in Japan*, 1984.

Table 2

JAPAN'S MAJOR AGRICULTURAL IMPORTS IN 1983

(Unit: 1,000 tons, million dollars)

	Quantity	Value	
1. Corn	14,701	2,119	(12.7%)
2. Soybean	4,995	1,375	(8.2%)
3. Wheat	5,816	1,126	(6.8%)
4. Pork	166	645	(3.9%)
5. Coffee beans	204	567	(3.4%)
6. Beef	138	447	(2.7%)
7. Grain sorghum	2,957	416	(2.5%)
8. Raw sugar	1,803	391	(2.3%)
9. Rapeseed	1,201	348	(2.1%)
10. Banana	576	231	(1.4%)
Total value of imports of agricultural products	--	16,673	(100.0%)

Source:

Japanese Government, Agriculture in Japan (1984).

majority of farmers made agriculture a part-time occupation while seeking employment in the growing industrial sectors of the economy. Domestically produced foods in terms of caloric supply account now for only 50 percent of total requirements. For the average Japanese family this means that daily dishes like sashimi, tempura, sushi, soba, udon, and kabayaki are made from foreign imports. Foreign sources of supply are crucial in everyday life: soybeans for shoyu, tofu and miso; wheat for bread, biscuits and noodles; malt for beer; beans for coffee.

The official policy of the Japanese Government is to encourage a Japanese dietary pattern consisting mainly of food products suitable to the Japanese climate, such as rice. Indeed, officialdom is engaged in a never-ending educational campaign to persuade the consumer

on the nutritional value of rice. Still, the outlook is for a slow shift towards a more Western-style diet. The younger "fast-food generation" will not have the same eating habits as their parents.[11]

Agricultural Production in Japan. Japanese agriculture is, in many ways, a highly modernized industry. Agricultural production has become specialized, technologically sophisticated and considerably mechanized. Most farms are run on a strictly business-like fashion. Nonetheless, the primary sector has been in trouble for many years. One of Japan's most influential experts on agriculture has recently written a large study posing the question, "Can Japanese Agriculture Survive"?[12] A few years ago, Keith Hay and I wrote as follows:

> Lurking behind Japan's glittering achievements in industry and foreign trade exists a record of failure and frustrations in agriculture. For two decades, the nation's political and administrative elite have been asking, "What is to be done about agriculture?" Many answers have been provided. A wide variety of policies and programs have been tried. Nonetheless, the economic and political behaviour of farmers continues to confound the premises of rationally designed blueprints fashioned by officials in Tokyo. Government policies are economically irrational and inconsistent. Consumers are unhappy. Industrialists are concerned. Trade-union leaders are annoyed. Trading partners remain baffled, stymied, and frequently impatient with the government's attempt to protect an economic sector that is weak, vulnerable, and unable to compete in international markets.[13]

Evidence now suggests that, despite puzzlement and unhappiness with regard to specific government policies and interest group demands, a national consensus has developed which supports a national goal that agriculture must survive, even at a high cost, but that new measures are required to reconcile the demands of food security and economic efficiency.

In such a short paper there is hardly space to deal in detail with the fundamental features of Japanese agriculture. For our purposes the most relevant aspects can be outlined around three considerations: (1) agrarian structure; (2) domestic production; and (3) international trade.

11. Hay and Lovatt, *Canadian Food,* p. 9.

12. Ogura Takekazu, *Can Japanese Agriculture Survive?* (Tokyo: Agricultural Policy Research Center, 1982).

13. Keith A.J. Hay and Michael W. Donnelly, "Canadian-Japanese Agricultural Trade," in Keith A.J. Hay, ed., *Canadian Perspectives in Economic Relations with Japan* (Montreal: The Institute for Research on Public Policy, 1980), pp. 341-376.

Agrarian Structure. Japan's population stood at 120 million in 1985 making it the seventh most populous nation in the world. The country occupies less than 0.3 of total world land area. Population density is about 314 per square kilometer, one of the highest in the world. About 75 percent of the population lives in cities.

The country is rich in volcanoes and mountains but probably no more than 14 percent of land area is suitable for farming. Moreover, during the last two decades cultivated land area declined from 6 million hectares in 1960 to 5.4 million in 1981. Double-cropping has also all but disappeared. The destruction of paddy and upland farm fields has been caused by urbanization and conversion of cultivated land to forests. Land prices have skyrocketed. Young farmers find it difficult to expand their scale of production, while those less interested in farming hold on to their land as a valuable asset. Hence, although a large number of farmers have migrated to non-agricultural sectors, the number of farm households has not decreased as rapidly.

Japanese farms are small. The average farm is slightly over 1 hectare, except in Hokkaido where 10 hectares is typical. Many farms are disconnected strips of land, some no larger than a professor's office desk, scattered about the village. This small scale of production is a major obstacle to gains in productivity.

No more than 10 percent of farm households can be classified as full-time.[14] A fewer number provide the basis of a viable source of total family income. Agriculture is thus a part-time occupation simply because small land plots do not provide adequate income in a wealthy society. Part-time farming has become the strategy employed by farmers to maximize household income. Job opportunities are within commuting distance of home, and paddy field rice production is mechanized, thus requiring fewer working hours than in the past. The price of rice is also subsidized well beyond any free market level.

This strategy has worked. Farm households where off-farm household income is greater than income generated by agricultural income (so-called Class II part-time households) have been able to achieve a level of income which is on the average higher than the national average for workers in industry. However, the implications of this strategy for agriculture are not bright. Farmers in this category represent 65 percent of total households, 50 percent of cultivated

14. Figures on farming in Japan can be gleaned from Government of Japan, MAFF, *Agriculture in Japan.*

lands and 55 percent (excluding Hokkaido) of paddy rice fields. Moreover, these farms are run by farmers of relatively advanced age. The crucial issues is that the ratio of part-time to full-time farmers is extremely high and the extent of agricultural production for which they account is also remarkably high. The issue then is not simply the large number of part-time farmers but also their relationship to the area of cultivated land and agricultural production.

Domestic Production. The character of agricultural production has changed dramatically in the last 25 years, even as the overall comparative status of agriculture has declined in the economy as a whole. Farm income has improved markedly as a result of increased productivity, increased prices of farm products and employment outside agriculture. Farm size has also expanded in land intensive sectors such as horticulture, pig and poultry raising. Infastructure and common facilities for agriculture have been improved through massive capital investment from both the public and private sectors. Food processing and marketing industries have come to play an important role in the national economy.

There has also been a selective expansion of products for which demand has grown. Table 3 shows production of various agricultural commodities for the period 1960 to 1977. The share represented by wheat, barley, beans, and potatoes decreased significantly while the importance of vegetables, fruits and industrial crops increased. Animal husbandry became more important and production of eggs, milk, and milk products was enhanced. In short, then, the table represents a major restructuring of Japanese agriculture which took place in a very short period of time. Yoshioka notes that, "It was this major restructuring of Japan's agricultural sector that made possible the massive exports from the United States, Australia, Canada, and other developed and developing countries."[15] Table 4 represents more recent trends in agricultural output in terms of value. Rice production has been well in excess of domestic needs for over a decade but in 1983 reduced acreage and poor yields produced a possible shortfall and thus the spectre of imports. Such a prospect naturally annoyed many rice farmers who had just cut back their production. According to Keith Hay, U.S. Agricultural Secretary John Block offered to sell rice to Japan, confirming a widely held view that the ultimate goal of the U.S. is to wipe out the very foundation of Japanese agriculture.[16] In any case, selective expansion of

15. Yutaka Yoshioka, "The Personal View of a Japanese Negotiator," in Castle, et al., *U.S.-Japanese*, p. 359.

16. Keith A.J. Hay, "Japanese Agriculture Policy Developments," manuscript dated

Table 3

JAPAN: SHARES OF PRODUCTION OF VARIOUS AGRICULTURAL PRODUCTS IN TOTAL AGRICULTURAL PRODUCTION, 1960-77

(percentage)

Products	1960	1965	1970	1975	1977	1977 as ratio of 1960
Total agricultural production	100.0	100.0	100.0	100.0	100.0	100.0
Total crops	80.4	76.0	73.4	71.8	72.1	0.90
Rice	47.6	43.1	37.9	38.3	39.0	0.82
Wheat and barley	5.6	3.0	1.0	0.6	0.8	0.14
Beans	2.6	1.6	1.2	0.8	0.9	0.35
Potatoes & sweet potatoes	3.0	2.5	1.7	1.4	1.4	0.47
Vegetables	8.3	11.8	15.8	16.2	14.9	1.80
Fruits	6.1	6.6	8.5	7.1	7.0	1.15
Industrial crops	4.4	4.8	4.4	4.3	5.1	1.16
Sericulture	3.0	2.3	2.7	1.6	1.5	0.50
Total animal husbandry	15.1	20.9	23.2	25.9	25.7	1.70
Beef cattle	2.3	2.4	2.1	2.7	2.6	1.13
Milk cows	2.6[a]	4.6	6.1	6.3	7.0	1.52[b]
Pigs	2.9	4.4	5.4	8.1	7.6	2.62
Chickens	5.2	8.7	8.9	8.3	8.0	1.54

Note: Numbers do not always add to 100 because of rounding.

Source: Norinsuisansho (Ministry of Agriculture, Forestry and Fisheries), Nogyo Hakusho Fuzoku Tokeihyo (Subsidiary Statistics from the Agricultural White Book) (Tokyo, various years).

[a] Milk only.

[b] For 1965-77.

Source: Kuroda, "The Present State of Agriculture in Japan."

Table 4

TRENDS IN AGRICULTURAL OUTPUT

	Output in billion yet				Composition in %			
	1970	1980	1981	1982	1970	1980	1981	1982
Total output	4,664	10,263	10,715	10,728	100.0	100.0	100.0	100.0
Rice	1,766	3,078	3,299	3,313	37.9	30.1	30.7	30.8
Wheat & barley	48	166	166	196	1.0	1.6	1.5	1.8
Potatoes	78	209	227	186	1.7	2.0	2.1	1.7
Pulses	55	95	113	134	1.2	0.9	1.1	1.2
Vegetables	740	1,904	1,955	1,903	15.8	18.5	18.2	17.7
Fruits	397	692	761	727	8.5	6.7	7.1	6.8
Sericulture	126	151	130	138	2.7	1.5	1.2	1.3
Dairy cattle	283	809	803	824	6.1	7.9	7.5	7.7
(Raw milk)	233	672	681	702	5.0	6.6	6.4	6.5
Beef cattle	97	371	383	396	2.1	3.6	3.6	3.7
Pig	254	833	838	896	5.4	8.1	7.8	8.4
Chicken	414	975	1,007	919	8.9	9.5	9.4	8.6
(Eggs)	306	575	589	505	6.6	5.6	5.5	4.7

Source: MAFF, "Gross Agricultural Output and Agricultural Income Produced."

production has not been sufficient to reduce Japan's reliance on imports.

As is well known, food prices in Japan are amongst the highest in the world, well above what a "free market" would generate. In part, this is because government programs protecting farm incomes consist mainly of price support devices. According to Yoshioka, there are several reasons why this approach dominates in Japan:

10 December 1984.

1. Price supports are the most effective assurance for farmers' incomes.
2. The Ministry of Finance has always been against a deficiency payment system because the burden on the consumer should be easier in terms of prices than in terms of taxes.
3. A deficiency payment system will not work in the case of Japan.
4. Producers have strongly opposed the deficiency payment policy because the government's soybean policy, which was to protect domestic production after import liberalization, failed completely, and soybean production decreased substantially.[17]

Trade Conflict. Japan may depend heavily on imports for its food supplies but the country's agricultural trade policies are still a matter of no small controversy, especially in the United States. The recent brouhaha over import quotas on beef and citrus products has been part of the American complaint going back for over a decade concerning the "closed Japanese market".

As is made abundantly clear in a number of articles in this volume, trade in agricultural and fisheries products has never really been brought within the rules and regulations of a multilateral trade system. The GATT system is perhaps at its weakest, as restrictions and distortions in this area of trade are wide-spread.

The Japanese Government has been moving slowly in the direction of "liberalization". But such movements have been more a passive response to outside pressure than a long-term strategy. In 1969 when the government first made the decision to promote imports, about 73 items of import restrictions related to agricultural and fishery products. By 1983 this figure had been reduced to 22 items. Under intense pressure, especially from the stalwart American Government, Japan has launched a number of liberalization packages. In the spring of 1985, Japan agreed to expand its beef, orange and citrus juice import quotas over the next four years. With regard to the thirteen farm products other than beef and citrus products which the Americans are upset about, the U.S. agreed to "freeze" its complaint to the GATT for two years.

Problems for Canadian agriculture arise from quotas on a variety of agricultural items such as beef, high duties on processed goods such as canola oil and meat, minimum import price controls, purchases by monopoly government agencies, and a number of non-tariff problems: stringent health, disease, food additive and labelling regulations, required cuts of meat, and domestic market distribution

17. Yoshioka, "The Personal View," p. 357.

practices.

A basically protectionist structure exists in Japan and is unlikely to be altered substantially in the near future. Tariffs and quotas exist on various commodities, while production of commodities like wheat and barley is subsidized at levels well above world prices in order to encourage domestic production. Beef imports are closely controlled by the Livestock Industry Promotion Corporation and handled through a limited number of importers. New importers cannot easily make the listing. The domestic food processing sector is a major area of protection in virtually all categories of processed food and beverage.

Agriculture and the Politics of Participatory Immobilism. Agricultural policy in any country is highly political because of the wide variety of economic and political interests which are affected by government decisions. Japan is no exception. Japanese farmers remain among the best organized interest groups in the country. The economic vulnerability of the primary sector has not significantly undermined the political importance of Japanese farmers. Government policy remains a mixture of economic rationality and political opportunism.

The Liberal Democratic Pary (LDP) has governed Japan since 1955, although at times with a very precarious plurality of seats. After three decades of super-fast economic growth, the Party remains strongly rooted in rural communities. Studies have shown that the greater the degree of urbanization of a constituency, the smaller the number of votes garnered by the LDP. Whereas opposition parties draw heavily from urban ridings, the LDP still relies for support on non-urban and semi-urban electoral districts.

The allocation of seats also works in a manner extremely favourable to rural ridings. The electoral system does not reflect the large-scale migration from rural regions to the cities that has taken place during the past years. There is no strict philosophy of "one-man, one-vote" in Japanese politics and the disparity between the value of a rural and urban vote is sometimes as much as five-to-one in favour of the countryside. All this means that rural politicians become prime ministers, cabinet officials, party leaders, and important committee chairmen in the Diet and the Party. Dairy farmers, beef farmers, rice cultivators, and fruit producers all have their supporters with the Party.

The openness of the policy-making process within the Party and the emphasis on the need to achieve a consensus, if at all possible, also helps achieve what Japanese journalists like to call the "intimidation by the weak." The array of formal and informal units

within the Party permits "resource brokers" to directly influence the Party leadership, government ministries and the Cabinet. Diet representatives are expected to work hard on behalf of their constituents and pork-barrel politics is a refined art that keeps people like Tanaka Kakuei in office. Indeed, one of the special characteristics of politics in Japan is the number of special subsidies made part of the government budget. Various "tribes" or Dietmen's Leagues get together to support a particular interest and can force cabinet ministers and even the Prime Minister to compromise. Such back-bencher influence over the executive and Prime Minister seems unimaginable in Canada.

The country's opposition parties also express their support for farmers in the name of higher "self-sufficiency" in food. The Japan Socialist Party, the nation's most important opposition party, recently adopted the following position.[18]

> Noting that as a result of Japan's flood-like mass export of manufactured goods, trade conflicts between Japan and industrialized countries are assuming more and more serious proportions and that the United States and EC countries are now strongly demanding that Japan liberalize the import of farm goods and increase their import quotas.
>
> That if the import of beef, oranges and other items presently placed on the restricted import list is liberalized or the import quotas of these products are expanded, this would deal a damaging blow at Japanese agriculture, particularly at a time when restrictions are placed on the domestic production of rice, tangerines, cow's milk, pork, leaf tobaccos and other farm products, and would mean a collapse of Japan's self-sufficiency system for foodstuffs.
>
> Particularly, considering the fact that Prime Minister Nakasone, who is going to visit the United States in mid-January and hold talks with President Reagan, is going to promise the U.S. Government on the liberalization of import of farm goods and expansion of their import quotas, a promise which we do not approve from the standpoint of foodstuff security for the nation.
>
> Reaffirming that Japan has become the largest importer of food in the world because of the Liberal-Democratic Government's policy of increasing imports of farm and livestock products and of reducing and rationalizing agriculture so that Japan's self-sufficiency rate in the supply of foodstuff has fallen below a 30

18. *Japan Socialist Review*, January 1983.

percent level, and that Japanese agriculture is being reduced in scale and is in a serious crisis.

Be it resolved, therefore, that our Party strongly oppose the government policy of giving priority to export and of liberalizing the import of farm and livestock products and expanding their import quotas, and that our Party make energetic efforts to negotiate with the government and strengthen struggles within local self-government entities to reconstruct agriculture and establish a self-sufficiency system for the supply of foodstuff on the basis of an industrial policy centered on the expansion of domestic demand, and to develop a nationwide mass movement, in cooperation with organizations of farmers and agricultural associations and also with democratic organizations concerned.

Farmers are well-organized. The major farm organization is the Association of Agricultural Cooperatives (NOKYO), a complex and loose alliance of all farmers in the country. In structural terms, the cooperatives are part of organized agriculture with some 6,000 different economic units, thousands of local pressure groups in all areas of Japan, including Tokyo, an administrative agency of the government, and a national political movement. The political activities of NOKYO are coordinated by the Central Union of the Cooperatives (ZENCHU) located in the middle of the city's business section, along with some of the nation's powerful public and private corporations.

The cooperative movement has a mix of political resources which make it one of the nation's most powerful interest groups. Resources include money, size, dense organization, crucial functions (food production and administrative responsibilities for government policy), skilled leadership, knowledge of the political process, mass commitment, and broad access to the LDP and Government ministries. NOKYO leaders can kindle the energies of tens of thousands of farmers on issues like trade liberalization.

During recent talks on beef and citrus products, ZENCHU officials applied pressures on LDP executives, cabinet members and the Prime Minister himself. They organized rallies of farmers in Tokyo which then marched en masse past the Prime Minister's official residence, the Diet buildings and nearby government offices while maintaining close liaison with LDP Committees dealing with agriculture and lining up as many Diet members as possible behind their cause. Outraged by critical remarks made by a well-known adviser to the Sony Corporation about "over-protection of agriculture" NOKYO

launched a boycott of Sony products. American farmers were invited to Japan as an opportunity to talk with their Japanese counterparts. French authorities in charge of farm policy were also invited to Japan and ZENCHU used the occasion to inform the Japanese public of the theory behind agricultural protection in various European countries. ZENCHU also organized meetings with domestic consumer groups, explaining how dangerous it would be in the long run to let Japanese agriculture be destroyed by cheap foreign products. The business community tended to keep silent on the issue, and many national labour unions supported the position of organized agriculture. While ZENCHU's power as a pressure group has slipped some in recent years, it is still a powerful voice in Japanese politics.

Japanese civil servants also play a significant role in agricultural policy. Indeed, the country's political tradition makes bureaucratic initiative a major determinant in how the government responds to foreign pressures. If the Ministry of Foreign Affairs or the Ministry of International Trade and Industry were to make decisions, Japan's foreign economic policy would probably be more "liberalized". The Ministry of Agriculture, Forestry and Fisheries (MAFF) is a clientele ministry within the government. No major decisions are taken on fundamental agricultural policies without some kind of consultation with the major farm groups and trade associations linked with ministry activities. The Ministry has a basic commitment to agriculture. Hay asserts that the MAFF is "unabashedly protectionist, opposing any major concessions which might result even in short-run cutbacks in domestic food production or losses in local trade."[19] NOKYO and the LDP also have close ties with the Ministry.

The single most important model of decision-making in Japan suggests that power is monopolized by a tripartite elite composed of the LDP, senior bureaucrats and "big businessmen". According to this model, these three major groups form an effective alliance and control the basic decisions on major policy issues. Another model suggests that Japanese politics is marked by "iron triangles" resembling the American decision system. Agricultural politics do not seem to fit either model very well. The three "allies" are divided within and among themselves and power is frequently more widely dispersed than what is implied by a power elite or ruling class model. In the case of agriculture, conflict spills out well beyond any cozy alliance of LDP committees, the MAFF and interest groups. Business is frequently ignored. The situation is more like a case of participatory immobilism. Broad participation means that decision-making is

19. Hay and Lovatt, *Canadian Food*, p. 54.

protracted, coordination is uncertain, leadership is weak, and the status quo is generally well-protected. The stalemate is sometimes broken when there are strong, external pressures for change. Major suppliers like the U.S. have thus tried to persuade Japan to liberalize even further and to be less concerned with national self-sufficiency in agriculture by applying outside pressure. How successful have they been?

Self-Sufficiency and Protection. To the outsider self-sufficiency in food seems to be an obsession in Japan. The idea, although impossible to achieve, is a national preoccupation and political symbol which can rally all parties at home while infuriating trading partners who wish to sell more. How can this seemingly incomprehensible preoccupation be explained?

Part of the explanation relates to history. The United States and Canada have never experienced the kind of food shortages faced by Japan during and after World War II. Most consumers in North America have seen price fluctuations and suffered through temporary shortages but never have these countries faced the spectre of massive starvation. The experience of shortages in the 1940s continues to haunt Japanese agricultural policy three decades later. Moreover, the world food crisis and the oil crisis in the early 1970s exacerbated anxiety about self-sufficiency. The American Government's embargo of soybean exports also influenced the debate at home, and the continued practice of Washington to use food as a strategic weapon of diplomacy feeds some very deep suspicions.

All political parties are to a considerable extent protectionist when it comes to agriculture, and consumers are reasonably tolerant of high prices of several foods. The only stout defence of consumer rights usually comes from the mass media. A number of opinion polls indicate that a majority of Japanese believe that whenever possible production of foods should be encouraged at home with effective government support. This is not to suggest that the population is satisfied with the current situation. Polls indicate a strong desire that Japan establish an internationally competitive sector, both to lighten the financial burden of supporting a farm economy and also to reduce the consumer's burden.

The rationale for self-sufficiency is constructed along the following lines:

1. National security dictates that no country should allow itself to become more dependent on foreign sources than what Japan has permitted. Poor harvests, strikes by stevedores in exporting countries, disruption of sea lanes or sudden strategic bans on exports could all threaten Japan and make it all the more imperative that the country secure a stable supply of domestically produced food.
2. Liberalization will undermine small-scale farmers who are currently unable to compete with low-cost, large-scale farmers in countries like the U.S. and Canada.
3. Agriculture has a value far beyond any narrow economic accounting. Farming is inseparable from family life and political stability. Dismantling protectionist policies will undermine the social and political stability of rural life and thus the basis upon which Japan's rapid economic growth was achieved. Preservation of the environment also requires that agriculture and a rural way of life be protected.
4. New farm initiatives like the livestock industry deserve protection until better able to compete.
5. If the government gives in on beef or citrus commodities, foreign competition will destroy domestic production and provide the incentive for liberalization in other areas.
6. Import liberalization will lead to a marked reduction in producer prices, thus decreasing rural income sharply and rapidly. Producers will be driven to seek employment outside agriculture but suitable jobs are extremely limited.
7. Other countries, including the European Economic Community, protect small-scale farmers for economic, social, political, and even cultural reasons. Indeed, it is almost an "empirical law" that agriculture protection increases when a country attains an advanced stage of economic development. Japan is no exception.
8. Countries like the U.S. are more concerned with short-term commercial gains and losses than stable, long-term trade relations. Thus the U.S. presses Japan only when it suffers a balance of payments problem. Other export countries have done the same and thus used Japanese agriculture as a scapegoat.
9. The only long-term solution to Japan's dilemma is to foster domestic agriculture efficient enough to compete internationally. But, during this difficult transition period, agriculture requires special attention and protection.

