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NATIONAL AND INTERNATIONAL FOOD POLICIES AND OPTIONS THAT IMPACT ON WORLD TRADE AND AID

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Preface

One objective of the IIASA Food and Agriculture Program is to develop models suitable for quantifying intra- and inter-country and global food interdependencies based on strategic variables and probable policy alternative.

However, it would be presumptious to expect that any systems analysis model could simulate the full range of food related policies even if they could be articulated. The objectives of this report are to focus on a more limited set, that is, policies that are generally perceived to have primary impacts on world trade and aid aspects of the food problem. It is intended that such a classification of existing policies and policy options will be the base for subsequent national modelling efforts and linking of national models.

Abstract

This report includes firstly a discussion of food goals, instruments and performance indicators in a general policy classification scheme. Then the main policy goals and instruments affecting agriculture and food trade on a country and commodity basis are noted. In the final two sections major international trade and aid policies and options are summarized and evaluated.

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POLICY GOALS, INSTRUMENTS AND PERFORMANCE INDICATORS [1)]

Tinbergen defines public policy as the deliberate variation by government of means (instrument variables) to accomplish ends (goals on target variables).[2)] Its intent is to bring "what is" closer to "what is desired". A third component is required, from a practical view, which can be labelled performance indicators. Performance indicators should measure the success of policy instruments in achieving policy goals. A "closed" policy analysis model would take into account the political process in formulating policy instrument variables and the links between general policy goals and performance indicators with appropriate feed-back mechanisms (see figure 1.). However, such a comprehensive systems approach is beyond the scope of this paper (and the ability of the authors). It should also be noted that we are emphasing agricultural policy analysis at the national level. We recognize, however, that for many policies analysis at a regional level is adequate and even preferred.

General Policy Goals

Policy as we noted is by definition goal directed. It is, therefore, necessary to say something about goals in food and agriculture policy. Usually these goals are stated in terms of normative statements such as to promote efficiency, increase farm income, to improve the distribution of farm income, to stabilize prices, to maintain low food prices, and to provide security of food supplies.

However, given the events of the past few years, it appears that the goals of food and agricultural policy are by no means

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1) This section draws heavily upon the following working paper: Swanson, Earl R.,Classification of Food and Agriculture Policies: Objection, Instruments and Performance Indicators, IIASA, WP-75-151, 1975.

2) Tinbergen, J. 1975, On the Theory of Economic Policy. North-Holland, Amsterdam, Sixth Printing.

clear and universally agreed upon and often are in conflict even within countries. Between countries, policy goals may show wide divergence. Therefore, we choose only to identify general policy goals which will be of concern in any food policy analysis.

1. Efficiency of the food production and delivery system.
2. Distribution or equity of income and assets among nations sectors and regions within nations and within groups.
3. Stability and security related to prices, incomes and food supplies.

Policy Instruments

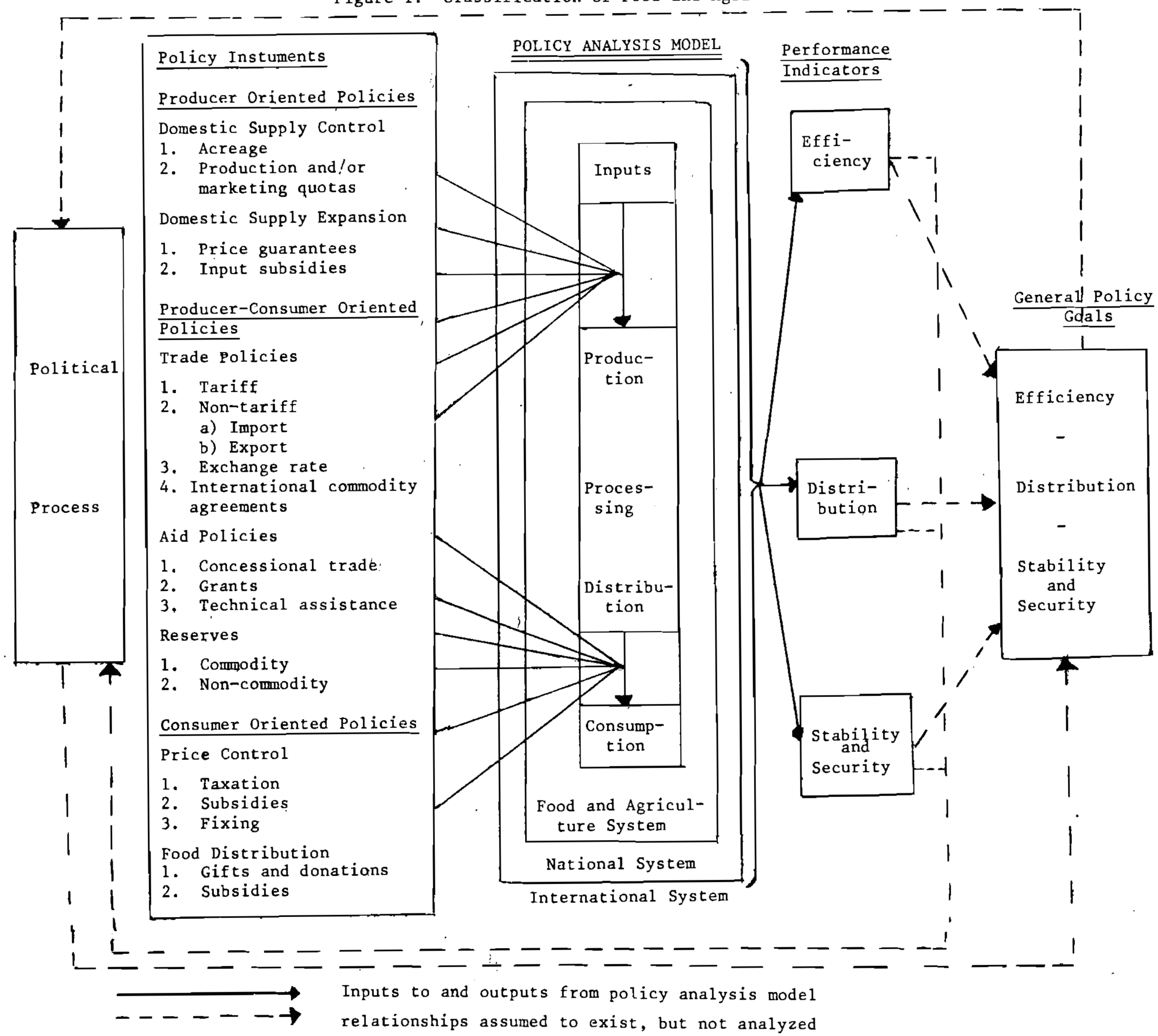
Policy instruments while having general objectives relating to a particular goal (efficiency, distribution, stability) can be sometimes classified in terms of the specific groups intended to receive the most direct impact from their implementation. For example, a support price for wheat in the US is a farmer or producer oriented program intended primarily to increase farmers incomes. A fair trade shop in India is consumer oriented designed primarily to subsidize low-income people. However, for some instruments the incidence of affected group(s) is clearly mixed between both producers and consumers. A grain reserve program can provide stable markets and security for both producers and consumers. Accordingly the general classification of policy instruments in figure 1 is listed under three categories:

- Producer Oriented Policies;
- Producer-Consumer Oriented Policies;
- Consumer Oriented Policies.

Performance Indicators

Performance indicators are intended to provide a measure of the success of policy instrument(s) in achieving a policy goal(s). In many modelling efforts performance indicators become proxies for policy goals. But realistically they should serve only as inputs along with other elements (some qualitative) into the political process that generates the institutional changes in the system. Some example of performance indicators are stated for each of the three general policy goals.

Figure 1. Classification of Food and Agriculture Policies



Source: Earl R. Swanson, Classification of Food and Agriculture Policies: Objectives, Instruments and Performance Indicators. WP-75-151, IIASA, Laxemburg, November, 1975. (with some modifications).

Efficiency (Performance indicators)

Cost of food to consumers (fraction of total income, temporal comparisons, cross-sectional comparisons).

Value added in the agricultural sector.

Total agricultural output/total agricultural input.

Marginal conditions (i.e. marginal factor cost = marginal value product).

Agricultural production per worker in agriculture.

Number of persons fed by one agricultural worker.

Crop yields per acre.

Rate of return to investment in agriculture.

Livestock production per unit of feed.

Rates of generation of new technology.

Rates of adoption of new technology.

Rate of growth of agricultural production and/or food output.

Rate of growth of agricultural production and/or food output per capita.

Rate of growth of agricultural exports, at current and constant prices.

Rate of growth of agricultural imports, at current and constant prices.

Productivity index - aggregate output of agriculture relative to aggregate production inputs.

Levels of, and changes in, farm employment.

Distribution or Equity (Performance indicators)

Index of prices received by farmers.

Ratio of index of prices received to prices paid by farmers--parity ratio.

Levels of, and changes in gross and net farm income.

Levels of, and changes in per capita farm income.

Levels of, and changes in per capita farm income relative to non-farm income.

Size distribution of income among farmers or other groups.

Degree of fulfillment of minimum dietary standards for all persons (calories, protein, vitamins)

Number of, and changes in, the size distribution of farms or index of concentration of landownership.

Agricultural output as percent of gross national production or share in total output.

Index of unemployment in agricultural sector.

Stability and Security (Performance Indicators)

Year-to-year fluctuations in:

Cereal grain production by regions, countries and total world;
Livestock production by regions, countries, and total world;
Supplies available for consumption by regions, countries and total world;
Supplies of livestock products available for consumption by regions, countries, and total world.
Prices for various agricultural commodities;
Incomes of agricultural producers.

Exports of agricultural commodities as percentage of imports of agricultural commodities;

Changes in agricultural trade balances;

Per capita imports of basic foods;

Level of protection in agriculture as measured by prices received by farmers for each of the principle temperate zone agricultural products as percent of corresponding world market price;

Degree of export dependence expressed as exports of each of the principle primary commodities in percent of domestic production;

Total public external debt outstanding as percent of exports of goods and services;

Ratio of foreign exchange reserves to imports;

Proportion of agricultural and/or primary commodities in total exports;

Degree of self-sufficiency in principal primary commodities (expressed as production plus imports minus exports in percent of domestic consumption), or;

Degree of import dependence (expressed as imports of each of the principal primary commodities in percent of domestic consumption);

Official development assistance to developing countries as percent of GNP and imports of recipient countries.

DOMESTIC GOVERNMENT POLICIES FOR SELECTED COUNTRIES

A myriad of international and domestic government programs and policies affect the magnitude and direction of world trade in agricultural products.[1)] Tariffs; non-tariff barriers (variable levies, import quotas, state trading); export incentives (subsidies, concessional sales); and domestic agricultural programs (price supports, marketing agreements and orders, production controls) all interact to define the institutional constraints on agricultural trade and/or meet domestic goals. Some of the more important policies and programs of leading trading nations are discussed in the following section.

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1) Other factors that influence trade in agricultural and food products include (1) Supply relative to demand and (2) international monetary conditions. These are discussed in a companion report: S.C.Schmidt, Assessment of Existing and Prospective World Economic and Food Trends Research Memorandum RM-77-14, March 1977, IIASA.

U.S.

Domestic Policy Development

Inasmuch as the United States is a principal exporter as well as importer of agricultural commodities, its programs and policies have far-reaching effects on world trade. Many U.S. policies bearing on its foreign agricultural trade have their origin in domestic agricultural policy. Beginning in the 1930's government intervention in agriculture has been substantial. The goals of farm policy were mainly to increase farm income and stabilize farm prices. Policy instruments for intervention in commodity markets included high price supports, marketing quotas, tariffs and import quotas, subsidies, and acreage diversion. No substantive changes were made in policy instruments for 30 years even though major structural changes occurred in U.S. agriculture.

A major transition in U.S. farm policy began in the 1960's in an effort to reduce "burdensome" surpluses and government costs. Increasingly, concern was expressed for the need of U.S. agriculture to be more competitive on world markets. Yet income support was still a sought after goal. Price supports were lowered and farmer- offered direct payments for acreage voluntarily withheld. Direct payments were continued (with payment limitations added) under the Agricultural Act of 1970 and general land diversion (set-aside) replaced crop-by-crop land withdrawal. Present legislation (the 1973 Agricultural and Consumer Protection Act) retains direct payments (and payment limitations) but the payments are tied to "target" price levels that can be raised as production costs increase. If market prices for feed grains, wheat, and cotton fall below the target levels, deficiency payments are made. Loan rates provide only a floor or distress price.

A program similar to that for feed grains, wheat, and cotton is now in effect for rice. The Sugar Act was terminated in 1974 which regulated for many years the marketing of domestic and foreign supplies. Only peanuts, tobacco, and extra long-staple cotton are now covered by rigid control programs.

Other general program provisions that currently are in effect include (1) price supports without production controls for dairy products at a specified minimal level of parity, (2) compensatory payments for wool production (without production provisions) to achieve a minimal specified national average unit return, (3) marketing orders and agreements for milk and selected fruit and vegetables, (4) food stamp program and other food distribution activities.

Relative to other developed countries, the U.S. government has a limited number of policies that directly affect this nation's imports of agricultural products. Section 22 of the Agricultural Adjustment Act of 1933, as amended, authorizes the imposition of import quotas or fees. Limited use has been made of this provision, and currently only certain dairy products, cotton, wheat and wheat flour, and peanuts are subject to import quotas. Import and export embargo authority exists however, under specific trigger conditions and "national interest" authority.

In 1964 Congress established a system for imposing restraints on the importation of beef, veal, mutton, and goat meat in fresh, chilled, or frozen form. Although quotas have been in effect only in 1976 under the act, foreign suppliers have in other years limited their exports of meat to the United States under bilateral agreements because of the existence of this legislation.

U.S. imports of supplementary products (those competitive with domestically-produced agricultural commodities) have risen in recent years. A sizable share of U.S. agricultural imports--nearly 40% based on value in recent years--represent complementary or non-competitive import and have entered free of duty and generally free of restrictive barriers.

In addition to measures affecting its agricultural imports, the United States has adopted programs designed to encourage its agricultural exports. The Agricultural Trade Development and Assistance Act (Public Law 480, enacted in 1954 and extended periodically since) authorizes:

--Sales of U.S. farm products in exchange for local currencies and long-term dollar and convertible foreign-currency credits.

--Donations and disaster relief.

--Barter or exchange of agricultural commodities for strategic or other materials to meet U.S. needs.

In addition Title V of the Trade Act of 1974 authorized a Generalized System of Preferences (GSP). This allows U.S. imports of most manufactured and semimanufactured products along with selected agricultural commodities to enter the U.S. free of duty, subject to certain limitations, when these imports originate in designated beneficiary developing countries.[1)]

Credits and credit guarantee programs, administered by the Commodity Credit Corporation (CCC) and the Export-Import Bank, have also assisted U.S. agricultural exports.

Future U.S. farm policy. At the end of 1977 the following legislation expires:

--The Agricultural and Consumer Protection Act of 1973 (applicable to feed grains, wheat, cotton, wool and dairy products)

--The Rice Production Act of 1975

--Authorization for Public Law 480. (For food assistance in developing countries)

New legislation will be influenced by the conditions of world markets. With strong export demand as was generally seen in the 1972-76 period, a continuation of the trend toward minimal government involvement and trade liberalization could be expected. A leveling off of export demand could well mean a retrenchment toward government intervention policies. For the short-term there is considerable speculation that a renewal of the 1973 Act is likely, essentially in its present form with some upward adjustment in the level of the target prices. Also, it is likely that some provision will be included for building of an on-farm domestic grain reserve stock, partly as a mechanism for stabilizing price fluctuations.

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1) Robert A. Riemenschneider "U.S. Generalized System of Preferences Completes first year. Foreign Agriculture, U.S.D.A., FAS April (supplement).

CANADA

Canadian agricultural policy has some of the same elements and purposes as U.S. policy since both are major exporters of agricultural products. Government market intervention programs are most evident in grains and milk. Programs for most other commodities have tended to emphasize improved production and marketing efficiency, market development and stabilization measures.

The domestic cereals policies have the greatest impacts on world trade of any of Canada's commodity programs. Grain policies have four major components: (1) control over marketing both domestic and foreign and pricing vested in marketing boards; (2) subsidies on grain exports; (3) subsidies on the shipment of food grains to the feed deficit areas of Eastern Canada and British Columbia; and (4) agricultural diversification in the main wheat-growing regions and cropland acreage diversion.

The Canadian Wheat Board (CWB) established in 1935, is the sole authority for marketing wheat, barley and oats grown in the main producing area, the Prairie Provinces and part of British Columbia. It administers both domestic marketings and export trade. Domestic marketing is controlled by the issuance of a delivery permit book and institution of delivery quotas to producers and establishment of purchase price. The quota procedures have been modified various times to prevent reoccurent accumulation of grain surpluses. Essentially, farmers are given an initial payment or floor price upon delivery and later after the years deliveries of grain is marketed by the CWB a final payment is made related to quantity and grades of grain delivered by eack producer. During the last few years of high grain prices quotas have been suspended.

The Agricultural Stabilization Act established in 1958 provides for a mandatory support of prices of nine commodities - cattle, hogs, sheep, eggs, butter, cheese, and wheat, barley, and oats and which are outside CWB jurisdiction. The support is to be at a level not less than 80 percent of the average of the preceding 10 years. The Board may support prices by purchases, deficiency payments or any other method, approved by the government. Prices of other commodities too may be supported if the government deems it necessary.

