THE DEVELOPMENT OF RATIONAL POLICIES FOR AGRICULTURAL TRADE BETWEEN NEW ZEALAND AND JAPAN

PROCEEDINGS OF A SEMINAR SPONSORED BY THE JAPAN ADVISORY COMMITTEE

HELD AT WELLINGTON
ON 12 DECEMBER 1978

EDITED BY

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The publication of these proceedings is part of a continuing research project being undertaken by the Agricultural Economics Research Unit, Lincoln College. The project is being sponsored by the Japan Advisory Committee.

Discussion Paper No. 41
June 1979
ISSN 0110-7720

THE AGRICULTURAL ECONOMICS RESEARCH UNIT

Lincoln College, Canterbury, N.Z.

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C O N T E N T S

TRENDS IN AGRICULTURAL PROTECTIONISM WORLDWIDE AND NEW ZEALAND INITIATIVES IN OVERCOMING THE PROBLEM

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TRENDS IN AGRICULTURAL PROTECTIONISM WORLDWIDE AND NEW ZEALAND INITIATIVES IN OVERCOMING THE PROBLEM

This Paper attempts to deal with the subject in two parts. The first section is a summary of some of the important developments in agricultural protectionism while the second section endeavours to list New Zealand initiatives in attacking the problem in so far as it affects it.

A. TRENDS IN AGRICULTURAL PROTECTIONISM

INTERNATIONAL TRADE

In a recent publication the G.A.T.T. Secretariat summarised trends in international trade. They are set out in Appendix A. The figures show that in value terms, world exports over the period 1960-1976 increased almost 800 percent; yet in the same period exports of agricultural products rose by only 400 percent. The greatest gains were achieved by 'manufactures' (almost 900 percent) and minerals (over 1100 percent). These statistics confirm the reason for the concern over the failure of international trade in agricultural products to keep pace with the developments of the two other major sectors.

In a post-war world where there has undeniably been a reduction in tariff barriers to international trade, the query must be posed, 'What has happened to agriculture?' Its terms of trade have not been as favourable as for manufactures and minerals. The other major reason is that barriers to international trade have become increasingly influential. Annually the non-tariff measures have proliferated and G.A.T.T. has disclosed[1] that an inventory of over 900 types of non-tariff barriers has been compiled as examples of measures which member governments believe have either hampered their exports or provided unfair advantage to their competitors. Some of the measures have been subjected to scrutiny by the negotiating committees involved in the Tokyo Round of multilateral trade negotiations.

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1 'GATT Activities in 1977' - GATT, Geneva, p.17.

THE EUROPEAN ECONOMIC COMMUNITY

One of the major developments for New Zealand was undoubtedly the United Kingdom's joining of the E.E.C. No other country could have been so affected as New Zealand and none made such a strenuous effort to protect its interests. Although in the years leading up to E.E.C. membership, the U.K. had modified some of its open-entry arrangements for New Zealand produce, the community represented a significant change for both the U.K. and New Zealand. A form of agricultural protectionism in which the cost of protection was imposed on the consumer took the place of the previous U.K. system where the main burden was met by the Exchequer. Not only was the E.E.C.'s 20 percent levy a new hurdle for New Zealand produce on top of rapidly escalating shipping freight rates, but in the case of beef a virtually complete ban was imposed as from 1974[2]. In addition, the Common Agricultural Policy's system of subsidising exports gave an advantage to the sale of stockpiled produce disposed of in other markets around the world. Fortunately, when some of it arrived on the U.S. market the U.S. Government took or threatened to take, some countervailing measures; but in most other markets the export-subsidised produce is given status equal to that accorded non-subsidised produce.

New Zealand was apprehensive at the prospect of the United Kingdom adopting what it regarded as a most undesirable and harmful form of agricultural protectionism. The Japanese Economist, Haruko Fukuda, summed up New Zealand's views when she stated:-[3]

> "The present problem of supporting farmers indirectly through raising the prices of farm products, which is the basis of the C.A.P. is inefficient and has undesirable side effects.
>
> It has been shown that this policy does least good for the poorest and the least productive farmers. Secondly, it raises the cost of food to the consumer, and the burden of supporting the rural poor has to be borne considerably by the urban poor and finally, it generates surplus production of food if heavy price supports are given with no quantitative limit on production (as is the case in the C.A.P.). This obliges the government concerned, if it is a net importer

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2 Appendix B.