In 1980 the Agricultural Policy Council *(Nosei Shingikai)* submitted two reports entitled "Basic Direction of Japanese Agricultural Policy in the 1980s", and "Long-term Prospects for the Demand and Production of Agricultural Products" to the Prime Minister, outlining a new direction for agricultural policy. The reports recommended the maintenance of national agricultural production, in part

by sharply shifting land use away from rice and toward wheat, soybeans, and feed grain production.

Two years later a special committee of experts established by the same Council submitted a proposed set of policy guidelines to the Minister of Agriculture. The report entitled "On the Implementation of the Basic Direction of Agricultural Policy in the 1980s," projects how Japanese agriculture and farming communities, under the helpful guidance of the state, should develop by 1990 in order to assure "wholesome and plentiful national dietary patterns" and "higher productivity in agriculture."[20] A whole series of recommendations are included in the report, including such topics as: reorientation of agricultural production, food stockpiling, consolidation of the "Japanese type of diet", maintenance of national food supply in "normal" times, improvement of productivity, price policy, and promotion of rural community development.

The report does not have a section dealing exclusively with issues of agriculture trade, although the view is reaffirmed in various sections that it will be necessary to "consistently maintain and strengthen national capacity of food production toward self-sufficiency." In brief terms, the report suggests that:

- efforts should be made to increase self-sufficiency in products which can be produced at competitive cost levels;
- imports should be stabilized through better arrangements with exporting countries and by stockpiling;
- efforts should be made to reduce producer price levels close to those of other countries;
- no call is made for strengthening the present system of protection;
- more imports are projected by 1990.

In any case, Japan will import even more. Table 5 shows official projections for supply and demand by the year 1990. While overall self-sufficiency is projected to remain at 73 percent, self-sufficiency ratios for wheat, soybeans, vegetables, fruit, meat (except beef), and sugar will increase.

In summary, the crux of the new approach in government policy is that to assure agricultural incomes emphasis will be placed not on price supports but on encouragement of cost-reduction, through an improvement of agricultural structure. Government plans call for the

20. Government of Japan, MAFF, "On the Implementation of the 'Basic Direction of Agricultural Policy in the 1980s.'"

Table 5

PROSPECTS FOR SUPPLY AND DEMAND IN FY 1990
(unit = 10,000 tons)

	1978 (standard year)			1990 (projected)		
	Domestic consumption (A)	Domestic production (B)	Self-sufficiency (B)/(A) (%)	Domestic consumption (A)	Domestic production (B)	Self-sufficiency (B)/(A) (%)
Rice	1,136	1,259	111	970-1020	1,000	100
Wheat	586	37	6	641	122	19
Barley, naked barley	238	33	14	348	58	17
Soybeans	419	19	5	520- 543	42	8
(of which for food use)	(61)	(19)	(31)	(69)	(42)	(61)
Vegetables	1,686	1,641	97	1826	1,799	99
Fruits	790	616	78	921	768	83
Milk and milk products	701	626	89	927- 972	842	89
Meats	347	276	80	473- 503	403	83
of which, beef	56	41	73	85- 92	63	71
pork	147	132	90	196- 210	194	95
chicken	109	102	94	147- 155	146	96
Eggs	204	198	97	255	222	99
Sugar	292	67	23	321	102	32
Total self-sufficiency rate of agricultural products for food	--	--	73	--	--	73
Self-sufficiency rate of staple food grains	--	--	68	--	--	68
(For references) Self-sufficiency rate of feed	--	--	29	--	--	35
Self-sufficiency rate of total grains (food and feed)	--	--	34	--	--	30

Source: Reference material attached to the Long-term Prospects for the Demand and Production of Agricultural Products (approved by the Cabinet Meeting on November 7, 1980).

Notes: 1. Self-sufficiency rates of individual items, of staple food grains and of total grains are calculated as follows:

$$\frac{\text{volume of domestic production}}{\text{volume of domestic consumption}} \times 100$$

Table 5 (continued)

Figures for staple food grains exclude those portions intended for animal feed.

2. Self-sufficiency rate of agricultural products for food in the aggregate = $\frac{\text{domestic production}}{\text{domestic consumption}} \times 100$ (based on value)

Values for domestic production and consumption were calculated using 1975 wholesale prices:

double accounting for feed use is excluded.

3. Self-sufficiency rate of feed

$$= \frac{\text{volume of feed supply using domestically produced raw materials}}{\text{volume of feed supply}}$$

x 100 (based on total digestible nutrition).

4. Self-sufficiency rates of agricultural products for food in the aggregate, for staple food grains and for total grains for FY 1978, are calculated presuming that the demand and supply of rice is balanced.

5. Self-sufficiency rates for FY 1990 for those items for which the range of domestic consumption is indicated are calculated using the mean figure.

promotion of an expanded scale of management in order to realize efficient cultivation of rice, wheat, soybeans, and feed crops. The report also includes a plan under which full-time farmers will be able to expand their scale of management to become the "core" producers of Japanese agriculture.

Clearly, a significant transitional period will be required to divert paddy fields to farm land suitable for upland crops and to develop the kinds of agrarian structure visualized in this new blueprint for agriculture. Earlier attempts to maintain or increase self-sufficiency levels have fallen short of targets and considerable doubts have been expressed about Japan's ability to meet the new targets. Even if targets are attained, a substantial increase in imports will be necessary, if only in response to population increases.

Conclusion. There is no evidence that Japan's level of protection is higher than that of other industrial countries.[21] In fact, Japan's doors were opened rather rapidly beginning in the late 1960s; hence the decline in the country's level of self-sufficiency, especially in crops such as wheat, feed grains, and soybeans. Nonetheless, whenever there is an unfavourable balance of trade between a major

21. See the data and arguments of Yujiro Hayami, "Adjustment Policies for Agriculture in a Changing World," in Castle, et al., *U.S.-Japanese,* pp. 368-392.

supplier and Japan, then a good deal is made concerning the closed nature of Japan's food and agriculture markets. The whole issue of protectionism might recede into the background if only the U.S. could restore some balance in its trade with Japan. But resolution of that issue goes well beyond agricultural relations. Certainly, there are impediments in Canada's efforts to sell more to Japan. These include the protectionist structure now in place but also competition with foreign and domestic suppliers, the quality and price of Canadian products, and transportation logistics within Canada. Canada will have to work hard just to maintain its market share in Japan.

The recent study by Hay and Lovatt and the Department of External Affairs' report on "Canada Export Development Plan for Japan" are both meticulous analyses, on a commodity-by-commodity basis, of areas of potential growth and comparative advantage. The government report tends to be more up-beat and optimistic.

Pressures exerted by the U.S. might open up the Japanese market some more for Canada. But not all advantages provided to American producers will automatically help Canadian suppliers as well. Hay and Lovatt suggest that the "beef option" does not look too attractive for Canada and could harm our shipment to Japan of feed grains, rapeseed, and dehydrated alfalfa. Liberalization of citrus imports could harm our future exports to Japan of apples, berries, and other fruits. In some areas Canadians could clearly benefit by a reduction in specific tariffs. But our interests are not always those of the United States.

Canada clearly needs a marketing strategy which emphasizes selectivity of markets and considerable focus and coordination. Trade will have to be pursued on a bilateral as well as multi-lateral basis. Americans and Australians are threatening economic competitors on a wide variety of agricultural commodities.

In bilateral terms, a product-by-product approach is probably more reasonable than general challenges, especially if there is a danger that loud noise will endanger the more general relationship. Japan has successfully maintained its structure of protection in the face of American challenges which go beyond anything that Canada might mount. As the recent "Review of Canadian Trade Policy" suggests, "Canada's leverage vis-à-vis Japan is very limited and must be used with care."[22]

An approach that politically links a number of commodities sold in Japan in a way to force open the door does not seem appealing or

22. Government of Canada, *A Review,* p. 221.

feasible. It would regionally divide Canada and make very unhappy exporters who are perfectly happy with their Japanese sales.

In short, then, the most suitable strategy seems to be a low-key style of diplomacy matching the way trade relations have been dealt with between the two countries for a number of years–not especially exciting but perfectly sensible.

Closely Watched Grains: The Political Economy of Soviet and East European Agriculture

Lenard J. Cohen

Introduction: "Grain is Gold"

> Everything which is eaten is the food of power. There are people who take...a champion eater for their chief...with other forms of chiefdom the eating capacity of the ruler becomes less significant. It is no longer necessary that his girth should be greater than that of everyone else...the man might not be the largest eater himself, but he owns the largest store of food, the most corn and the most cattle. If he wanted to he could always be the champion eater, but he transfers the satisfaction of repletion to his court, to those who eat with him, only reserving for himself the right to be offered everything first.
> Elias Canetti, *Crowds and Power*

On the eve of World War II, high-ranking Soviet trade officials complained to Stalin that the cost of certain machine tools ordered from abroad was exorbitant, and that the price of each of the machines would purchase enough grain to fill the hold of a large freighter. "Grain is gold" *(khleb–eto zoloto),* Stalin replied, "we had better think it over."[1] The reaction of Stalin and his subalterns in this single episode illustrates the close relationship of food supply to broader elite strategies and issues of socio-political development, which have been a persistent theme throughout the history of communist party-states. From Lenin's 1917 revolutionary slogan "Bread, Land, and Peace," to the 1985 ascendancy of a Soviet party functionary with specialized experience in the area of agricultural development, from Poland's recurrent mass protests over food price

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1. B. Vannikov, "Oboronnaia promyshlennost USSR nakanune voiny" ("The Defense Industry of the USSR on the Eve of the War") in *Voprosy istorii* 1 (1969):131.

increases, to Beijing's recent innovations with material incentives for agricultural production, the issue of food supply has been of crucial importance to the political life and political legitimacy of communist regimes.

This paper will focus on three aspects of agricultural development with regard to the Soviet Union and Eastern Europe (1) trends and issues in the ability of the countries in that region to achieve their agricultural goals during the 1970s and the first half of the 1980s; (2) the current pattern of their agricultural trade with the West, and the potential of such trade during the remainder of the decade, and; (3) the prospects for agricultural reform in the USSR, especially in relation to recent food supply techniques adopted by neighbouring Hungary.

Into the Eighties: Economic Slowdown and a Shift in Developmental Strategy. During the late 1970s and early 1980s, the Soviet Union and East European countries experienced a period of difficult economic readjustment. As previously impressive industrial and agricultural growth rates plummeted, political decision-makers in the European centrally-planned economies were forced to question their overall strategy of development, both domestically and in regard to their economic relations with the outside world. The economic downturn in the Soviet Union and Eastern Europe can be traced to a variety of internal and external factors, with a different combination of considerations depending upon the specific country in question.[2]

In Eastern Europe, some of the most important external factors included a marked deterioration in terms of trade with outside markets (including the other Comecon states), regional supply bottlenecks, and most importantly, the region's growing indebtedness to Western banking institutions. The rise in international interest rates hit the East European countries particularly hard, and by 1981 the combined net external debt in convertible currencies of the six East European Comecon countries amounted to $60 billion, or about ten times the level of 1970. Such high rates of indebtedness obliged

2. This section draws upon the analysis by the International Monetary Fund, "Economic Developments in Eastern Europe and USSR" in *World Economic Outlook* (1984), the United Nations "Medium-Term Growth and Trade in the Light of the Socio-Economic Development Plans of Eastern Europe and the Union of Soviet Socialist Republics for 1981-1985" in *Supplement to World Economy Survey* (1982), the OECD, *Prospects for Agricultural Production and Trade in Eastern Europe: Poland, German Democratic Republic, Hungary* (Paris, 1981), the OECD *Prospects for Agricultural Production and Trade in Eastern Europe: Bulgaria, Czechoslovakia, Romania* (Paris, 1982), and G. Vitonova, "Trade Prospects for Centrally Planned Economies" in *Market Commentary* (1982). The discussion in this paper focuses on the USSR and the six Eastern European members of Comecon.

most countries in the region to restrain rates of growth of domestic expenditures and imports, which in turn led to falling investments and output. When the world recession of the early 1980s, became interspersed with the growing debt-payment difficulties for some of the countries (notably Poland and Romania), the outside market for the region's exports significantly diminished, and the supply of new financial credits virtually dried up.

Such externally generated economic problems were exacerbated by serious domestic pressures, such as increased popular demands for goods, growing claims for government services and outlays (e.g., higher minimum wages, pensions, price stabilization through subsidies, residence construction, family allowances, etc.), overstretched transportation capacities, and bad weather conditions. Some of the same internal problems accounted for the decline in the Soviet Union's growth rates in the second part of the 1970s. Factors such as the claims of defence expenditures on investment funds and poor economic management (including Moscow's abhorrence of East European style economic reforms), however, played a much larger role in the Soviet case. Economic growth in the USSR was also less constrained by external factors than it was in the smaller East European countries. For example, by increasing energy exports and gold sales, Moscow was able to avoid heavy borrowing abroad, and to continue expanding industrial investment and production, albeit at a lower rate than in the preceding period.

The agricultural sector of the Soviet Union and the East European states was closely linked to the general economic trends described above. In the Soviet case, huge and unprecedented investments in agricultural development by the Brezhnev regime could not offset the impact of bad management and bad weather. These problems necessitated the substantial importation of foodstuffs from the West (Table 1). Soviet food imports which had been negligible in the 1960s, rose to constitute about one-quarter of all the country's convertible currency imports during the late 1970s. Such hard currency outlays for food imports reduced the funds available for non-food imports, and exposed the USSR to troublesome, if not decisive, pressure from its food supply sources (e.g., the "case of the Afghanistan sanctions"). By 1980 and 1981–years when domestic Soviet food production actually declined–food imports reached approximately two-fifths of total Soviet hard currency spending, and food consumption became more dependent on imports than ever before. It has been estimated, for example, that over 20 percent of the Soviet calorie intake around 1980 was derived from imports,

Table 1

SOVIET AND EASTERN EUROPEAN IMPORTS OF FOOD FROM THE WEST 1971-1980

	in million current dollars										in percent			
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1971-80	1971	1976	1980	1971-80
Bulgaria	53	38	49	144	134	144	128	173	225	234	1322	3.1	1.7	1.6	1.9
Czechoslovakia	228	242	330	328	329	464	504	508	682	729	4434	13.5	5.6	4.8	6.4
East Germany	238	418	534	562	618	1060	706	801	934	1150	7021	14.1	12.9	7.7	10.3
Hungary	123	145	171	298	305	252	348	331	339	399	2711	7.3	3.0	2.6	4.0
Poland	225	258	440	588	720	1178	1064	1291	1399	1875	9038	13.3	14.3	12.5	13.3
Romania	60	61	121	220	279	395	376	488	576	932	3508	3.6	4.8	6.2	5.2
Comecon Six	928	1161	1648	2141	2384	3493	3128	3592	4156	5319	27950	54.9	42.3	35.4	41.1
U.S.S.R.															
Grain and Flour	207	889	1527	724	2528	2936	1457	2429	3538	5276	21511)	45.1	57.7	64.6	58.9
Other Food	556	646	993	1157	1794	1821	2346	1838	3002	4437	18590)				
Comecon Seven	1691	2697	4168	4023	6707	8249	6930	7859	10695	15032	68051	100.0	100.0	100.0	100.0

Source: Vanous, February 1, 1982:3-4.

including material for food production.[3] Although such large Soviet imports of feed grain were designed to improve the livestock sector and thus the meat consumption of Soviet citizens, the overall deficiencies of agricultural production and distribution still led to very disappointing results. For example, per capita meat consumption in the USSR was the same for 1980 as in 1974, and that level was only slightly better than that of 1971. In his novel, *The Island of Crimea,* finished on the eve of the Soviet invasion of Afghanistan, Vassily Aksyonov captures the effect of food supply problems on average Soviet citizens:

> There were several women standing at the counter inside the shop...Basically there was nothing to be had. No, I don't want to overestimate or rather underestimate the country's achievements. There were in fact a few things...
>
> "What are you looking for?" the woman asked sullenly.
>
> "Cheese,"..."We wanted to buy some cheese." The second time he said the word "cheese" he used the diminutive, recalling that the Soviet populace was partial to diminutive names for food products. It worked. The women broke into smiles...a person who asks for a "cheeselet" immediately makes himself both clear and likeable and earns a smile.
>
> "Cheese? Why you can get cheese most any time at the base...Eight miles down the road. A military base. You can't miss it...."
>
> "What about butter...and sausages?"
>
> "...Can't say we ever get much in the way of sausage around here. Now butter they do bring in every once in a while, but not sausage, no, not sausage. You have to go to Oryol for sausage, and you have to get there early. Its all gone by now. And where would you happen to be going, friend?"
>
> Moscow."
>
> "Oh Moscow's got plenty of everything," the women squealed joyfully.[4]

3. P. Hanson, "Brezhnev's Economic Legacy" in P. Joseph, ed., *The Soviet Economy After Brezhnev* (Brussels, April 1984), p. 14.

4. (Vintage: New York), p. 9. As a rule, whether an observer views the USSR's agricultural sector to be "in crisis" or having made "phenomenal gains" depends on what aspect of the country's record is being emphasized. For example, if one takes the long view Soviet grain output during the five year period 1976 to 1980 was 2.3 times the 1951-1960 level, and even the poor 1982 harvest was more than double the harvest of 1950. By the same reasoning, Soviet meat production rose from an average of 5.7 million tons during the period 1951-1955 to an average of 14.8 million tons

Table 2

GROSS AGRICULTURAL PRODUCTION IN EAST EUROPE AND THE USSR, 1971-1984

	Percentage change in constant prices						
	1971-75	1976-80	1980	1981	1982	1983*	1984*
Eastern Europe	3½	½	-5½	2½	-2½	1	2
Eastern Europe excluding Poland	3½	2	-	1	1½	½	2
U.S.S.R.	2½	1½	-2½	-1	4	5	6½
Eastern Europe and U.S.S.R.	3	1	-3	-	2½	4	5½

*Data shown for the U.S.S.R. are official estimates for 1983 and official forecasts for 1984.

Source: International Monetary Fund, 1984:147.

For most East European countries, growth rates in agricultural production either stagnated or (in the case of Poland) declined at the end of the 1970s (Table 2). As a result, East European dependence on food imports grew throughout the 1970s and increased sharply during the last two years of the decade. By 1980, Eastern Europe's $3.8 billion agricultural trade deficit was three and a half times the level of 1971, and a major portion of the total trade deficit accumulated by the entire region. As with overall economic performance, clear differences were apparent among the various East European states. For example, Poland's deficit in agricultural trade grew from $283 million in 1971 to $1.3 billion in 1978. Hungary's trade figures

during the period 1976-1980. F. Durgin, "The USSR in Crisis: The Failure of an Economic System by Marshall I. Goldman: A Review Article" in *ACES Bulletin*, vol. 2-3 (1984), and F. Durgin, "The USSR in Crisis: A Reply to a Reply" in *ACES Bulletin*, vol. 4 (1984). Another view which evaluates the USSR's performance over an even longer time frame and in comparative terms can lead to a far more negative perspective. Thus, it can be pointed out that although Tsarist Russia served as an important grain exporting country, the USSR is now dependent on foreign grain, imported from Western capitalist nations. M. Goldman, "Reply to Frank Durgin" in *ACES Bulletin*, vol. 2-3 (1984), and "A Reply to a Reply" in *ACES Bulletin*, vol. 4 (1984). Whether the Soviet agricultural crop is half-empty to half-full remains an ongoing and fascinating debate, K. Gray, "Soviet Consumption of Food: Is the Battle 'Half-Full,' 'Half-Empty,' 'Half-Water,' or 'Too Expensive'" in *ACES Bulletin*, vol. 2 (1981).

represent the other extreme, with its export surplus in agricultural products increasing from $188 million in 1971 to $650 million in 1979. All the East European countries made impressive strides toward improving the diet of their citizens, but in most cases such success depended upon the importation of costly food products. Moreover, the use of price policies designed to hold the retail price of food below cost, contributed to a major economic burden on the East European states and forced them to satisfy growing consumer demands by large-scale agricultural imports.

The difficulties faced by the Soviet and East European economies at the end of the 1970s should, of course, be considered in relative terms. Thus, compared to the 1950s and 1960s, all the European centrally-planned economies (and this applies the least to Poland and Romania), had made remarkable progress in their economic performance and agricultural production. The striking growth of dependency on Western food imports coupled with economic stagnation, however, prompted a reexamination of developmental strategies by the political leaders of the Soviet Union and its Comecon allies. Briefly, a decision was made by all of the Comecon regimes to place greater stress on economic self-sufficiency, constrain imports, and alleviate balance of payment pressures to the greatest extent possible. Agricultural development was accorded a central role in this policy reorientation.

In Eastern Europe the effort at enhanced self-sufficiency took several forms, including a rather drastic domestic cutback in the rate of overall growth of economic investment, increased food prices, changes in meat consumption patterns (e.g., reducing the need for imported feed grains by emphasizing cattle production instead of pigs and poultry), and restricted imports from convertible currency areas. Most East European countries, which had become heavily dependent on grain imports from the West, clearly saw the need for greater agricultural self-sufficiency as both an economic and a political strategic problem. For example, faced with a large debt situation owing mainly to grain imports, and reportedly also having difficulties raising additional Western credits, GDR party leader Erich Honecker emphasized that "the question of securing a steady [grain] supply" for East German citizens touched upon his country's "vital interests." "Today," he added, "one can compare the grain problem with the oil problem in terms of priority."[5]

5. R.D. Asmus, "The Grain Problem in the GDR" in *Radio Free Europe Research, RAD Background Report*, 112 (May 13, 1982):2.

The Soviet leaders responded to the agricultural problem of the late 1970s and early 1980s in a somewhat different manner than their East European comrades. Faced with unprecedented food imports, declining domestic per capita food consumption, and local rationing, Leonid Brezhnev was compelled to launch a major new initiative for the agricultural sector. External relations also played a role in the Brezhnev initiative. Thus, he first referred to plans for a new "Food Program" in October 1980, only nine months after the American-led embargo on exports of agricultural commodities.[6] When details of the program were adopted in May 1982, Brezhnev emphasized the importance of reducing reliance on imports from capitalist countries. Essentially, the new program seeks a solution to Soviet food supply difficulties through increased capital investment, higher procurement prices and increased price subsidies.[7] Besides raising food production levels, the Soviet agricultural effort is also aimed at reducing administrative inefficiencies and waste throughout the food chain–from production to final consumption. Coordinative responsibility for all questions relating to the tasks of the agro-industrial complex has been entrusted to a new and powerful commission, established in June 1982, under the Presidium of the Council for Ministers. As tangible evidence of its commitment to agricultural development–even in the fluid political succession period following Brezhnev's death–the regime allocated one-third of the USSR capital budget in 1984 to the agricultural sector.

The New Strategy in Practice: Current Trends and Grain Import Forecasts.