The Agricultural Products Board has the authority to act as an agent of the Agricultural Stabilization Board in undertaking any of the desired price stabilization operations. Additionally the Board has been engaged in the disposal of commodities acquired as part of the price support activities through exports at concessional prices.

Canada's milk supply management program limits price guarantees to allocated individual delivery quotes for all milk and applies sharply rising levies on milk supplied in excess of market requirements. The target price is adjusted with a index of inflation. It is to be supported by purchases of butter and non-fat dry milk (NFDM). The Canadian Dairy Commission administers subsidies for Canadian dairy farmers.

AUSTRALIA

As an exporter of agricultural products (almost half of export earnings are from agricultural commodities) Australia attempts to gain access to markets and to avoid large instability in world commodity markets. Their policies, accordingly, have tended to parallel many of those in other exporting countries, particularly Canada. In addition to the usual program to promote efficiency in production and marketing, producer incomes have been supplemented directly by government payments under various commodity stabilization schemes (e.g. wheat, wool and dairy products).

As a means to cope with low prices and mounting surpluses in the late 1960's, the government (both Commonwealth and state) have actively intervened in the agriculture industry at all levels. Marketing boards representing the heavily exported commodity promote market development and in some cases subsidize exports, and these programs are backed up with supply adjustment and management authority. Indirect assistance is provided to the industry by such means as import licensing (which effectively prohibits import of certain competing products) and by charging higher "home consumption prices" than that charged to foreign customers. Specific program for cereals and livestock products, two commodities of considerable importance in Australian agriculture are discussed below.

Domestic Grain Policy

The Australian Wheat Board is the centralized authority carrying out price support and marketing operations. To control production marketing quotas for wheat were instituted in 1969/70. The producer receives an advance payment on deliveries of quota wheat and further payments determined on the basis of net earnings of the pool for the year.

There is no price support on feed grains. Regional marketing boards and pools are engaged in the marketing of feed grains. As a result of favorable market conditions in 1973, price supports and marketing quotas were not applied.

The Australian Wheat Board exercises a monopoly control over the export of wheat.[1] It sets and adjusts the export price by destination points and concludes sales agreements with buyers.

Prices agreed to in forward sales are maximum prices with the possibility of downward adjustment according to market conditions.

The Australian Wheat Board has much flexibility in setting credit terms to be used for maintaining competitiveness with other exporters. Wheat export credit terms have varied between one and three years. Export sales of feed grains are made on a free market basis.

Livestock Products

The Australian Meat Board is the principle agency responsible for the promotion of sale of meat and meat products both on the domestic and foreign markets. It also coordinates meat research programs within the country. The financing of Board operations are obtained from levies charged to producers on cattle and sheep sold for slaughter.

Research on improving meat quality is financed by a levy on cattle, sheep and lamb slaughterings, and by matching expenditures from the Commonwealth Government.

According to recent proposals the present Australian Meat Board is to be replaced by an Australian Meat and Livestock Corporation.[2] In addition to retaining the present fucntions and powers of the Meat Board the Corporation would also have:

1) responsibility for export of livestock;
2) permission, without prior consultation to trade with private exporters;
3) powers with respect to the quality of meats and livestock exported;
4) greater borrowing powers and new arrangements for financing the Corporation.[3]

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1) The Australian Standard White (ASW) is the dominant class of wheat and supplies the bulk of Australia's wheat export trade.

2) US Department of Agriculture, News, 1251-77 p. 6

3) The Corporation would consist of nine members, an independent Chairman, a commonwealth representative, four members representing livestock producers, one meat exporter representative and two specially qualified members.

In addition improvement and extensions of transportation facilities, railway systems and roads permits livestock producers to ship beef from the producing areas to coastal fattening areas and packing plants. Costs are shared between the Commonwealth and State Governments.

Substantial help to grazers of livestock is provided by rail freight rebates on cattle shipped to agents or packing houses for fattening and slaughtering. These rebates amount to 50 percent of shipping costs. Cattle producers are also entitled to freight rebates on breeding stock or cattle to be used for rebuilding of herds in amount of 20 percent.[1] Land development and irrigation programs were instituted. These were of direct and indirect benefit to livestock producers. Some of the land development programs were giving emphasis to beef cattle production. Likewise irrigation projects are developed for the promotion of livestock and feed crops.

Australia is moving toward a two stage dairy program to implement a national market entitlement scheme as a means of reducing the level of milk output. The first stage will protect the domestic price structure through a compulsory levy/disbursement scheme. Producer returns would be equalized from domestic and export sales, thus a two price system only in the disposition of products would be maintained. This stage is expected to begin in July 1977.

The second stage, expected to follow in a year, would allot marketing entitlements or quotas among the states and then to individual products.[2]

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1) These rebates are applicable only if the number of cattle shipped makes up 25 or more train freight cars. Otherwise the amount of freight rebate is only half those rates.

2) News: U.S. Department of Agriculture, June 8, 1977, p. 4-5.

NEW ZEALAND

New Zealand enjoys a comparative advantage in the production of most pastoral products (beef, veal, lamb, milk beef and wool). Policies have been oriented toward exploiting and maintaining this advantage largely through programs to improve production and marketing efficiency and to expand international markets. The latter activity has been pursued more vigorously in recent years to lessen dependence on the historically dominant UK market.

Specifically, agricultural policy objectives are to expand production largely by means of production incentives to farmers in the form of:

1) indirect subsidies on farm inputs;
2) land development programs;
3) credit assistance;
4) tax concessions;
5) direct subsidy to sheep farmers.

Subsidy for the transport of non-live fertilizers is in effect to encourage development of remote hill country and to serve as an incentive for increased fertilizer usage in general.

Land development, both new and existing marginal land is being encouraged by allowing deduction of expenses from income and deferral from tax liability for a period of five years.

As an incentive to modernizing buildings and equipment farmers can apply accelerated depreciation schedule, which reduces the tax in the years immediately following purchases.

In contrast to other food exporting countries, marketing and price support policy in New Zealand has been more on a ad hoc basis in the absence of permanent farm legislation. Heavily reliance is planned on statutory commodity boards for each of the main agricultural products whose responsibilities include either a supervisory role in marketing or they take full control of the marketing of the industry output. In addition the producer represented boards administer floor price arrangement to cushion producers only against severe price fluctuations.

ARGENTINA

Export markets have always been important to the agriculture and the general economy of Argentina. Farm exports now account for about 80 percent of Argentina's export earnings and thus were paying for imported raw materials. Consequently government policy goals have stressed export expansion. Over the years the peso was devalued repeatedly with the aim of making Argentine exports more competitive and to reduce treasury outlays for subsidizing exports.

The National Grain Board has been responsible for the administration of government grain price support programs and control of trade. Since 1973 the Board has enjoyed a monopoly power in the domestic and export marketing of wheat, corn and grain surghum. Meats exports are handled by the National Meat Board which has practically unlimited powers of acquisition and the ability to export in its own name.

Government price and export tax policies were designed to produce revenues and keep farm prices at low levels. Government farm support prices for grains, oilseeds and beef were fixed annually at relatively low levels. Support prices, have, for most of the time, been considerably below the market prices. The Government has been purchasing grains from farmers at prices ranging from 50 to 71 percent of export prices, then resold them abroad at higher prices; the difference was used to cover budget deficits. Adjustments in grain support prices have not kept pace with the prices of industrial goods, notably from machinery and equipment which were permitted to rise and kept high through tariff protection. Export taxes have been applied on grains, oilseeds and their products and livestock products. These taxes are designed to perform two major functions: raise revenue and regulate the distribution of farm commodities between domestic consumption and export markets.[1)] In addition export taxes are being used to dampen fluctuations in export prices. Taxes are expressed as a percentage of index values based on world market

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1) Export taxes have two components: (1) special purpose taxes for raising revenue for financing research and infrastructure investments; and (2) retention taxes designed to reduce export returns (in pesos) to exporters following a devaluation.

prices. At times of rising prices export taxes are raised to hold down farm and consumer prices.

New policy directions. The new government which assumed power in March 1976 apparently intends to loosen-up the rigid control system and to encourage the return to a free market for grains, oilseeds and their products and livestock. In furthering this goal the government has (1) raised price guarantees; (2) reduced export taxes and adopted more favorable exchange rates for agricultural products; (3) modified agricultural tax structure with the aim of stimulating production; (4) eliminated domestic price controls; (5) eliminated State monopolies in the grain and meat trade reducing marketing influences of the National Grain and Meat Board; and (6) gave encouragement for foreign investment in Argentina farm projects.

The new agricultural policy emphasizes increased wheat, oilseed and beef production by bringing internal prices into greater proximity with world market levels, by extending credit for the purchase of seed and assuring supply of inputs. Concurrently export retention taxes on agricultural commodities were reduced from 39-50 percent to 10-20 percent and exports are to be negotiated at the free market rate of exchange. Producer support prices for feed grains for 1977 were more than doubled and raised substantially for livestock. No support or minimum trading prices were set for flaxseed, sunflowerseed, soybean and peanut crops to be harvested in 1977 as local market prices were considered adequate.

In the beef sector, to stimulate export markets a tax reduction was granted to encourage cattle producers to expand breeding herds.

For 1977/78 grain crops support prices were set at 80 percent of fob export prices and the 10 percent export tax, already lifted for wheat, was removed for all grains.

THE COMMON AGRICULTURAL POLICY OF THE EUROPEAN COMMUNITY

Inauguration of the European Economic Community in 1958 and implementation of its Common Agricultural Policy (CAP) have been among the significant postwar developments affecting international agricultural trade.[1] The value of total exports of the EC to third countries in 1973 was almost 100 billion (U.S. dollars) or one-forth of total world exports (excluding intra EC trade). Agricultural exports along amounted to 9.4 billion dollars. Total imports of the EC from third countries were about 104 billion dollars and accounted for one-forth of world imports. Agricultural imports were almost 30 percent of the total EC imports (by value) in 1973.[2]

Objectives for Common Agricultural Policy

The specific objectives of the common agricultural policy as set forth in Article 39 of the Treaty are:

1) to increase agricultural productivity through technological progress by insuring rational development of agricultural production as well as the optimum utilization of the factors of production, particularly labor;
2) to insure a fair standard of living for the agricultural population, particularly by raising the individual incomes of persons engaged in agricultural activities;
3) to stabilize markets;
4) to guarantee supplies;
5) to insure the delivery of supplies to consumers at reasonable prices.

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1) The European Community (EC) was established by the Treaty of Rome, signed by Belgium-Luxembourg, France, Italy, West Germany and the Netherlands; it became effective on January 1, 1958. The United Kingdom, Denmark, and Ireland joined the Community on January 1, 1973, one and a half years ahead of the original target date.

2) H. de Haen, J.-V. Schrader and S. Tangermann, Problem Assessment EC: General Economic and Agricultural Situation in the EC IIASA working paper (unpublished), 1977.

The common agricultural policy has two main aspects: structural policy as stated under objectives 1) and 2) and market policy as indicated under objectives 3), 4), and 5).

Even though programs and regulations covering commodities differ from one another, most have certain common characteristics. The central mechanism for the establishment of common market organizations and common prices rests on:

1) a three-price system consisting of target, intervention, threshold and c.i.f. prices;
2) open-market buying and selling by intervention agencies to stabilize markets;
3) protection against foreign competition by a system of variable import levies;
4) export subsidies for the disposal of surplus products depressing domestic prices.

Cereal Policies

Common Market Organization for Cereals[1)] are discussed to illustrate the instruments used to accomplish CAP objectives.

Target Price: The target price is the wholesale market price of a commodity that the EC considers necessary to provide a fair income for the great majority of relatively small farms. Thus, support levels are high. It is the basic price support level that is fixed in advance each year for the following crop year at a level desired in the most deficit wholesale markets in the community. For grains the basic target price is set for a standard quality European grain at Duisburg, Germany, the Community's largest deficit area.[2)]

The target price plays a pivotal role in the price support scheme; it is used in arriving at intervention and threshold prices and import levies.

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1) The implementation of the common market for cereals and rice is a complex task involving the resolution of five problems associated with (1) the setting of annual price levels; (2) relative price levels among grains; (3) the price differences among the various qualities and types; (4) transportation costs between deficit and surplus centers and ports of entry; and (5) seasonal variations in price, costs of storage, and rates of interest.

2) Target prices vary according to regions. Regional target prices are set in relation to the Duisburg price minus the cost of transportation. In addition, the target prices for cereals and those for rice are subject to monthly increases to cover the costs of storage and insurance and to even out supply.

Intervention Price: Intervention price is the primary price-support mechanism and is the guaranteed price for Community crops. It is determined annually and tied to the target price, and is the price at which government intervention agencies enter and buy all commodities offered by producers. In a similar fashion, intervention agencies are going to sell commodities at times when shortfalls in supply threaten to drive prices above a stated maximum level. For each commodity, one basic intervention price is established for the deficit center. Separate regional intervention prices are also established, derived by subtracting from the basic intervention price the cost of transportation between the deficit center and the regional intervention centers in the main producing areas. There is a single intervention price for hard wheat, corn and rye ruling throughout the Community.

Intervention agencies also have authority to store or dispose of the grain in the domestic market at target price levels, denature the wheat and divert it into feed use, and sell it in export markets at world price levels.[2)]

Intervention prices are stepped up during the marketing year by monthly increments to allow a more even distribution of deliveries.

Threshold Price: The threshold price is a designated minimum import price. It serves to insulate domestic prices from fluctuations of world prices and to prevent the cheapest imported grain from selling below target prices. The means for raising the prices of imported grains to threshold price levels is the variable import levy.

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1) Intervention prices relate to the EC standards for grain set by regulation. A grain must meet a minimum standard or it may not be accepted by the intervention agency. A schedule of premiums and discounts is applied to any grain that exceeds or falls below the standard.

2) Denaturing premiums are used to facilitate the diversion of wheat into feed. The premium consists of two parts: technical costs of denaturing (dye, fish oil, or mixing with other grains), and a payment to equalize the difference between food grains and feed grains. The denaturing premium rises slightly during the year.

The threshold price is set for only a single point, the major point of import, and is uniform for all points of entry into the Community. For grains it is Rotterdam. The threshold price is based upon "standard quality" EC grain and is derived from the target price by subtracting the loading and freight charges applicable between the frontier of port of entry, Rotterdam, and the designated deficit center, Duisburg.[1] Like the target price, the threshold price increases by a series of monthly increments during the crop year so as to cover costs of storage and insurance normally encountered during the course of the season.

The C.I.F. on World Market Price: The world market price is the lowest daily c.i.f. price (including insurance and freight) for a commodity from outside the Community at the port handling the heaviest volume of trade in that commodity in transit to the deficit center. In the case of grains, when an offer is not for Rotterdam it is adjusted by prevailing ocean freight rates so that it represents an equivalent Rotterdam c.i.f. price. The c.i.f. price is used for the calculation of Community-wide single variable levies. When calculating levies a c.i.f. price is adjusted by the use of a system of coefficients to take account of differences in quality and world market value between different types within each grain and the EC standard for this grain.[2]

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1) Thus, the threshold price at Rotterdam for grains corresponding with Duisburg destination equals the cost of transportation between the two cities plus handling charges.

2) To the extent that these coefficients remain generally unchanged from year to year as well as may not accurately reflect true market value differences between types and qualities they can distort trade patterns. For one, this situation tends to limit exporter's ability to make competitive adjustment of price relationships and thereby, influence the amount of grain imported from particular foreign suppliers.

Single Variable Import Levy: The single variable import levy is an import charge equal to the difference between the threshold price and the lowest c.i.f. world market price observed after adjustment for quality and other factors. Levies are calculated daily.[1] The same levy applies throughout the EC regardless of actual port of entry and internal destination. The variable import levy effectively eliminates price competition from imports.

Variable Export Subsidy: An export subsidy is a refund to exporters to the extent that it may be necessary to meet competition on the world market. The subsidy equals the difference between the internal purchase price paid by the exporter for the product and the lower world market price he receives in selling it outside the Community.[2]

A stated goal of the EC is the establishment of a single support (intervention price for corn, barley and feed wheat. The determination of actual prices of these grains would be left to the market based on their relative nutritional values. The idea for setting the feed wheat support prices equal to that of feed grains is to enhance its competitiveness with corn for compound feed use and on farm use. This would encourage the use of domestically produced wheat at the expense of imported corn and sorghum.

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1) The amount of levy, however, remains unchanged unless the difference between the threshold price and the c.i.f. price exceeds a margin of 0.60 UA per ton.

2) Subsidies are established for five "destination zones" to allow for appropriate transport costs.

Dairy Products

Under the CAP the EC dairy market is governed by three kinds of prices: A target price for milk; intervention prices for butter, NFDM and certain cheeses (for Italy only); and a threshold price for the pilot product (the most representative product) of each of 12 dairy product groups.[1]

Fats and Oils

The CAP for fats and oils is divided into two major commodity groups: olives and olive products of which olive oil is the major product, and oilseeds and oil-bearing materials, oil cakes and meal, marine fats and oils, crude and unrefined vegetable oil, hydrogenated animal fats and solid preparations of fats including margarine.[1]

The CAP for olive oil establishes four prices for the internal market and a variable-levy system for trade with third countries. The producer target price is set at a level which provides an adequate return to the producer and stimulates a desired volume of production. A market target price is set at a level designed to keep olive oil competitive with other high-quality edible oils. The CAP provides for direct payments to olive oil producers to make up the difference when this situation exists. The intervention price, which is set below the market target price, is the minimum support price at which intervention agencies step in to buy supplies offered at that price. The threshold price is the minimum import price and assures that imported olive oil sells at the market target price.