3 "Japan and World Trade - The Years Ahead", Haruko Fukuda, 1973, p.126.

to reinforce the subsidy to domestic production by excluding imports from lower cost foreign sources of supply, or if it is a net exporter, to choose from the unattractive options of storing the surplus to no purpose, dumping it on world markets at subsidised prices, or controlling the right of farmers to produce in the first place."

GATT AND THE DEVELOPMENT OF REGIONALISM

Regional trading arrangements in which a group of countries agree to abolish barriers against imports from one another, have been established in many parts of the world in recent years. The GATT recognised, by article XXIV, the value of closer integration of national economies through freer trade. It has given its approval to such groupings as exceptions to the general rule of most-favoured-nation treatment, provided that certain strict rules are met. The rules are intended to ensure that the arrangements facilitate trade among the countries concerned, without raising barriers to trade with the outside world.[4]

This quotation from an official GATT publication could only be greeted with derision by New Zealand when it reflects how its dairy products have fared in the E.E.C. The formation and certainly the enlargement of the E.E.C. have caused new trade barriers to be erected against New Zealand and it would be hypocritical to pretend otherwise. In 1972 Grogan asserted that[5] "E.E.C. agriculture is the most highly protected in the world with a level about three times what it was eight or nine years ago". In the period since then there are no signs of any liberalisation of the C.A.P., despite the hoped-for liberal influence of the U.K. and Denmark.

Transitional arrangements for the U.K. have enabled the provision of consumer subsidies to be paid on butter. But these have only marginally relieved the upward pressure on prices and events have turned out very much as New Zealand predicted - substantially increased butter prices and lower per capita consumption of butter. The main sector to gain has been the margarine industry. There has been a scramble amongst the E.E.C. members for the U.K. butter and cheese market from which New Zealand has been forced

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4 GATT Activities in 1977 - GATT Geneva, p.60.

5 'International Trade in Temperate Zone Products' - An Agricultural Adjustment Unit Symposium, Edited by F.O. Grogan, 1972 - p.46.

to retreat - markedly in the case of butter and virtually completely in the case of cheese.[6]

AUSTRALIA

World wide there has been little evidence that governments intend seriously to reduce the level of protection accorded their agricultural sectors. A notable exception could perhaps be the Australian Government which has been pressing on resolutely with its task of reviewing the assistance accorded its dairy industry. The achievements to date are certainly not insignificant and there do appear to be real prospects of a reduction in the price supports that this sector of the Australian economy has enjoyed in recent years.

THE PERSUASIVE POWERS OF THE FARM SECTOR

Governments, influenced strongly by their farm organisations, have been pressed to intensify the level of protection given to their farm sector. This has been done in the name of 'protection of the family farm' and the need to ensure incomes for farming comparable with those ruling in the industrial sector. Emotional pleas have been successful in continuing to persuade politicians that agriculture is 'a special case' - it involves human and social issues and 'the very fabric of society', yet most of the population are engaged in the non-farm sectors. For those people who are employed say in the industrial sectors in these industrial countries, human values do not appear to count nearly as much - or is it because industrialists do not possess the art of influencing politicans as well as farming leaders do?

PARLIAMENTARY REPRESENTATION OF RURAL ELECTORATES

Recent trends in agricultural protection have not disclosed any significant reduction in the influence of rural electorates on the import policy decisions of governments. Within the E.E.C. and in Japan for example, the extraordinary dominance of governments by rural politicians, despite the exit of many of their constituents to the urban areas, makes the Pocket and Rotten boroughs of England look relatively harmless. The decisions of the 5 yearly Boundaries Commission in New Zealand do not always please electors, but at least they give democratic recognition to demographic changes. Does

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[6] Appendix C.

the matter of electoral boundaries appear as one of the 900 N.T.B.'s in the GATT list or would such a query be considered as intrusion into the domestic affairs of a member government?

RISE OF CONSUMERISM

There is a detectable rise of protest in some E.E.C. countries from consumer groups against their being forced to pay well above world prices for their food. These consumers are mainly in the urban areas where living costs have escalated rapidly in recent years. It is of interest to note that during a recent visit to Europe the writer learned from one of the University researchers that some of the protests against high food prices are coming from ex-farming people who now reside in the urban areas! Many have experienced a fall in real incomes and are especially conscious of the high food prices they encounter in their new urban existence.