Eastern Europe. The effort by East European Comecon regimes to improve their agricultural performance and self-sufficiency has yielded mixed results. The data on gross agricultural production in East Europe (Table 2) indicates a modest increase in the early 1980s, with similar increases in the production of grains considered separately. Agricultural production in some countries, particularly Hungary, Poland and Romania, was adversely affected by drought, but different approaches to the problems of agricultural management appears to have had more impact on output than the weather. In the area of improved management, Hungary and to a lesser extent Bulgaria, have achieved the best results among the countries

6. The impact of the "Afghanistan sanctions" of 1980 on the grain trade are discussed more fully in Cohen and Marantz "Soviet-Canadian Trade: The Politics of Intervulnerability" in *Canada and International Trade, Conference Papers,* vol. 1, Major Issues of Canadian Trade Policy (Montreal, 1985).

7. K. Severin, "An Assessment of the Soviet Food Program" in P. Joseph, ed., *The Soviet Economy After Brezhnev* (Brussels, 1984).

in the region. The states with the highest agricultural trade imbalances, such as Poland and the GDR, were able to restrict agricultural imports markedly in 1981 and 1982, but other less debt-burdened countries, such as Czechoslovakia and Hungary, also achieved success in that regard. By 1984, especially strong external and internal pressure on the Polish economy forced further reductions in grain imports down to between 3 and 3.2 million tonnes compared with 7.8 million tonnes in 1980.

Despite the attention recently given to raising food production by the East European regimes and also to reducing agricultural imports, most specialists forecast that the region will continue to be a net importer of grain throughout the present decade.[8] Overall grain production is expected to grow slowly in the region, but increased domestic demand and insufficient supply will require continued reliance on imported Western foodstuffs. Net annual imports of grain in 1990 and 1991 are estimated at 5.7 million tons for Eastern Europe (including Yugoslavia), which represents a sizable decrease from the 13.5 million tons imported in 1980. The GDR is expected to supplant Poland in Western imports and by 1985-1986 to become the largest net importer of grain in the region. Net grain imports by the GDR, however, may decline from 3.2 million tons in 1985-1986 to 2.8 million tons by 1990-1991, when Polish imports connected with an expected rise in livestock production should rebound to reach 3.5 million tons. Czechoslovakia is also expected to remain a substantial net importer of grain and other foodstuffs throughout the 1980s. Other interesting projections include Bulgaria's possible achievement of near grain self-sufficiency during the second half of the 1980s, and Hungary's persistence as the area's largest grain exporter.

The quest for overall East European self-sufficiency in grain, begun at the end of the 1970s, will apparently only be partially realized. It is projected that the region's high rate of indebtedness will continue, with Poland, Romania, and the GDR ranking as the largest debtors among the European Comecon countries. Moreover, it is also estimated that food consumption patterns will not change considerably by the end of the decade, and that likely increases in per capita consumption of meat in countries such as Romania and Bulgaria will be quite small. Poland stands out as a country where

8. The forecasts in this section draw upon data provided by E. Cook et. al., "Eastern Europe: Agricultural Production and Trade Prospects through 1990" in *Foreign Agricultural Economic Report,* vol. 195 (February, 1984), S.C. Schmidt et. al., "Cooperative Grain Trade Opportunities in Eastern Europe" in *Agricultural Cooperative Services ACS Research Report,* vol. 21 (May, 1984), and USDA, *Eastern Europe Outlook and Situation Report* RS-84-7 (Washington, D.C., June, 1984).

consumption levels of meat have actually declined to levels of the early 1970s. For example, per capita consumption of meat for Poland in 1985-1986 is projected to be 55-60 kilograms, compared with 74 kilograms in 1980. Moreover, due to slow growth in Polish domestic production and pressure to boost meat exports, per capita consumption of meat in that country may not exceed 60 kilograms before the end of the 1980s. In Poland, and also Romania (where the validity of published food consumption figures are in some doubt), widespread shortages have also resulted in rationing.

The USSR. Soviet efforts which began during the 1980s to improve agricultural output and self-sufficiency have also produced varied results. Gross agricultural production took an upward turn after 1981, largely due to an infusion of investment funds, enhanced labour productivity, and a strenuous commitment to the reduction of economic inefficiencies. Meat, milk, and egg output set new records, and in 1983 for the first time during the period of the current five-year plan (1981-1985), all of the Union republics met their goals for agricultural production and procurement.[9] As in earlier years, however, the combined impact of climatic problems and the continued deficiencies of what remains a basically unreformed agricultural management framework, resulted in very unsatisfactory overall agricultural performance. Agricultural and grain imports fluctuated from year to year (Table 3), but in the 1984-1985 crop year the Soviets were suffering from the sixth poor harvest in a row, and imports–after having dropped somewhat in 1982 and 1983–reached a record high level at somewhere between 45 and 52 million tons. Although official data on Soviet grain production has not been available since 1980, it has been estimated that the grain harvest in 1984 yielded about 170 million tons, or 70 million tons short of the official goal.

While the Kremlin clearly has devoted closer attention to the agricultural sector than at any time in the last few decades, it is still rather unclear how this will affect Soviet food supply and the Soviet consumer. By mid-1985, the three-year-old Soviet Food Program was clearly in the take-off stage of development, but expert assessment of the program ranged from the opinion that it was "shockingly unimaginative"[10] to the perception that it was a "set of sensible measures"[11] and a "national effort touching every facet and every person

9. Severin, "An Assessment of the Soviet Food Program."

10. D.G. Johnson, "Agriculture" in J. Cracraft, ed., *The Soviet Union Today* (Chicago, 1983), p. 204.

11. E.A. Hewett, "The Gorbachev Approach: Slow Change Ahead for Soviet Economy," *New York Times*, 17 March 1985, F3.

Table 3

GRAIN PRODUCTION, GRAIN IMPORTS, AND MEAT CONSUMPTION PER CAPITA IN THE SOVIET UNION AND EASTERN EUROPE

	USSR*	Bulgaria	Czechoslavakia	GDR	Hungary	Poland	Romania
A. Total Grain Production	.....	.....	.....	1,000 tons	.....	.....	.....
1976-1980	205,028	7,849	10,060	9,037	12,550	19,495	19,383
1980	189,090	7,627	10,699	9,622	13,800	18,336	20,200
1981	160,000	8,420	9,400	8,863	12,628	19,721	19,945
1982	180,000	9,926	10,275	10,021	14,648	21,160	22,335
1983	195,000	8,135	11,040	10,060	13,479	22,100	18,000*
1984	170,000	n/a	n/a	n/a	n/a	n/a	n/a
1985-86*	238,000-243,000	9,400	11,905	10,200	14,160	22,000	22,600
1990-91*	250,000-253,000	10,170	11,610	10,860	14,920	23,930	25,200
B. Grain Imports	.....	.....	.....	1,000 tons	.....	.....	.....
1976-1980 (average)	n/a	576	1,679	3,896	291	6,880	1,719
1980	34,800	692	1,980	4,465	153	7,811	2,277
1981	45,653	1,016	1,003	3,338	179	7,218	2,814
1982	32,500	397	1,442	2,559	23	4,329	1,405
1983	34,000	n/a	n/a	n/a	n/a	n/a	n/a
1984	50,000	n/a	n/a	n/a	n/a	n/a	n/a
C. Per Capita Consumption of Meat	.....	.....	.....	kilograms	.....	.....	.....
1971	50.0	43.6	73.2	68.5	59.5	56.1	n/a
1975	57.0	58.0	81.1	77.8	68.5	70.3	45.7
1980	58.0	61.2	85.6	89.5	71.7	74.0	60.0
1981	57.0	66.6	86.6	90.7	73.0	65.0	n/a
1982	57.0	68.3	81.0	91.0	74.5	58.5	65.0
1983	n/a	69.5*	80.5	91.3	74.8	57.0	65.0*

*Estimated/projected (for all data for Soviet Union after 1980).

Sources: USDA (May 1984); USDA (June 1984); Severin (April 1984); Cook (1984).

in Soviet society."[12] Irrespective of how one characterizes the potential of the 1982 Soviet Food Program, Western experts seem to agree that the USSR will continue to import Western grains throughout the 1980s, although perhaps at lower magnitudes than in the past. Thus it is estimated that aggregate grain imports of the USSR will continue to decline between 1985 and 1990 because of increased grain production, better protein supplies, and a modest increase in feeding efficiency.[13] Even if Soviet output improves markedly, however, it is suggested that grain imports will continue to be essential in years of harvest failure, or for rebuilding grain reserves. It has been forecast that the Soviet Union will import as much as 40 million tons of grain annually in the 1986-1990 period.[14] Toward the end of the decade it is also predicted that coarse grain purchases may constitute a larger proportion of grain imports as a result of Soviet efforts to upgrade livestock feeds.

Whether such projected grain purchases will fundamentally strengthen or weaken the Soviet economy and political system is a matter of some disagreement, both in the West and in the USSR. It is argued, for example, that the Soviet Union actually imports very little grain given the exceedingly unfavourable domestic trade-off between the additional investment that would necessitate the sale of more oil and gas, and the very high costs of trying to produce more grain.[15] In brief, since the Soviet Union is a relatively low-cost

12. Severin, "An Assessment of the Soviet Food Program," p. 6.

13. USDA, *USSR Outlook and Situation Report,* RS-84-4 (Washington, D.C., May 1984).

14. D.G. Johnson and K.M. Brooks, *Prospects for Soviet Agriculture in the 1980s* (Bloomington, 1983), p. 106. Alec Nove has forecast an average Soviet grain harvest of "210-220 million tons for the years 1984-1988 permitting a 10-15 percent increase in production of meat and milk, and a reduction of some 30-40 percent in the high levels of agricultural (especially grain) imports of the most recent years which, in the absence of substantial increase in retail price, will mean continued shortages." In view of that forecast, Nove suggests that "the USSR will continue to spread its grain purchases around, seeking to avoid excessive dependence on any one supplier, deriving some satisfaction from not buying as much from the United States as the United States now wishes to sell, while pressuring the clealy-enunciated aim of reducing import dependence." A. Nove, "Soviet Agriculture: Problems and Prospects" in C. Keeble, ed., *The Soviet State: The Domestic Roots of Soviet Foreign Policy* (Aldershot, Hants, 1985). Philip Raup has suggested that the Soviet Union has "an enormous potential for a reduction in grain import requirements through greater efficiency in animal feeding." Philip Raup, "Agricultural Prospects in Centrally Planned Economies," in *Market Economy* (1984), p. 45. See also, USDA, *Eastern Europe Outlook and Situation Report* RS-84-7 (Washington, D.C., June 1984).

15. J. Vanous, "Comparative Advantage in Soviet Grain and Energy Trade" in G. Smith, ed., *The Politics of East-West Trade* (Boulder, 1984).

producer of oil, gas, and other raw materials, and a relatively high-cost producer of grain, the law of comparative advantage implies increased grain imports by Moscow. Strictly following relative cost considerations, the USSR should curtail investments for domestic grain production, increase grain imports, and use the savings achieved for other purposes. Such a strategy would also alleviate the need for undertaking major "liberal" management and institutional reforms in the agricultural sector; a business-as-usual alternative that would be very popular in certain Soviet political circles.

In view of such advantages, the obvious question has been asked: Why doesn't the Soviet Union import more grain and export more of its energy resources? While the economic costs involved are undoubtedly part of the reason–that is, the initial capital outlay needed to boost oil and gas production and distribution–the major underlying explanation is political-stategic. Thus, despite the USSR's ability to weather the 1980 Afghanistan sanctions, a marked increase in grain imports today would make the Soviet Union more vulnerable to future grain embargoes, even if they were to prove ultimately unsuccessful. During the first half of the 1980s, net grain imports constituted between 20 and 30 percent of all the grain annually available in the USSR, and it seems unlikely that the Soviet elite would feel secure about increasing that proportion.[16] Indeed, the same type of anxiety has been a major impetus to the recent stress on Soviet agricultural self-sufficiency and reform.

The Politics of Agricultural Reform: Is Hungary the Soviet Future?

> We are not content with the structure of our diet. Our people want more high-quality meat, dairy products, fruits and vegetables, and so our main efforts are addressed at increasing the

16. It might be argued that recent Soviet investments in the food sector (rather than in oil production) to finance increased grain imports, derive from the fact that agriculture is a renewable resource while energy is not. Problems with oil production have, nevertheless, apparently forced Moscow to sharply increase Soviet efforts at oil exploration just to maintain output at current levels. Thus, it is expected that the five year plan for 1986-1990, to be adopted at the 27th Communist Party Congress in February, 1986, will call for a 40 percent overall increase in oil exploration. Despite the recent drop in petroleum prices, the Soviet Union would also benefit economically if it would divert its exports of crude oil away from Eastern Europe–where the USSR has traditionally sold raw materials at a loss–and sell more to the West. The main obstacle to such a move by Moscow is also political and strategic, namely, special terms of trade for Eastern Europe keeps the region closely linked to the Soviet Union. By 1985, Soviet energy subsidies to Eastern Europe had sharply declined, but the USSR still commits about half of its crude oil exports to its European Comecon countries.

output of these products.
Mikhail Gorbachev, May 1983

For most of the European centrally-planned economies, agriculture has been the Achilles heel of "socialist construction." Moreover, agricultural problems in the European Comecon states have been directly related to the viability and stability of their political systems. Whether the issue is avoiding dependency on capitalist states, attracting political support from the domestic population, or achieving fundamental policy objectives and ideological goals, a good deal of Soviet and East European politics, to paraphrase Lenin, amounts to agricultural questions in "concentrated form." In a reciprocal pattern, problems of food supply shape the discourse and tenure of communist political elites, while the vested interests and preferences of those elites determine the policies and accomplishments of the agricultural sector.

The most recent Soviet efforts at improving domestic food supply illustrate the persistent and close connection between politics and agriculture in centrally-planned economies. Even after Brezhnev's belated initiatives and promises regarding increased food output, there appeared to be a significant disagreement in the Soviet leadership about how to proceed with agricultural reform. Brezhnev's successors have all been ardent supporters of the 1982 Food Program, but during the short tenure of Yuri Andropov and Konstantin Chernenko, the overall approach to agricultural reform retained many of its conventional features.[17] Thus, Soviet efforts in agriculture before March 1985 were focused heavily on land reclamation projects to expand the amount of drained and irrigated land–an approach in the USSR which harkens back to early Bolshevik and even Tsarist times. Relatively little discussion was devoted, however, to decentralization, managerial restructuring, and pricing reforms, which many Western and East European experts maintain are the keys to increased agricultural productivity. At the end of October 1984, for example, Chernenko told a special Central Committee plenum that expanding the land available for farming

17. Under the ill-starred "Andropov regime" Soviet newspapers stopped describing the achievements of the agricultural sector, and turned their attention to criticisms of inefficiency and losses in the food industry, as well to a campaign for increased labour discipline. Some indirect efforts were made during the Andropov period to increase food prices to a more economically sound level, but the manner in which it was attempted, and the accompanying crackdown on citizens' extra or freelance sources of income reduced the benefits of the new policy, Z. Medvedev, *Andropov* (Oxford, 1983), pp. 132-134.

was the "decisive factor" in the campaign to feed the Soviet population. Although no details of the land reclamation program were made immediately available, a favourite Soviet project under discussion has been the diversion of water from two Siberian rivers to Central Asian deserts–an expensive long-term project which has raised world-wide controversy in terms of its environmental impact. Chernenko pointed positively to gains in Soviet food production, but nevertheless admitted that "despite all the positive results achieved, the problem of providing many cities with foodstuffs, above all meat, is still acute."

One person mysteriously absent from the October 1984 plenum on food issues, and who reportedly was opposed to the irrigation and land reclamation program, was Mikhail Gorbachev. Gorbachev's involvement with high level agricultural policy-making from 1980 to 1984 coincided with a string of poor Soviet harvests–an association which has apparently been outweighed by his own innovative record and his political acumen as a leader representing the new generation within the Soviet elite. By the end of 1984 Gorbachev's responsibilities had grown beyond the agricultural field alone, to include broad economic and political concerns.

Gorbachev's ascession to the top position within the party politburo following Chernenko's death (March 1985) may herald a shift in the Soviet approach to agricultural change. Unlike his immediate predecessor, Gorbachev has argued for organizational changes as the basis of agricultural reform, rather than new endeavours to cultivate marginal lands. While it is too early to evaluate Gorbachev's impact on Soviet agriculture, some of his recent remarks seem to confirm that there has been a definite change of emphasis, that is, away from ideological exhortation, limited administrative streamlining, and land reclamation, to basic organizational restructuring and the recruitment of new managerial talent. Speaking to managers of factories and state farms on 11 April 1985, Gorbachev seemed to set a new tone:

> We cannot ignore the harsh winter, of course. But let's be frank–disorganization, sometimes complacency, and in some place irresponsibility had a significant effect on the first quarter's results, which cannot satisfy us...An analysis shows that the pace at which we have moved during this five-year plan is inadequate....We cannot hope for manna from heaven, so to speak...Everything that has been said also fully applies to agriculture to which we have devoted and are continuing to devote enormous attention...All this

> is producing certain results, but many farms are continuing to make inefficient use of land, and of labour and material resources.[18]

In seeking an explanation for shortcomings in industry and agriculture Gorbachev placed the major blame on the outlook and behaviour of managerial personnel.

> We will not solve the problem of autonomy if directors have to get approval from dozens of people every time something comes up and discuss everything from A to Z. Decisions on every question cannot be passed on to the central bodies...In the past few years, labour collectives have been given a good many rights...Apparently a great many executives have not yet proved to be psychologically prepared for this change. Many of them still think that if they engage in fewer consultations and do nothing but give orders, the road to the projected goal will be simpler and shorter.[19]

The appointment of three new full members to the Politburo (23 April 1985) from the younger age cohort in the Soviet leadership indicates that Gorbachev is successfully consolidating his position and perhaps may soon be able to implement the less conventional reform schemes he apparently favours. When announcing the new personnel appointments Gorbachev called for the right blend of experienced and young workers:

> Communists in their letters to the Central Committee call attention to the fact that some leaders, holding one and the same post over a long period cease to see new things, and reconcile themselves to shortcomings. There is food for thought here, to seek ways for a more active promotion of our leading cadres.[20]

18. *Pravda*, 12 April 1985, pp. 1-2.

19. Gorbachev's emphasis in the area of agricultural reform has not been on land reclamation projects, but as of June, 1985 it appeared that he intends to move ahead with massive plans adopted during Chernenko's rule to divert water south from Siberia's major north flowing rivers. The project could more than double the amount of grain growth on irrigated land–to approximately 60 million tonnes by the year 2000 compared with 25 million now.

20. *New York Times*, 24 April 1985, p. 4.

Gorbachev's ideas on economic and agricultural reform are said to be influenced–and much the same was reported for his mentor, Yuri Andropov–by developments in Hungary. In 1983, for example, Gorbachev toured Hungary and praised its agricultural accomplishments; Hungary is the only net exporter of grain in East Europe, and the only country in that region to supply grain to the USSR. The success of the Hungarian economic model over the past fifteen years can be traced primarily to a restructuring of agricultural organization and labour incentives, along with a gradual increase in food prices.[21] The most important feature of Hungary's approach to agriculture is the decentralization of decision-making power to small-sized agricultural units, both in the collective and private sectors. The role of the state is very indirect, and rigid central planning in physical commodities has been abandoned. Collective farm management in Hungary is permitted to flexibly organize production, mixing together collective and private labour, and distributing tasks down to small brigades and even families. Farming on small private farms, private plots, and garden plots (together about 14 percent of the arable land), is regarded as a permanent rather than temporary feature of socialist agricultural life. The private sector is given considerable encouragement and opportunity for marketing, in both the free market and through the public sector. Private plots and private farms produce nearly one-third of the country's gross agricultural output, and 49 percent of net agricultural production. Using a flexible combination of the above elements, the Hungarian food industry not only has been able to supply domestic requirements but, for example in 1983, accounted for 25 percent of the country's total exports, including 37 percent of dollar exports. As one Hungarian observer proudly remarked: "Everyone including Kadar keeps his nose out of agriculture....The farms are our safety net...industrial sales are terrible this year, but we can still sell our wheat and meat for hard currency."[22]

Soviet politicians and experts have shown a keen interest in Hungarian agricultural development since the early 1980s, and have made some approving and tolerant comments about Budapest's innovative style.[23] This does not mean, however, that the lessons and

21. K. Waedekin, "Agrarian Structures and Policies in the USSR, China, and Hungary, A Comparative View," unpublished paper; P. Knight, *Economic Reform in Socialist Countries: The Experiences of China, Hungary, Romania and Yugoslavia* (Washington, D.C., 1983); L. Rasko, "Soviets Draw on Hungarian Agricultural Expertise," *Radio Free Europe Research Hungary*, vol. 7 (1983).

22. *New York Times*, 18 October 1982, p. 4.

23. Soviet interest in the general features of Hungarian economic experimentation

features of Hungarian agriculture can or will be easily transferred to the USSR. One obstacle to Soviet acceptance of the Hungarian model is essentially psychological. Thus, to some, extent Moscow views Budapest's economic experimentation, for all of its successes, as a special case improvised by the audacious elite of a relatively small-sized country at the Western fringe of the European Comecon orbit, a country where communism's shallow roots may require special allowances for ideological deviation. It is difficult for the Soviet Union to accept too much advice, and assimilate too many innovations from a country which it regards as an essentially ideologically immature newcomer within the socialist commonwealth. Indeed, it is useful to remember that Khrushchev's description of Hungrian consumerism as "goulash communism" was not meant as a compliment.

There are also political obstacles of a more practical nature to any acceptance of Hungarian methods by the Soviet elite. For example, attempts at decentralizing reforms in the USSR are notoriously difficult to achieve, and must confront the inertia of a deeply entrenched Soviet bureaucracy. That bureaucracy has had much more experience and capability at resisting innovation than the Hungarian conservatives and centralists had when their country's reforms were instituted.[24] Moreover, decentralization schemes in the multinational USSR tend to carry contentious centrifugal overtones, which are not really present in the smaller and ethnically homogenous Hungarian environment.

Other components of Hungary's decentralized model are also difficult to replicate in the USSR, and illustrate the close connection between the economic and political dimensions of agricultural change. The need for Budapest to gradually raise food prices provides a particularly troublesome aspect of economic reform from Moscow's point of view. For example, in July 1977, Hungarian leaders instituted the largest price rise since 1946 for consumer goods: prices for basic foodstuffs were increased by 20 percent, for

began almost twenty years ago. See A. Nove, "Economic Reforms in the USSR and Hungary" in *Socialist Economies* (Baltimore, 1972).