Imports of fresh olives for oil and olive oil products are subject to a variable levy. The levy on unrefined olive oil is equal to the difference between the threshold price and the lowest representative c.i.f. offer price. If the olive oil is refined, the levy in increased by an amount considered necessary

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1) See section on Dairy Policies for further details

2) The main justification for this division is that the EC is 10 to 80 percent self-sufficient in olive oil but only 5 to 10 percent self-sufficient in other vegetable oils.

to protect the EC's processing industry.

Exports are subsidized if the EC price is below the world market price. The direct payments to producers of olive oil may be considered a consumer subsidy as well as a producer subsidy.

The CAP regulations for oilseeds and oil-bearing materials, embrace all animal and vegetable fats and oils except nonhydrogenated land-animal products such as lard and tallow.[1)]

However, only two oilseeds--rapeseed and sunflower seed--have been made subject to price support. These are the principal oilseeds grown in the Community. Support is provided by payments to EC oil mills for crushing of domestic rapeseed and sunflower seeds. These payments enable crushers to pay higher prices to producers and still keep their product competitive with imported oilseeds.

The deficiency payment to crushers equals the difference between the world price and the target price.

An intervention price is also provided at which level purchases would be made to assure that market prices do not fall far below world market levels. But in practice the deficiency payment to crushers has been the effective means of support. While no variable import levies are provided for under this CAP, there is provision for a countervailing duty against imports which have been subsidized by foreign countries.

Tobacco

The CAP for tobacco is basically a leaf-tobacco marketing order together with certain additional provisions covering trade. Prices are supported by government purchasing at levels above the duty-paid price of imports. EC manufacturers receive a buyer's premium on purchases of domestic tobacco which reduces its cost below that of imported tobacco. There are no production controls and export subsidies can be used if necessary to dispose of surpluses. Imports of tobacco are subject to a fixed duty. For Greece, Turkey and many African countries the duty is zero.

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1) Lard and poultry fat are under the CAP for Pork, tallow is not under the CAP.

Fibers

Under the CAP regulations for flax and hemp for fiber, producer prices are supported through payments based on acreage harvested. The regulations also provide that, when necessary, markets can be stabilized by subsidizing the storage of surplus supplies. Imports are subject to the duties imposed by the CXT.

Poultry and Eggs

The CAP for poultry and eggs except for the imposition of basic quality standards, is based entirely on a minimum import price consisting of a sluice-gate price plus a composite levy and, if applicable, a supplementary levy. There is no domestic support purchasing of these products, guaranteed producer prices, or production and marketing controls. Duties on certain products covered by this CAP (e.g., poultry livers and poultry meat and offal which is not fresh, chilled, frozen, salted, or in brine) were bound in the GATT and therefore total import levies on these items cannot exceed the level of GATT bindings. Export subsidies are provided to enable the EC to sell poultry and eggs on the world market.[1)]

There is a very high level of import protection. The ad valorem equivalent of variable levies, supplementary levies and monetary compensatory amounts in Germany range from 21 percent on whole turkey to 89 percent of turkey hind quarters in 1977.

Live Hogs and Pork

The main features of the CAP for live hogs, pork, and lard parallel those for poultry and eggs, but, unlike the latter, this CAP provides for mandatory internal market intervention. This intervention may take the form of either purchases by intervention agencies or subsidies for private storage of products. A base price is fixed annually. Intervention must take

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1) Effective April 1977 export subsidies amounted to 12 units of account (UA) per 100 kilograms on whole broilers and 10 UA per 100 kilogram on eggs not for hatching.

place if market prices fall below the base price. The prices offered by the intervention agencies must be between 85 and 92 percent of the base price. Trade with third countries is regulated by sluice-gate prices, composite and supplementary levies and export subsidies. Thus, imports must meet a minimum import price and pay a levy equal to the difference between the minimum import price and the price offered. The minimum import price includes also a built-in preference for the EC producer.

Beef and Veal

Beef production is supported and stimulated by an orientation or guide and intervention price system, by the control of imports through quotas and levies and by a common External Tariff of 20 percent ad valorem.

The orientation price is an average price considered to provide fair compensation to producers under normal market conditions. It is not a guaranteed price but serves as a yardstick to which the intervention prices and import levies are tied. Intervention can be in the form of beef purchases by intervention agencies and its placing into storage or aids to private storage. There is no mechanism for the support of calf prices.

To reduce EC surplus beef stock the Community has used several schemes.[1)] The socalled "jumelage" linked sales program was introduced in January, 1976. This program made the import of one unit of beef or live slaughter cattle over 600 pounds conditional upon the purchase of two tons of bone-in frozen beef from intervention stocks to be disposed either through sale in domestic markets of exports. The "jumelage" program was suspended effective April 1, 1977.

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1) Disposals by the Community amounted to over 400,000 tons during 1975.

Imports of beef and veal[1] are controlled by levies tied to the orientation price, GATT quotas, duties and special preferential concessions to several African, Caribbean and Pacific (ACP) countries.

There is no CAP for ovine meats, but imports are subject to a common external tariff of 20 percent ad valorem. Each member country regulates the imports of ovine meat under a country licensing system.

EC Economic Cooperation and Preference Trade Agreements

Since its establishment the EC has gradually widened its trade network by (1) concluding a series of preferential trade and economic cooperation agreements with a number of developing and developed countries; and (2) associating Greece and Turkey. Preferential trade arrangements and agreements with developing countries were concluded or extended through the Lomé Convention, EC's Generalized System of Preferences and a series of special bilateral agreements with the Mediterranean countries. Regarding developing countries, the EC has concluded bilateral trade and economic cooperation agreements with the developed Mediterranean countries, the seven EFTA member countries and with a number of other countries including Canada.[2]

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1) The levy program of the beef import system was modified effective April 1, 1977. The new rules permit the raising of the percentage of the basic import levy to 114 percent when the internal market prices fall to 90 percent of the guide or orientation price. Conversely, levies adjusted monthly, are removed when domestic EC cattle prices reach 106 percent or more of the guide price. Levies vary according to scale for prices falling within this range.

2) See Appendix A for discussion of EC Preferential Trade Agreements.

JAPAN

Japan is the third largest trading nation in the world and one of the world's largest importer of agricultural commodities, accounting for about ten percent of total world agricultural imports. Japan's importance in world agricultural trade varies by commodities being highest for soybeans where it accounts for about one-fourth of total trade. It provides a major outlet for grains and raw sugar, absorbing in 1975/76 18 percent of world exports of coarse grains and 14 percent each of total grains and raw sugar. In 1975, Japan imported practically all its maize, wool and raw cotton requirements, along with 96 percent of its wheat and soybean supply. Only in rice has Japan surpluses whereas in pigmeat and poultry it produces most of its requirements.

Policy Goals and Domestic Programs

Besides increasing the level of food self-sufficiency, the other stated target of Japan's agricultural policy is to reduce the disparity in productivity between agriculture and other industries and to achieve farm incomes which, as far as possible, are comparable to those earned in other sectors.[1)]

Complementary to these goals are:

1) the creation of as many large-scale and highly efficient forms as possible;
2) changing the pattern of agricultural production consistent with the changing demand for food;

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1) The overall objectives of agricultural policy and guidelines for agricultural development were laid down in the Agricultural Basic Law of 1971 and clarified in more concrete forms in a document "Promotion of Comprehensive Agricultural Policy". The framework of agricultural policy for the preceeding years were provided by the Food Control Act of 1942 and the Agricultural Land Act of 1952.

3) stabilizing prices of agricultural products so that they fully reflect the market balances in the long-run;
4) the encouragement of outmigration from agriculture.

By 1985, the Japanese government plans to be 37 percent self-sufficiency in grains, 86 percent in meat, 94 percent in dairy products and 51 percent in total feed.[1] Overall the goal is to raise total agricultural food self-sufficiency from 73 percent in 1972/73 to 75 percent in 1985.[2]

Japan also plans to hold security stocks of food. Surplus rice is to be stored rather than exported, building up stocks to two million tons by 1978. Its feed grain stock-piling program was initiated in its 1976/77 fiscal year (April-March) aiming at a reserve of 500,000 tons by the year end 1978. This reserve would be made up of 300,000 tons of corn and 200,000 tons of feed barley. Soybean stocks are to be built up to 300,000 tons by 1981. The Government is also encouraging private stock holding of feed grains and soybeans. Yet, considering the limited storage facilities available, it is unlikely that Japan will be able to institute any sizable food storage program.

The government is encouraging farmers to increase production by offering incentives in the form of minimum price

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1) The corresponding self-sufficiency ratios in 1972/73 were respectively, 42, 81,86 and 46

2) Trends and prospects of self-sufficiency ratios are elaborated in "Long-term Prospect of Demand and Production of Agricultural Products" prepared by the Ministry of Agriculture and Forestry in 1975. See OECD, Study of Trends in World Supply and Demand of Major Agricultural Commodities. Paris, 1976, p. 163

guarantees, domestic market regulations, infrastructure development and import controls. The extent of government intervention in agricultural markets differs from commodity to commodity.

Marketing of rice is under direct governmental control, authorized under the Food Control Act of 1942. The purchases and and resale of rice is done by the Food Agency at fixed prices or executed under government regulations. The government purchase price is established on the basis of changes in the production costs of an average rice producer to ensure maintenance of producer incomes.[1] The government resells the rice through registered dealers at a specified guiding price tied to a "standard rice price". The level of resale price is set below the government purchase price and with a view to help stabilize consumer food budgets.

Japan's high price supports for rice has led to rice surpluses, some of which has been disposed of through concessional exports at greatly reduced prices and fed to animals.[2] Curbing production was effective through the Rice Production Control Program of 1970.

Trade Policy

Japan's food trade policy is geared to the support of domestic agricultural policy objectives by way of controlling the volume and terms of agricultural imports. Diversification of markets is another major target of Japan's trade policies mainly as a means of increasing total Japanese exports and assuring adequate supplies of imports. Overseas agricultural development investments that enhance the export capacity of the host countries is being promoted for this reason. Development projects are being carried out by private industry with cooperation and assistance from various government agencies. The most important ones are the Export-Import Bank of Japan, The Overseas Economic Cooperation Fund (OECF), and The Japan International Cooperation Agency (JICA).[3] The Export-Import

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1) Guides for computation of prices are given in "Production, Cost and Income Compensation Formula".
2) The Producer Price or rice in Japan is the highest in the world, exceeding three times the price in the EEC, another round grain producing area.
3) For further details see Foreign Agriculture, 14 No.33, Aug. 16, 1976.

Bank is in charge of trade financing and encouraging direct investment financing in overseas markets. The Bank also provides Loans and credits to all countries.

The instruments for the control of trade are state trading, quotas, tariffs and "administrative guidances". Agricultural commodities or product groupings subject to state trading or monopolistic imports are rice, wheat, barley, tobacco and dairy products. State trading in wheat is carried out by the Food Agency operating through authorized and licensed traders. Millers determine the amount of wheat needed and the Food Agency allocates the share for each trader as well as specifying the source of imports.[1] Traders in turn, are obliged to sell all imported wheat to the Food Agency which resells it to millers at a markup of about 70 percent. The resale price differs by type and quality of wheat reflecting their intrinsic value for all types of wheat. The markup is not necessarily the same. Thus, the prices spread among different types of wheat are set by the government instead of market forces. Barley is state traded in Japan undertaken by the Food Agency. The trade practice is similar to that used for wheat. There is free trade in maize imported for feeding purposes. Japan also uses trade agreements to cover its feed-maize import requirements. A specific case, for example, is the annually negotiated bilateral trade agreement between the Japan Free Trade Association and Thailand for a fixed quantity of maize.

Foreign trade in leaf tobacco is fully controlled by the Japan Tobacco Public Corporation.

The government is committed to maintaining complete protection for the country's domestic livestock economy. The Livestock Industry Promotion Corporation is the sole importer of dairy products to be released when domestic markets rise above the target stabilization prices. The Corporation also controls about 90 percent of beef imports.

1) Millers are allowed to purchase wheat at world market prices in amounts equal to floor exports. These purchases represent only about two percent of total imports.

Meat import restrictions vary by type of meat. Imports of bovine meats are controlled by quotas. The quota applies mainly to boneless fresh, chilled or frozen beef on a product weight basis.[1] A separate and much smaller quota is set for high-quality beef. Beef imports are stopped whenever beef prices in the domestic market decline and expanded when domestic prices are on the rise. There is no import limitation on ovine meat. In the case of egg and poultry imports the Japanese Government may use "administrative guidance" to get the Japanese trade to cut back on imports.[2]

The main agricultural products still subject to import restrictions are certain dairy (milk, cream, processed cheese) products, beef, certain fruits and their juices (oranges and tangerines), rice flour, wheat flour, certain pulses, dried preas, edible and roasted peanuts, canned pineapple and tomato juices. Tobacco, rice, wheat and barley also remain under quotas as part of state trading operations. Import quotas are set on a half-yearly basis taking into account domestic market conditions. Commodities subject to quota limitations are being imported under import licenses.

Tariff quotas are applied on imports of natural cheese, oats, maize, live cattle, mixed forages and peppermint oil. Maize imported for non-feeding purposes is subject to a quota plus a 10 percent duty. Over-quota maize imports are burdened with a combined tariff and variable levy amounting to about 58 percent ad valorem.

The level of import tariffs also varies widely from commodity to commodity. Tariffs may be flexibly applied or suspended for pigmeat, live swine, ham, bacon and onions when domestic prices are above ceiling levels or when the c.i.f. price is above the maximum domestic price.

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1) The total beef import allocation in Japanese fiscal year 1976 (April 1976-March 1977) was 93,000 tons and 85,000 tons in fiscal year 1975.

2) Plans are to keep poultry meat imports at 30,000 tons a year.

There is a 20 percent duty on wheat, but it is waived every year. Likewise the 10 percent duty on corn imported for feeding purposes and on barley is waived each year. The 5 percent duty on grain sorghum too, is waived on an annual basis. Rice and oats carry duties of 15 percent and 10 percent respectively.

Pork imports are also subject to license. A standard import price is set on pork midway between the minimum and maximum stabilization prices. The tariff equals the larger amount of the difference between the standard import price and the c.i.f. price of imported pork, or 10 percent of the c.i.f. price. In effect this represents a variable levy.

Seasonal tariffs are applied on bananas, oranges and grapefruit.

Japan introduced in 1971 a preferential tariff system for developing countries.

CENTRALLY PLANNED COUNTRIES

Agricultural policies and goals of the centrally planned countries are an inseparable and integral part of the national plans of the respective countries.[1] While the emphasis may vary between countries, the following goals are generally articulated:

- growth of agricultural production;
- increased efficiency and productivity through specialization and modernization of methods and organization;
- increased self-sufficiency in agricultural products;
- increased foreign exchange earning from agriculture;
- improved living standards of the rural population;
- continued development of the food processing industry.

Both direct and indirect policy instruments are used in the centrally planned countries to accomplish targets established by the respective national plans. Among the direct policy instruments that may be used depending upon the country and the specific plan target:

- the determination of the type, size, location and program;
- the determination of farm production by plan targets;
- the central distribution of technical and financial resources of production
- determination of labor flow within and between agriculture and other branches of the economy;
- direct orders for delivery contracts;
- the control of the establishment of new producing organizations in agriculture;

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1) C. Csaki "Agricultural Policy Goals and Instruments and Modelling of Agriculture in Centrally planned European Countries" Working Paper, IIASA, 1976.

- any other plan targets or orders given directly to the enterprise.

Indirect economic instruments of the state include:

- state pricing and price policy;
- state budget and tax policy;
- the regulation of forming and using different financial funds on enterprise level;
- the regulation of the depreciation system;
- the control of wages and incentive system in agriculture;
- centralized credit and interest policy;
- state subsidies;
- export tariffs, import restrictions, exchange rates, export and import duties.

Among the CMEA member countries, some difference exists as to the relative emphasis on direct versus indirect insturments used to achieve targeted plans.[1)]

Eastern European Countries (excluding USSR)

Agricultural growth planned for 1976-80 and estimated annual growth rates for 1966-70 to 1971-75 for Eastern European countries (except USSR) are given in table 1. Agricultural growth plans for 1976-80 range from 2.7 percent in Czechoslovakia to 5-5.5 percent in Romania. Planned growth is greater than what was achieved in the previous 5 year period (1971-75) for all countries except Czechoslovakia, Poland and Hungary. In most cases the crop sector is planned for faster growth than the livestock sector in

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1) Todor Popov, Agricultural Development in the European CMEA to Member Countries--situations, tendencies, problems--(1969-1975) and up to 1980 (prliminary assessment) unpublished report, IIASA, Laxenburg, Austria.