EFFECTS OF STATE TRADING NATIONS

One of the reasons why GATT has failed to be as effective in agricultural protectionism is that its membership does not contain important trading nations such as China, the U.S.S.R. and East Germany. These and several member countries of GATT (e.g. Japan in respect of most meat and dairy imports) have state trading organisations responsible for their imports. GATT has approved such practices (subject to certain conditions) on the grounds that it makes for stability; on the other hand it places great authority in the hands of governments and GATT has had little influence over the conduct of such negotiations. In New Zealand's experience, state trading arrangements usually mean sporadic purchases unduly influenced by political considerations.

VETERINARY REGULATIONS

Another trend in agricultural protectionism that has intensified in recent years has been the use of indirect non-tariff barriers such as veterinary regulations. Whereas international trade negotiations are traditionally undertaken by government-elected Ministers and their diplomatic and trade staff, in the case of verterinary barriers the professional veterinarians are not only 'on tap', they appear to be 'on top'. They have banded together to practise a game of 'veterinary one-upmanship' to the

detriment of consumers in importing countries and producers in exporting countries such as New Zealand. As the European Director of the New Zealand Meat Producers Board has stated[7] "... proponents of increasingly strict hygiene measures still appear to be able to twist governments in importing countries around their little fingers". When professional veterinarians are brought together to prescribe and monitor hygiene regulations they appear to interpret their task as a challenge as to who can think up a new regulation.

VOLUNTARY RESTRAINTS OR 'GENTLEMEN'S AGREEMENTS'

In 1963 the United Kingdom Government and the countries supplying bacon to it instituted a series of 'gentlemen's agreements' with a view to relating bacon supplies to market needs and maintaining prices satisfactory to both producers and consumers. New Zealand was not involved but it was affected by somewhat similar arrangements made in 1964 to limit U.S. imports of beef, veal, mutton and goat meat. Under the legislation contingency quotas can be applied to imports when they exceed 110 percent of an adjusted base quantity. The system places an important responsibility on the governments of the supplying countries to ensure that exports do not exceed the limitations prescribed by the U.S. Government.

The U.S. beef producers are proud of the fact that their industry is an unsubsidised one ("free from the bureaucratic hand of government and Treasury"), but they are quite uninhibited about asking their government to protect their product from the effects of imports. Despite the heavy decline in beef cattle in the U.S. from around 140m in 1974 to 116m in 1978, pressure from U.S. cattle producers for protective legislation has persisted. The decline in supplies caused prices to rise substantially and in an effort to restrain price rises the U.S. President approved of additional imports. He rejected legislation whose effect would have been to prohibit imports of beef when U.S. cattle numbers rise, but he has promised to consider in 1979 legislation whose effect could be similar.

The GATT Agreement on milk powder prices was another example of voluntary international co-operation in maintaining minimum prices. Its

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7 Report by Mr A.E. Frazer, European Director, N.Z. Meat Producers' Board, to the Mid Year Meeting of the Electoral Committee, August 17, 1978, p.1.

operation helped prevent complete chaos in our over-supplied world milk powder markets, although it did not avoid big falls in world prices of this product.

THE INFLUENCE OF THE CONSUMER PRICE INDEX

A trend already referred to in part has been the increasing government and public awareness of changes in the so-called consumer price index in most developed countries. The increased sensitivity to this index has probably caused governments, consumer groups, trade unions and others to examine some of the factors that have caused large rises in living costs. I believe that as a result the consequences of agricultural protection have been spotlighted. Instances of this have been the U.S. beef prices and the decision to increase imports; the expressed determination of the U.K. Government to maintain open-entry to imports of New Zealand sheep meats. In both instances it was the concern of the two governments to avoid any undue rises in the cost of living of the community rather than concern for the economic welfare of New Zealand producers that dictated the policy decisions that were taken. When statisticians compiled consumer price indices for their governments it is unlikely they anticipated that such indices would come to be of such political and economic importance in government fiscal policy. It may be that the significance of such indices could be a factor that makes governments in those areas where agricultural support derives mainly from reliance on consumer prices (e.g. the E.E.C.) turn to income supports or grants as a less harmful and less sensitive form of support.