24. Budapest's economic reforms may be on the cutting edge of change in Eastern Europe, but many conservative members of the Hungarian political and economic bureaucracy have opposed steps to further decrease their traditional authority by means of additional market mechanisms and political democracy. T. Bauer, "The Second Economic Reform and Ownership Relations: Some Considerations for the Further Development of the New Economic Mechanism" in *Eastern European Economics*, vol. 3-4 (1984). For some other factors affecting the transferability of the Hungarian model to centrally planned economies see K. Hartford, "Hungarian Agriculture: A Model for the Socialist World?" in *World Development*, vol. 1 (1985).

meat by 30 percent, and for bread by 50 percent.[25] As a result, the overall price index rose by 9.7 percent. Consumer prices were again raised in the first half of 1980 by another 12 percent, and in July and August 1982, prices for some cereal products increased by 40 percent. Meanwhile, the growth rate of real wages during the period 1976 to 1980 declined, and it was announced that in the period from 1981 to 1985 "workers will have to work better for the same wage." Hungary's ability to adopt such potentially unpopular policies must be seen within the total context of the country's unique consumerist model, and also in relation to changes in the political culture since the 1956 revolution. Experience has taught other European communist leaders to be more anxious about the linkage between food price stability and political stability, and it is unlikely that Soviet leaders would wish to duplicate the difficulties regularly encountered, for example, by their Polish allies.[26] Since 1962, when price increases permitted by Khrushchev led to local riots, the USSR has kept food costs to consumers quite stable.[27] For example, a loaf of bread costs less than 20 cents in the USSR and is one of the cheapest food products available to Soviet citizens. At the same time, the cost of producing bread (including the price for the imported grain generally used for baking), continues to rise. The food price subsidies which support such an arrangement represent an enormous drain on the Soviet economy–about 13 percent of all state expenditures–and serve as a barrier to the expansion of agricultural output.[28]

25. A. Zwass, "The Economies of Eastern Europe" in *International Journal of Politics* (Fall-Winter, 1983-1984), p. 15.

26. Zbigniow Fallenbuchl has provided important evidence of the way in which changes in developmental strategy interacts with the systemic features of centrally-planned economies to cause politically explosive situations. Z. Fallenbuchl, "Sources of Periodic Economic Crisis Under the Centrally Planned Socialist System" in P. Johnson and W. Thompson, eds., *Rhythms in Politics and Economics* (New York, 1985).

27. The Kremlin must also be concerned by the fact that Hungarian agricultural self-sufficiency has resulted in that country's *heavy dependence on the private sector.* Such dependence exposes a communist regime to a threat of *internal embargo* which the Soviets have not faced since before 1929. For example, on the first weekend in 1985 more than fifty bakeries, bakery goods tradesmen and private bakehouses in Budapest, were unable to open because of a bread shortage: "The amount of bread lacking triggered a real avalanche...consumers were forced to go on a real peregrination...Those responsible have already been discovered, declared to municipal council, and contravention procedures have been initiated against private bakers and small tradesmen who arbitrarily stayed away from the bread market. The basis for calling them to account is the fact that the majority of bakers and private tradesmen who did not open their shops did not fulfill their obligation to provide prior notice." *(Foreign Broadcast Information Service, Daily Bulletin Eastern Europe,* 17 January 1985, FI).

One area of Hungarian-type agricultural reform which is often given more prospect of Soviet acceptance concerns the enhanced use of production-oriented labour remuneration for so-called "normless teams" or "contract brigades." Such a brigade usually involves a few dozen people–or a smaller group, the so-called "link" *(zveno)*–renting tractors and other necessities from the state, and then carrying out agricultural tasks in anticipation of higher earnings than are routinely paid by state and collective farms. In essence, the contract brigade approach is a kind of piecework-plus-bonus style of remuneration which, to a limited extent, liberates the agricultural worker from the traditional restraints of collectivized agriculture. The Soviet use of such brigades actually preceded the current Hungarian model, and although they were abandoned as "socially dangerous" in the early 1960s (for widening income differentials), they have recently been reintroduced throughout the Soviet agricultural structure.[29] The application and scope of the brigades' method in the USSR has been far more restricted than in Hungary, but a significant movement to broaden the experiment is becoming apparent.[30] The economic advantages of the brigades are frequently mentioned by Soviet observers, and it now seems that their use has also been urged as a device to revive a collective spirit among farm workers. Although the Soviets are taking parallel steps to prevent the brigades from becoming a source of individual enrichment outside of state control, the initial expansion and discussion of the method looks very promising. Mikhail Gorbachev's long-standing sympathy and personal experience with contract brigades (as first secretary of the Stavropol territorial committee he introduced "link" type reforms, but without success) suggests that they will likely become an aspect of any forthcoming Soviet agricultural reform.[31]

How many other components of the successful and politically contentious Hungarian agricultural model (for example, the expansion of private plot farming) will be accepted by the Soviet leadership will also depend heavily on Gorbachev's preferences and political future.[32] The expectation of reform generated by Gorbachev's political succession, along with his apparent physical and political health, may presage an interesting series of changes in many areas of Soviet economic organization.[33] Whether the new leader can really accomplish a "profound transformation" in the management and output of Soviet agriculture, however, is still very much an open question.[34] The political obstacles to agricultural reform are certainly considerable, but then so are the costs of failure.

28. For the effect of food price subsidies on both Soviet and East European agricultural development, see D.G. Johnson, "Food and Agriculture of the Centrally Planned Economies: Implications for the World Food System" in *Essays in Contemporary Economic Problems: Demand, Productivity and Population* (Washington, D.C., 1981).

29. For the political drama which scuttled the use of contract brigades in the early 1960s, see A. Yanov, *The Drama of the Soviet 1960s: A Lost Reform* (Berkeley, 1984).

30. K. Waedekin, "What is New About Brigades in Soviet Agriculture?" in *Radio Liberty Research* RL 56/85:1-5 (18 February 1985).

31. Waedekin (18 February 1985) suggests that Gorbachev's advocacy of contract brigades in Soviet agriculture has not always been "consistent and unequivocal," and also that the new Kremlin chief may support certain agricultural reform varients that are actually incompatible with current contract brigade proposals.

Epilogue: New Course?–Old Patterns?

> He could have killed more than he could have fed but chose to do neither. By falling dead he leaves a vacuum and the black Rolls-Royce to one of the boys who will make the choice.
> Joseph Brodsky
> (on the death of Leonid Brezhnev)

In mid-1985 the Soviet Union appears poised for important political and economic changes. While Mikhail Gorbachev's consolidation of power has yet to be translated into specific or fundamental domestic policy initiatives, there are indications that the preconditions for broader changes are being established, and that the agricul-

32. Private plots averaging .03 hectacres each and making up only about 2.8 percent of total Soviet farm land, account for approximately 25 percent of total agricultural production in the USSR (including half of the country's potatoes, a third of its meat, milk, eggs, and vegetables). Until now, there has been little political support for the growth of private plot farming, or even smaller garden-plot agriculture. As one specialist in the USSR complains: "Unfortunately, the view still prevails that a personal plot is the embryo of small scale private industry and that its elimination marks a higher stage in the development of our society." A. Tenson, "The Third Sector in Soviet Agriculture" in *Radio Liberty Research* RL 336/84:1-3 (6 September 1984), p. 3.

33. The prospects for "modern reform" in the Soviet Union are thoughtfully discussed in T. Colton, *The Dilemma of Reform in the Soviet Union* (New York, 1984).

34. Climate undoubtedly plays an important role in Soviet agricultural output and by the law of averages, the weather may be kinder to Moscow's plans over the next six years than it has been over the last six. At the same time, it has been pointed out that poor weather was only one, and not the main cause of large Soviet grain imports in the past: "While climatic change clearly has important effects on human society, the main factors affecting the development of human society at the present time are not external (such as weather) but internal (e.g., economic, social and political)," M. Ellman, *Collectivization, Convergence and Capitalism: Political Economy in a Divided World* (London, 1984), pp. 106-107.

tural sector will very likely be affected. Interesting evidence of such potential development was revealed in recent remarks made by Tat'yana Zaslavskaya, one of the USSR's most prominent pro-reform economists. The author of an extremely critical assessment of Soviet weaknesses prepared in 1983 for internal discussion, (but leaked to the Western press), Zaslavskaya's views have publically surfaced in 1985 as an apparently legitimate basis for debate. In an interview published by *Izvestia* on 1 June 1985, Zaslavskaya did not hesitate to identify which branch of the Soviet economy should become the first target of a new national economic strategy:

> In my opinion agriculture. This is proved by the experience of the other socialist countries enacting economic reforms. The agro-industrial complex is most favorable for the introduction of new relations. It is the most sensible, and in economic forms of leadership the most flexible. Most of all its priority is determined by society's needs for agricultural output. Moreover new forms of the management of agriculture are being introduced independently of directives and administrative controls in agriculture. Many of them are quite effective, produce results, and are original.[35]

Exactly what policies will be enacted by the Soviet leadership, and with what effect remains to be seen. Zaslavskaya, however, is undoubtedly referring to reforms in socialist countries such as Hungary and Bulgaria,[36] and also to various Soviet experiments with "contract brigades" (see above). She may also have been alluding to speculation that the Gorbachev leadership group is considering the expansion of family farming experiments conducted in the Baltic region, as well as the decriminalization of broader private enterprise efforts in agriculture.[37]

35. *Izvestia* (1 June 1985), p. 5. Zaslavskaya is a professor, a full member of the USSR Academy of Sciences, and head of the section dealing with social problems at the Institute of the Economics and Organization of Industrial Production of the Siberian Division of the Academy.

36. Since 1970 the Bulgarians have gradually introduced innovative structural alterations within their state agricultural sector, while simultaneously fostering private farming initiatives. Approximately 13 to 14 percent of the total land under cultivation in Bulgaria is set aside for private use, and that sector produces 27 to 28 percent of total agricultural output. Grain production has reached about nine million tons a year, or roughly one ton per capita. For more on the Bulgarian case, see Paul Wiedemann, "The Origins and Development of Agro-Industrial Development in Bulgaria," in Ronald A. Francisco, Betty A. Laird, and Roy A. Laird, eds., *Agricultural Policies in the USSR and Eastern Europe* (Boulder, Colorado: Westview Press, 1980), pp. 97-135.

37. Despite recent trends some Western specialists on the USSR remain rather pessimistic regarding the possibilities of any fundamental reform of the Soviet economy and polity along East European lines. "And it will once again be," remarks Seweryn Bialer concerning potential change in the post-Brezhnev period, "a situation where an 'experiment' is undertaken, just as has been the case in the last twenty-five or thirty years–'experiment' after 'experiment', every few years something new, and all turning out to have no real effect." Bialer illustrates his point by drawing on an 'experiment' he tried with students in an advanced seminar on the USSR: "I took some editorials printed in *Pravda*, of different periods from the death of Stalin to today–about ten editorials on the same subject–on agriculture. I erased every reference to any date and I asked them to select a chronology, to say in what sequence those editorials were written. It is impossible to do it. Not a single student was able to do it. I could not do it, and the Soviets themselves would be unable to do it. In other words we're speaking about a chronic disease, you know. And aspirins will not suffice to cure it." Comments in Michael Charlton, ed., *The Eagles and the Small Birds* (Chicago: University of Chicago Press, 1984), pp. 167-168. See also Silviu Brucan, "East-Bloc Economic Reform: The Strategic Implications," *World Policy Journal* 2, no. 3 (Summer, 1985):467-480.

Whatever agricultural reforms are envisaged or undertaken during the next several years, there are no signs–at least in the short run–that Moscow will end its reliance on Western grain imports.[38] The importance of foreign grain supplies to the Soviet Union was underscored by the May 1985 visit to Canada by Politburo member Vitaly Vorotnikov. As Premier of the Russian Republic within the USSR, Vorotnikov's busy itinerary in Alberta, which included meetings with Premier Lougheed, was ostensibly designed to reinforce good will between important regions of the two federal systems (Lougheed visited the Soviet Union in 1977 as a guest of the Russian Republic, and Alberta currently supplies approximately 25 percent of Canadian exports to the USSR). Vorotnikov's visit also included high-level discussions in Ottawa, during which he launched the delicate negotiation process for a new long-term grain agreement between the USSR and Canada. The current long-term grain agreement, signed in May 1981, provides for a resumption of negotiations before the 31 July 1986 expiry date.

During his Alberta visit, Vorotnikov emphasized a point frequently made by Soviet spokesmen since the collapse of the 1980 United States-initiated Afghanistan sanctions, namely, that Canada is regarded by the USSR as an *"old, good, reliable business partner."*[39] Such perceived reliability will undoubtedly be a major consideration in future Soviet grain trade negotiations with Ottawa, although many

38. For historical background regarding the priority of food *consumption* objectives over food *power* objectives in Soviet foreign policy, see Robert L. Paarlberg, *Food Trade and Foreign Policy: India, the Soviet Union and the United States* (Ithaca: Cornell University Press, 1985), pp. 63-99.

39. *Edmonton Journal* (1 June 1985), p. 1.

other factors such as price, and availability of supply will also play an important role. While Soviet politicians and commentators habitually identify Canada's enormous trade surplus with the USSR (Table 4) as a factor detrimental to future commercial relations–a theme reiterated several times during the Vorotnikov visit–USSR food imports from Canada remained at a quite impressive level throughout the first half of the 1980s, and Canadian wheat sales actually rose by 31 percent from 1983 to 1984.

Premier Vorotnikov's trip to Canada closely preceded visits to Moscow by James Kelleher, Canada's Minister for International Trade (June 11-13, as head of the delegation at the annual meeting of the Canada-USSR Mixed Economic Commission on Economic, Industrial, Scientific and Technical Cooperation), and by Canadian Wheat Board Minister Charles Mayer (June 23-28). Upon his return to Canada, Mr. Mayer remarked that "the Soviets appreciate the high quality of our wheat, as well as their long standing and positive relationship with the Canadian Wheat Board." He added, however, that "the Soviets are understandably concerned about the trade imbalance that exists between our two countries....For every dollar we spend in the USSR, they spend $75 in Canada, mainly for grain."[40] Serious and sensitive negotiations for a new long-term grain agreement will certainly be at the center of Soviet-Canadian relations throughout 1985. The USSR's interest in an embargo-proof grain procurement policy achieved through the diversification of foreign supply sources, together with Moscow's high opinion of Canada's "reliability" as a trading partner, increase the likelihood that negotiations concerning a new grain agreement will ultimately prove successful.[41] In what manner the anticipated Gorbachev agricultural reforms will affect future (i.e., late twentieth and early twenty-first century) Canadian Wheat Board sales to the Soviet Union remains, however, a very open and significant question. Many

40. "Canada Remains Preferred Grain Supplier to USSR" *News Release, Minister of State, Canadian Wheat Board* (4 July 1985), pp. 1-2.

41. In the first week of December 1985, Canada and the USSR signed a new long-term grain agreement. Under the terms of the new pact, the Soviet Union must buy at least 25 million tonnes of grain from Canada between 1 August 1986 and 31 July 1991. Mr. Gorbachev, however, remains committed to agricultural reform. For example, on the day he returned from the Geneva summit, it was announced that five ministries and a state committee have been merged into a streamlined super-agency called the "State Committee for the Agro-industrial Complex", headed by Mr. Gorbachev's protegé from Stavropol, Vsevolod S. Murakhovsky. Among other things, the move was expected to reduce the bureaucracy by some 3,000 people. The fact that four other farm-related ministries were not placed under the new agri-business agency may indicate that Mr. Gorbachev still faces some resistance to his reforms.

Table 4

THE COMPOSITION OF CANADIAN-SOVIET TRADE, 1980-1984
(thousands of Cdn. $)

	Canadian Export to the USSR					Canadian Imports from the USSR				
	1980	1981	1982	1983	1984	1980	1981	1982	1983	1984
Live animals	38	435	842	2	59	--	--	--	--	--
Food products	1,288,985	1,757,269	1,924,579	1,633,395	2,015,439	547	665	801	1,392	6,635
Crude materials	50,728	44,355	47,110	44,168	42,575	603	1,020	827	1,402	5,124
Fabricated materials	124,864	46,898	65,208	29,722	10,552	14,730	10,582	4,241	7,598	5,966
End products	70,246	16,621	29,049	53,528	53,652	43,225	64,653	36,719	22,298	10,795
Special transactions	--	3	6	10	9	378	749	260	562	210
TOTAL	1,534,861	1,865,581	2,066,794	1,760,824	2,122,285	59,483	77,669	42,848	33,252	28,735
Year-to-year percentage change	+101.2	+21.5	+10.8	-14.9	+20.5	-7.5	+30.6	-44.8	-20.6	-13.6

Source: Derived from Statistics Canada, Export by Countries and Imports by Countries.

in the West, including Canada, may welcome the ascendancy of the most reform-minded Kremlin leader in the last 22 years (i.e., since the fall of Nikita Khrushchev), but it is also useful to remember that this same period was a time of Soviet economic drift during which the USSR held uninterrupted prominence as the Canadian Wheat Board's largest customer. It is the inextricable linkage between potential Soviet agricultural reform and the marketing of Canadian grain which will most profoundly influence both commercial and political relations between Moscow and Ottawa in the years ahead.

Canadian-American Relations and Agricultural Surpluses: The Case of Barter

Theodore Cohn with Inge Bailey

The literature on Canadian foreign policy reveals a distinct preoccupation with the United States, as Michael Tucker has observed:[1]

> There are few issues, if any, in Canadian foreign policy which do not at some point cross the question of Canada's relations with the United States. Much of the substance of Canada's external relations is concerned with the Canadian-American relationship as such.

In agriculture, the two North American states have had a complex and multifaceted relationship marked by shared interests and cooperation, as well as by competition and conflict. Yet, food and agricultural issues have been virtually ignored in most general studies of the United States and Canada.[2] Agricultural economists have done a number of analyses *comparing* American and Canadian agricultural policies, and to a lesser extent they have also focussed on Canadian-U.S. relations. These analyses, however, are often highly technical, and there have been few serious attempts by political scientists to incorporate them into the theoretical literature on Canadian foreign policy.[3]

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1. Michael Tucker, *Canadian Foreign Policy: Contemporary Issues and Themes* (Toronto: McGraw-Hill Ryerson, 1980), p. 79.

2. For example, see Annette Baker Fox, Alfred O. Hero, Jr., and Joseph S. Nye, Jr., eds., *Canada and the United States–Transnational and Transgovernmental Relations* (New York: Columbia University Press, 1976); Stephen Clarkson, *Canada and the Reagan Challenge* (Toronto: James Lorimer, 1982); Kenneth M. Curtis and John E. Carroll, *Canadian-American Relations* (Lexington, Mass.: D.C. Heath, 1983); Charles F. Doran, *Forgotten Partnership* (Baltimore: Johns Hopkins University Press, 1984); and David Leyton-Brown, *Weathering the Storm: Canadian-U.S. Relations, 1980-1983* (Toronto: C.D. Howe Institute, 1985).

A major reason for this inattention is that U.S.-Canadian agricultural trade is dependent upon numerous commodities such as beef, pork, oilseeds, fruits and vegetables, poultry and eggs, raw tobacco, and sugar. It lacks the "drama" of the agricultural trade of both countries with the Soviet Union and China, which is so dependent upon a single type of commodity–wheat and other grains. Yet in 1983 a significant shift occurred as the United States became Canada's *leading* market for agricultural exports–a position previously occupied by the European Community and, more recently, by the Soviet Union. The United States was also the most important source of Canadian agricultural imports in 1983, supplying over sixty percent.[4] Furthermore, protectionist pressures in the United States are having a significant effect on a number of Canadian agricultural exports.

A related reason for inattention to food and agricultural issues is that some of the most important American and Canadian agricultural exports, such as wheat, primarily involve trade with third countries. Issues which can be examined in a more exclusively bilateral context such as foreign investment, energy, and non-agricultural trade, are more obvious areas of discussion. Nevertheless, Charles Doran (who also ignores agriculture) warns against the tendency to perceive Canadian-U.S. relations as separable from other systemic interactions:[5]

> One of the shortcomings of contemporary foreign policy analysis is its frequent depiction of Canada and the United States as a dyad, a pair, separable and separated from the rest of the international system. This conceals the origins of state action. It tends to oversimplify decision making and causes policies to appear as though they emerged from a political vacuum. At every point in history, the international system has impinged on U.S.-Canada relations and has shaped outcomes.

3. See J. Price Gittinger, *North American Agriculture in a New World* (Montreal: Canadian-American Committee, 1970); T.K. Warley, *Agriculture in an Interdependent World: U.S. and Canadian Perspectives* (Montreal: Canadian-American Committee, 1977); Theodore Cohn, *The Politics of Food Aid: A Comparison of American and Canadian Policies* (Montreal: McGill University Studies in International Development, 1985); and selected articles in such journals as *American Journal of Agricultural Economics, Journal of Farm Economics, Foreign Agricultural Trade of the U.S.*, and *Agriculture Abroad.*

4. Agriculture Canada, *Canada's Trade in Agricultural Products, 1981, 1982, and 1983,* October 1984, pp. 11 and 15.

5. Doran, *Forgotten Partnership,* p. 29.

This paper, which takes account of "the rest of the international system," examines Canadian-U.S. relations and agricultural surpluses. It is part of a larger research project being conducted on Canadian-American relations and global agricultural trade issues.

Since surpluses have been such a major and recurrent issue in North American agriculture, we can focus here on only one of an array of policies to promote surplus disposal/utilization: barter. We will begin with an historical discussion of the development of agricultural surpluses, and the methods employed to dispose of or utilize them. Barter will then be examined as an issue in Canadian-U.S. relations, and special attention will be given to the multifaceted nature of barter as a surplus disposal measure.[6] There was a gradual shift in the American barter program from Europe and Japan toward the Third World. However, U.S. agricultural barter transactions could not be easily categorized as either governmental or private, as commercial or concessional. One of the laws authorizing the U.S. barter program was Title III of the Agricultural Trade Development and Assistance Act (or Public Law 480). PL 480 is generally considered to provide the authorization for the American food aid program, but as we will discuss, barter was always considered to be a surplus disposal measure that was *not* designed to provide food aid.

The Development of Surpluses and Surplus Disposal. In the early 1950s, global demand for wheat imports declined sharply while wheat production and stocks were increasing to record levels in the major exporting countries. The surplus conditions resulted from a number of factors, including rapid technological advances in agriculture, the end of the Korean War in 1953, support prices in the United States, and a revival of agricultural production and protectionism in Western Europe.

The United States and Canada, as the largest wheat exporters, were seriously threatened by the growing surpluses, and both considered maintenance of a stable export price a primary objective. The two countries endorsed a series of International Wheat Agreements from 1949 to 1967 guaranteeing a continuous supply of wheat at reasonable prices, in part to discourage importing countries from stimulating uneconomic domestic production. While the Wheat

6. "Surplus disposal" in international trade has been defined as "an export operation (other than a sale covered by an international commodity agreement) arising from the existence or expectation of abnormal stocks, and made possible by the grant of special or concessional terms through government intervention." (See Food and Agriculture Organization, *FAO Principles of Surplus Disposal and Consultative Obligations of Member Nations* [Rome, FAO, 2nd edition, 1980], p. 27.)

Agreements deserve some credit for price stabilization, "duopolistic" cooperation between the United States and Canada, whose representatives met quarterly to agree on price levels, was probably a more important factor.[7]

North American food aid policies also resulted partly from a common interest in price stabilization and surplus disposal. The 1954 Agricultural Trade Development and Assistance Act (PL 480) in the United States was enacted for two specific purposes: "to move domestic agricultural surpluses and to make food available on grant and concessional credit terms to food deficient nations."[8]

The Canadian food aid program began at a later date and on a much smaller scale than its American counterpart, but with similar motivations. While the Minister of Trade and Commerce described the establishment of a separate food aid allotment in 1964-1965 as an important part of development assistance, he also defended it in surplus disposal terms as "the right approach to the problems that confront western wheat producers."[9]

Under this broad umbrella of cooperation and consensus, however, there was also tension and conflict between Canada and the United States, resulting largely from differences in domestic politics and in economic capabilities. American agricultural policies were a major factor in the development of surpluses in the 1950s. Government intervention in the market on behalf of U.S. farmers began in earnest with the Depression of the 1930s. The Commodity Credit Corporation (CCC), created by President Franklin D. Roosevelt in 1933, was given authority to support domestic prices by nonrecourse loans to producers and by removing agricultural commodities from the market. American efforts to control production through acreage allotments (beginning with the 1938 crop) and through marketing quotas (starting with the 1941 crop) were inadequate in limiting supplies at prevailing support prices, and large stocks accumulated in the 1950s. This in turn created intense political pressures to dispose of the surpluses. Don Paarlberg has

7. Jon McLin, "Surrogate International Organization and the Case of World Food Security," *International Organization* 33 (1979):46-48; Theodore Cohn, "The 1978-1979 Negotiations for an International Wheat Agreement: An Opportunity Lost?," *International Journal*, 35 (1979-1980):132-149.