Eastern Europe. Each country has a goal of self-sufficiency in temperate-zone food products but the 1976 drought has reduced chances of reaching this goal in the 1976-80 period.[1)]

1) Eastern Europe Agricultural Situation Review of 1976 and Outlook for 1977 Foreign Agricultural Economic Report No. 134, U.S.D.A. ERS. pp. 16-17.

Table 1

Average annual growth rates in gross agricultural production Eastern Europe, 1971-75, 1976, and plans for 1977 and 1976-80

Country	1966-70 to 1971-75	1975 to 1976	1976 to 1977	1971-75 to 1976-80
Bulgaria	3.1	3.1	4.0	3.7
Czechoslovakia	2.7	-2.7	8.2	2.7
GDR	2.1	-9.8	2.8	3.4
Hungary	3.4	-3.0	7-8	3.2
Poland	3.7	-0.8	5.3	3-3.5
Romania	4.6	17.2	10.9-13.6	5-5.5
Yugoslavia	3.2	8.0	4.0	3.9

Source: Eastern Europe Agricultural Situation Review of 1976 and Outlook for 1977 Foreign Agricultural Economic Report, No. 134, U.S.D.A. ERS. pp. 16-17.

USSR

Soviet agriculture is beset by a formidable natural disadvantage associated with climatic and soil conditions. Despite 2.5 times the land area of the US only 11 percent of Soviet soil is deemed arable. A mere 1.1 percent of that arable soil has favorable rainfall level compared with 60 percent in the United States. Most of the land is located in the cold region. In addition to natural disadvantages Soviet agriculture is also handicapped by a scarcity of labor, fertilizer and machinery, inadequate transport, grain storage and drying facilities. All these add up to lower yields and large post-harvest losses. Equally damaging have been the weather induced large fluctuations in USSR grain production. Since 1960 the annual fluctuations have averaged nearly 18 percent. With the launching of its 10th Five Year Plan (1976-1980), the USSR intends to improve and expand its agriculture in several areas.

The 10th Five Year Plan (1976-1980). The current plan emphasizes both expanded grain and livestock production.[1] The grain output target was set at an annual level of 220.4 million tons for the 1976-80 period. Average output in the five years 1971-75 was 181.6 million tons. The meat output target is 16 million tons or about 11 percent above that of the past five years. A 9 percent increase is targeted for milk output, while egg production is planned to rise approximately 17 percent. The grain-livestock expansion targets suggest that U.S.S.R. may contemplate importing more grain than originally intended over the course of the plan period. What is particularly notable in the new plan is a series of new agricultural policies, backed by increased investment in major agricultural sectors. Most notable of them is a policy for expanding agricultural production and strengthening the structure

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1) The 1971-75 five year plan has set very ambitious goals for livestock product production. It called for a 23 percent increase in meat production over the previous 5-year plan, a 30 percent increase in egg output, and a 15 percent increase in milk production. Other than milk output, the USSR has attained its goals for livestock production.

of agriculture, known as "Cooperation Between Management Units and Integration of Agriculture and Industry". Above all, particular attention will be given to the establishing units of management for specialized production, which is several times larger in scale than at present, while maintaining the basic system of kolkhoz and sovkhoz. These large-scale units are expected to operate more efficiently, reduce production costs and increase the farmers' income.

This goal is to be implemented through

1. specialization of kolkhoz and sovkhoz management and expansion of the scale of specialized divisions;
2. creation of large-scale specialized production through the combination of kolkhoz or sovkhoz; and
3. combination of kolkhoz or sovkhoz and processing enterprises.

Already there are about 6,000 cases throughout the country where the kolkhoz or sovkhoz have combined to specialize production and constructed large-scale enterprises.[1] Such moves to specialize are especially in evidence in raw cotton production in Central Asia; sugar beet production in the Ukraine, North Caucasus and Kirgiz; fruit production in Moldavia, Crimea, Georgia and Armenia; tea production in Georgia; and vegetable growing in the suburbs of big cities.

Shift to large-scale specialized livestock farming complexes with advanced automation is underway. Poultry production enterprises built in various regions turn out as many as 200 million eggs annually. Hog production enterprises in the planning stages are expected to hold up to 108,000 head with all the processes being totally mechanized.[2] In crop production specialization would be tailored to suitability to local conditions.

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1) Leading in these ventures is the Moldavian Soviet Socialist Republic.

2) In the case of hog raising, mechanization ranges from the preparation of feed, feeding and water supply to disposal of excrement.

Vertical integration of farm enterprises is another area stated for expansion. For vegetable and fruit growing enterprises vertical integration may involve the building of own canning, juicing and freezing factories.

Major efforts are made for the development of the Russian Federation's "non-black soil" zone with emphasis on drainage of large areas of often swampy soil. Earmarked were 47 billion dollars for such improvement to the region as irrigation, fertilizer, machinery and over 15,000 miles of hard-surfaced road.

The extent of Soviet success or failure in boosting its farm productivity has important implications not only to this country but to the rest of the world. Success in increasing output would not only permit them to meet their own mounting needs and enhance the standard of living, but also to make a contribution to world food supplies.

POLICY INSTRUMENTS FOR SELECTED COMMODITIES

In this section we review and summarize briefly the major policy instruments specifically related to major commodities. Our emphasis is to identify the policies that impact on world prices and trading patterns rather than those concerned with internal structural policies. However, it is recognized that such policies are not mutually exclusive either in design or effect.

Dairy Policies

The world dairy economy is characterized by structural imbalances between supply and commercial demand manifesting in the oversupply of milk, milk fats and milk proteins. This situation gives rise to complex problems of surplus disposal with wide ranging international repercussions. The reasons for imbalance in the dairy markets are many and varied including:

1) domestic price support policies;
2) large number of small family farms in Western-Europe;
3) availability of ample natural grassland;
4) increasing productivity of dairy cows;
5) stagnant or slightly declining demand for milk and dairy products in developed market economy countries.

Government dairy programs generally state two major objectives: providing a fair income to producers and ensuring an adequate supply of dairy products to consumers.

Among the market economy countries the principal producer-exporters are the United States, Canada, the countries of the EC, Australia and New Zealand. Although these nations account for less than half of the world's total milk output they supply the bulk of dairy products moving into international trade.

Price Support Policies

High price support policies of developed market economy countries accentuated by the absence of effective production adjustment mechanisms are central elements responsible for market imbalances. High price supports are justified on grounds that milk is produced usually by a great number of small farms where it represents a particularly important activity. These farmers depend on daily receipts even if in the aggregate this output has no ready outlet. High price supports on the other hand discourage consumption which in turn contributes to the accumulation of surplus stocks.

The EC is the world's major producer, exporter and stockholder of dairy products. At the present the EC has no production adjustment programs in effect. Among the surplus producing countries only Australia, Austria, Canada and Switzerland have programs for the curbing of production.

Canada's supply management program limits price guarantees to allocated individual delivery quotes for all milk and applies sharply rising levies against milk supplied in excess of market requirements. The national quota is allocated among the provinces which in turn reallocate them among producers. The respective provincial dairy boards administer the dairy program. The target price is being adjusted with a previously designated index of inflation.[1] It is to be supported by purchases of butter and non-fat dry milk (NFDM). The Canadian Dairy Commission administers subsidies for Canadian dairy farmers. Israel is the only other developed country which applies individual delivery quotas for all milk.

Australia and New Zealand apply individual delivery quotas on drinking milk. In both countries, farmers deliver to their creameries and receive preliminary payments. These payments are based on the expectation of respective national marketing

1) Estimated stocks of nonfat dry milk in mid 1976 were 110,000 tons, up 93 percent from 57,000 tons the previous year's level.

boards as to returns realized from the export of dairy products. The preliminary payments (or prices) are supplemented by subsequent payments based on final returns from milk deliveries.

The dairy boards are semi-state corporations and have monopoly control over the export of dairy products. Export prices and returns realized by the boards were generally lower than domestic prices. Because of differential returns, pooling arrangements are being used in Australia for averaging prices between the domestic and export markets. With declining world market prices in recent years the export component of dairy returns has become smaller, therefore, reducing total returns to the producers. Prompted by depressed world market prices, low returns to dairy farmers and growing surpluses of butter and NFDM, Australia is in the process of revising its dairy policy aimed at reducing output. This goal is being promoted by way of speeding up the exit of dairy farmers through adjustment assistance including carry-on loans administered under the Dairy Adjustment Program. As part of the production adjustment program a new two-stage Dairy Entitlement Scheme was introduced effective from July, 1977. Under this scheme production of all manufactured dairy products is limited to domestic needs plus a "realistic assessment" of export potentials. As a short-term assistance measure, Australia has set minimum returns for butter and cheese.

Austria and Switzerland employ a holdback program whereby producers help in the financing of surplus disposal. Under the Swiss program a full price guarantee is given to a fixed global quantity of milk intended for processing; any quantities in excess of this global quota is bought at a reduced price.

Dairy policies of developing countries are still basically consumer oriented as producer prices are kept at a low level. Because of unattractive prices producers are unwilling or unable to supply dairy products in amounts that would satisfy local demand.

Utilization trends and disposal programs

Consumption of milk and dairy products (expressed in terms of liquid milk) in most Western-European countries has either remained stagnant or declined slightly over the past decade. Butter consumption has been especially affected by rising prices and changing dietary preferences. Among dairy products only cheese consumption has shown an increasing trend, whereas in fluid milk, consumption there has been a trend in favor of milk with low fat content at the expense of whole milk. Thus in north-western Europe, over the 1960-1973 period per capita consumption of whole milk, cream and other fresh products has declined 6.9 percent, butter 5.8 percent but cheese increased 40.8 percent.[1)]

The major problem of the dairy industry in the mid 1970's is the rapid growth of nonfat dry milk (NFDM) stocks, notably in the EC, but also in Canada, the United States, Australia and New Zealand. The main underlying factors were the gradual reduction of use of skim milk in liquid form and the replacement of smim milk powder in feedingstuffs used for calves with the cheaper soy-proteins. NFDM powder stocks stood at the end of 1976 at the level of around 2 million tons, covering about half a year's world NFDM needs. In the EC skim milk powder stocks at the same period totaled 1.3 million tons, representing over 60 percent of the world's stocks.

In an endeavor to reduce expenditures toward supporting and subsidising dairy products national governments are giving some thoughts to revise their dairy policies with the aim of reducing incentives to overproduce and to simulate consumption, with respect to the latter, governments have adopted a number

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1) OECD, World Supply and Demand of Major Agricultural Commodities, Paris, 1976, p. 169

of measures to encourage;

1) the use of liquid skim milk and skim milk powder in animal feeds and for casein making;
2) the export of skim milk powder and butter;[1]
3) increased food aid disposals.

Feed use of liquid and dry skim milk is being promoted in West European countries, in North America and Oceania. The main elements of the measures were feed subsidies, export refunds, import levies and food aid disposals.

The EC has been for the last ten years the largest producer of skim milk powder (or nonfat dry milk NFDM) accounting now for more than half of world output (1.9 million tons as 3.4 million tons in 1975). The main use of skim milk powder is animal feeding. In order to reduce its huge stocks of skim milk powder, totaling 1.1 million tons at the end of 1976 the EC is stimulating its use in feeding, human consumption for food aid programs and aids to storage of protein products. Various schemes have been tried. The compulsory mixing schemes aimed at the incorporation of 400,000 tons of NFDM into feedstuffs other than calf feeds. Under this scheme, effective during March - October 1976, feed manufacturers were required to make deposits on domestically produced and on imported vegetable protein for which NFDM could be substituted in livestock rations. With these deposits or protein certificates their holders were permitted to buy NFDM from EC stocks at reduced prices. The import deposits were refunded upon proof that the required NFDM has been incorporated into feeds.[2]

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1) The stipulated quantity of NFDM powder which was required to be purchase was 50 kilogram per ton of soybean meal. The corresponding import deposit was 27 UA and would have been forefeited without the required purchace of NFDM.

2) Butter in recent years has been sold at about one-third of the prevailing EC price.

To stimulate exports to third countries, the EC has increased the export refunds and to protect the domestic prices has raised the import levies.

Government-held intervention stocks of butter in the Community at the end of 1976 approximated 300,000 tons. To reduce its surplus butter stocks consumer subsidies on butter were granted from time to time along with subsidies on exports to promote its sale in foreign markets and donations as food aid to developing countries.

The Canadian Dairy Commission subsidies the export of surplus dairy products.

Proposed policy changes

Subsidized use of milk and milk products currently account for almost one third of total commercial milk production in the EC.[1] Not surprisingly then the idea for the development of new policies bringing about a better balance between milk output and commercial utilization seems to be gaining ground. In an effort to reduce the chronic dairy surpluses the Commission proposed a number of short-term programs and plans for structural changes in the dairy sector.[2]

Short-term remedial measures proposed include:

1) premiums for the non-marketing of milk;
2) imposition of a co-responsibility levy at a rate of 2.5% of the milk price;
3) stimulation of dairy consumption through subsidies;
4) tax of about 10 percent on the price of both imported and domestic vegetable, fish and marine fats and oils competing with milkfat;

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1) FAO, Monthly Bulletin for Agricultural Economics and Statistics, 26, No. 1 (January 1977), p. 13

2) Economic Commission for Europe, The European Dairy Products Market in 1975 and 1976. Agri/R.48 (December 9, 1976) pp. 7-8.

5) suspension of all EC and national aids to the dairy sector for 3 years.

Eligibility for premiums for non-marketing of milk would be made conditional upon a 5 year withholding committment. The co-responsibility levy would serve to make producers bear a share of the market risks associated with the marketing of their produce. It would be applied on all milk delivered and would be an alternative to any global production quota which might be difficult to control in a group of countries. The proceeds raised by the co-responsibility levy would be used partly for defraying the costs of subsidized disposals and for the financing of the common dairy policy.[1)] The proposed tax on vegetable, fish and marine fats and oils is designed to boost EC butter consumption by raising the price of competing products. Several plans for long-term structural reform of the dairy sector are proposed. The major ones recommend subsidies for:

1) retirement from dairying;
2) cow slaughter
3) terminate most national and EC expenditures toward improving efficiences on farms and dairies;
4) conversion of herds from dairy to beef.

The latter subsidies would be tied to the achievement of specified levels of progress within a period of 3 years.

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1) In 1976, expenditures to support the EC dairy sector amounted to over 2 billion units of account (UA) or to nearly $ 2.5 billion.

Meat Policies

World meat production expanded at an average annual rate of 2.9 percent over the decade 1965-75, largely in response to increased per capita income over this ten year period; centrally planned countries realized the largest average annual growth with 3.3 percent for all meat reflecting their intent to upgrade protein diets. The developed market nations showed meat production increases of 2.8 percent and the developing nations had annual meat production gains for the decade of 2.5 percent.

On a relative basis, the developed market countries accounted in 1975 for 44 percent of total world meat production, the developing countries accounted in 1975 for 18 percent and the centrally planned countries for the remaining 35 percent.

World exports during the 1965-75 decade expanded even more rapidly than production. World export totals for all meat rose at an average annual rate of 4.2 percent compared to production gains of 2.9 percent. However, the developed market economies account for the major share of exports--about 75 percent weight in 1975--and showed the highest increases over the 1965-1975 period (5.6 percent average rate of growth). The centrally planned countries accounted for 14 percent of the world export market in 1975 and had annual average increases in meat exports of 2.8 percent. The remaining 11 percent of world meat exports is captured by the developing countries but their meat exports have not changed significantly over the last 10 year period.

The European Community (EC) originated much of the increased meat exports of the developed countries but a high proportion of their exports results from intra-Community trade which is promoted by the Common Agricultural Policy (CAP). Outside of the EC, Australia and New Zealand are by far the largest exporters and realized much of the gains in the world growth in demand for meat products.

In terms of imports, again the EC countries accounted for a major part of the world meat imports but mainly in terms of intra-EC trade. North America, mainly the US, is the largest importer, particularly of red meats. Japan is an importer of increasing importance and the USSR in recent years has made heavy purchases of meat in commercial markets.

National policies both of a direct and indirect nature impinge upon world meat trade. Consider first the exporting nations. Aside from the EC, the major exporters, Australia, New Zealand, Argentina and Ireland have Meat Boards, each with varying authority to manage exports. The New Zealand and Argentina Meat Boards can acquire and export in their own names whereas the Australian and Ireland meat Boards operate with considerable authority but through private exporters. However, the new Argentinian government has stated intentions to eliminate State monopolies in the grain and meat trade and to reduce marketing influences of the national grain and meat boards.[1] Because of limitations (voluntary quotas) imposed by the US on imports of beef, veal, mutton and goat meat, the Australian Meat Board introduced a diversification program under which exporters earn entitlements to ship meat to the US by exporting a certain amount to other markets. For example, in 1976, exporters earned an entitlement to ship 3 tons of beef to the US for each 2 tons shipped to other markets. The paper value of increased entitlements reached as high as 20-25 Australian cents per pound in 1976. Now, apparently the Australian Meat Board intends to phase out this program.[2]

As noted above the countries that comprise the EC, when considered as a region, are large producers, importers and exporters. In recent years much of the trade has been intra-EC because of CAP policies. Domestic beef production in the EC is given in incentive and support by their orientation and intervention price system. The orientation price is the target price that EC trade policy measures are intended to reach and it is generally

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1) Foreign Agriculture Circular, July 12, 1976, p.2.