EXPLAINING THE BENEFITS OF INTERNATIONAL TRADE

There has also been an effort in some countries to make people more aware of the importance of international trade in agricultural products. The United States is an example of a country to whom agricultural exports have become of increasing importance to its balance of payments situation. This has made the producer organisations more conscious of the need to reduce barriers to agricultural trade. It has not, however, stopped individual commodity groups (e.g. milk producers - whose market is mainly local) from opposing any liberalisation or the cattlemen from agitating for more restrictions. However, exercises such as the one carried out by the Agricultural Economics Department of the University of Michigan amongst

rural people have demonstrated that rural people are not generally aware of the importance and benefits of international trade in agricultural products. While many see the advantage of being able to dispose of their produce on international markets, until it is explained to them they do not appreciate the importance of two-way trade. After the University's campaign, surveyed views registered a significant difference and a much more tolerant attitude to reciprocal trade.

INCREASED BUREAUCRATIC POWER

The increasing power of the bureaucracy is associated with recent trends in agricultural protectionism. The massive concentration of civil servants dealing with agricultural protection in the E.E.C. Headquarter's building in Brussels is a testimony to the power of bureaucrats, many of whom maintain close relations with the E.E.C. (influential farm organisations). As Hillman has commented "... agricultural protectionism has been associated for at least two centuries with social and philosophical issues related to agrarian life and its values. In addition to this, non-tariff barriers touch not only on economic policies, but in many cases relate to vast administrative bureaucracies in which public employment is an issue. Here the outcome of trade negotiation could, ex ante, be affected by some perceived effect it might have on the authoritarian mechanism. In sum, non-tariff and other agricultural trade barriers are tied up in all kinds of domestic laws, rules and regulations managed by many different parts of each government. In the United States, for example, there is much congressional resistance to giving the executive branch a blank check; yet the executive branch cannot effectively negotiate without some kind of mandate. Within the executive branch there is competition among the departments as to who will wield the power; hence the administrative bureaucracies within the departments vie keenly with each other for that power.[8]

TREND TOWARDS INCREASED COMPLEXITY OF MEASURES

Parallel to the increased bureaucracies associated with agricultural protectionism has been the trend towards increasing complexity of the methods

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[8] Hillman, J.S., Non-Tariff Barriers: Major Problem in Agricultural Trade, Am. Jnl. of Ag. Econ., Aug. 1978, pp.491-501.

for achieving the aim of agricultural economic nationalism. These measures have become not only more complex, as witness the Common Agricultural Policy of the E.E.C., but also they have become much more influential as the tariff has declined in influence. Thus they have become more and more difficult to negotiate - a fact which is doubtless welcomed by protectionist groups opposed to any liberalising of agricultural trade.

The GATT Secretariat in 1974 summed up the situation regarding this increasing complexity as follows:

> "Today, the problem of trade in agricultural products remains among the most difficult in international economic relations. There is first of all, the vast and formidable panoply of measures and devices to which governments subject agricultural trade. Their variety and complexity render negotiations aimed at a balanced reduction particularly difficult. Serious as these difficulties might be, they are technical in nature and were it but for this, could be overcome by appropriate negotiating techniques. The added complications stem from the fact that in general the measures employed reflect and are linked to the policies with which governments try to protect their farmers ... The last two decades have been frequently marked by problems of surpluses, price wars in which exporters tried to undercut one another in world markets, and by rising economic and social costs of governmental farm policies. In the very recent past, the problems have been those of shortages in a number of major agricultural commodities."[9]

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[9] 'GATT Activities in 1973'. GATT, Geneva, 1974, p.31.

B. NEW ZEALAND'S INITIATIVES

GATT

Since GATT's establishment in 1947 New Zealand has taken a prominent part in its negotiations. It has striven to ensure that agriculture is part of any multilateral negotiations aimed at liberalising trade. The Kennedy Round which began in 1963 aimed at creating acceptable conditions of access to markets and the conclusion of some general arrangements for grains, meat and dairy products. Some bilateral agreements were concluded with respect to meat, but the negotiations yielded only meagre results in regard to dairy products.

DAIRY PRODUCTS

New Zealand then took the initiative in requesting the establishment of a Working Party in December 1967 to conduct consultations on the urgent problems that had arisen in international trade in dairy products. In May 1970 the principal participants in international trade in dairy products reached an arrangement in GATT to fix minimum export prices for skimmed milk powder, in order to restore stability to the world market for this product. In 1973 they reached agreement upon and brought into effect a Protocol which made similar arrangements for milk fats such as butter oil. In addition a 'Gentlemen's Agreement' under the aegis of the OECD provided for a minimum price for whole-milk powder.