8. Mitchell B. Wallerstein, *Food for War–Food for Peace* (Cambridge, Mass.: The M.I.T. Press, 1980), p. 35.

9. Keith Spicer, *A Samaritan State?–External Aid in Canada's Foreign Policy* (Toronto: University of Toronto Press, 1966), p. 179. Also see Theodore Cohn, *Canadian Food Aid: Domestic and Foreign Policy Implications* (Denver: University of Denver Press, Graduate School of International Studies, 1979), chap. 2.

succinctly described the Eisenhower Administration's response to the pressures (from 1953 to 1961):[10]

> We sold what we could for cash. What we couldn't sell for cash we sold for credit. What we couldn't sell for dollars we sold for foreign currency. What we couldn't get money for we bartered. What we couldn't get anything for we gave away. What we couldn't export by any means we stored. And still the stocks increased.

With a smaller economic base, Canada could not contemplate adopting the price support and subsidy policies of the United States. Farm income, and total national income in Canada were far more dependent on the ability to export sufficient quantities of wheat at satisfactory prices. In 1956, for example, wheat and wheat flour accounted for 12.2 percent of Canada's total exports compared with only 4.2 percent of American exports. It would be incorrect to assume that Canadian agriculture was completely unsupported in this period. Indeed, Canadian agricultural price support legislation was introduced in 1944 to protect farmers against postwar price decreases such as those experienced after World War I. Production of hogs, eggs, and dairy products benefitted from this legislation. Government intervention was, nevertheless, far more limited in Canada than in the United States, and Canadian wheat production did not qualify for price supports under the legislation.[11]

Canada was highly critical of American price support policies, arguing that they encouraged farmers to produce wheat without regard to market demand. Furthermore, U.S. export subsidization and surplus disposal programs were a constant threat to Canadian commercial exports. Canada was certainly not opposed to American PL 480 food aid "per se"; as discussed, Canada itself became a food aid donor, albeit on a much smaller scale. Criticism, then, was directed to specific American surplus disposal policies and tactics–such as tied sales and barter–that were particularly threatening to other exporters. Canada felt that U.S. concessional sales should not pre-empt existing commercial markets and should not be used to force less-developed countries (LDCs) to purchase a higher

10. Trudy Haskamp Peterson, *Agricultural Exports, Farm Income, and the Eisenhower Administration* (Lincoln: University of Nebraska Press, 1979), p. xii.

11. FAO of the United Nations, "Changing Attitudes toward Agricultural Surpluses," CCP/CSD/63/27, 12 April 1963, p. 6; Warley, pp. 13-14; and W.E. Hamilton and W.M. Drummond, *Wheat Surpluses and their Impact on Canada-United States Relations* (Washington, D.C.: Canadian-American Committee, 1959), pp. 7-10.

percentage of their commercial imports from the United States. There was also concern about the definitions of "commercial" and "concessional," and about whether "hard" concessional terms were really a form of unfair price-cutting in the commercial market.

Canada frequently used bilateral channels to express concern, but its position was strengthened by the early emergence of multilateral fora to oversee American surplus disposal activities. Other exporters were similarly disturbed by the dumping of U.S. surpluses. The multilateral fora in which surplus disposal/utilization was discussed included the General Agreement on Tariffs and Trade, the International Wheat Council, and the Wheat Utilization Committee. Of particular importance, however, was the Food and Agriculture Organization (FAO), which, in 1953, recommended general principles that governments should follow to prevent surplus disposal from interfering with the sales of commercial exporters. The FAO Principles sought to ensure "additionality," that is, that

> agricultural commodities which are exported on concessional terms result in *additional* supplies for the recipient country, and do not displace normal commercial imports; and similarly that domestic production is not discouraged....While the Principles are not a binding instrument, they represent a commitment by signatory countries.[12]

To ensure adherence to the FAO Principles, a Consultative Subcommittee on Surplus Disposal (CSD) was created in 1954, the same year that the American PL 480 program was enacted. The CSD is a subcommittee of the FAO's Committee on Commodity Problems (CCP), which has generally been dominated by developed-country agricultural exporters. CSD meetings are held monthly in Washington, D.C., and the representatives are national agricultural or commerical counsellors or attachés stationed there. The United States and Canada have been prominent members of the CSD and have often used the Subcommittee to express their common and conflicting views on surplus disposal/utilization measures.

The Barter Issue. Throughout the history of the U.S. agricultural barter program, Canada expressed concerns about displacement of its commercial agricultural exports. The Third World probably profited from the Canadian-U.S. controversy over barter transactions. The United States was pressured to find markets where barter would not injure trade competitors, and therefore more rapidly shifted the

12. *FAO Principles of Surplus Disposal,* p. 2.

focus of its program from Europe and Japan toward the LDCs. However, this was a fortuitous benefit for the Third World, since economic development was not a primary concern to either the United States or Canada in the barter controversy. Also, Europe and Japan continued to provide large, although relatively less important, markets for U.S. barter commodities.

Before examining Canadian-U.S. relations, it is necessary to discuss the origins and evolution of the American barter program. Particular emphasis will be placed on the motivations for the program, and on its gradual shift toward the Third World.

The U.S. Barter Program. The classical definition of barter is "the straight exchange of goods having offsetting values without any flow of cash taking place," but there are many variants that do not accord with this definition.[13] The American program was initially designed from 1949 to serve the dual purposes of reducing stocks of U.S. agricultural commodities, and of acquiring foreign-produced strategic metals and minerals. The strategic materials were stored in government stockpiles to prevent over-dependence on foreign supply sources during national emergencies. American agricultural barter was anomalous in that the government did not barter with foreign governments, but through its Commodity Credit Corporation with U.S. private traders. Contracts were drawn with U.S. firms to deliver to the CCC named strategic materials, and in return these firms took an equivalent value of CCC-owned agricultural commodities and exported them. The barter or exchange, therefore, took place only between the CCC and the U.S. contractors. In actual practice, barter contractors often sold surplus commodities for dollars that were then used to purchase the approved materials.

When barter transactions were first authorized under the CCC Charter Act in 1949, they were limited to acquiring materials that could be immediately transferred to the strategic stockpile or to other agencies with full reimbursement to the CCC. However, since there was a finite requirement for strategic materials, legislation in 1954 and 1956 permitted storage of barter imports not urgently needed in a "supplemental stockpile". The supplemental had no limit on quantities to be acquired, and was simply one indication that the barter program was designed

13. Pompiliu Verzariu, *Countertrade, Barter, and Offsets* (New York: McGraw-Hill, 1985), p. 24.

not primarily to acquire additional materials for their national defense value but to facilitate the disposal of agricultural surpluses in foreign markets. The Department of Agriculture would receive something of value in exchange for the surpluses, materials which would be much less perishable and less bulky, hence much less costly to store, than agricultural goods. For example, storage cost for a ton of wheat is about $5 a year, as against one fifth of a cent for a ton of ore.[14]

By late 1961, materials acquired through barter were valued at over 223 million dollars in the strategic stockpile and at almost 962 million in the supplemental.[15] President Kennedy's reaction to these expanding inventories again demonstrated that the *primary* reason for barter was agricultural surplus disposal, and not the acquisition of strategic materials. On 20 September 1962, Kennedy approved recommendations that the emphasis of agricultural barter be shifted to procurement; that is, acquiring supplies and services needed by overseas agencies, primarily the Department of Defense and the Agency for International Development. This change was designed in part to reduce the outflow of dollars involved in U.S. procurement abroad, but it also facilitated the "export of agricultural commodities."[16]

There are further indications that barter was altered to facilitate the continued disposal of agricultural surpluses. Initially, U.S. legislation limited barter to bilateral contracts. These contracts were often impractical, however, because countries furnishing strategic materials could not necessarily absorb an equivalent value of agricultural commodities. Bilateral barter was therefore largely replaced by multilateral and then open-end contracts, in which strategic materials originated in one country and U.S. agricultural commodities could be exported to one or more different countries. It was not until 1968 (when barter for strategic materials was no longer important) that PL 480 was amended to again restrict barter to bilateral transactions.[17]

14. Glenn H. Snyder, *Stockpiling Strategic Materials: Politics and National Defense* (San Francisco: Chandler Publishing, 1966), p. 218.

15. Ibid., p. 221.

16. United States Department of Agriculture (USDA) Press Release 1958-1961, "USDA Eases Barter Rules for Federal Procurements," 1 May 1961.

17. Comptroller General, Report to Chairman, Subcommittee on Preparedness, Committee on Armed Services, U.S. Senate, *Conditions that Limit Using Barter and Exchange to Acquire National Defense Stockpile Materials*, 19 October 1983, appendix II, p. 5.

Flexibility was demonstrated, not only in the methods of barter adopted, but also in the geographical focus of barter activities. The U.S. Department of Agriculture consistently maintained that barter transactions were commercial, but they are *in fact* not so easy to classify. American barter was usually used with importing countries that were lacking in "effective demand," or demand backed by purchasing power. For example, barter was more common during the 1930s Depression era when normal means of payment broke down. In one agreement, a private U.S. company and the Brazilian government exchanged 25 million bushels of wheat for 1.3 million sacks of coffee.[18]

In Europe and Japan in the 1950s, governments were still prohibiting the convertibility of their currencies and resorting to foreign exchange controls because of balance of payment problems. In the 1950s, therefore, these countries were involved in the predominant share of U.S. barter agreements. As import purchasing power in Japan and Europe increased, American policy statements in the late 1950s and early 1960s signalled a gradual reorientation of barter toward the Third World. In 1961, the Department of Agriculture maintained that its barter for strategic and other materials provided "an additional market for the products of less developed countries, thus contributing to their economic well-being." When the legislation emphasizing barter for overseas procurement was enacted in 1962, it was announced that emphasis would also be given to barter "as an aid in assisting some of the lesser developed countries." In 1963, the Agriculture Department predicted that "future barters for those [agricultural] materials in stockpile surplus will be chiefly with underdeveloped countries."[19]

The data on barter confirm this shift toward the Third World, but they also show that industrial states continued to account for a substantial portion of the transactions. Before 1958-1959 well over three-quarters of American agricultural barter exports went to Japan and Europe.[20] However, by 1969 to 1973 the portion of barter exports to these areas had decreased, ranging from a low of 30.3 percent (in 1970) to a high of 45.9 percent (in 1972).[21] The

18. John C. Kimball, ed., *The Trade Debate*, U.S. Department of State Publication 8942, U.S. Government Printing Office, Washington, D.C., May 1978, p. 7.

19. USDA Press Release 1761-61, "Barter Program Task Force Meets," 5 June 1961; Press Release issued by the White House, 25 September 1962; USDA Press Release 494-63, "USDA Announces Revisions in Barter Program," 13 February 1963.

20. James P. O'Hagan, "International Barter Involving Agricultural Products," *Monthly Bulletin of Agricultural Economics and Statistics* 11 (July/August 1962):7.

21. Selected issues of *Foreign Agricultural Trade of the United States (FATUS)*. A small

geographic distribution varied according to agricultural commodities exported; of particular importance to Canada were wheat shipments under barter for overseas procurement. By the late 1960s, these were directed almost entirely to the Third World. For example, in fiscal 1969, 51.2 percent of U.S. barter wheat went to Latin American LDCs, 47.5 percent to Asian LDCs, 1.4 percent to African LDCs, and only 0.1 percent to Europe.[22]

Despite the shift toward the Third World, the motivation for the barter program continued to be U.S. surplus disposal, and not development. Thus, a 1960 report of the Canadian-American Committee accurately predicted that:[23]

> Barter...is obviously a means of providing a degree of economic assistance to some less developed countries. Its role in this connection, however, is likely to be sporadic and fortuitious in the sense that it is difficult to mesh barter transactions in an appropriate over-all framework of economic aid to particular countries. In other words, reliance on barter is limited by the fact that consultation between the United States and recipient governments concerning over-all supplies and requirements for food and fibers cannot proceed with full assurance that suitable barter opportunities will be discovered by private traders. In these circumstances, other surplus disposal techniques will be more effective in achieving specific economic aid objectives.

Tables 1 and 2 show that American agricultural exports under barter steadily increased from 1963 (when barter for offshore procurement was facilitated) to 1973. However, agricultural barter was suspended on 1 July 1973 for the same reason that it had been introduced in 1949: surplus disposal considerations. According to a report submitted by a former administrator of the barter program, "relatively tight supplies of some major agricultural commodities resulted in the suspension of the program."[24]

With the re-emergence of U.S. agricultural surpluses, of strategic material shortages, and of serious balance of payment problems in some important LDCs (as well as in the United States), pressures for a revival of agricultural barter developed in the early 1980s. In

percentage of U.S. agricultural barter exports also went to Canada and Australia during this period.

22. *FATUS*, December 1970, p. 18.

23. *Wheat Surpluses and the U.S. Barter Program*, A Statement by the Canadian-American Committee, March 1960, p. 12.

24. Statement of Francis A. Woodling, appendix, p. 1.

Table 1

VALUE (IN MILLIONS OF DOLALRS) OF U.S. AGRICULTURAL EXPORTS UNDER BARTER TRANSACTIONS
(fiscal years)

1950	$ 8	1962	$ 198
1951	9	1963	60
1952	43	1964	112
1953	14	1965	130
1954	34	1966	229
1955	125	1967	295
1956	298	1968	302
1957	400	1969	269
1958	100	1970	467
1959	132	1971	870
1960	149	1972	876
1961	144	1973	1,088

Source: Willard W. Cochrane and Mary E. Ryan, American Farm Policy, 1948-1973 (Minneapolis: University of Minnesota Press, 1976), Tables 7-6 and 7-7.

Table 2

U.S. AGRICULTURAL EXPORTS UNDER BARTER TRANSACTIONS
(IN MILLIONS OF DOLLARS)
AS A PERCENT OF U.S AGRICULTURAL EXPORTS
UNDER ALL FORMS OF GOVERNMENT ASSISTANCE
(IN MILLIONS OF DOLLARS)
(fiscal years)

1950	0.4%	1962	5.3%
1951	0.7	1963	1.8
1952	4.8	1964	2.8
1953	1.2	1965	3.2
1954	2.8	1966	5.6
1955	9.6	1967	7.1
1956	14.9	1968	8.9
1957	12.9	1969	12.5
1958	3.8	1970	13.8
1959	6.2	1971	19.8
1960	5.7	1972	20.0
1961	5.0	1973	18.2

Source: Cochrane and Ryan, derived from Tables 7-6 and 7-7.

February 1982, the U.S. Agriculture Department, under Presidential directive, signed an agreement with Jamaica to barter dairy products for bauxite to be placed in the strategic stockpile; a second barter agreement for Jamaican bauxite was signed in November, 1983. Unlike previous barter transactions, these were implemented by government-to-government agreements.[25]

In accordance with earlier American policy, it is clear that "surplus disposal" rather than "economic development" was the primary motivation. The Jamaican-U.S. agreements were difficult to reach, particularly because of disagreement over suitable commodities. Jamaica preferred to receive wheat and corn, but American price restrictions made these products too expensive. Only after protracted negotiations did Jamaica reluctantly agree to take U.S. dried milk and butter oil. The special focus on dairy products is not surprising since CCC inventories of these commodities as of July 1983 were valued at over 3.25 billion dollars.[26] Prospects for additional U.S. barter agreements involving agricultural exports are uncertain, primarily because of restrictive U.S. legislative requirements, conflicting domestic interests, and the protests of competing exporters.

Canadian-U.S. Relations and American Barter. Canada never seriously considered using barter to dispose of agricultural commodities, even though storage of surpluses was extremely costly. As discussed, Canada was far more dependent than the United States on exporting wheat at satisfactory prices and could not adopt similar surplus disposal measures. Furthermore, as a smaller power without wide-ranging military interests, Canada did not require large stockpiles of strategic materials. Thus, in 1955 the Canadian Minister of Trade and Commerce C.D. Howe remarked:[27]

> I am surprised–perhaps shocked is a better word–at the suggestions that...Canada should follow the very same policies of surplus disposal that we criticize when followed by our competitors. Some people would like us to go in...for barter and so forth...these proposals...are all a concealed form of 'give away' or discount. If we were to go in for that sort of marketing, we would really be selling cheaper to one customer than to another.

25. G.W. Green, "The Agricultural Barter Issue in the United States," *Agriculture Abroad,* 34 (1984):51; Verzariu, *Countertrade, Barter, and Offsets,* pp. 55-56.

26. Green, "The Agricultural Barter Issue in the United States," pp. 46-51.

27. "Howe Sees Little Loan Demand," *Winnipeg Free Press,* 28 November 1955, pp. 1 and 4.

Despite the strong opposition to U.S. barter, it is interesting that Canada did receive some benefits from the program. The issue was rarely discussed, but many of the metals and minerals in U.S. stockpiles were supplied by Canada in multilateral and open-end barter agreements. Indeed, Canada was the second largest source of strategic materials under the U.S. Department of Agriculture barter program, supplying exports valued at 141,797,000 dollars (U.S.).[28] When a program reappraisal by the U.S. government in 1957 threatened to reduce barter transactions drastically, a *Financial Post* article expressed frustration with Canadian vulnerability:[29]

> The cards are stacked against us in our economic poker game with the United States. It now has become clear that the only reason we may be able to sell more wheat in the world market is because we will soon be selling a lot less lead and zinc....Washington has been stockpiling lead and zinc...in exchange for surplus wheat...This buoyed up the world market and kept prices relatively stable. With the United States suddenly cutting off this heavy buying for the stockpiles, the bottom fell out of the market.

The possible benefits to Canada notwithstanding, the official government position was to disapprove of agricultural barter. In 1961, for example, a U.S. State Department official referred to the interest of a Canadian company (Consolidated Mining and Smelting) in the barter of agricultural commodities for lead and zinc. A Canadian Department of Trade and Commerce official nevertheless maintained that any gains Canada received from strategic material exports could not offset the potential loss of entire markets for grains.[30]

A major problem for Canada was finding a proper forum for expressing its opposition to U.S. barter. As discussed, the primary mandate of the FAO Consultative Subcommittee on Surplus Disposal (CSD) is to ensure that subcommercial transactions (that is, food aid) do not interfere with the markets of agricultural exporters. The CSD seeks assurance of "additionality" in food aid transactions, that is, that concessional exports are *additional to* commercial sales, and therefore do not displace them. The Subcommittee has developed a

28. Statement of Francis A. Woodling, appendix. South Africa was the largest supplier, India was third, and Jamaica was fourth.

29. Quoted in Hamilton and Drummond, *Wheat Surpluses and their Impact on Canada-United States Relations,* pp. 3-4.

30. Confidential source.

two-tiered process by which aid-supplying countries are expected to notify and consult with competing exporters that may be adversely affected by their transactions:[31]

> Having developed...a proposed food-aid transaction, the aid-supplying country usually first consults bilaterally with third countries which are normally suppliers to the recipient country of the commodity involved. Following bilateral consultations (which may result in some modifications of the proposals) multilateral consultations are conducted through CSD.

The American barter program was frequently discussed by the United States and its competitors in the CSD in the 1950s and 1960s, and a working group on barter was established by the Subcommittee in March 1960. However, Canada and other exporters were dissatisfied that barter agreements did not fall under the usual notification and consultation procedures. The nature of the American barter program, which involved transactions through private contractors, prevented advance notification and consultation with other governments. The amount of information available even after completion of such transactions was limited. Unlike other surplus disposal measures, the American government felt that providing the details of barter contracts would put unacceptable restraints on the activities of private contractors.

Canada joined with other exporters in criticizing the American barter program in the CSD and supported formation of the working group on barter.[32] However, it also sought regular bilateral discussions with the United States on barter transactions, in view of the U.S. propensity to provide only limited information to the CSD.

Barter issues were often discussed in the Canada-U.S. Ministerial Committee on Trade and Economic Affairs. The Committee was established in November 1953 by an exchange of notes "to consider matters affecting the harmonious economic relations between the two countries."[33] Surplus disposal problems were almost a regular item on the Committee's agenda from 1957, when American

31. *FAO Principles of Surplus Disposal*, p. 6.

32. Members of the CSD working group on barter were Australia, Canada, the Netherlands, New Zealand, the United Kingdom, and the United States. The group held eight meetings between March 1960 and June 1961, but in the end never reached agreement on the appropriate scope for their study, or even on a definition of barter.

33. Roger Frank Swanson, *Intergovernmental Perspectives on the Canada-U.S. Relationship* (New York: New York University Press, 1978), p. 159.

programs began to have serious adverse effects on Canadian commercial marketings. However, the Committee's annual meetings were too infrequent for adequate expression of Canadian concerns. In view of Canada's strong reaction to revisions in the U.S. barter program in November 1958, the Joint Committee agreed at its fourth meeting in January 1959 to establish Quarterly Meetings between Canadian and U.S. officials on wheat and related matters. The Quarterly Meetings provided a regular opportunity to consult on U.S. transactions under PL 480 and on Canadian shipments under the Colombo Plan. U.S. barter was frequently a major topic of discussion at these meetings.

As Table 1 demonstrates, the U.S. barter program had an erratic history, marked generally by increases in barter from 1950 to 1957, fluctuations at a lower level from 1958 to 1962, and steady increases from 1963 to 1973, when the program was abruptly suspended. The variable levels resulted from numerous policy reassessments and changes, too numerous in fact to discuss in this paper. In general, the policy changes occurred because of external protests (primarily from Canada), and more importantly, because of domestic political factors in the United States.

Canada viewed agricultural barter as an unorthodox form of price-cutting that gave the United States an unfair competitive advantage. We earlier discussed the fact that U.S. agricultural barter had concessional characteristics and was usually directed toward countries lacking effective demand. In earlier years, American barter contractors benefited from extremely favourable interest rates and other incentives; this enabled them to take a somewhat lower dollar price on sales of CCC agricultural commodities. Also, U.S. barter commodities could sometimes be offered at cut-rate prices if strategic materials were in turn readily available and in abundant supply. Furthermore, the association of barter transactions with foreign assistance programs (the Mutual Security Act and PL 480) indicated that the U.S. government was intimately involved in promoting such transactions. Indeed, Canada viewed a "barter differential" paid to U.S. exporters to make them more competitive as simply a hidden form of export subsidy.