2) Foreign Agriculture Circular, Livestock and Meat, December, 1976

substained above world beef prices. The intervention price is the market price at which the EC purchases or removes beef from the market and is about 90 percent of the orientation price. In addition, the domestic beef producers of the EC are afforded protection both by levies and external tariffs. On occasion the EC has embargoed beef and slaughter cattle imports and further restricted imports by the jumelage system. This restriction permits the import of a unit of beef for each unit of "intervention" beef that is either sold domestically (within the EC) or exported.

EC pork producers are protected by a minimum import price system that reflects the higher cost of grain within the EC gives a preference for the domestic producers. Also exports of EC pork to third countries are subsidized.

Ovine meat imports into the EC face an external tariff of 20 percent ad valorem. Some countries within the EC use a licencing system for importers that may be quite restrictive.

The US as the worlds major meat producer and importer relies mainly on Public Law 88-482 for protecting the domestic producers. The meat import law which applies to fresh, chilled and frozen beef, veal and mutton was enacted in 1964. The legislation provides for a market sharing arrangement between domestic and imported suppliers, allowing imports to grow at the same rate as the growth in domestic production. Each year mandatory quota levels are established but are not invoked unless the secretary of agriculture estimates that imports for the year will exceed this level by 10 percent--which is called the "trigger point". Only in October 1976 were mandatory quotas placed in effect. In other years, voluntary restraints agreements were negotiated with exporting countries.

Indirect effects on US livestock production and trade result from domestic price support programs for dairy products and deficiency payments for wool. Also federal program allowing grazing permits for public lands may have some effects on production levels. Similarly, tax laws giving favorable treatment for capital gains income in cattle feeding and breeding may encourage agricultural investment and expand output. Recent tax legislation has severely limited tax shelters in agriculture.

Canadian policies impact on meat trade both from protection given to domestic livestock producers and by various import restrictions. For example, the Agriculture Stabilization Act provides domestiv beef and pork producers with deficiency payment for grades A-1 and A-2. Also, Canada effectively prohibits imports of chilled and frozen meat from most other countries, except Australia and New Zealand by animal health and sanitation regulation.

In Japan, beef production is stimulated with support prices. The Livestock Promotion Corporation is authorized to purchase beef when prices are nearing a floor level and well it at near the ceiling prices. Similar programs are authorized for pigmeat and poultry meat.

Meat import restrictions in Japan vary by type of meat. Imports of bovine meats are controlled by quotas. The quota applies mainly to boneless fresh, chilled of frozen beef on a product weight basis. A separate and much smaller quota is set for high-quality beef. The Livestock Promotion Corporation controls about 90 percent of beef imports. For example, in 1976 the Corporation imported beef at a price of around 700 Yen per kilogram and sold it at 1000 Yen. The difference of 300 Yen was profit for the Corporation.[1] Beef imports are stopped whenever beef prices in the domestic market decline and expanded when domestic prices are on the rise. There is no import limitation on ovine meat. In the case of egg and poultry imports the Japanese Government may use "administrative guidance" to get the Japanese trade to cut back on imports.[2]

The level of import tariffs in Japan also varies widely from commodity to commodity. Tariffs may be flexibly applied or suspended for pigmeat, live swine, ham and bacon when domestic

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1) The Japan Economic Journal, March 8th, 1977, p. 14

2) Plans are to keep poultry meat imports at 30,000 tons a year.

prices are above ceiling levels or when the c.i.f. price is above the maximum domestic price.

Pork imports are also subject to license in Japan. A standard import price is set on pork midway between the minimum and maximum stabilization prices. The tariff equals the larger amount of difference between the standard import price and the c.i.f. price of imported pork, or 10 percent of the c.i.f. price. In effect this represents a variable levy.

Grain Policies

The principal barometer of the world's food supply is the level of grain production and trade. Grains occupy more than 70 percent of the world's harvested area and supply more than half of man's food energy when consumed directly and an important proportion of the remainder when consumed indirectly.

Over the last 40 years production and trading patterns have shifted markedly. During the 1934-38 period, Western-Europe was the major net importer while Latin America, the USSR, Eastern-Europe, North Africa, the Middle East and even Asia were among the net exporters. Latin America then exported 9 million tons per year, while North America exported only 5.3 million tons (Table 2). Now, with the possible exception of Latin America, all these regions mentioned as net exporters are net importers, some of substantial magnitude. Asia's grain and rice imports in recent years have risen to a high of 45 to 50 million tons. The differential rates of growth of population and income relative to agricultural production in the developed and developing countries has led to this shift in the pattern of world grain trade. Population growth has been less influential in Eastern Europe.

North America, particularly the United States, is playing a more dominant role than ever before as the supplier for the world's grain imports. The United States now accounts for more than 40 percent of total wheat exports and almost 60 percent of the world's course grain exports and its total share of world exports for all grains has increased in the last few years.[1]

Supply Management

Government supply management of grain is relatively common in both exporting and importing nations.[2] Only the specific measures used to achieve objectives vary and are sometimes modified as supply-demand condition change.

Price policies take on various forms but the main technique includes fixed, guaranteed or procurement prices. Under these schemes the government or milling industry agrees to purchase grain at predetermined prices depending on grade, type, season, etc. Methods of payment vary by country from cash payment at delivery (common in developing countries) to base payment at delivery with subsequent payment after the grain is marketed (Canada, Australia).

Another variant of guaranteed fixed prices is "floor" or "distress" prices. The government agrees to purchase the grain at a set price but leaves the producers with the option to sell the grain at any higher market price. In the US, the "floor" price was given in the form of a nonrecourse loan which the farmer could, at his option, pay back after selling the grain at a higher price. Developing countries using "floor" prices include Columbia, Mexico, Ghana, Libya, India and South Korea. Deficiency payments to producers were previously used by the

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1) US Department of Agriculture, Foreign Agricultural Service "World Grain Situation: Outlook for 1976-77", Foreign Agriculture Circular, FG 26-76, Washington, DC. (October 27. 1976) pp. 21-27.

2) The FAO published a series on national policies and measures affecting grains. Much of this section is based upon the most recent publication in the series and supplemented with various national reports. National Grain Policies, 1975, Food and Agriculture Organization (FAO) of the United Nations, Rome, 1976.

Table 2 World Net Imports (-) and Net Exports of Grain, Selected Periods, 1934-77

Country	1934-38	1948-52	1960-62	1969-71	1972-73	1973-74	1974-75	1975-76	1976-77
DEVELOPED COUNTRIES	- - - - - - - - - - - - million metric tons								
United States	0.5	14.0	32.8	39.8	73.6	75.0	64.9	79.6	78.6
Canada	4.8	6.0	9.7	14.8	14.8	12.7	12.6	16.4	16.4
South Africa	0.3	.0	2.1	2.5	3.1	3.7	3.5	3.3	1.8
Oceania	2.8	3.7	6.6	10.6	8.9	9.4	11.6	11.4	10.6
Western Europe	-23.8	-22.5	-25.6	-21.4	-21.0	-22.5	-19.2	-17.4	-35.9
Japan	-1.9	-2.3	5.3	-14.4	-18.5	-19.3	-18.5	-19.4	-20.1
CENTRALLY PLANNED COUNTRIES									
U.S.S.R. & Eastern Europe	4.7	2.7	0.5	-3.6	-14.2	-10.5	-8.7	-33.5	-19.6
China	-1.0	-0.4	-3.6	-3.1	-6.3	-5.7	-4.5	-1.1	-1.4
DEVELOPING COUNTRIES									
Latin America	9.0	2.1	0.8	3.2	0.6	-2.5	-3.1	-0.3	3.2
North Africa & Middle East	1.0	-0.1	-4.6	-9.2	13.7	-12.7	-15.1	-13.4	-12.5
Asia	2.4	-3.3	-5.6	-11.0	-14.8	-15.2	-16.0	-16.5	-13.1

Note: Grain includes wheat, milled rice, corn rye, barley, oats, and sorghum.

Source: Data for selected periods 1934-71 and 1972-73 are from Economic Report of the President (Washington, D.C. : U.S. Government Printing Office, 1975) p. 172. Data for 1973-77 are from U.S. Department of Agriculture, Economic Research Service, World Agricultural Situation, December, 1975-76.

United Kingdom before joining the EC. The payment or subsidy amounts to the difference between an average market price received by producers and a predetermined price. The deficiency payment may be made on the total marketed output or only on the output specified allotment acres as in the US. However, the "floor" price or the nonrecourse loan in the US covers the farmers entire crop.

In addition non-price policies mainly aimed at producers include:

a) Subsidies for farm inputs, e.g. fertilizer. (Many developed and developing countries including Australia, Austria, Finland, New Zealand and Norway);

b) Provision for government credit or government guaranteed credit;

c) Government support of research and agriculture extension activities;

d) Miscellaneous: tax benefits to producers, subsidised transport of grain, government crop insurance, etc.

The objectives of producer oriented price policies, whatever the method employed may be either to:

a) encourage expansion of production (many developing countries and some developed countries promoting self-sufficiency);

b) manage supply consistent with world demand (most exporting countries);

c) provide farm income support (both developed and developing countries).

Government policies can affect also, domestic utilization of grain products with both price and non-price programs. Price fixing of grains for food consumption is a common procedure in both developed and developing countries, e.g. Eastern European countries, "fair trade" shops in India, etc. A variant is the multiple price system where a central marketing authority sells grain at different markets, (e.g. Australia, Canada). Domestic utilization is affected also by various welfare programs involving outright subsidies (e.g. food stamp program in the US) and specific food distribution programs for low income people. The latter may be intracountry or intercountry grain transfers as gifts or on a concessionary basis.

Denaturing of grains, particularly wheat for cattle feeding is permitted under current legislation in several countries, (Austria, Cyprus, EC) although the practice is currently not in force. Some countries subsidize animal feed purchase, (e.g. Norway, Malta, Tunisia, Libya and Saudi Arabia).

Trade Policies

Most countries employ some form of tariff on grain imports. In most cases the intent of the tariff is a protective measure for domestic producers, but in certain cases it is designed to bolster government revenues. While the EC regulations are not specifically classified as tariff measures they have a similar effect.

The mainstay of the EC grain trade regulation is the threshold price, which provides a barrier between community price levels and world markets.[1)] It is established for the main grain varieties so that the wholesale selling price for imported grain in Duisburg is the same as the target price. Variable levies are imposed on the entry of grain from third countries to cover the difference between the threshold and the world market prices. The levy is calculated and reset each day. The EC operates a system of export restitution to allow export trade when world grain prices are less than EC prices. And when world grain prices were well above EC prices in 1973, the community imposed an export levy on grain to

1) See section of Common Agricultural Policy of the European Community for further details

to guarantee adequate domestic supplies. Thus, with instruments of the variable levy and the export levy, the internal grain market of the EC is effectively insulated from world price differences.

Other standard instruments used by many countries to regulate grain trade include export subsidies, export taxes, credit insurance, promotion grants, tax incentives and export and import licensing.

Most cereal exporting countries are members of the Food Aid Convention of the International Wheat Agreement of 1971 and a large number of countries follow the FAO Principles of Surplus Disposal. The International Wheat Agreement of 1971, which consists of the Wheat Trade and the Food Aid Conventions, has been extended for the third time by the 1976 Protocol to 30th June, 1978. Discussions are being held on the International Wheat Council to examine the possible bases for a new international agreement to replace the present Wheat Agreement. Negotiations are also proceeding in the GATT Group on Agriculture which is considering proposals by government regarding possible approaches to the stabilization of prices and markets, expansion and liberalization of trade, and objectives concerning the developing countries' interests as exporters and importers. In addition to wheat, the GATT negotiations also cover maize, barley and sorghum.[1)]

It should also be noted that most major exporting countries (including the US, Australia, Canada, Argentina and Thailand) have bilateral agreements. For example, the US - USSR agreement states that the USSR will purchase a minimum of 6 to 8 million metric tons of US corn and wheat annually for 5 years starting in October, 1976.

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1) 1976 FAO Yearbook p.

Sugar Policies

Sugar is an important product in international trade to both developed and developing countries. Cane sugar which accounts for about 60 percent of world sugar production is an important crop mainly in developing countries, particularly Latin America. Beet sugar production is confined largely to developed countries with temperate climates.

World sugar production expanded over the 1965-75 period at an average annual growth rate of 2.3 percent.[1)] The fastest growth was seen for cane sugar--3.3 percent, compared to a one percent increase in production of beet sugar over the past decade. The developing countries, currently accounting for about one half of world production, showed the greatest annual average increase (3.7 percent) with Brazil, other Latin American countries, the Far East and Oceania marketing significant gains. In contrast the developed market economies increased sugar production at a rate of 2.2 percent annually with the centrally planned countries (as a group) showing essentially no production change.

Total world consumption grew at an even faster rate than production in the 1965-75 period. (3.4 percent compared to 2.3 percent). As a result carryover stock declined over the same period at annual average rate of 2.2 percent. Although per capita consumption of sugar is considerably lower in developing countries than in developed countries, consumption in the developing countries increased at a much more rapid rate over the last decade (4.9 percent in developing nations compared to 2 percent is developed market economics and 3.8 percent is centrally planned countries).

1) FAO Commodity Review and Outlook, 1975-76.

World net exports of sugar increased at an annual average rate of 2 percent for the 1965-75 period - slightly less than the production rate. Major sugar exporters include Cuba, Brazil, Australia, the European Community, Philippines and Dominican Republic. Major importers of sugar are the US, Japan, USSR and the European Community.

The history of sugar trade is dominated by special arrangements and agreements. Nagle notes that gross exports to the free market in 1972 and 1973 represented not more than about 57 percent of world gross exports of sugar.[1)] The remaining balance was accounted for by exports under special arrangements and agreed upon price provisions (see table 3). This situation has changed markedly since 1973. The 1968 International Agreement expired in 1973. The United States Sugar Act and the Commonwealth Sugar Agreement were effectively terminated at the end of 1974. Formal negotiations on a new International Sugar Agreement began in Geneva in April 1977 and ended on May 27, 1977 without resolving a number of key issues. There may be a second session of the conference in the fall in Geneva.[2)] But currently a major part of world sugar trade is closer to a free market basis than has existed for many years.

Concern is being expressed now by US producers about the need for a domestic program as spot and future sugar prices have steadily declined since early 1975.[3)] The US import tariff on sugar was raised in September 1976 to 1.875 cents a pound, up from the "preferential" rate of 0.625 cents.

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1) Nagle, J.C., Agricultural Trade Policies, Saxon House, DC Heath Ltd., 1976, p. 103.

2) Foreign Agriculture, FAS, U.S.D.A., June 13, 1977, p. 11

3) Edward, U., Jesse and Glenn, Zepp, A., Sugar Policy Options for the US, ERS, USDA Ag. Econ. Report no. 351, 1977.

Table 3

Sugar exports under special arrangements, 1972 and 1973
(thousand tons, raw value)

	1972	1973
To US under US Sugar Act	4,813	4,718
To UK under Commonwealth Sugar Agreement	1,808	1,781
Cuba to other Communist countries	2,338	3,023
USSR to other Communist countries	40	35
Congo and Malagasy Republic to OCAM	49	59
Total	9,048	9,616

Source: Table 7.5 Nagle, J.C. Agricultural Trade Policies, Saxon House D.C. Heath Ltd., 1976, p. 103.

EEC Sugar Policy: The CAP for sugar, covers raw and refined sugar and molasses as well as the sugar-added content in processed fruit and vegetables. All EC members meet their sugar requirements from their own production, and France and Belgium also are traditional exporters. Practically all EC sugar is produced from sugar beets rather than sugar cane.

The CAP price-support system is a full variable levy system, similar in many respects to that of grain. If it includes a target price for refined sugar, intervention prices for refined sugar, raw cane sugar, and threshold prices for refined sugar, raw sugar, and molasses. The target price is established for the end product, refined sugar, rather than for the unprocessed product, sugar beets. The target price, which is received by the sugar refiner, reflects the return desired for the beet grower and is established for the EC area with the greatest surplus-northern France. A guaranteed minimum price for sugar beets is established by means of calculation from the refined sugar price. Intervention prices provide a floor for EC sugar prices, since sugar will be purchased by government agencies at these prices. The "basic" intervention price is set 5 percent below the target price and then the "derived" intervention prices, based on the basic intervention price, are established for areas outside the northern France surplus area. The threshold price, which is the minimum price, is equal to the target price for northern France plus transportation costs to southern Italy, a deficit production area.

Imports of refined sugar, raw sugar, and molasses are subject to variable import levies. Export subsidies, which can be varied depending on country of destination, are provided to make up the difference between EC and world market prices. A variable import levy and export subsidies also apply to the sugar-added content of processed fruit and vegetables.

Sugar output in the EC is controlled by a system of quotas which are allocated on the basis of past output, to each EC country and to each sugar refiner within each country. The refiner is assured of a market for his output and receives the full guaranteed price for his quota amount. Moreover, a guaranteed market is provided for output up to 135 percent of the refiner's quota, but the guaranteed return falls in proportion to the amount by which the basic quota is exceeded. This is accomplished through a production levy imposed on all the beet sugar a refiner produces above his basic quota, up to a maximum of 35 percent more than that quota.[1)] Sugar beet growers are guaranteed a minimum price on all of their output except that portion which exceeds 135 percent of the refiner's quota.

The CAP sugar program has significantly stimulated production and resulted in substantial surpluses during its first years of operation. These surpluses have been used as livestock feed and by the chemical industry. Substantial quantities in some years have also been exported to non-member countries.

Eighteen associated African nations are exempt from the EC sugar-added levy, and imports of processed fruit from these countries as well as from Greece, are also accorded duty-free entry preference. The subsidies granted on the sugar-added content of processed fruit and vegetables exported from the EC have resulted in the Community becoming a major factor in some third-country markets.

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1) Extra production which exceeds 35 percent of the refiner's quota cannot be sold on the EC's internal market, but must be sold abroad at the world price without benefit of an export subsidy.

INTERNATIONAL TRADE

AND COMMODITY POLICIES AND OPTIONS

In a period of growing international economic interpendence among nations, intervention in commodity markets by national action alone is generally inadequate for remedying most problems related to instability of markets and lagging economic growth.[1)]

International trade is seen to stimulate economic growth through its effects in widening markets, raising the level of capital accumulation and in providing access to technological knowledge. Wider markets and exchange in turn should enable individual nations to fully exploit their respective comparative advantage. Ultimately then trade will affect efficiency, income distribution and stability.

The world food and agriculture economy appears to take on the features of an oligopolistic market dominated by the actions of three market economy powers, the United States, EC and Japan and three centrally planned economy powers, the USSR, the East European countries forming CMEA and PRC. Action taken by one of these powers will have impact not only on the other five but also on the rest of the world. Trade policies, in particular, can have wide ranging effects and repercussions on each of the major trading powers.

Faced with an oligopolistic market configuration the developing raw material producing countries are making efforts to protect their interests by collective action. These actions may take four forms: (1) increasing access to markets of developed countries; (2) improving the terms of trade; (3) conclusion of bilateral and multilateral agreements for a range of commodities; and (4) establishing new regional economic groupings or the revitalization of existing ones.

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1) For a discussion on the nature and scope of international economic interdependencies and international relations see Therald K. Warley "Agriculture in International Economic Relations", American Journal of Agricultural Economis (December, 1976) pp. 820-830.

Therefore for purposes of our discussion of alternative international policies and policy instruments we specify two broad (but not inclusive) categories; those policies that relate mainly to trade and cooperation among (a) developed and developing countries, (b) developed countries.

Trade Policy and Cooperation Among Developed and Developing Countries.

To an important extent the capacity of developing countries to respond to market opportunities lies beyond their own direct control. Export earnings depend also on the trade policies of the developed countries, economic conditions in the developed countries and commodity prices prevailing in international markets. A large proportion of trade in temperate zone agricultural commodities, processed agricultural products and manufactured exports by developing countries are subject to tariff and non-tariff barriers of varying intensity, as discussed in previous sections of the report. The scale of protection differs from commodity to commodity and from country to country. In the case of agricultural commodities the highest barriers are raised against the basic foodstuffs like cereals, meat and dairy products for which trade represents a small share of production. Most of the benefits of this protection accrue to the processing industries rather than to the farmer.

In general import barriers are highest for manufactures where the impact on domestic industry is biggest and least important for minerals and metals. Protection of domestic producers against competition from imports are the principal underlying reasons for the continued retention of barriers to access of certain commodities.

Tariff barriers: Although trade liberalization efforts undertaken under GATT auspices resulted in a signigicant reduction of tariff barriers, many still remain that interfere with trade in products of special importance to the developing countries. New avenues for trade liberalization were opened up within the framework of the General System of Preference (GSP).[1)]

The GSP is a scheme under which developed countries grant preferential duty margins to exports of developing countries in their markets in relation to the exports of other developed countries. These are voluntary and nonbinding offers which are extended without requiring reciprocal benefits from developing countries. Since the GSP is in violation of GATT principles a waiver was approved in 1971 authorizing the developed countries to grant tariff preferences to developing countries without reciprocity for 10 years.

Presently programs of general preferences have been introduced by most all developed market economy countries. The EC introduced a generalized non-reciprocal system of preferences in 1971. The United States' scheme of preferences entered into force on January 1, 1976. Most of the socialist countries of Eastern Europe participate in some way in the GSP by offering special inducements for imports from the developing countries. Generallized preference programs of various countries are broadly similar to one another insofar that they cover industrial products generally and agricultural commodities selectively. The US program differs from those of the EC[2)] and Japan in two ways: by setting limits on preferential imports of most of the agricultural commodities covered and in eliminating rather than reducing tariffs.[3)]

So far the preferential market access arrangements granted under the GSP have made only small contributions to the expansion of trade. The main reason for the limited success of GSP is the rather narrow range of commodities covered by these measures notably processed agricultural products and others in

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1) The General System of Preferences have their origins in a resolution of the first United Nations Conference on Trade and Development (UNCTAD), held in 1964, which called for "the participation of the developing countries in international trade in manufactures and semimanufactures". It was accepted in principle at the second session of UNCTAD in 1968.

2) See appendix A for discussion of EC cooperation and preference. and trade agreenents.

3) For a list of agricultural commodities and countries designated as eligible under United States GSP see US Dept. of Agriculture, <u>US Generalized System of Preferences Completes First Year Supplement.</u> FAS, Washington, DC (April, 1977), pp. 5.25.

which the developing countries have exportable surpluses or a comparative advantage.

Nontariff barriers: There is a wide variety of nontariff barriers, an area where the GATT has been notably unsuccessful in effecting liberalization. These include quantitative barriers, "voluntary agreements", regulations on health, safety and sanitation restrictions by the importing country are replaced by "voluntary agreements" where the exporting country agrees to limit export. That is to avoid the imposition of quantitative restrictions exporting countries are induced to "voluntarily" restrict exports of some sensitive commodity.

Another group of measures that interfere with trade are (1) subsidies[1] especially export subsidies;[2] (2) "internal taxes or other internal charges of any kind in excess of those applied directly, to like domestic products";[3] (3) certain customs valuation practices[4] such as the American - selling price system; and (4) charges and documentation requirements which exceed the normal requirements.[5] Government procurement practices too are being used to discriminate against foreign supplies including limitation of credit or access to credit insurance on exports to certain markets.

Reduction of barriers indicated above is central to the intensification of trade relationships and world trade. Yet, it needs to be pointed out that major progress in liberalizing trade with developing countries is not likely until developed market economy countries' economy remain at reduced level of activity. That is, aside from the dismantling of trade barriers revival of trade and export earnings of the developing countries

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1) GATT document L/2812 of July 12, 1967

2) Article XVI 1 GATT

3) Article XVI 2 GATT

4) Article VII GATT

5) Article VIII GATT

will also depend on future rates of economic growth in the industrial countries.[1)]

Commodity Market Stabilization Schemes: A reasonably stable commodity market may bring distinct benefits for both importing and exporting countries. These are expected to follow from a steadier flow of trade, a better balance of supply and demand, and the creation of favorable conditions for the expandion of investment in production and processing capacity. The principal instruments which are available for commodity market stabilization include:

(a) building up of international buffer stocks;
(b) international commodity agreements;
(c) informal price and trade stabilization arrangements;
(e) establishment of producers associations marketing arrangements and trade groups.

A common element in the application of each of the instruments is the setting and maintenance of commodity prices at levels which are acceptable to producers and equitable to consumers of importing countries. Basically prices should be stabilized around a long run trend and not at artificially raised level. Closely linked to the price issue is the question of quantity committments to be made under these schemes. The safe-guarding of the market share of developing exporting countries ranks high among proposed corrective actions. It is assumed that by agreed price ranges and market sharing provisions market instability can be effectively corrected.

Buffer stocks: Setting up of international buffer stocks is now widely held as the main instrument for security of supply

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1) It is likely, however, that acceptance of larger volumes of imports from the developing countries will be conditioned by developed countries' willingness ot provide adjustment assistance to domestic industry by foreign competition.

"world raw materials banks" to protect the assets of developing countries. It was suggested that the assets of the developing countries would be safer invested in raw materials than in unstable currencies or in companies which the developing countries could not control. Stocks, of course, can be set up solely for the relief of emergencies and may well be administered by an existing international agency such as the World Food Council. An alternative to holding food security stocks would be the setting up of a fund to compensate poor countries for purchase of food imports necessitated by shortfalls in domestic output.

Up to now buffer stock schemes have been used only in the agreements on tin and cocoa. Any future buffer stock schemes may need to be supplemented with other measures if they are to become viable remedial devices for commodity market stabilization. Thus buffer stocks may need to be operated within the framework of international commodity agreements or in combination with supply management by producers and possibly export regulation. Even more important, is the establishment of a common fund needed for the financing of stocking operations. Establishment of a common fund for the financing of stocking operations was one of the major demands of developing countries at UNCTAD.

With respect to commodity market stabilization, UNCTAD IV proposed an "Integrated Program for Commodities" (IPC) that would involve concerted action in 18 commodities including 12 agricultural products, through a set of measures which, by and large, are

1) For elaboration see UNCTAD IV, New Directions and New structures for Trade and Development, TD/183, Nairobi, May, 1976, pp. 12-14.

applicable to each major primary export product. These commodities are of importance to most developing countries. For about 31 countries these commodities supplied half or more of their total export earnings in the 1970's. (see Appendix B) Among these countries, three derive more than 90 percent of their export earnings form the 18 commodities in UNCTAD's list.

Ten of the 18 commodities (cocoa, coffee, copper, cotton and cotton yarn, jute and products, rubber, sisal, sugar, tea and tin) are classified as "core commodities" which are storable and considered suitable for international stocking schemes. Regarding the remaining commodities, stocking devices are envisaged for wheat and rice, and some form of international stabilization arrangement for beef and veal, vegetable oils and oilseeds, bananas, phosphates, bauxite, manganese, iron ore and tropical woods.[1)]

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1) The North-South Conference (officially known as the Conference on International Economic Cooperation) conducted in Paris for a year and a half ended June 3, 1977 with limited sucess. The main elements of the new international economic system hoped for by the South were: (1) a common fund and buffer stocks for commodity price support; (2) increased development assistance; (3) debt moratorium; and (4) price indexation of raw materials. Agreement was reached on two proposals. These are to finance a $ 1 billion Special Action Program to help thepoorest countries of Africa and South Asia and a committment on the creation of a common fund to stabilize commodity prices. The United States will continue to contribute $ 375 million to the Program and EC will add $ 385 million. The rest will come from other developed countries, wither in aid or by cancelling debts. The final outcome of the proposal of developing countries for setting up a common fund fell short of meeting the demands. The disagreement arose over the range of commodities covered by the fund. As envisaged by the developing countries, the fund would cover 18 commodities and provide for new transfers of funds as well as for stabilizing income. The developed countries have countered this proposal with one involving a limited common fund and reserve stocks to support the price of a few commodities, perhaps six, subject to severe price fluctuations. However, they should be handled in separate negotiations, not under a general system. Moreover, the developed countries expressed unwillingness to accept price indexation of raw materials and a debt moratorium.

But there is another aspect to the concept of commodity stocks and that concerns the costs and benefits of holding stocks compared to other forms of stabilization policies. In this context, it needs to be recognized that stocks can serve mainly as short-term stabilization instruments, they can mitigate some fluctuations but cannot correct a chronic disequilibrium faced by certain commodities. Moreover, buffer stock type of arrangements are not equally feasible to apply comprehensively to each commodity group. Best suited for buffer stock arrangements are homogeneous commodities with long storage life. For these reasons it would be very difficult, for example, to apply it to all oilseeds, oils and fats.

International Commodity Agreements: In the post war period there have been only six working international commodity agreements or arrangements, covering wheat, sugar, tin, olive oil, coffee and cocoa. Of these, only the agreements for wheat, cocoa, tin and coffee are now in effect. The Third International Coffee Agreement took effect on October 1, 1976 and the Fifth International Tin Agreement went into effect on July 1, 1976. Informal intergovernmental agreements evolved under the auspices of FAO for tea, sisal, abaca and jute.

The experience of the agreements already concluded, suggests that they failed to fulfill the aspiration of trading partners to stabilize prices or export earnings when both supply and demand vary markedly. However, specifications of different agreements vary in terms of the choice of operational technique, method of market sharing, enforcement provisions, etc. For example, in addition to the buffer stock schemes, international commodity agreements can be in the form of mulitlateral long-term contract type agreements which involve the purchase and sale of guaranteed quantities of commodities as exemplified by earlier international wheat agreements. The export restricting agreements aim at stabilizing prices by limiting market supply, a goal pursued through the agreements on sugar and coffee. Other pertinent considerations are the selection of compensatory methods to

offset fluctuation in commodity trade and the sharing of the fiscal burden in intervention in commodity trade. Much depends on the level of prices established. If agreements with minimum pricing provisions were able to freeze production pattern, serious misallocation of resources would result.
"High" price levels in general tend to stimulate the use of substitutes and reduce comsumption. High grain prices, e.g. raise food costs to consumers and production costs for the livestock industry. They encourage expansion of uneconomic production by limiting adjustments based on improved technology. Additionally, any non-cooperating country of signigicant market importance can upset an international agreement. In view of these factors, if international commodity agreements are to play a major role in market stabilization they need careful consideration of direct and indirect effects both in terms of costs and benefits.

Compensatory financing scheme: The objective is compensatory financing to guarantee against short falls in earnings from commodity exports from developing countries. Such facility is regarded as a supportive and complementary instrument to other commodity price and trade stabilization measures. It implies that the main stabilization devices are not fully effective in insuring coountries against major declines in export earnings. The present IMF scheme allows member to borrow currencies to offset shortfalls in export receipts from a calculated average because of adverse production or low world prices. The IMF facility provides only for a temporary decline in export earnings and this, according to UNCTAD judgements does not meet the needs of developing countries.[1)]

UNCTAD IV proposals would enlarge the basis of compensation to cover all exports and provide assistance to make up for shortfals in real export earnings. Additionally, more liberal terms of financing than is presently provided on the ordinary lending terms of the IMF were proposed.

1) UNCTAD IV, Commodities, TD/184, Nairobi, May, 1976, p. 15.

Producer associations: These schemes are perceived as means for improving the terms of trade for developing countries by enhancing the bargaining power for groups of primary commodities producing countries. In addition to oil its proponents regard copper, tin, bauxite, and molibdenum as critical raw materials and suitable for supply manipulation. For example, Chile, Peru, Zambia and Zaire, mine much of the world's copper; Malaysia, Thailand and Bolivia, account for 70 percent of the tin mined in the world, and Morocco is a major source of high yield phosphate rock. The aim is to regulate the supply by united and concerted action to aviod uncoordinated expansion which would result in depressing prices. This goal is invisaged to be promoted by means of:

(a) introduction of export or production quotas;
(b) establishment of buffer stocks;
(c) application of multinational purchase and supply committments under medium and long-term contract, and
(d) establishment of multinational export enterprises.

There are, however, a number of developing countries which do not produce or rely on export of any primary commodity included in UNCTAD's list. These countries, other than OPEC members will need special trade and compensatory financial assistance or arrangements.

Cooperative action may be initiated by the producing countries along or undertaken jointly with consuming countries.

Concerted action by importing countries: There is scope for joint action initiated by importing countries themselves. Such associations on the buyers side may serve to counteract the strength of producer associations and secure stable supplies at prices they consider to be equitable. Most of the techniques for market regulations employed by producing countries can also be undertaken by the importing countries. Moreover, importing countries could establish multinational import enterprises or resort to mulinational pooling of imports on a selective basis. The effectiveness of joint actions taken by producer-importing country associations hinges on:

(a) the degree of concentration on the side of the sellers and buyers;
(b) the possibility of substitutes or of alternative sources of supply.

Other Trade Groups:

Several other multi-country trade groups influence world agricultural trade to varying degrees. The European Free Trade Association (EFTA)--including Austria, Norway, Portugal, Sweden, Switzerland, Iceland and Finland as an associate member--specifically excluded agricultural products from their free-trade provisions, so the policies of individual countries govern the agriculture of each member.

Integration of agricultural trade among the 11 members of the Latin American Free Trade Association(LAFTA) has been retarded by the reluctance of many of the member countries to relinguish national control over production and marketing of agricultural products. Conduct of agriculture in each of LAFTA countries continues to be based largely on national policies guided by domestic considerations.

Economic integration has advanced in the Central American Common Market (CACM) since 1961, though at an uneven pace, and intraregional trade in agricultural products has been stimulated. Studies have indicated that the CACM has the potential to become self-sufficient in agricultural production, with the exception of wheat.

Trade Policy and Related Options

By way of a summary we note possible approaches for enhancing the export capacity and/or trade opportunities of developing countries these are:

(1) further liberalization of access to markets of developed countries;

(2) extension of the generalized system of preferences to cover all agricultural products;

(3) modification of internal policies aimed at encouragement of export expansion;

(4) enhancing the bargaining power of developing countries in external relations;

(5) institution of a system of preferences among developing countries.

Some possible operational instruments for modelling include:

(a) changes in domestic policies to encourage shift in production pattern along lines of comparative advantages;

(b) increased investment in industries with export potentials;

(c) changes of export subsidies and other aids to exports;

(d) international trade agreements of different types;

(e) exchange rate manipulation;

(f) varying levels of trade liberalization by developed countries.