In the Quarterly Meetings, Canada expressed the view that the United States should honour the additionality principle in its barter transactions. It argued that the U.S. transactions should be additional to commercial sales of *all* major exporters, and not only to American sales. Criticism in the 1950s was also directed at the barter program's focus on Europe and Japan. Canada maintained that its

largest commercial market for wheat exports (in Western Europe) was being threatened, and that the United States should reorient barter transactions toward countries with less effective demand. These Canadian objections undoubtedly contributed to development of a U.S. classification system of countries eligible for barter in the late 1950s. Canadian markets in Western Europe, including Britain, Belgium, Luxembourg, the Federal Republic of Germany, the Netherlands, and Switzerland became ineligible for these transactions.[34]

Canada's protests therefore were one factor in a reorientation of the U.S. barter program toward Third World countries. However, LDCs were only inadvertently beneficiaries of Canadian-U.S. disputes over barter transactions. Canada's primary concern was protecting its commercial markets, and it also protested loudly when U.S. barter with LDCs threatened its interests. For example, in the early 1960s an American-owned flour mill was established in Haiti, and this was subsequently supplied with U.S. barter wheat. Some of the Haitian-produced flour was sent to Jamaica, which has supplied the United States with bauxite through barter agreements. Canada complained repeatedly that the market for its flour in Jamaica virtually disappeared because it could not ship flour at Haiti's low prices.

From a Canadian perspective, the U.S.-Haitian agreement showed how damaging barter could be, since barter in one market (Haiti) could disrupt sales in another (Jamaica). The United States explained that there had been a ban on re-exports of barter wheat from Haiti but not of flour. However, this was not, of course, considered to be a satisfactory response. As a result, Canada proposed reclassifying the Caribbean so that the area would be ineligible for U.S. barter transactions.

Canada experienced only mixed success in pressuring for alteration in U.S. barter policies, but it was evident that the United States was sensitive to Canadian concerns from an early date. For example, a memorandum concerning an April 1954 meeting of the U.S. National Security Council states:[35]

> Secretary Dulles...raised the specific problem of a Brazilian request for U.S. wheat. Since Brazil had played a key role in helping the United States at Caracas, should we not give the Brazilians the wheat they needed in exchange for materials which we might not need very much? At least this would get rid of our wheat and help a good friend. The President [Eisenhower] replied that if the transaction did not place obstacles in Canada's path it should be done by all means.

34. Confidential source. Some countries were reclassified in subsequent revisions of the system. Also, these European countries were not ineligible for U.S. barter for overseas procurement, which gained importance in the 1960s.

35. U.S. Department of State, *Foreign Relations of the United States, 1952-1954* (Washington, D.C., 1983), 1:195.

American sensitivity to Canadian interests also increased as a result of the Quarterly Meetings beginning in 1959. However, domestic U.S. politics was clearly a more important factor than external pressures in determining the direction of the barter program. Canada's influence was always affected by the relative strength of domestic American groups with convergent (and divergent) interests.

The history of the American barter program was marked by almost constant differences among domestic producer and government actors. Congressional agricultural leaders, representing producer interests, were certainly among the most consistent supporters of barter. For example, during the Eisenhower period, Congress felt that the Administration and the Department of Agriculture (USDA) were failing to vigorously implement surplus disposal policies, including the barter program. Indeed, the Administration was concerned (like Canada) that barter transactions with Northern Europe were replacing rather than supplementing (U.S. as well as Canadian) dollar sales; it felt that unlimited barter might simply stimulate overproduction in the United States; and it realized that by 1959 strategic stockpile goals had been met and that some materials greatly exceeded domestic requirements. In contrast, agricultural leaders in Congress emphasized the positive aspects of barter and felt that it was better to invest in durable goods than in perishable agricultural products. The USDA's reluctance to accelerate barter activities

> led to the introduction of legislation requiring the Secretary of Agriculture to carry out barter transactions...Democrats were not alone in taking issue with the Administration's attitude on the use of PL 480.[36]

36. Elmer L. Menzie and Robert G. Crouch, *Political Interests in Agricultural Export Surplus Disposal through Public Law 480* (Tucson: The University of Arizona Press, Agricultural Experiment Station Technical Bulletin 161, September 1964), p. 38.

The U.S. State Department was viewed by legislators as an even greater threat than the USDA to surplus disposal activities in the 1950s. State Department officials were more sensitive to demands of friendly competitors such as Canada, and thus were highly skeptical of the barter program. A statement by one congressman at the time expressed the exasperation of many of his colleagues with these outward-looking policies:[37]

> It looks to me as if the Department of State is afraid of offending some foreign countries and therefore has not permitted the Department of Agriculture to freely carry out the intent of the Congress to dispose of this surplus.

Canada seemed to benefit from these domestic differences in the 1950s, and there is considerable evidence of its influence on U.S. barter policy. It was during the late 1950s that the United States first applied the additionality principle to barter, developed its country classification system, agreed to the establishment of Quarterly Meetings with Canada, and shifted the focus of barter transactions toward the Third World.

However, friction between Congress and the Department of Agriculture decreased with election of the Democratic Kennedy Administration in 1960. The new government was more willing to promote PL 480 programs aggressively in accordance with demands of the Democratic-controlled Congress.[38] Canada was fearful of the more unified U.S. position and of the "New Frontier" philosophy which involved aggressive use of American agricultural abundance as an instrument of foreign policy.

In accordance with the attitudes of the new Administration, the U.S. barter program was extensively reassessed from 1961 to 1963 with a view to increasing such transactions. During this period, Canada vigorously protested the program in the Quarterly Meetings, and there is evidence that the United States responded by modifying its objectives. Nevertheless, on 25 September 1962, President Kennedy announced a reorientation of barter from acquisition of strategic materials to offshore procurement of goods and services.

This change in the program led to a steady increase in barter activity from 1963 to 1973 (see Table 1). While Canada had lost sales in the 1950s because of U.S. barter in Europe and Japan, in the 1960s it was also losing markets in LDCs. For example, Table 3

37. Quoted in Ibid., p. 40.
38. Ibid., p. 39.

shows that Canadian sales of wheat and flour to Costa Rica, Guatemala, Honduras, and Nicaragua virtually disappeared from 1964 to 1968, while Canada's share of wheat exports for Ecuador was seriously eroded during this period. Barter was one factor contributing to decreased Canadian competitiveness in these markets. Starting in 1965, an increasing proportion of U.S. wheat exported to Central America was bartered. In 1967, all American shipments to Costa Rica, Guatemala, Honduras, and Nicaragua were based on barter transactions. In Ecuador, barter covered one-half of U.S.

Table 3

CANADIAN AND U.S. EXPORTS OF WHEAT AND WHEAT FLOUR*
(thousand metric tons)

	1964		1965		1966		1967		1968	
	C	US	C	US	C	US	C	US	C	US
Costa Rica	24	26	28	18	24	37	--	46	--	71
Guatemala	13	53	6	61	1	72	--	59	1	59
Honduras	3	25	3	30	2	30	--	27	**	39
Nicaragua	14	16	14	18	7	28	--	22	--	35
Ecuador	32	25	32	37	11	55	8	58	14	63

* Figures for Ecuador are only wheat.

** Less than one thousand metric tons.

Source: S. C. Hudson, Future Market Outlets for Canadian Wheat and Other Grains, prepared for the Economic Council of Canada, January 1970, pp. 179 and 183.

wheat shipments in 1965 and all U.S. shipments in 1966 and 1967.

The history of the American barter program demonstrates the importance that Canada should give to communicating its viewpoint to the U.S. Congress. In the 1950s, Congress pressured the Eisenhower Administration to accelerate its surplus disposal activities, and in the 1960s it supported the more aggressive position of the Democratic Administrations. Although President Reagan endorsed the barter agreements with Jamaica in the 1980s, it is clear that support for a revival of barter is emanating from some agricultural leaders in Congress. In November 1981, for example, a House of Representatives subcommittee requested that the Department of Defense help initiate a program to barter surplus agricultural commodities for needed stockpile materials. An ad hoc working

group was then established by Defense to identify countries with an interest in barter agreements.[39] A Canadian Agricultural Counsellor in Washington, D.C. has also noted that

> Of the hundred or so bills and resolutions dealing with agricultural trade which were introduced in the U.S. Congress during 1983...some twenty were concerned, in one way or another, with the encouragement of international barter.[40]

Canada has in the past been rather inept in dealing with the U.S. Congress and has directed its energies primarily to the Executive. The major discussions on barter, in the Joint Ministerial Committee and Quarterly Meetings, were held with American executive rather than legislative officials. As Peter Dobell has stated,

> with parliamentary government...the prime minister and the government are in practice normally able to speak for and commit Parliament. That the separation of powers produces an entirely different situation in Washington is a fact often ignored in Canada.[41]

Efforts have been made in recent years to remedy this shortcoming in Canadian foreign policy-making. For example, in 1983 the Cabinet approved a policy developed by the External Affairs Department to ensure that Canadian views are more clearly heard in the United States, with Congress one of the intended targets.[42] A recent article in an Agriculture Canada publication on the possible revival of U.S. agricultural barter also gives considerable attention to the role of the Congress. The United States was usually sensitive to Canadian criticisms of its barter program, but history shows that Canada's influence was extremely limited when alignments among U.S. domestic groups were unfavourable to Canadian interests.

Experience with the American barter program also demonstrates the importance to Canada of bilateral as well as multilateral fora for discussion of major issues. As stated, Canada turned to the bilateral Joint Ministerial Committee and Quarterly Meetings in part because

39. *Conditions that Limit Using Barter*, p. 3.

40. Green, "The Agricultural Barter Issue in the United States," p. 46.

41. Peter C. Dobell, "The Influence of the United States Congress on Canadian-American Relations," in Fox, Hero, and Nye, *Canada and the United States–Transnational and Transgovernmental Relations*, p. 334.

42. David Stewart-Patterson, "Soft Talk, Bigger Sticks are Planned for U.S.," *Globe and Mail*, 14 March 1983, p. B1.

American notification and consultation procedures for barter in the multilateral CSD were inadequate. It is interesting that a 1969 working group of the Committee on Commodity Problems decided that barter transactions should no longer fall within the jurisdiction of the FAO (and therefore also the CSD). Although barter has some concessional aspects, it was considered directly related to commercial trade and therefore the responsibility of the General Agreement on Tariffs and Trade (GATT).

The GATT, however, has often been ineffective in dealing with agricultural trade issues, and barter was no exception. No decision has ever been reached in the GATT regarding consultations, reporting obligations, or surveillance procedures for agricultural barter transactions.[43] If such transactions become more frequent in the 1980s, Canada might therefore have to depend on bilateral channels for negotiation with the United States even more than it did in the 1950s and 1960s.

Conclusion. The American agricultural barter program was suspended in July 1973, but the issue remains highly relevant today. As discussed, barter was revived with U.S. agreements to exchange dairy products for bauxite with Jamaica in February 1982 and November 1983. Although prospects for additional barter agreements are uncertain, there has clearly been a renewed interest in the subject among Congressional agricultural leaders. The conditions that originally led to the barter program are also present today: the re-emergence of U.S. agricultural surpluses, of strategic material shortages, and of serious balance of payment problems in some important Third World countries (as well as in the United States). Some recent studies have highlighted the dependence of the United States on imports of many important metals and minerals from LDCs:

> About one-half of total petroleum supplies available to the United States are imported; 90 percent of these imports come from developing countries....U.S. imports from developing market economies account for 100 percent of domestic consumption of columbian and strontium. The Third World supplies more than one-half of the bauxite, tin, cobalt, and other materials vital to U.S. industry...these imports constitute a major element of

43. FAO of the United Nations, "Twenty-Sixth Report of the CSD to the Committee on Commodity Problems," CCP/CSD/76/184, 27 September 1976, p. 5. Also see Robert L. Bard, *Food Aid and International Agricultural Trade* (Lexington, Mass.: D.C. Heath, 1972), p. 157.

U.S.-developing country interdependence.[44]

If barter were to become important again, however, agricultural surpluses rather than strategic material shortages would be the primary motivating force, as in the earlier period.

Even if U.S. *agricultural* barter is not revived, the history of the program can provide valuable insights for understanding other "compensatory arrangements" involving exchanges of products today. "Barter trade exchanges," which are a growing industry, are clearing-houses "for the sale and purchase, on either a full barter basis or a part-barter basis, of goods and services belonging to...[their] membership." In the United States and Canada there are currently about 300 barter exchanges serving 100,000 members.[45] Also, "countertrade" is another form of compensatory arrangement that is of increasing interest today.

Of more importance to this paper, U.S. agricultural barter agreements were often "grey area" transactions that were neither governmental nor private, neither commercial nor concessional. Such transactions can be a disguised form of price-cutting. They threaten the commercial markets of other exporters, such as Canada, and yet provide only questionable benefits to LDCs. A more contemporary form of "grey area" transaction is the U.S. Intermediate Credit Program, authorized in 1978 to promote exports of agricultural commodities. The new Aid-Trade Fund of the Canadian International Development Agency is more aid-oriented than the above forms, but is also somewhere in the "grey area." In February 1984, the federal Liberal government announced that up to one-half of the increase in Canada's foreign aid budget over the next five years would be directed to the Aid-Trade Fund. An article in *International Perspectives* on this fund was entitled (not surprisingly) "CIDA–Aiding or Trading?." When this trend of mixing trade promotion with CIDA's aid activities was accelerated under the Mulroney Conservative government, *The Globe and Mail* suggested that CIDA "may as well be renamed the Canadian Export Development Agency (CEDA)."[46]

44. John A. Mathieson, *U.S. Trade with the Third World: The American Stake* (Muscatine, Iowa: The Stanley Foundation, Occasional Paper 28, January 1982), pp. 11-12.

45. Verzariu, *Countertrade, Barter, and Offsets*, p. 26.

46. Gary Gallon, "CIDA–Aiding or Trading?," *International Perspectives*, July/August 1984, pp. 17-20; "Bad for Aid and Trade," *Globe and Mail*, 28 May 1985, p. 6.

The American agricultural barter program was originally focussed on Europe and Japan, but it shifted gradually toward the Third World. However, it remained a program to promote U.S. national objectives rather than an instrument of development. This was clear from a statement of a USDA official in 1973 before a Senate Subcommittee on Foreign Agricultural Policy:[47]

> About 1 3/10 percent of the value of the commodities exported is a barter differential that is paid to exporters and it does allow them to be more competitive in the foreign market.
> By the same token, it generates funds in those destination countries which can then be used by the Department of Defense and some by AID. It is a great help to our balance of payments.

In accordance with this approach, U.S. barter was abruptly suspended in 1973 when commercial demand escalated and agricultural surpluses virtually disappeared. In the agreement in the 1980s, Jamaica was pressured to accept surplus U.S. dairy products rather than wheat and corn, which it preferred. It is not surprising, therefore, that LDCs have been unenthusiastic about U.S. agricultural barter. The ad hoc working group established in 1981 by the Defense Department had difficulty in identifying countries willing to barter strategic materials for U.S. dairy products. Nigeria and China were the only countries identified with a potential interest, but their stockpile materials are sale items and they would probably be reluctant to barter.[48]

Canada's protests against American barter in the 1950s undoubtedly contributed to the program's shift toward the Third World. However, Canada was no more concerned about the effects of barter on economic development than was the United States. It protested U.S. barter activities in Haiti and Jamaica as readily as in Europe and Japan if Canadian commercial markets were threatened. Since Canada was dissatisfied with U.S. notification and consultation procedures in the FAO Consultative Subcommittee on Surplus Disposal, discussions on barter often were left to the Canada-U.S. Quarterly Meetings and Joint Ministerial Committee, in which LDCs were not present.

47. General Sales Manager, Export Marketing Service, USDA, before the Subcommittee on Foreign Agricultural Policy of the Committee on Agriculture and Forestry, U.S. Senate, 93rd Congress, 1st Session, 23 March-30 April 1973, p. 124.

48. *Conditions that Limit Using Barter*, pp. 9-10.

The United States and Canada both have substantial food aid programs and have also been important contributors to agricultural development research in LDCs. Yet, in Canadian-U.S. discussion on the "grey area" issue of agricultural barter, Third World development was clearly an entirely peripheral issue.

Notes on an International Perspective on Agriculture

Jozef M. van Brabant

Introduction. Even a cursory analysis of the current agricultural situation in the world reveals two sharp contrasts. On the one hand, the international community has been extremely concerned in the past year or so about: (i) the deteriorating agricultural situation in Africa south of the Sahara, which has been increasingly recognized as structural in origin; (ii) the impact of the drought that has now devastated wide tracts of land and uprooted many traditional societies in the sub-Saharan region for over three years; and (iii) the widespread escalation in the levels of malnutrition, famine, and, indeed, starvation in Africa. The latter scourges have been rampant in many areas of the continent with great virulence for over a year now, and no quick relief is in sight in spite of stepped-up international emergency assistance.

In fact, conditions in many countries of the subcontinent have been so bad that the 39th General Assembly of the United Nations last year adopted the Declaration on the Critical Economic Situation in Africa. The emergency situation for 20 drought-stricken countries of sub-Saharan Africa has galvanized international relief efforts of various dimensions. But thousands of people have already starved to death, millions have had to consume whatever little assets they possessed and then abandon their traditional villages in search of food and water. A multiple of the dispossessed and uprooted millions are being exposed to the adverse effects of malnutrition. These factors are bound to have an indelible impact on the physical constitution and psychological well-being of an appalling number of people. Especially greatly affected have been the children of Africa. Even if they manage to avert starvation now, malnutrition is known to have a particularly devastating impact on children that, in some instances, will last for the rest of their lives.

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On the other hand, the situation in many developed countries, especially those of North America and Western Europe, is one of trying to stave off rising production levels in order to curb fiscal subsidies and to avert further erosion of producer prices. In fact, maintaining agricultural incomes through government regulation of domestic farm markets has been a matter of serious concern in these countries. But increasingly more forceful questions are being raised about the budgetary implications of such government policies, especially in the context of the "disengagement" that governments of many developed market economies have professed as one essential avenue leading out of the stagflation syndrome of the 1970s. The national and particularly the international repercussions of such domestic policies as trade prices, food reserves, accessibility by those in need, and traded quantities have not yet received the full attention due to them.

A related paradox derives from the sharp contrast between efforts in a number of developing countries to raise domestic output levels and integrate subsistence farming into a better integrated economy. This is taking place, with considerable international financial and technical support, at a time when many developed market economies are trying to avert rising production levels through increased regulation of domestic markets and, in many cases, further restrictions on foreign competition. Such efforts to restructure the agricultural sectors in many of the least developed countries were basically launched in the mid and late 1970s, that is, at a time of growing instability in international economic and financial markets. In fact, the resolve to undertake meaningful structural changes in agriculture, especially in Africa, has been considerably frustrated by external payments constraints and, more generally, by the policies of developed market economies. The sluggish state of development assistance in the past five years or so and the emergency economic situation in many developing countries, owing to rising interest rates, weakening of their terms of trade, flagging demand for their key commodity exports, and increased servicing costs of foreign debt, have had a grave impact on "investment," including agriculture investment.

The recent past has amply demonstrated that the domestic resolve to progress with adequate national policies–which is today present in most developing countries–must necessarily interface with a favourable international environment, which has still to materialize.

Shortages in some parts of the world in combination with surpluses elsewhere, according to elementary economics, should

indeed be a normal characteristic of an orderly interdependent world economy. Unfortunately, this is not quite the case for a variety of reasons. An application to Canada may buttress this point, although I do not intend to do more than flag a few crucial indicators.

Although it was once central to the Canadian economy, agriculture now accounts for only about 5 percent of total employment and perhaps 3.5 percent of total value added in Canada's real GNP. But the sector continues to be an important and rising source of export earnings–well over 10 percent in recent years. Exports of grain in various forms account for about half of all agricultural exports and, in recent years, have continued to gain in importance. As in many other developed economies, government intervention in agriculture is very extensive. Half of farm revenues are said to pass through various marketing boards. Thus, the Canadian Wheat Board attempts to keep prices artificially high through its role as the sole export marketer of these crops. But there are quota systems used for dairy products, eggs, tobacco, and other products.

Generally speaking, the trading and financial networks at the global level have continued to improve considerably, so that the present degree of worldwide economic interdependence is already very high. While this still growing degree of the immediacy with which economies interact may enhance the synchronization of business cycles and may perhaps intensify the amplitude and narrow the length of the cycles, the world economy on the whole has been served well by this interaction. Since Canada is a substantial net exporter of agricultural products and such a vast component of Canadian agricultural exports is regulated through various provincial and federal government channels, it may be of interest to explore several dimensions of why–at the global level–all is not well with agriculture and why the sector is one characterized by severe contradictions and conflicting contentions that need to be resolved at the earliest opportunity.

Global interaction in agriculture is marred by a number of obstacles. Some are institutional, such as the trading environment, but others derive from a lack of coordination of policies pursued by key actors in the world economy. Since the chances for success of national policies directed at enhancing agricultural development in the most deficient countries depend to a large degree on the external environment, the particular type and mix of policies chosen by large producers and exporters are crucial.

Against this broad backdrop, it may be of some interest to reflect

upon a selection of key issues that help to explain why there are palpable maladjustments in agriculture. The most important problems facing the international community at this juncture can be discussed at five levels: very uneven, and at times quite unstable, output performance of different regions; food security; international competition; agricultural development strategies; and food aid.

Uneven and Unstable Output Performance. Agricultural growth in the world has been very uneven. In fact, the gap between policy goals and achievements in agriculture and food in many countries has continued to grow. I shall raise here only a few key points with respect to the output performances of centrally planned economies and the least developed countries because they have an important bearing on food security, food aid, and agricultural development strategies.

The Soviet Union especially but also the industrialized centrally planned economies of Eastern Europe have embraced food independence as a key aspiration of development policies. This goal has been made very explicit since the mid-1970s, when external payments problems started to become chronic. Even though this policy ambition is not aimed at absolute independence, it does signal that policymakers there are prepared to enact measures that will ensure, on average, steady increases of domestic agricultural output and cutbacks in imports.

It is well known that the grain harvests of the USSR have fallen substantially short of plan targets[1] now for over six years, with the shortfalls roughly ranging between 40 and 80 million tons.[2] Mainly for policy reasons, as examined in some detail in Cohen's paper in this volume, the Soviet Union has been one of the main chronic importers, particularly of grains. Most of the USSR's import needs have been met in an orderly fashion, through contractual and other bilateral arrangements, in spite of the fact that major exporters have been using agricultural trade as one important channel through

1. The most recent plan data for the USSR were adopted in the late 1970s in the context of the formulation of the medium-term plan for 1981-1985. These were certainly firm guidelines under the Brezhnev leadership, especially in view of the grain embargo imposed in January 1980 by then President Carter. Indeed the food program adopted in 1980 was in direct response to the growing uncertainty about access to international grain markets. It is, however, unknown whether the succeeding three leaders of the USSR, especially Mr. Gorbachëv, have reviewed the long-held aspiration toward self-sufficiency.

2. It would be a serious mistake, however, to equate this below-plan performance with "bad" production levels. While in the past six years the record 1978 output level could not be replicated, it should be stressed, nevertheless, that in 1983, for example, the harvest was the second highest on record.

which broad foreign policy precepts are slated to be pursued. This substantial volume of trade has nevertheless been cause for concern in view of: (i) the drain on convertible currency reserves, although the substantial windfall gains from Soviet energy exports have helped to mitigate the impact to a considerable extent; (ii) the marginalization of most other importers through the sheer size of Soviet import demand; and (iii) the meshing of political and economic goals in grain trade.

Regarding the majority of the least developed countries in the world, their agricultural and food performances in recent years have fallen far short of the goals held by most national policy-makers and the international community at large in many important respects. The shortfalls have been most pronounced in Africa–the one region of the world where food production has not kept up with population growth now for a decade and a half. This long-term decline in *per capita* agricultural and food production in Africa poses, in a sense, the most immediate threat to global food security, on which more below.