Trade Policy Issues Among Developed Countries

History shows that when governments are faced with economic difficulties, the application of protective trade and financial measures become tempting alternatives. Stimulation of exports through discretionary subsidies and government supported export credit programs constitute one possible course of action. The other is the begger-thy-neighbour trade restriction policy aimed at keeping foreign products out and protecting domestic producers. A wide range of means as have been discussed are available to pursue such courses of action. The most universally applied measures for the protection of agriculture are the non-tariff interventions, notably quantitative barriers, variable levies "voluntary agreements", and unfair trading practices.

Also, agricultural protectionism is rooted in domestic price and income support policies and in national food self-sufficiency aspirations of industrialized nations. The "costs" of these policies has been widely recognized: the stimulation of excessive and uneconomical production necessitating subsidized disposals of surpluses. Aggravating the situation is that national policy goals of both importing and exporting countries may be conflicting. And developing countries may bear a particularly heavy burden of the costs.

However, given present political realities and inward-looking national agricultural policies full-scale trade liberalization can only be regarded as a distant goal. GATT offers other major international institutional vehicle for trade liberalization in the foreseeable future.

Trade liberalization under GATT auspices. GATT is a multilateral treaty between governments based on reciprocal rights and obligations. Its major aim since inception has been to facilitate the reduction or elimination of barriers that restrict the flow of trade among nations and to improve the rules and procedures that govern the commercial dealings between nations. In

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1) At the time of its creation in 1947 GATT had a membership of 23 nations; presently it has 105 member nations of which 83 are full, 3 provisional, and 19 de facto.

carrying out its objectives GATT operates with four principles:

1. The most-favored-nation clause, stipulating that trade should be conducted on the basis of non-discrimination. Preferences granted to one member country should be extended to all other member countries.
2. Industrial protection confined solely to import and export duties. This rule prohibits the use of quantitative restrictions on imports. Import duties are to be reduced, eliminated or bound against increase through negotiations.
3. Domestic price and income support programs should not be used to increase exports or to reduce imports by the country applying them. The export subsidization prohibition, however, does not apply in the case of primary commodities, including agricultural products.
4. Prior consultation should be made before introducing policies that can damage the trading interests of contracting parties.

In addition to laying down rules for international trade conduct GATT provides a forum for the holding of trade liberalization negotiations.

Negotiations in the current round of multilateral trade talks concentrate on agreements for the reduction or removal on nontariff barriers to trade.[1] With a view of speeding up the process of trade liberalization the Trade Negotiation Committee has established a number of groups including Agriculture; Nontariff Barriers; Tariffs; Safeguards; Sectors and Tropical Products. Actual negotiations are carried on in a number of separate subgroups.

There are subgroups on Subsidies and Countervailing Duties; Quantitative Restrictions; Technical Barriers to Trade; and three subgroups on agriculture: grains, meat and dairy products.

The subgroups on grains concentrates on three interrelated issues: stabilization of prices and markets; greater liberalization of trade; and the special position of developing countries.

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1) Negotiations have been in preliminary stages since September 1973, but substantive bargaining sessions began in March 1975 awaiting the passage of the U.S. Trade Reform Act of 1974.

The subgroups on meat is engaged in analyses on the characteristics, structure and problems of the world meat trade including direct and indirect impact of trade barriers and trade distorting practices.

The Subgroups on dairy products is dealing with anhydrous milk fat and butter, cheese traded internationally, dried milk (skim milk powder and whole milk powder) and casein. As part of the first stage of negotiation it has made a study of world trade in dairy products. Of particular concern in the current negotiations are export subsidies and taxes levied on imports. Regarding export subsidies, the main targets are the subsidized disposal of surpluses of grains, dairy products, poultry, fruits and vegetables. Here the aim is the adoption of a strict code controlling their application. Proposals were made for differential treatment for export incentive measures used by developing countries and for countervailing duties applied by developed countries against developing countries' products.

Grains, dairy products, beef and sugar enjoy the highest degree of trade protection. Also, there is the question of safeguards--allowing countries to take emergency action to curb imports causing disruption of markets.

There are few signs of progress for the agricultural negotiations. The European Community is opposed to negotiations on agriculture arguing that the principles of the Common Agricultural Policy and its mechanism are not negotiable. Their position is to isolate agriculture into a separate negotiating group and into product sector subgroups. The U.S. favors considerations of agricultural and industrial trade measures as a package by offering improved access to its industrial markets in exchange for concessions on agricultural exports in the markets of other countries. The U.S. tariff cutting proposals seeks the reduction of both agricultural and nonagricultural duties within the range of 5-15 percent where the largest volume of trade is transacted and largest number of rates occur.

The EC proposal calls for the harmonization of the general tariff level involving a greater reduction of high tariff rates so as to narrow the overall range of the tariff structure. This would be implemented in four steps, each reducing duties by the same percentage as its ad valorem rate. In contrast to the U.S. proposal the EC tariff reduction formula would keep agricultural trade liberalization separate from those of industrial products.

Moreover, the EC's objective is the stabilization of prices and trade rather than the liberalization of trade. It has proposed increased use of international commodity agreements as the principal means of effecting stability. For grains the Community has proposed an agreement involving minimum and maximum prices to be maintained by reserve stock operations and by reciprocal supply and purchase commitments.

Japan too is in favor of trading arrangements that would assure her of a steady supply of agricultural commodities at stable prices. The U.S. opposes commodity agreements with price provisions and market stability. With respect to tropical products the U.S. presented an initial offer to 37 developing countries to liberalize trade in 147 products contingent upon reciprocal concessions by the beneficiary countries.

Trade Policy Options

Trade policy options among developed countries might be broadly summarized as:

(1) gradual and phased reductions in the level of agricultural protection including both tariff and non-tariff barriers;

(2) adjustment and compensation policies for cushioning the adverse effect on domestic farm income;

(3) extension of most-favored-nation treatment to all countries.

INTERNATIONAL AID POLICIES AND OPTIONS

Numerous food/population studies of the past few years have projected growing cereal grain imbalances between developed and developing countries.[1] Projected regional deficits of cereals in the developing countries vary from a low of 22.5 million tons to a high of 118.1 million tons depending on various assumptions. And since many developing countries will not be able to purchase all their food needs on commercial terms, food aid will continue to remain an imperative necessity. Food aid at concessional terms will probably be needed for a number of other reasons as well. Food insecurity caused by short-term fluctuations will continue to occur in the future requiring assistance to prevent hunger and disasters. Nutritional standards are very low in many countries. Thus food aid will also be needed for remedying nutritional deficiencies.[2] Moreover, direct food aid may be needed to supplement financial assistance. To the extent that food aid can be used directly to foster agricultural and social development or to relieve balance of payments pressures, it is an addition to development financing.

Effects of government policies

The overall effects from food aid in whatever form are greatly influenced by government policies and the food distribution methods employed. In the absence of government price support policies food aid items sold directly in the open

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[1] U.S. Department of Agriculture, Economic Research Service, The World Food Situation and Prospects to 1985, Foreign Agricultural Economic Report, No. 98 (December 1974), p. 35; University of California Food Task Force Report, A Hungry World: The Challenge to Agriculture (Berkeley: University of California, July 1974); and International Food Policy Research Institute, Meeting Food Needs in the Developing World: The Location and Magnitude of the Task in the Next Decade, Research Report No. 1 (Washington, D.C.: International Food Policy Research Report, February 1976).

[2] Estimates by the U.S. Department of Agriculture indicate that about 25 million tons of grain would be required to meet the world's 400 million undernourished people's minimum nutritional requirements. USDA, ERS, The World Food Situation and Prospects to 1985, Ch. 6.

market at prices prevailing for indigenous commodities may have a price depressing effect.[1] It is argued that the domestic producer would suffer the consequences in terms of lower prices, incomes and reduced incentives to produce. Benefits, at least in the short run from such marketing policy accrue to urban consumers with purchasing power. To minimize or eliminate the price depressing and production disruptive effects of food aid the government of recipient country has several options. First, food aid commodities could be distributed through a two-price system and differentiated market situation.[2] Simultaneously governments may pursue production stimulating policies.[3]

In situations where domestic production is far below consumption the government may be able to maintain high incentive type of price supports and still sell the lower priced imported items at some prevailing fixed low level. As a result, food aid could reduce government outlays on price support operations.

There are ways for the distribution of aid commodities in the recipient economy in a manner that creates a shift in demand

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1) These issues were discussed affirmatively in a number of studies including David Jones and Peter Tulloch "Is Food Aid Good Aid?" Overseas Development Institute Reviews, No. 2, 1974, pp. 1-6. S. Stanley Katz, External Assistance and Indian Economic Growth, (London: 1968). Edward S. Mason, Economic Development in India and Pakistan, Harward University, Occ. Papers in International Affairs No. 13, Sept. 1966. Lawrence W. Witt, "Development through Food Grants and Concessional Sales" in Agriculture in Economic Development, (New York: McGraw Hill, 1964). S.R. Sen, The Strategy of Agricultural Development. (London: Asia Publishing House, 1962).

2) Uma K. Srivestava et.al., Food Aid and International Economic Growth, op.cit., ch.2.

3) That food aid combined with such policies had some positive effects in increasing agricultural production in Greece, Spain and Israel during the years 1955 to 1966 were reported by Frank D. Barlow and Susan A. Libbin, Food Aid and Agricultural Development, U.S. Department of Agriculture, Washington, D.C., June 1969. G. Coutsoumaris et.al., Analysis and Assessment of the Economic Effects of the United States PL 480 Program in Greece. (Athens: Centre of Planning and Economic Research, Special Studies Series No. 1, 1965).

as well as shifting total supply. This can be accomplished by giving food aid as a grant to be distributed outside normal channels. This may be done either by selling the commodities below the prices of corresponding local products (at subsidized prices) or by diverting them for the support of nutrition or other social programs. The latter outlets can be maternal child health, school feeding and distribution for needy people. Such methods of distribution create an additional consumption which would not have otherwise taken place. Food may also be used directly for agricultural development projects which may not be forthcoming from domestic resources. In this connection food is being used for partial payment of labor who otherwise would remain unemployed.

There are other policy options available for limiting the negative price effects of food aid flows. The government could limit the acceptance of aid to amounts corresponding with deficit in domestic production or reduce, by an equal amount, normal commercial imports. Moreover, the government could engage in market intervention and build buffer stocks possibly using food aid supplies.

The policies of donor countries too can have an important bearing on the effect of food aid on the economy of the recipient countries. Donor countries may largely determine the volume and type of aid extended, the terms and grant element in aid and also may influence the development policies, including investment in agriculture. Donor countries could link the granting of assistance to the adoption of policies by the recipient countries which stimulate increased agricultural production as Jones and Tullock proposed.[1] Food aid could be made an unattractive form of aid by extending it on a commercial basis and by emphasizing its temporary nature. Food aid could be given only for the alleviation of supply difficulties and then withdrawn or replaced by financial aid.

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1) David Jones and Peter Tullock "Is Food Aid Good Aid?" Overseas Development Institute Review, No. 2, 1974, pp. 1-6.

Effects of food aid on trade patterns

Food aid may have direct and indirect effects on trade. This can manifest by (1) reducing the volume of like commercial food imports; (2) changing the volume of other agricultural and nonagricultural commodity imports; (3) shifting the geographical distribution pattern of imports; (4) changes in the balance of payments; and (5) influencing world prices.

Food aid may displace commercial imports of like commodities.[1)] This may affect the usual commercial exports of the donor country or that of competing nations.[2)] The incidence of trade diversion depends on whether the fall-off in exports is borne by a developing country and on how important these exports are as foreign exchange sources for the developing country.

To limit occurrence of trade diversions some safeguards were provided at the national and international level. At the national level the United States and the EC have developed control systems to prevent aid transactions from interfering with normal commercial exports or distorting production. In the international sphere the safe-guard system consists of (a) the FAO Principles of Surplus Disposal;[3)] the Food Aid Conventions of the IWA; and (c) the Wheat Trade Convention of the IWA.

Food aid can have a positive effect on trade in nonagricultural commodities. It may permit release foreign exchange for the importation of goods essential for development and avoid the need to restrict capital imports.

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1) Galal A. Amin, Food Supply and Economic Development (London: 1966), suggests that US wheat and wheat flour aid to Egypt has displaces imports.

2) Soybean and cotton oils could replace palm and peanut oils and cotton and cottonseed oil produced by developing countries. That PL480 shipments had a negative effect on competing third-country trade was found by Theodore J. Goering and Lawrence Witt, United States Agricultural Surpluses in Colombia, A Review of PL 480, Tech. Bull. 289 (East Lansing: Michigan State University, 1963).

3) Details on the provisions are given in FAO's "Committee on Surplus Disposal: Outdated or Uniquely Useful?" (CSD/74/25, 31st May 1974).

Other trade affecting consequences associated with food aid are felt through world market prices. Aid flows contribute to an increase in world supplies and therefore can have a depressing effect on world prices and export earnings.[1)]

Aid Policy Options

We have noted first the transfer of resources affects the economies of both donor and recipient countries and may also effect third countries through changes in trade pattern. The effects can be short term and long term in nature depending on the purposes for which aid was extended. Basically aid impacts manifest through changes in supply, demand, prices, incomes and possibly balance of payments position of the parties. The impact will depend on the form, magnitude and terms on which aid is being extended and the purpose and distribution methods used by the recipient countries. For purposes of subsequent modeling efforts in linking various country models, the assessment of aid can focus on four broad areas:

(1) the impact of different forms and volumes of assistance on the economies of donor and recipient countries;
(2) the effectiveness of different forms and volumes of assistance in the achievement of specified goals;
(3) the effects of alternative distribution methods on prices, production and consumption in the recipient countries; and
(4) the impact of aid on the patterns of trade.

Accordingly, specific assessments may concentrate on measuring and/or estimating:

(1) the impact of different food aid levels on the economy of donor countries with respect to;
  - volume of food production and resource use,
  - farm and food prices,
  - food and nonfood exports,
  - treasury costs.

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1) D. Hedley and D. Peacock, "Food for Peace" PL 480" and American Agriculture. Agr. Econ. Rep. Dep. Agr. Econ., Michigan State University, East Lansing, Michigan, No. 156, 1970.

(2) the impact of different food aid levels on the economy of recipient countries with respect to:
- volume of food production and resource allocation farm and food prices,
- meeting minimum nutritional standards,
- volume and geographical distribution of nonfood imports,

(3) the potential contribution of nonfood assistance forms for given total cost towards:
- increasing food production,
- improving balance of payments.

(4) the distribution methods employed by the recipient countries has a very important bearing on the impact of foreign assistance. Thus donated commodities may be distributed free directly to the final consumers in the importing country or sold on the open market.
The impact of alternative food aid distribution methods employed by recipient countries on:
- volume of food production,
- farm and food prices,
- food consumption and nutritional standards.

Food aid distribution methods to be considered: direct sales on the open market; sales in differentiated markets; and work projects.

(5) the effectiveness of emergency food aid programs in meeting aid requirements with respect to;
- location of food stocks,
- mode of transportation,
- methods of distribution,

(6) direct and indirect effects of food aid on the pattern of trade in terms of:
- the volume of like commercial food imports,
- the volume of other agricultural and nonagricultural commodity imports,
- changes in the geographical distribution patterns of trade,
- changes in the balance of payments,
- level of world prices.

SUMMARY

The "world food problem" can more accurately be characterized as many problems having some relations to food. These problems are deeply rooted in a complex of ecological, biological, cultural, technological, socio-economic and political factors. Accordingly, these are literally hundreds of public policies that directly or indirectly affect producers and consumers of food. Food and agricultural policy goals that these policies are directed toward are usually articulated in terms of (a) promoting efficiency, (b) increasing and improving the distribution of farm income, and (c) stabilizing markets and providing security of food supplies.

While most food policies are motivated from domestic political considerations, occasionally recognition is given to the fact that national actions alone may be inadequate or even counter productive, especially, for remedying such interdependent problems as market instability and lagging agricultural economic growth. For example, trade and trade policies of developed countries are of particular relevance to developing countries for expanding their export earning.

This report has focused on a limited set of country and commodity related policies that are perceived to have primary impacts on problems of world food trade and aid. It is anticipated that such a classification will provide a basis for subsequent national modelling of specific policy alternatives and possible linking of national models in a trading network.

By way of a brief summary, we list below example of policy instruments used to intervene in domestic and international markets . Trade and aid policy options for modelling are presented at the conclusion of the previous two sections.

Partial Listing of Food Policy Instruments

I. Producer Oriented Policies
   A. Domestic supply control and income support
      1. Price incentives
         - commodity price supports
         - deficiency payments
         - minimum prices and loans
         - diversion payments
         - direct payments and subsidies
         - compensation payments
      2. Acreage, production and marketing quotas
         - acreage controls or allotments
         - government licencing of growing rights
         - production and/or marketing quotas
         - government purchase or rent of farm land
   B. Domestic supply expansion and income support
      1. Price incentives
         - commodity price supports
         - deficiency payments
         - minimum prices and loans
         - guaranteed prices
         - direct payments and subsidies
         - incentive payments
      2. Input availabilities
         - subsidies on input (e.g. fertilizer, machinery, credit, etc.)
         - rail freight rebates
         - government organized banks, irrigation projects, etc.
         - government livestock purchases or subsidies
         - subsidies and assistance for construction of storage, transportation facilities, etc.
         - tax concession on input purchases

II. Consumer Oriented Policies

A. Pricing and/or subsidy

- government pricing
- two price systems or "home consumption" prices
- excise taxes
- denaturing premiums
- fair price shops
- processor payments
- export taxes
- price concession on surplus food products

B. Food distribution and security of supplies

- distribution for school lunch programs and needy people
- food stamps
- export embargo
- Overseas development investment to insure import supplies in deficit countries

III. Producer - Consumer Oriented Policies

A. Trade

1. Tariff
   - ad valorem
   - per unit
   - general systems of preferences
2. Non-tariff

   (a) Imports
   - variable levies
   - supplementary levies
   - minimum import price
   - quotas
   - licensing of importers
   - calendars
   - voluntary agreements
   - health, safety and sanitary regulation
   - special internal taxes for imported goods only
   - customs valuation practices
   - state trading

   (b) Exports
   - credit programs
   - embargoes
   - subsidies

- state trading
- bilateral and multilateral agreements
- administrative guidance

3. Exchange rate regulation
4. International Commodity Agreements

B. Aid policies

1. Concessional trade
   - minimum import price
   - preferential agreements for tariffs, credits, interest rates, access to markets, etc.
   - common fund for price support of key commodities of developing countries
   - compensatory financing schemes
   - price indexation of raw materials
   - sales in local currency
   - barter and exchange
2. Grants
   - commodity transfers
   - farm production inputs (fertilizer, cattle, etc.)
   - investment funds
   - debt moratorium
3. Technical assistance
   - research assistance and training
   - extension " "

C. Reserves

1. Commodity
   - private stocks
   - private stocks with government assistance
   - national stocks
   - international stocks
2. Non-Commodity
   - export earning stabilization schemes

APPENDIX A

EC Economic Cooperation and Preferential Trade Agreements

The Lomé Convention. The Convention was signed on February 28, 1975 in Lomé among 46 African, Caribbean and Pacific countries (ACP) and the nine countries of the European Communities[1]. Subsequently, the Convention was extended to three more small and newly independent countries. The Lomé Convention, became fully operative in April 1976 and will run (except for the provisions on sugar) for five years. It provides the framework for the promotion of economic development of the ACP's through trade, finance and technical cooperation and aid arrangements.

With respect to trade, the Convention provides for duty exemptions, compensatory payments on export earning and minimum prices together with quotas for sugar exported to the EC. All non-agricultural and 94 percent of agricultural products (by value) from the ACP's now enter the Community markets free of duty and quantitative restrictions. Most of the remaining 6 percent of ACP agricultural exports to the EC consist of products regulated by the ACP. Even some of these commodities enter the EC market at more favorable terms than those shipped by other third country exporters. Beef and related products exported by the ACP's are exempt from customs duties but subject to the variable levy and quotas. For the period July 1976-December 1977, import quotas of

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1) It extends and replaces the Yaounde Convention, which covered 19 former dependencies, the 1969 Arusha Trade Pact which provided for the accession to the community of Kenya, Uganda Tanzania and Commonwealth preferential arrangements.

about 27,500 tons were allocated to ACP countries[1]. Among oil-seeds and products only olives and olive oil exported by ACPs are subject to an EC variable levy. ACP grain, rice and their products enter the EC markets at reduced variable levies whereas citrus fruits and products pay less than the regular customs duty. Processed foods containing raw materials regulated by the ACP are subject to levies consisting of fixed and variable components.

An important feature of EC trade concessions is that there is no requirement for reciprocity except the granting of most favored nations treatment to Community exports.

Stabilization of export earnings. A novel element of the Convention is the stabilization of export earnings on a number of commodities sold to the EC which are of importance to the economy of ACPs. Ten principal agricultural commodities plus 17 of their products plus wood products and iron ore are covered by the Export Earnings Stabilization system (STABEX). Cocoa, coffee, tea, oil-seeds (peanuts, palm nuts and kernels), fats and oils, sugar, fresh bananas, tea, natural fibres (cotton, sisal), hides and skins are the major protected agricultural commodities. A fund of 375 million u.a. has been set up for the support of export earnings stabilization operations over the five years of its duration. Countries get compensation in the form of government-to-government loans or grants for export revenue losses resulting from fluctuations in prices or production. Such compensations are given regardless of whether the losses are the result of natural causes such as floods or draughts, or of economic factors notably falling prices or reduced physical volume of exports excepting declines resulting from restrictive export policies. STABEX does not set any floor or ceiling on commodity price movements.

Two criteria are used for the establishment of eligibility for STABEX assistance: (1) the major products account for 7.5 percent of a country's total export earnings in the preceeding year; and (2) export earnings have fallen by at least 7.5 percent below the previous four years' average. Exceptions to these rules apply to the products of 34 least-developed ACP countries, for which

[1] U.S. Department of Agriculture, Foreign Agriculture, Vol. 15, No. 8 (February 21, 1977) p.4.

only a 2.5 percent share of total export value or a 2.5 percent drop in export earnings is required.

Loans are to be repaid whenever commodity prices recover. The repayment requirements are, however, waived for 25 of the 34 poorest countries.

In its present form the STABEX system provides some stability to export earnings at the national level but does not compensate individual producers for the loss in their income. The beneficial feature of this set up is that it does not provide subsidies to producers in periods of downward trending commodity prices that would tend to encourage overproduction. Because of its small scale, the STABEX system is neither designed nor adequate for the elimination of international commodity price fluctuations. The sugar export earnings stabilization arrangements differ from those applied to other agricultural commodities insofar that the EC offers an annual guaranteed minimum price for these imports. Under this arrangement, the EC is committed to purchase up to 1.4 million tons of raw or white sugar expressed as quotas from 13 producing ACP countries. The guaranteed prices are set annually within a range in effect in the EC.

The EC has allocated a total of 3.4 billion units of account for financial and technical aid over the five years the Convention is in effect. This includes the 375 million u.a. made available for STABEX.

Mediterranean agreements. The EC has initiated a series of special trading and economic cooperation agreements with all the countries bordering the Mediterranean Sea except Albania and Libya. Essentially, these agreements provide for EC tariff concessions of varying degrees for fruits and vegetables and their preparations, olive oil, wine, cotton and unmanufactured tabacco. These preferences are in the form of reductions in the Common External Tariff rate ranging from 40 percent for fresh citrus from several countries to 80 percent for others. To protect its own producers primarily French and Italian, the EC imposes certain restrictions on the entry of certain products in the form of minimum import prices, import certificates, import calendars, quotas and security deposits. The main fruits and vegetables falling under such import controls include tomato products, citrus fruits, raspberries, canned peaches, pears, peas, mushrooms and french beans.

In addition to agricultural commodities all EC-Mediterranean agreements also provide for EC tariff concessions on a wide range of industrial exports and for financial assistance. In general, these preferential trade agreements constitute restrictive trade practices and as such are in contravention of GATT rules. They are causing disturbances and diversions in trade of commodities involved at the detriment of third countries.

Association agreements. The EC has concluded agreements of association with Greece and Turkey followed by Cyprus and Malta. The agreements with Greece and Turkey provided for customs union by the mid-1980's and in the interim for preferential access for their products to Community markets. Imports for a substantial number of commodities are now treated in the same manner as products of member nations.

Greek fruits and vegetables and their preparations, and unmanufactured tobacco are now exempted from EC's common external tariffs. Fresh fruits and some vegetables, however, are subject to EC minimum import prices. Access to Community markets has, on the whole, stimulated the growing and canning of peaches, tomato products and citrus fruits in Greece. Greek industrial exports to the original members of the EC-6 now enter without duties whereas the bulk of Greece's non-farm imports from the EC-6 are exempt from duties.

Major Turkish agricultural exports enjoying duty-free entry into EC markets include unmanufactured tabacco, raisins and fresh or dried figs. A number of fresh fruit, vegetables as well as certain canned vegetables, olive oil and some categories of meat, benefit from substantial tariff reductions.

Both Greece and Turkey are currently pressing for a widening of the range of products eligible for preferential access to EC markets and for an increase of the margin of such preferences. Greece is seeking full membership in the EC by 1984 while Portugal and Spain are hoping for an earlier accession.

EC-EFTA agreements. Bilateral free trade agreements were signed with each of the seven EFTA countries: Austria, Finland, Iceland, Norway, Portugal, Sweden and Switzerland. These agreements entered into force in 1972 and 1973 calling for a phased reciprocal elimination of industrial tariffs and partial removal of impediments on selected processed foodstuffs. Most of the tariffs were eliminated by July 1, 1977 marking the establishment of a single EC-EFTA industrial free trade area. With respect to processed foodstuffs duties are removed only from the industrial element of the price but are retained for the agricultural component of the product after July 1, 1977[1]. Unprocessed agricultural commodities with few exceptions are excluded from free trade arrangements.

Each EFTA country is committed to liberalize its own agricultural imports from the EC.

Other agreements. The EC has concluded agreements with Argentina, Brasil, Canada, India, Mexico, New Zealand, Uruguay and Yugoslavia covering trade, financial, technical and industrial cooperation. The agreement with Canada provides a framework for industrial and commercial cooperation and development of Canada's natural resources. It has no preferential trading arrangements. The agreement with New Zealand involves the granting of temporary concessions to New Zealand's dairy products to cushion losses resulting from the alignment of the UK and Irish tariffs with the common external tariff of the EC. The EC-India agreement signed in 1973, while basically non-preferential, provides some tariff benefits to India's major agricultural exports such as tea, jute, tobacco, sugar and spices.

Generalized System of Preferences (GSP). Effective 1971, the EC introduced a generealized non-reciprocal system of preferences permitting duty free entry of most industrial goods and of specified processed or semi-processed agricultural products from

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[1] Protocol No. 2 of each of the bilateral EC-EFTA agreements contains the list of the processed food products involved in special tariff treatment.

designated developing countries. Certain competitive agricultural products received only partial exemptions from customs duties or are subject to quotas[2]. On the whole, the scope of preferential treatment given to products covered under the GSP are of a lower order of magnitude than those extended to the ACP countries. Thus, the main beneficiaries of EC's GSP are countries not covered by the ACP.

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1) The principal products subject to quotas include unmanufactured tobacco of the Virginia type, canned pineapple, cocoa butter and instant coffee.

APPENDIX B

Importance of 18 commodities specified by UNCTAD to the exports of developing countries 1972-74.[1) 2)]

	Share of 18 Commodities in Total Exports of each country	Major Export from UNCTAD List	
		Commodity	Share in total exports
Bolivia	58	Tin	46
Burundi	86	Coffee	83
Cameroon	74	Coffee	27
Gen. Afr. Rep.	59	Cotton	27
Chad	70	Cotton	70
Chile	77	Copper	73
Colombia	64	Coffee	52
Costa Rica	69	Coffee	28
Dominican Rep.	66	Sugar	47
El Salvador	60	Coffee	42
Fiji	52	Sugar	45
Ghana	75	Cocoa	58
Guatemala	60	Coffee	31
Haiti	61	Coffee	37
Honduras	76	Bananas	37
Ivory Coast	77	Coffee	23
Liberia	88	Iron Ore	67
Malaysia	68	Rubber	28
Mauritania	92	Iron Ore	75
Mauritius	89	Sugar	87
Nicaragua	63	Cotton	29
Panama	50	Bananas	38
Philippines	65	Sugar	21
Rwanda	69	Coffee	40
Sri Lanka	71	Tea	48
Sudan	59	Cotton	57
Togo	75	Phosphate Rock	45
Uganda	95	Coffee	67
Yemen Arab Rep.	54	Cotton	37
Zaire	83	Copper	68
Zambia	94	Copper	93

1) The countries listed are those developing countires for which the 18 UNCTAD commodities accounted for over half of total exports in both 1970-72 and 1972-74. The figures cited are for the 1972-74 period.

2) Includes the 18 commodities mentioned in the text. Due to data and definitional problems, cotton yarn, hard fiber products, jute products and oilseeds have not been included. For the following commodities only specific groupings were included: meat--beef; tropical woods--broadleaved timber; vegetable oils--palm oil, coconut oil, peanut oil and linseed oil.

Source: US Department of Agriculture, World Economic Conditions in Relation to Agricultural Trade. ERS, NEC-11, Washington DC, December, 1976 p. 20.

APPENDIX C

The Share of Exports of Selected Countries Represented by Agricultural Products

COUNTRY	Mil.$ Total Imports[1]	Agri. Commodity Share Mil.$[3]	Agri. Commodity Share %	Major Agricultural Commodities[4]	Mil.$ Total Exports	Agri. Commodity Share Mil.$	Agri. Commodity Share %	Major Agricultural Commodities
U.S.A.	103389[1]	1.0149	9.82	Sugar, centrifugal raw, beef, coarse grains	107652	22261	20.68	Wheat, maize, rice
CANADA	36418	2985	8.20	Sugar, centrifugal raw, maize Potatoes, sweet potatoes, cassava	33843	4123	12.18	Wheat, coarse grains Pork
AUSTRALIA	11145	557	5.00	Soybeans, maize	11887	5402	45.44	Wheat, beef, sugar centrifugal raw
JAPAN	57853	11131	19.24	Maize, wheat, sugar centrifugal raw	55817	348	00.62	Rice, sugar, non-centrifugal
SWEDEN	17861	1308	7.32	Pork, beef	17384	531	3.05	Pork, coarse grains
EEC								
BELGIUM	30685	4166	13.85	Maize, wheat, coarse grains	28804	3080	1.07	Pork, sugar non-centrifugal, eggs
DENMARK	10368	1065	10.27	Maize, coarse grains	8712	2817	32.33	Beef, pork
FRANCE	53964	7591	14.07	Beef, pork	53118	8611	16.21	Wheat, maize, coarse grains
GERMANY	74924	13482	17.99	Beef, wheat, maize	90166	448	00.50	Beef, wheat, sugar non-centrifugal
ITALY	38365	8271	21.56	Beef, maize, pork	34815	3056	8.78	Rice, wheat, potatoes, sweet pots.
NETHERLANDS	35563	5603	15.76	Maize, wheat, beef	35046	8323	23.75	Pork, beef, poultry
IRELAND	3768	566	15.02	Maize, wheat	3179	1562	49.13	Beef, pork, mutton
U.K.	53576	10949	20.44	Beef, wheat, sugar centrifugal raw	44124	3556	8.06	Beef, sugar non-centrifugal, mutton
SOUTH AFRICA	8293	487	5.87	Rice, beef, sugar non-centrifugal	8851	1522	17.20	Maize, sugar centrifugal raw, beef
SPAIN	16264	2891	17.78	Maize, beef, pork	7691	1565	20.35	Soybeans, wheat, rice, potatoes & sweet potatoes
USSR	36969	9238	24.99	Wheat, sugar centrifugal raw, maize	33310[2]	2350	7.05	Wheat, beef, maize coarse grains
COMECON	N.A.							
CHINA		2257		Wheat, maize, soybeans	N.A.	2518		Rice, sugar centrifugal raw, pork
THAILAND	3280	173	5.27	Wheat, milk	2208	1541	69.97	Rice, maize, sugar centri. & non-centrifugal
MEXICO	6581	985	14.97	Wheat, maize	2952	960	32.52	Sugar centrifugal raw, beef, maize
TURKEY	4739	421	8.88	Soybeans, wheat	1401	907	64.74	Sugar, non-centrifugal, wheat
EGYPT	3751	1105	29.46	Wheat, soybeans, maize	1402	724	51.64	Rice, potatoes & sweet potatoes, sugar non-centrifugal
INDIA	6135	1739	28.35	Wheat, rice, soybeans	4299	1711	39.80	Wheat, sugar centrifugal raw
INDONESIA	4709	680	14.44	Rice, wheat	7103	857	12.07	Maize
BANGLADESH	1271	530	41.70	Wheat, rice, soybeans	326	133	40.80	
PAKISTAN	2151	547	25.43	Wheat, soybeans, sugar non-centrifugal	1049	462	44.04	Rice
NIGERIA	6035	542	8.98	Wheat, sugar non-centrifugal	8096	455	5.62	
PHILIPPINES	3774	354	9.38	Wheat, rice, maize	2275	1277	56.13	Sugar centrifugal raw, sugar noncent.
IRAQ	2838	677	23.85	Sugar centrifugal raw, wheat, eggs	8439	44	00.52	Wheat, coarse grains
KENYA	938	78	8.32	Sugar noncentrifugal, wheat	601	297	49.42	Wheat, beef
ETHIOPIA	310	17	5.48	Wheat, coarse grains, rice	239	218	91.21	Sugar noncentri., beef

APPENDIX C (contd.)

COUNTRY	Mil.$ Total Imports	Agri. Commodity Share		Major Agricultural Commodities	Mil.$ Total Exports	Agri. Commodity Share		Major Agricultural Commodities
		Mil.$	%			Mil.$	%	
BRAZIL	13558	881	6.50	Wheat	8670	4845	55.88	Coffee, sugar centrifugal raw, beef
IRAN	10343	1719	16.62	Wheat, soybeans, sugar noncentrifugal	19933	245	1.23	Potatoes & sweet potatoes

1) IMF International Financial Statistics,January, 1977
2) Yearbook of International Trade Statistics, 1975
3) FAO Trade Yearbook, 1975
4) FAO Trade Yearbook, T973

NB: Several major products such as beverage crops and fiber crops were not included.