Two decades ago, the continent was self-sufficient in food. However, neglect of the rural sector and the generally low priority accorded to agriculture in development strategies gradually eroded the agricultural base and made many African countries dependent on outside supplies. The recent food crisis is characterized by a long-term decline in soil quality, chronic or seasonal hunger in the countryside, and growing dependence on food imports and food aid to feed expanding rural centers. Rising foodstuff imports have conflicted with other claims on scarce foreign exchange reserves. Food aid has, at best, been a rather unstable source of supply and, in any case, has not been sufficient to maintain parity with constantly rising needs, even though Africa's share in total food aid has risen from almost 5 percent in the early 1970s to nearly 50 percent in the early 1980s.[3] These developments are all the more disturbing since the continent has considerable potential for higher levels of productivity in food production.

Food Security at the National, Regional, and Global Level. Food security has to do with production, stability of supplies, and global access to overall supplies. By food security I mean two interrelated characteristics. On the one hand, it signals that at any moment adequate reserves of key food items, cereals in particular, are guaranteed at the global, regional, and, national levels.[4] How this guar-

3. Food and Agriculture Organization of the United Nations, *World Food Report–1984* (Rome: FAO, 1984), p. 28.

antee is enacted is in and of itself not as important as the fact that adequate stocks are being maintained. On the other hand, it also requires that appropriate access to those stocks is guaranteed to all those who can be expected eventually to offset shortfalls in domestic output levels or unexpected losses of national reserves by drawing on these reserves. Food security is a very broad concept with many different dimensions. I shall touch upon five related issues here: national security, institutional and market instability, price instability, market access, and the financing of food inventories.

1. *National Security.* For many countries, maintaining adequate domestic production levels of food and key agricultural products has axiomatically been held to be an integral component of national security. The "security" motivations behind this concern may well fail to be supported by economic considerations, especially in several developed market economies. It is true, however, that the integration of markets and the sharp increase in the division of labour in many developing countries justify the expansion of domestic agriculture both from an economic as well as from a more socio-political point of view.

An important reminder when looking at agriculture from a global perspective is that 25 countries together represent approximately 80 percent of both total supply and demand.[5] In other words, those largest producers and trading nations effectively determine for all countries what happens in international markets for agricultural products. The real problem with this market structure is that virtually all of the major countries pursue autonomous agricultural policy objectives. The spillover effects of these policies into international markets have been accepted as unavoidable byproducts. But this inward-looking stance of agricultural policies has been impeding the smooth functioning of world markets especially for foodstuffs.

The specific sectoral interests of large exporters of agricultural products are dominated by domestic policy considerations. This has been especially true in the case of North America and Western Europe. Whereas the latter group has been concerned chiefly with price and income policies and has taken growing surpluses of key foodstuffs in stride, Canada and the United States have attempted

4. But including the various kinds of coarse grains that are a staple, for instance, in the African diet although they are not widely traded in the world because they are not important output items in the largest and most efficient producer countries.

5. United Nations World Food Council, *External Economic Constraints in Meeting Food Objectives: The Need for Expanding World Trade* (WFC/1985/5 of 1 March 1985), p. 4.

mainly to forestall surplus production. In both areas, food subsidies absorb a very substantial share of national budgets and governments there have become quite concerned about how to curb this dependence on financial transfers. Pressures to reduce production, and hence to avoid the cost of continued stockholding and downward drift in market prices, have been especially pronounced in the United States. Canada's sectoral policies are also formulated largely with domestic objectives, including farm income, as the chief determinant of its agricultural regime.

2. *Institutional Changes and Increasing Market Instability.* Conflicts between domestic and international policy objectives have arisen at several different levels. One such unanticipated byproduct stemmed from the narrowing of the "free trade" market. To mitigate the impact of fluctuations between global demand and supply, several large producers in the early 1970s encouraged the signing of medium- to long-term bilateral agreements with potential importers. While such contractual arrangements may have secured greater stability for the two partners concerned, they have entailed an even greater potential for overall instability in global markets as the burden of adjusting to tight supplies, when they emerge, will have to be borne increasingly by residual importers or by the major exporters themselves. As a rule, residual importers can least bear the brunt of adjustment since they are mostly developing countries with barely adequate domestic food output levels and chronic foreign exchange shortages. On the other hand, national policy considerations in the major exporters may induce producers to scale output to assured demand levels rather than to bear the cost of substantial stockpiling, in particular in an environment of high interest rates and international tensions that may give rise to embargoes. There is, therefore, ample room left for concerted international action so as to maintain orderly markets with stable prices.

Conflicts in food security have also arisen as a result of successful policies to raise productivity and overall output levels. China, which was until recently a chronic importer of basic food items, has undergone a sharp transformation since the introduction of the economic adjustments and agricultural reform measures that started in 1979. While this development has been very welcome, it has also further sharpened the interests of exporters and importers. This in turn has had a particularly negative impact on the comparatively small importers of food, especially many African developing countries, whose access to the "free" market is actually relegated to the margin and is therefore tantamount to rather rapid market disruption.

Another uncertainty at this stage derives from the "agricultural revolution" itself. It is as yet unclear to what degree the increase in productivity and output levels achieved in the majority of countries over the past ten to twenty years has been due to selective breeding and chemicals that may, in fact, be so delicate that even a small disturbance of the agricultural environment is bound to have very substantial impacts on output levels. Their long-term implications for soil and water erosion are as yet inadequately understood. Especially in the case of grains, the extensive use of new technologies, although increasing yields per hectare, has made production more sensitive to the weather. Since world production has become more unstable, another element of greater instability has entered grain markets. Because fewer varieties are being planted, a single adverse factor can have a large effect on total production. The global agricultural balance may shift once again. Its impact on trading relations might be quite destabilizing. This potential vulnerability argues for building up adequate buffer and working stocks, and for embracing more positive agricultural policies at the international level.

3. *Global Price Instability and Stock Formation.* Particularly in the case of grains, production and exports are dominated by the policies and institutions of a few developed market economies. The latter's agricultural regimes therefore have a very powerful effect on the developing countries. As importers, the developing countries suffer from the vagaries of world prices which result largely from two forces: restrictions on the free functioning of domestic and international markets, and the fluctuating import needs of large developed countries, which experience wide swings in their year-to-year production levels and seek to stabilize domestic consumption primarily through imports.

World prices would not fluctuate as much as they have in recent years if the main exporters could, as in the 1960s, be relied upon to adjust their stocks so as to balance supply and demand. However, their stock policies are now being increasingly dictated by short-run considerations. At the present time of low grain prices, the United States has been actively seeking to curtail domestic production so as to restore some balance to its domestic market and to reduce stocks. Since this policy is bound to affect export availabilities in the near term, it appears imperative that the developing countries build up their stocks of cereals despite the present surplus on world markets.

It is widely felt that the answer to the whole question of trade in grains cannot be left to market forces, which, in any case, do not operate freely, or to decisions taken by individual exporting nations.

Instead, it would be highly desirable to work out a solution among both consuming and producing nations. Unfortunately, there has been little progress in negotiations toward a new International Wheat Agreement. These negotiations reached an impasse in 1979 and are not expected to be resumed in the foreseeable future. Part of the solution to the problem requires an increase in the capacity to store food grains in developing countries. Some beneficial results have been attained in this respect, partly through the FAO's Food Security Assistance Scheme, but much more progress has to be made in the way of building up extra storage capacity and stocks in the developing countries. Whereas the targets for stocks in most developing countries range from one-and-a-half to three months of their annual consumption, actual stocks are often substantially below the target. Donor countries could play an important role in this effort to increase inventories in food-deficient countries. It should be made clear that what needs most attention is the formation of adequate working stocks–those needed to assure availability of supplies in consumer markets.

The other form of stocks that could be held are buffer stocks designed to cover year-to-year fluctuations in production levels. However, most developing countries do not make large demands on world grain markets and so should be able to obtain through imports whatever supplies they might require, although at a cost. Purchases in world markets when required would seem to be a less costly solution than holding buffer stocks. The capital required for maintaining buffer stocks can usually be allocated more productively to other uses, including the removal of bottlenecks in the distribution of domestically produced and imported foodstuffs.

4. *Access to Markets.* Another crucial problem, particularly in recent years, has been how to reconcile the need to balance supply and demand in world markets with the need to increase food supplies to the malnourished. The pivotal issue is not so much the inadequacy of world food production, but rather the instability of rural incomes in the developing countries. At times of crop failures, incomes of rural households suffer and farmers find themselves without adequate purchasing power. This is exacerbated by the fact that farmers have inadequate access to credit at an affordable price because of the absence of properly functioning credit markets. Governments can try to remedy the problem by public distribution of foodstuffs. However, poor transportation and distribution networks frequently complicate its implementation. In order to mitigate the disincentive effect of free food distribution, governments

have also provided food to the unemployed rural workers at times of shortage in exchange for their working on public programs. It cannot, though, be said that developing countries have yet had much success in dealing with the food security problems of rural areas.

At the present time of adequate food supplies at a global level with prices being at comparatively low levels, the cost of making up for domestic production shortfalls, and of helping maintain rural consumption through imports is relatively low. However, because of their severe debt problem and the frequent inadequacy of their foreign exchange reserves, many developing countries cannot afford the required purchases. This would, then, be a strong case for the international community to help by expanding and liberalizing the credit facilities available to the developing countries for the purchase of food.

5. *Financing Stocks.* Earlier I noted that the way in which buffer stocks are maintained at the global and regional level is not as important as the fact that it is being done. This lofty principle, of course, disregards various realities. Access to stocks provides relief to those in distress without jeopardizing foreign exchange positions too much since prices can be buffered by drawdowns from the stocks. But this benefit has a natural cost in the form of the financing of stockpiling in a wide sense. To the extent that national governments refuse to carry this burden (as indeed their policies are not mainly motivated by global requirements and the potential importing countries do not have the capital to undertake such a venture), the question arises of who in the end will pay for greater global food security.

International burden-sharing would make unnecessary such unilateral action as has been pervasive recently. However, simple buffer stock policies are not the answer. Perhaps a more equitable sharing of the cost of stock-formation and -maintenance on the part of all food traders might provide an acceptable way of financing food security. But prevailing conditions are not favouring a quick solution. The matter has been temporarily resolved–and then only on a relatively small scale–in connection with the food emergency situation of 1979-1980. Output levels have progressed substantially since then in many countries so that global stocks have remained adequate. But there is no guarantee at all that this will continue to be so if there were to be several years of widespread adverse developments. Some progress with the implementation of the Plan of Action on Food Security has been achieved but the results to date are fragmentary and unsatisfactory.

Food Strategies. In spite of there being many failures to realize the goals held by national policy-makers and the international community at large, there have been some encouraging developments in agriculture. Perhaps the most important is the growing appreciation, both by donors and recipient developing countries, of the importance of the agricultural sector in achieving balanced domestic economic development and of the necessity to formulate and to pursue a coherent policy that will foster domestic production and higher nutritional levels. The lack of appropriate attention to agricultural development in general and to more integrated food policies in particular can be identified as the central underlying causes of the present adverse situation in Africa.

National food strategies have become in vogue in many developing countries that have not yet participated in the sharp rise in productivity levels in agriculture. Especially in many African countries, the concept has in recent years been applied on a wide scale in an effort to try to correct the situation. Over thirty African countries are currently engaged in food strategy reviews and about a dozen have food strategies in place.[6] However, implementation has been considerably hampered in the early 1980s on account of the adverse domestic and external economic environment.

A food strategy is a dovetailed package of policy measures and institutional provisions that will enable governments to pursue whatever domestic agricultural policies they deem to be in their best interest. In what follows, I should wish to extend this dimension to the international arena so as to include regional food strategies and, indeed, international food strategies in selected areas.

Food strategies must address themselves in the first instance to the measures that have to be taken at the national level to increase production and consumption. Depending upon the different situation of individual countries, including their agricultural traditions, output potential, and the state of their infrastructure, different measures are being planned. Some national plans put the greatest importance on increasing production from smallholders; others attach importance to large state-owned cooperatives. There are, however, some common threads running through the discussions that lead up to the adoption of national plans, especially in Africa. It is seen that government policies need to be directed toward giving greater incentives to agriculture and other rural activities. A growing proportion of government expenditure should go toward the improvement of the rural

6. United Nations World Food Council, *Progress in Implementation of Food Plans and Strategies in Africa* (WFC/1985/2 of 25 February 1985), p. 1.

economic and social infrastructure. This frequently requires that policies entailing an overvaluation of exchange rates, subsidization of food prices, inefficient industrialization through ill-conceived protective measures, high taxation of export crops directly or through marketing boards, and inefficient and costly marketing and transportation systems need to be reversed.

Another important issue that has to be faced when drawing up food strategies is striking an appropriate balance between food crops for export and for domestic consumption. At times when the terms of trade are moving against developing countries that rely heavily on commodities for their exports, it might appear the correct policy to try to promote the export of agricultural commodities to obtain the foreign exchange necessary for the development effort. However, the result has often been neglect of production for domestic markets which requires rising food import levels. The seriousness of the situation can be seen from the fact that whereas the exports of food and other agricultural products of the developing countries rose from $20.0 billion in 1970 to $76.8 billion in 1983, their imports rose from $10.3 billion to $63.6 billion in the same period. Food exports increased from $14.6 billion in 1970 to $61.1 billion in 1983 but imports from $7.9 to $51.3 billion in the corresponding period. In other words, the average annual rate of growth of both exports and imports of agricultural trade was inferior to that of food proper. But this reflected largely developments outside Africa. Thus, the developing countries of Africa, which were net exporters of $5.3 billion of food and agricultural products in 1970, changed to net importers of $2.4 billion in 1983.[7] The figures for the low-income food-deficit countries are even more distressing.

Food strategies are essentially formulated so as to take advantage of indigenous production capacities in a broad sense, that is, including transportation facilities, marketing, product specialization, etc. They have been designed to counter the pro-industry bias that characterized development policies in many of these countries in the first decades following upon independence. Given their precarious balance-of-payments position, greater food security requires that domestic productive resources be husbanded more efficiently and more effectively. In some countries, these strategies are already paying off handsome benefits. In others, however, the entrenched policies in the agricultural sector are so pervasive that many more

7. Based on world trade matrix in *Monthly Bulletin of Statistics*, 1985:5, Special Table D. Food is defined as SITC categories 0 and 1. The group agriculture includes in addition SITC categories 2 (except 27 and 28) and 4.

years will be needed to overcome these inhibitions. Finally, a successful implementation of many of these strategies hinges crucially on international support in the form of material as well as other aid. While the bulk of the effort in formulating and implementing appropriate food strategies must, of necessity, be borne by the developing countries themselves, as the recent experience has demonstrated, the technical, financial, and other assistance in the promulgation of food strategies by bilateral and multilateral aid agencies of developed economies and by international organizations can be of strategic importance. Appropriate technology is yet to be developed in order to buttress output expansion in a substantially different environment.

Food Aid and Stocks. As well as goals for production increases to improve food security at the global and regional level, target goals for financial aid and technical assistance are also required to ensure food security. Whereas world cereal stocks since 1980 have exceeded the minimum level of 17 percent deemed adequate for food security, the developing countries individually and as a group have not made much progress in establishing their own national food stocks. That is not to say, of course, that there has been a lack of commitment. In fact, in 1983 seventy-two countries had a national stock policy and a further twenty-six were reported to follow such practices without governments having a declared policy. Nevertheless, these actions taken by developing countries, in most cases, are still in the early stages and thus do not add up to a system capable of maintaining a minimum safe level of basic cereal stocks for the world as a whole.

On the one hand, almost all of the increase in global inventories since 1981 has taken place in the large food exporters among the developed countries, notably in the United States of America. On the other hand, a substantial share–about three-fourths–of the overall increase in aggregate cereal stocks has been in coarse grains, which are not suitable for direct human consumption and so would be of little value in an emergency situation. In recent years, stocks of cereals in the developing countries have been around 10 percent of annual consumption–but much below that level in Africa especially at this juncture–and there is, consequently, a *prima facie* need to enhance substantially the building up of working stocks in the developing countries, and possibly also of necessary buffer stocks.

Shipments of food aid have not reached 10 million tons in recent years and have thus fallen short of desirable targets. With the stagnation in the volume of food aid, the percentage of the cereal imports of the low-income food-deficit countries covered by food aid has fallen steadily from 30 percent in the mid-1970s to an estimated

16-18 percent in recent years. Food aid has declined to less than 10 percent of Official Development Assistance as compared to about double that percentage in the early 1970s. But a noticeable shift in food aid toward the neediest has been a gratifying trend. A useful development in recent years is the institution of a facility at the International Monetary Fund to help finance food imports. Since May 1981, compensation for excesses in the cost of cereal imports is integrated with that for shortfalls in receipts from exports under the Fund's compensatory financing facility. Although this facility has benefited only a few countries (only eight drawings by six countries have been made since its establishment in 1981), its provisions should be expanded when the facility expires in the near future and modified to ease access.[8]

Food strategies are designed to provide a framework into which all components of the picture will fit. One very important component is food aid which has an impact on consumption, prices, and inventories. The formulation of fully articulated food strategies would enable food aid to make the greatest contribution to development without any adverse consequences on production or rural incomes and this, it is hoped, would encourage donor participation.

Many developing countries derive a large proportion of government revenues from export taxes and from the proceeds of marketing boards. A shift away from relying on these sources of revenue would not be easy and would require the support and understanding of the international community, particularly of donor agencies and lending institutions. In general, the move toward market incentives so as to encourage farmers to increase production will require considerable thought and preparation. Otherwise, the urban consumers might see their real incomes drastically reduced by a rise of food prices and find themselves unable to purchase the products that would in other circumstances be forthcoming, or government revenues might suffer so sharp a reduction as to make non-viable the development effort. It is because of the complexity and interrelatedness of so many factors affecting agriculture that the adoption by developing countries of food strategies is felt to be central to their development aspirations.

It is important in this connection to clarify what is meant by food aid. In what follows, I shall not limit the notion to emergency food aid, which involves chiefly the free transfer of surplus food from developed to the food-deficient countries. It is well-known that free food distribution may be counterproductive as it may interfere with

8. United Nations World Food Council, *External Economic...*, p. 6.

the proper operation of domestic markets, which in many developing countries are already far from transparent. Since it adds to available supplies and thus depresses prices, free food aid may discourage domestic producers and encourage consumption, sometimes of the wrong kind of products since the consumption habits and the production capabilities of the countries do not normally include those products.[9] Free food aid made available on a sizeable scale may also exert a disincentive effect on producers.

But a case can be made for food aid also for structural reasons. The rationale may be illustrated by resorting to the "primitive accumulation" paradigm: should one consume one's stores or save part so that tools can be fashioned which will measurably elevate future food production levels? Seen in that perspective, food aid could be used to support working reserves and, perhaps in some cases, buffer stocks, to assist in increasing production by facilitating grassroot investment, and by fostering appropriate research. Clearly, food aid in such cases could take the form of a "loan" at favourable rates, drawn perhaps from a "common fund," constituted by donor countries. As already indicated, food aid should also include provisions for technical assistance and research. The latter has become particularly important in the case of the majority of African countries that have a potential for increasing food production competitively but lack the means to develop it either because they are endemically poor or because external constraints have considerably complicated the implementation of programs that are *in se* worthwhile and economically justified.

As well as helping the developing countries plan and implement their food strategies, donors can render other vital assistance to foster the development of the agricultural sector of developing countries without disrupting domestic production and incentives. This could be acted upon by expanding, for example, triangular transactions or food aid in support of public works programs. The former involves essentially the purchase, with financial resources from the international community, of food in a surplus developing country for delivery to the food-deficit country. The latter alleviates unemployment, increases incomes and thereby improves family food security, and creates the infrastructure that could support and enhance broader-based rural development. These other forms of economic cooperation among the developing countries could be explored further, where appropriate, with the assistance of the technical, financial, and other resources of developed countries. However,

9. This has been particularly the case for many African urban consumers whose demand for cereals available only through imports has risen sharply.

these programs require careful administration. Since many low-income food-deficit countries suffer from a severe shortage of skilled administrators, very careful planning is required for these programs to be effective. Overly complex bureaucratic planning structures should be eschewed in favour of more decentralized and market-oriented arrangements so as to encourage greater private and local initiatives.

The "green revolution" relied heavily upon irrigation of fertile soil, and so could not be easily applied in sub-Saharan Africa, where less than 5 percent of arable land is irrigated, the climate is quite variable, and arable land is fragile. More research will have to be directed toward dryland farming systems with particular emphasis on the climatic conditions of Africa.[10] In this context it is encouraging that several international research centers and experimental programs are being funded by the international community on a bilateral and multilateral level.[11] These and other recent initiatives seek to improve development assistance coordination and to strengthen links with African institutions in order to assist in building up national research and delivery capacities.

Nevertheless, further support for agricultural research remains a major task for the international community. At times of financial difficulties, activities with a pay-off in the longer term are often the first to be cut back, and indeed some of the above-named programs have lately run into financial trouble. However, such measures, inspired by short-term financial considerations, would appear to be false economies. There is little indication that aid to agriculture will be substantially increased in the near future. Major donors are still trying to reduce their budgets, including their aid budgets. This has particularly affected the World Bank's International Development Association and the International Fund for Agricultural Development, which have had to reduce their budgeted lending programs.[12]

The fall in aid to agriculture is all the more serious in view of the fact that there are many areas of the world where nutritional standards are below minimum acceptable levels. Although at the present time there are adequate global food supplies, it cannot be said that proper arrangements have been made to assure food security. As previously mentioned, the situation of excess supplies of some

10. J. Shepherd, "When Foreign Aid Fails," *The Atlantic Monthly*, 1985:4, p. 42.

11. United Nations, *The State of Technology for Food and Agriculture in Africa* (A/38/280).

12. See, for instance, The World Bank, *World Development Report 1984* (New York: Oxford University Press, 1984), p. 49.

commodities on world markets could be quickly reversed. Similarly, the heavy regulation of trade relations in agricultural products and the marked instabilities that pervade production and trade markets are having very grave consequences for the development potential of substantial parts of the developing world. A resumption of moderately fast growth in GDP levels of 5-7 percent per year on average (without aggravating the external payments position of these countries) would perhaps be the most important determinant of greater security in the world economy.

International Competition. By efficient international competition in agriculture, I mean that distortions arising from national trade policies are more or less equalized across sectors, that agriculture be included fully in international arrangements on tariffs and trade, and that legitimate concerns about domestic security in terms of food supplies and minimum income levels be met through positive adjustment policies, including direct income transfers. It is in the field of international trade in food and other agricultural products that the gap between policy objectives and actual performance has been the widest. Surely, the weakness of recent years can be attributed to the depth of the prolonged recession and the uneven recovery that has occurred since then. However, any feasible recovery could not in itself remedy the more fundamental shortcomings of the international trade system, such as the instability of world markets and mounting protectionism.

Although the international trading environment of the past few years has been severely buffeted by protectionist pressures and protectionist actions, usually of the non-tariff kind, this with some important exceptions, has not been the case for most agricultural products. The reason for this is quite simple: agriculture has remained by and large outside the framework of international trading arrangements such as the General Agreement on Tariffs and Trade (GATT); it has even remained outside the mainstream integration schemes such as that of the European Community (EC) for a variety of reasons. Though most countries, exporters as well as importers, regularly pay lip-service to the need for enhancing world trade in agricultural products, little is being done about this situation.

Trade in agricultural products has been severely restricted. Although formally part and parcel of the GATT rules, the special provisions permitted under articles 11, concerning quantitative restrictions, and 16, on export subsidies, as well as the less formal exceptions being increasingly enacted by an ever growing number of

countries as a result of "re-interpretations" of the official GATT stipulations (including article 19 concerning safeguard restrictions) have made the agricultural sector one of the most domesticized in most developed countries.

What is required is a two-pronged approach. First, for better or worse, nation-states are concerned about their food security and therefore accord considerable importance to a domestic production capability, almost regardless of cost. Second, many agricultural products are currently being produced at greater cost than need be in a global framework. While some countries have done so mainly to assure desirable minimum income levels of their farmers, others have undoubtedly held on to a substantial domestic production capability out of concern for the reliability of foreign supply. Embargoes and interferences with the smooth functioning of trading markets are indeed a legitimate concern. Another one is a guarantee on availability: since the markets of developing countries, generally speaking, are not sufficiently flexible to accommodate sophisticated market arrangements, if the developing countries were to become the main producers would they be able to guarantee smooth supplies even under adverse production conditions? It would be particularly difficult to see how such developing countries could be found willing to secure adequate stocks from which production shortfalls might be offset.

These concerns are genuine. Yet, there would appear to be several instruments as yet inadequately explored that could meet a substantial part of the enumerated objections. Thus, greater international food security could be provided through adequate stockpiling policies operated on a commercial basis. All that is required is that producer countries be willing to dovetail their domestic policy concerns with those of the international community at large. Similarly, concerns about minimum income levels of farmers could be met through lump-sum transfers, retraining and relocation assistance, reconversion, and other forms of positive adjustment assistance.

However, positive structural adjustment has not been a mainstay of agricultural policies in developed countries. In fact, "local interests" appear to have played such an overwhelming role that domestic policy-making has easily caved in to this sacred cow wherever broad-based attempts at reform were being formulated. Yet these idiosyncratic agricultural policies have been very costly. For consumers, prices of many foodstuffs and products based on agricultural inputs have been far higher than they would have been with more effective

competition. Potential exporters in developing countries have had to forego income and to foster growth in other sectors without having had the benefit of a feasible agricultural surplus (for instance, in the case of sugar and vegetable oils). For governments, policy-making has been complicated at the national as well as regional integration level, and has distorted the more efficient utilization of budgetary funds.

For example, many of the donors of foodstuffs are themselves large producers of food and their domestic agricultural policies, trade institutions, and international economic policies largely determine whether the developing countries obtain access on a predictable basis at relatively stable prices to agricultural markets. Of particular concern at the international level is the use of export and production subsidies and import restrictions that limit access to traditional markets and displace developing country exports from other markets. A standstill on import restrictions affecting such exports should be agreed upon. A firm commitment should be made to start rolling back measures inconsistent with GATT principles which affect the potential of developing countries to expand their trade. As a second important longer-range measure, the entire compass of issues associated with trade in agriculture should be brought under stricter GATT discipline. This would ensure more predictable and stable market developments, as well as greater efficiency in international production and consumption. To this effect, clear limits as to the permissible degree to which purely national policy considerations can conflict with international trade requirements and development priorities should be drawn up. Similarly, provisions should be made to improve and expand access of exports from developing countries.

Unfortunately, very little effort has been made by the developed economies to address the whole question of the effect of their domestic agricultural policies on world trade in general and on the economies of the developing countries in particular. There has been considerable friction between, on the one hand, the United States and other major food exporters and, on the other hand, the Commission of the European Communities. However, there is little evidence that the outcome will be a complete re-appraisal of their agricultural policies. In the meantime, trade in agricultural products is for many countries essentially a residual with the bulk of agricultural production and consumption heavily regulated at the national and regional level. This has very significant consequences: (i) for those countries whose agricultural and food production levels are subject to sizeable fluctuations, owing primarily to domestic condi-

competition. Potential exporters in developing countries have had to forego income and to foster growth in other sectors without having had the benefit of a feasible agricultural surplus (for instance, in the case of sugar and vegetable oils). For governments, policy-making has been complicated at the national as well as regional integration level, and has distorted the more efficient utilization of budgetary funds.

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tions; (ii) for those that are not now or in the near future in a position to attain substantial food self-sufficiency; and (iii) for the trade potential of developing countries that would be in a position to compete in international markets if those were not heavily regulated.

A strong and continuing effort should be undertaken by developed countries to liberalize access to their markets, especially for developing countries. For this, they will need to adjust those sectors in their agricultural, as well as manufacturing, industries that have become uncompetitive. These national efforts can be facilitated by strengthening the multilateral framework for trade adjustments. This concerns not only rolling back the "new protectionism" embraced by many developed market economies. The GATT rules should also be extended in breadth to a growing number of countries and in depth to forms of trade (especially in services, technology, and also in agricultural products) that in fact now escape GATT surveillance rules. The former concerns the countries that still remain outside the GATT framework. With reference to trade in agricultural products, it is especially important to bring the large importers, particularly the Soviet Union and China both of which are now excluded from GATT, under some kind of common rule.

In recent years, the call for holding another GATT round of multilateral negotiations has gained many backers. While this has been launched in particular to free up international trade in all kinds of services, to regulate technological exchange, and to reverse many of the formal and informal non-tariff barriers enacted by many countries in the last decade or so, some countries have attached particular importance also to embedding agriculture more fully in the GATT provisions.

As a result, leading partners in international relations have advocated holding another GATT round that would table everything currently slated for further multilateral negotiations. It may be recalled that the Tokyo Round took about six years. Given the present fragile state of commitment to internationalism and multilateralism in international affairs, it is doubtful that another round could be successfully completed in less time than required for the Tokyo Round. Probably several more years are necessary before some kind of understanding on the matters discussed above can be reached. There is some doubt that such a long time period can be afforded at this stage. Especially if the recent global imbalances are not corrected in the near future, it is unlikely that a standstill in protectionist postures can be assured–an essential requirement to maintain an environment congenial to multilateral negotiations with

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a minimum of *ad hoc* friction.

Under the circumstances it might perhaps be more useful to negotiate first a broader agreement regarding agriculture, or non-tariff barriers in general, before negotiators are asked to delve into the myriad, sometimes arcane, details of individual sectors and indeed individual commodities, and into the question of how acceptable degrees of reciprocity in scaling down effective barriers to trade can be hammered out.

Since each developed country has by now fully asserted its interest in maintaining some degree of self-sufficiency in agricultural production, especially of food, international attention might fruitfully be directed at recognizing the right of each country to maintain some degree of self-sufficiency as a matter of "national security" or "national sovereignty." Such a compact, or code of conduct if you will, might provide an opportunity for reaching a broad understanding on principles, or "rules of the game," not only amongst the present GATT members but also with outside partners. A bilateral extension of the compact to, say, the members of the Council for Mutual Economic Assistance as a whole might not be too far-fetched to contemplate.

Perhaps more important, such a code of conduct might afford the opportunity to reconsider national policies and, indeed, to re-assess part of the rationale underlying the present operations of the EC's Common Agricultural Policy (CAP)–a hardy set of protectionist issues indeed. While the Commission of the European Communities is not likely to be inclined to renegotiate all aspects of CAP, it might well be swayed into rededicating that policy to its original goals, *viz.* chiefly the stabilization of farm incomes and agricultural prices. I do not recall that full self-sufficiency or the subsidization of exports of agricultural products were goals at the origin of CAP, although *de facto* they have become crucial features of recent policies.

Such a code might also offer a number of countries concerned about strengthening their national security by fostering greater self-sufficiency another opportunity to re-examine their policies in light of the changed international trading environment. Taking the main exporters' food trade policies out of the arena of foreign policy configurations–at least to the extent that manufactured goods for civilian purposes are traded without foreign policy fetters–could be a crucial ingredient for the long-term stabilization of world trading markets. This in turn would enable main importers to forego self-sufficiency aspirations, especially if those can be met only at great cost and with sharp cyclical fluctuations. The area for trade competi-

tion in foodstuffs might as a result widen considerably so that the caloric intake throughout the world can be raised above minimum desirable levels.

In any discussion of international trade in agriculture, the needs of the least developed countries must be given special attention. Over the last fifteen years or so, output levels in those countries have expanded at substantially slower rates than those experienced by other developing countries as well as by the developed countries. External constraints did sometimes affect their export performance, but also of importance has been the generally unfavourable growth of world markets for some of their principal exports (such as groundnuts, jute, and tea). Their inadequate infrastructure, which has slowed down the growth of their processing industries, and the fact that rising domestic demand in these countries has tended to limit their exportable surpluses are also significant factors. The net effect of these and other factors has been that the share of world trade in agricultural products held by low-income countries has been more than halved since the mid-1960s.

Canada's Role in an International Perspective–A Conclusion. Nations like Canada have an important role to play in rectifying the international climate for trade in agricultural products and, indeed, in creating more rational agricultural regimes. As a large exporter, chiefly of primary food products, Canada by necessity must rely upon the existence of an ambient trading environment that functions on the basis of agreed upon rules, rather than on the basis of power policies–a policy option that is only truly available to large countries such as the United States and the USSR. Being a mid-sized, comparatively rich developed country, Canada could take a leading role in working out international rules for acceptable national agricultural regimes that, although in fact narrowing the areas for *free* trade, would substantially enlarge the sphere for *fair* trade in agricultural products.

Its own self-interest in being able to access such markets through comparatively free international competition should provide Canada with an important incentive to sway other small and mid-sized developed countries, including those in Europe, in that direction as well. Such an acceptable regime should include provisions for domestic production levels deemed to be a minimum for guaranteeing national food security. The means used to support this objective should take the form preferably of direct monetary transfers rather than price distortions. Furthermore, the multitude of non-tariff barriers now effectively hindering international trade in agricultural

products should be replaced by a duty structure that is stable, transparent, predictable, and fair. Indeed, I suggest that like-minded countries strive for a compact that would permit unfettered fair trade, since "free trade" in agriculture, realistically speaking, is not a feasible option now or in the near term.

As a large surplus food producer, Canada also has a substantial role to play in the formulation of comprehensive food strategies and in supporting their timely and orderly implementation. At first sight, this might undercut the potential for exports. Certainly, if developing countries were to succeed in replacing all actual and potential imports by raising domestic output levels, the scope for trade competition and hence Canada's ability to sustain its export strategy would be negatively affected. However, it is worth recalling that present nutritional levels in many developing countries are so low that increased domestic output levels and prosperity would undoubtedly boost rapidly overall demand for foodstuffs as it would provide the financial means to afford such imports on a commercial basis. As a result, the scope for primary and secondary foodstuff exports, and indeed for the entire array of consulting and process technologies could well become a multiple of present levels. While assisting the developing world might well have a negative impact on the scope for primary food exports, it is bound to exert a very favourable pull in other types of agricultural and related exports. Some structural adjustment might therefore be incumbent on countries such as Canada. Positive adjustment policies supported by provincial and federal governments could substantially ease the burden of enacting the desired transformations.

New Lamps for Old: Reversing Modernization

Robert Moore

There are three kinds of people in the world; those who will not look into the future and try to embalm the past; those who will not look into the past and go blindfolded into the future; and those who strive to create the future because they look wisely into the past. Christianity is the religion of that last group of people and, in the Anglican tradition, one of the most potent emblems of that state of being is a cathedral. Cathedrals are really commentaries on that well known text from Ecclesiastes: "Where there is no vision, the people perish." With the concentrated power of an atmosphere designed to raise our sights, they remind us that what we do today is influenced by what we did yesterday as well as by what we can do tomorrow.

There are two ways of approaching tomorrow. The first is to wait passively for it to arrive. The second is to strive to shape, as far as we are able, the form in which it will come. To decide to shape something is to have a vision of what that shape will be, and that requires two qualities. The first is imagination: to be able to see the shape in our mind's eye. The second is will: the determination to turn it from dream into fact. Cathedrals seek to awaken those two qualities, not only in their regular congregations but in the larger communities they serve. By their architecture, their works of art, their music, their memorials, the dramatic poetry of their liturgy, and the splendour of their great occasions, they remind us that our forebearers were people of vision. What they left us was not only the magnificence of great forms, but a spirit so much bigger than their own times that we can still be moved by its power. What cathedrals require of us is that we show the same spirit in turn. As we have inherited so also we must create. They call upon us to so do our work in the world that our tomorrows may be more open to the beauty, the love and the justice of God than our today is.

Cathedrals are therefore both nouns and verbs, nouns because as structures they are repositories of our heritage and verbs, because as atmospheres, they activate us to look as seriously at the future.

In one of the celebrated stories contained in A Thousand and One Nights, we are told to pay some attention to Aladdin, a character who was something of an entrepreneur and a politician. He surprised his peers by announcing that he was prepared to exchange new lamps for old. Evidently, even in his day, there existed those who felt that nothing was worthwhile unless it was fashionable. In other words, new lamps represented the received wisdom and up-to-date technology. The old ones stood simply for backwardness because they symbolized tradition. Aladdin, on the other hand, whose instincts told him to judge a thing by its effectiveness and not by its media vogue, knew that some old lamps carried terrific power because they represented a disciminating spirit–a genie which could select what was vital in the old, and what was worthwhile in the new, and blend them. At the end of the story, Aladdin has become quite a figure: he is comfortable; he is eminent; and he is powerful. Most important of all he is resourceful, and it is that which put him so far ahead of his contemporaries, who, for all we know, continued to fall over themselves in a frenzied purchase of new lamps, depleting their scarce resources in an attempt to be seen as modernized.

The story of Aladdin and his lamp is one of those fundamental myths which we ignore to our cost. The cost of ignoring this myth has certainly proved horrendous for many Third World countries, whose politicians and economic planners, advised by the fashionable theories of development of the late 1950s, right through the 1960s and into the early 1970s abandoned much of the traditional wisdom of their societies and lurched into forms of economic development that have led to unfortunate conditions, the most lurid of which are now seen in many parts of the African continent.

But before I discuss some of the mistakes of advice given and taken in parts of the Third World, I want to continue, as I began, on a fairly cheerful note. I shall therefore draw your attention to an example of political and environmental wisdom shown by a small Third World country, in fact the country of my origin, Guyana. It exemplifies an attitude contained in the Aladdin myth: that of using resources that do not possess the "chic" of modernization but which contain all of the characteristics of genuine development. In the 1950s and 1960s when the modernization theories of development were in their heyday, the word "fish" in Guyana had two connotations. Certain kinds of fish symbolized the forward thrust of society, a society that was clearly being plugged into the world market. Salted cod and all the multitudinous varieties of canned fish belonged to this category. The fish that inhabited the rivers of

Guyana–a land abounding in rivers which abound in fish life–and even those that swam on the Atlantic coast of the country, belonged to a second category. They were symbols of backwardness–sustenance for those who were left behind in the march of development. The fact that the indigenous fish were a rich and inexpensive source of protein was glossed over. So too was the fact that in order to purchase the cod, the salmon, and the sardines, it was necessary to dispense with scarce foreign currency.

Then in 1971 the government of Guyana provoked a "fish revolution." It banned the importation of all foreign fish. There was considerable opposition to this at first, some people going as far as to say that one of their fundamental human rights–the right to foreign fish–was being abrogated by the government.

What was really in process was a cultural revolution, a change in attitudes which involved a new way of perceiving the Guyanese environment and the resources that it made available to the Guyanese people. The banning of foreign fish was accompanied by a vigorous campaign of popular education using all the channels available, particularly the radio, as Guyana did not at the time yet have television.

Among other things imaginative dieticians–and there were many of them–designed all kinds of new recipes for enhancing the culinary qualities of the local fish. The results were pretty impressive. The local fisherfolks ceased to be creatures of pity and became figures of significance in the society. Predictably an infastructure evolved which facilitated the process by which the fish left the nets and reached the marketplace. The marketplace itself acquired an enhanced value, for there the fundamental protein base of the nation was purchased. The fish even found themselves swimming into the curriculum of schools. For teachers, now emboldened by the new significance of the indigenous variety, could make an awareness of Guyanese fish part of their biology lessons.

The international economic climate became increasingly abrasive for Third World countries in the late 1970s. With foreign currency reserves rapidly depleting and the price of imported fish rising significantly, the actions taken by the Guyanese government to encourage the consumption of local fish were amply justified.

The story of many other countries in the Third World is often the story of movement in the opposite direction: the countries which once produced food adequate for their needs and even with some to spare for export have become vulnerably dependent on the granaries of the North to keep their people fed.

At the bottom of this distorted development lies a distorted form of distillation of the historical experience of some Northern countries. The development oracles of 1960s, extrapolating from the evolution of their own societies only the most recent features, delivered themselves thus to the Third World: industrialize. The urban-oriented elites of Third World societies, many of them having drunk deep from the wells of Northern universities, were, by and large, only too ready to comply.

In both the giving and the receiving of this advice a fundamental ingredient was omitted: that where industrialization had been most successful it had been preceded by an equally successful agricultural development. In short, industry was a complement to agriculture, not its supplanter. The chief result of applying this limited view of history to the Third World has been the neglect of the peasant farmer. The incentive to produce disappeared, as governments increasingly fed their city populations with cheap food imported from the North. Large masses of rural folk therefore migrated to the cities where little but discomfort awaited them. This has been particularly true of Africa and parts of Latin America, although fortunately this has been less true of South Asia and South-East Asia. Wherever the degradation of the peasant farmer has taken place, there has followed quickly the degradation of the land. That in turn has contributed powerfully to the conditions of malnutrition and hopelessness which are found among peasant cultivators in many parts of Africa, particularly the Sahel region, and also in many parts of Latin America, particularly Central America. With declining markets and multiplying mouths to feed, even farming at its lowest level–subsistence farming–becomes an increasingly unrewarding operation. With sources of fuel for cooking unavailable, peasants turn increasingly to those provided by the environment. Much against their traditional instincts they begin cutting down large tracts of trees for firewood. That in turn brings catastrophic consequences, not only for them but also for the environment which is their natural home.

In fact, what we have come to learn from the crisis of the 1980s in many Third World countries, can best be summarized in this maxim: As goes the small farmer, so goes the whole society; as go the trees, so goes the small farmer. Not a minute too soon, development planners are now paying full attention to trees and to their importance to the natural habitat of people. We are learning at tremendous cost lessons that long ago, the Mayas, and the Incas, and the Aztecs in the new world, and the ancient populations of the old

world knew through their ancestral channels of wisdom: trees are sacred and to treat them with proper respect is really to understand their crucial–even seminal–significance for our well-being. For trees not only hold the soil together and prevent it from eroding but also help to preserve the amount of moisture in the atmosphere, regulate the quantum of carbon in relation to the quantum of oxygen and ensure that the rainfall does not end completely in large rivers which then overflow their banks destroying human life and property. For example, environmentalists have recently come to realize that the destructive inundations caused by swollen rivers in India are largely due, not to increased quantities of rainfall, for the rainfall has generally maintained its seasonal averages, but to the cutting down of trees in the higher woodland areas of northern India.

In other words, what trees do is regulate and filter the amount of water that actually gets into the streams. They are, therefore, directly responsible for the normality of river behaviour, as their absence is responsible for the opposite. It is a staggering reality to ponder upon–the fact that the world loses 11 million hectares of forests every year. This is equal to the area of Nova Scotia and New Brunswick combined. It is equally sobering to consider that the average Canadian every year consumes as many trees in the form of paper as the average Tanzanian family of six people consumes in the form of firewood.

Our multiplying opportunities to waste paper–stimulated by an ethic which accepts waste as an essential lubricant to our economy–contribute prodigiously to the continuing deforestation of the planet. Many Third World countries starved of foreign exchange mindlessly hack away at their forests in order to satisfy our paper avarice. There are times when it is salutory to look into our history and to learn a little from the wisdom of our forebearers. Victorians are not much admired these days, and certainly there was much that one could not admire about them. But they did possess a concern for trees. "Next to English people," wrote a somewhat chauvinistic governor of one of the West Indian islands during the nineteenth century, "the tree is God's most exquisite creation." His sense of hierarchy was positively peculiar, but his sense of trees was certainly near the mark. The Victorians were not only fascinated by trees but they were constantly planting and transplanting them all over the length and breadth of their vast empire. The splendid botanical gardens that are still the pride of many Third World countries owe their origin to the fastidious preoccupation of the British with trees and their characteristics. They did not possess the sophisticated

knowledge of the environment that we now do, but instinctively they realized that there was a strong umbilical between the health of trees and the health of an environment. Moreover, if you go beyond history into religion you will find once again the importance of the tree as a symbol in many of the world's faiths. For instance, two of the central symbols of the Christian religion, the crucifixion and the resurrection are, when you come down to the bottom of it, powerful ecological statements as well as theological ones. The crucifixion represents a dead man on a dead tree with the implication that the life of man and the life of trees are mutually reinforcing. The drama of the empty tomb–the resurrection–takes place in a flowering garden. The festival is celebrated always at springtime with the implication that the resurrection of nature and the resurrection of man are parts of the same continuum.

Trees are equally an integral part of Buddhist, Shinto, Confucian, and even Moslem symbolism. The Moslem symbol of paradise is depicted as a non-terrestial oasis with flowering gardens and trees–understandably so, for a religion that originated in the deserts of Arabia.

The wisdom contained in these symbols and the tradition of many of the world's most ancient peoples are pointing all of us in the 1980s to an inescapable conclusion. If we are going to protect our environment from degradation, then we must pay special attention to the fate of our trees. That involves in turn a considerable reconstructing of our perspectives and a solicitude for the environment which our consumer ethic cupidities and our industrial processes have tended wantonly to ignore. But those things by themselves would not stand a chance unless we here in the North also rethink our attitudes toward the concept of cheap food for developing countries. The African catastrophe has convinced many governments on that continent that they ought to look again at the farmer. They are once again beginning to realize that cheap food imported from the developed countries often has the effect of inhibiting the production of food in their own countries by their own rural populations.

For many Third World societies, the era whose motto was, "I industrialize therefore I am," may now be coming to an end. They will continue, in some ways, to industrialize, but they will no longer regard industrialization as an exclusive objective at the expense of their production of food. Two things remain to be said. First, we have to assist many developing countries in programs of aforestation or reforestation. There is already available a considerable corpus of scientific knowledge which can be deployed by Third World governments for the planting of specific species of trees, particularly in areas which suffer from repeated droughts. Equally, money will have to be spent researching into the various kinds of seeds and grains suitable for Third World agriculture which will bring nutritional benefits to their population and consequently reduce the food insecurity now rampant among the poorer Third World people.

We still have a lot to learn from the food systems of people whom we once in our misplaced zeal regarded as being in dire need of development. That too demands careful research. But it is research that is likely to be rewarding because of the integrated approach to the ecosystems which it will reveal to be essential to the survival of ancient peoples.

Trees, land, peasant farmers, they are a trinity not just of entities but also of values to which both Third World governments and governments in the North must increasingly give scientific and political respect. E.B. White once wrote, "The land will support the people if the people will support the land." In the two decades of development (the 1960s and the 1970s) we insouciantly ignored both halves of White's dictum. We are now, one hopes, both wiser and more realistic: more realistic because the disappearance of trees and the consequent erosion of soil have raised spectres of environmental catastrophe in our minds, and wiser because we no longer assume that we have all the answers and that "less developed peoples" have nothing to teach us.

That is why Aladdin's genie of the old lamp with its powerful discriminating wisdom which lay in knowing how to combine the old and the new, is as relevant to the world of the 1980s as he was to the halcyon city of Baghdad, a city of trees and of pools of water, so many centuries ago.