Success was not achieved in negotiations on any arrangements to stabilise the international butter situation, mainly due to opposition from some of the EEC member countries. One of the Protocol 18 clauses relating to New Zealand and the U.K. membership of the enlarged EEC includes a statement that parties will strive for an international dairy agreement. So far the prospect of success in this area has not appeared even remotely likely.

THE TOKYO DECLARATION

The Tokyo Declaration of 1973 laid down the terms of reference for a new series of GATT negotiations. It stated that "negotiations should aim, inter alia, to (e) include as regards agriculture, an approach to negotiations which, while in line with the general objectives of the negotiations, should

take account of the special characteristics and problems in this sector."[10] New Zealand has supported the Tokyo Declaration in its call for the negotiations to reduce or eliminate non-tariff measures or where this is not appropriate to reduce or eliminate their trade-restricting or distorting effects, and to bring such measures under more effective international discipline. It has taken part in Sector councils' negotiations and the New Zealand Government has expressed the hope that from the Tokyo Round there will be improved access for New Zealand's produce in its major markets.[11]

UNITED NATIONS ORGANISATION AND AGENCIES

In international organisations and agencies of the United Nations, New Zealand has, with unremitting persistence, taken the opportunity to put its case for reduced agricultural protection. In many instances it has been virtually 'a dialogue between the deaf'. Being a small economy New Zealand has little bargaining power and on numerous occasions it concentrated on supporting efforts by major agricultural trading countries such as the United States on occasions such as when the U.S. was pleading for a more liberal common agricultural policy.

BILATERAL ARRANGEMENTS

In bilateral negotiations New Zealand has made agreements with some importing countries whose agricultural imports are governed by quotas. For example, with the world's largest agricultural importer, West Germany, it has a small quota of sheep meat. With the United States, New Zealand has small quotas for butter, cheese and frozen cream. It continually takes the opportunity to press for greater access into these and other markets such as Japan. In addition New Zealand has negotiated a number of bilateral agreements - notably with Japan (1958), Malaya (1961), South Korea (1967), Romania (1968), USSR, Poland and the People's Republic of China. These have been of some assistance in improving prospects for increased exports of agricultural produce. They did not involve departure from GATT principles. In 1973 New Zealand achieved formal accession to OECD - a move which was motivated by hopes for reduced barriers to agricultural trade through lower levels of agricultural protectionism amongst member countries of OECD.

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[10] GATT Activities in 1977. GATT, Geneva, 1978, p.12.

[11] See footnote at conclusion of this article.

INCREASED UNDERSTANDING OF NEW ZEALAND'S POSITION

To foster an understanding amongst the major industrial nations of its heavy dependence on agricultural trade, New Zealand has brought to New Zealand prominent leaders of these economies. Whilst one might criticise the fact that the guests included too few representatives of consumers, the effort has assisted in making known New Zealand's case with foreign governments and prominent leaders in the non-government sectors of these countries.

NEW ZEALAND AGRICULTURE

As a symbolic gesture New Zealand in 1959 removed meat and dairy produce from import licensing. The only barriers to the import of dairy produce and meat are tariffs and a hygiene regulation. Since then the farming sector has been accorded support from government in various forms, mainly in input subsidies, direct livestock grants and more recently income support by way of price support for major commodities. To what extent these policies have weakened New Zealand's case for less protection of agriculture in its overseas markets is a matter of conjecture. Frazer has, however, asserted[12] that he views with some concern the increasing financial involvement of government in the agricultural industry. "While there does appear to be some change in international thinking in regard to subsidisation of agricultural products, which means that today we are less likely to be told that our claims for access on grounds of efficiency of production and lack of subsidy are not valid, such views are already being propagated in relation to the support measures announced in the last Budget. Farmers, both in the United Kingdom and in Ireland, have already claimed that our case for access has been weakened by these measures."

CO-OPERATION WITH LOCAL PRODUCERS

Some years ago the U.S. sheep industry whose flock numbers have been declining rapidly became strongly protectionist and sought government support for a restriction on imports of sheep meat. It claimed that imports of New Zealand and Australian frozen lamb were injuring their industry by undermining their markets, especially in the long-established sheep eating

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[12] Op. Cit. p.2.

areas on the West and East Coasts of U.S.A. Fortunately for New Zealand the U.S. Government took no action and tariffs plus hygiene regulations remain the only barriers to the entry of lambs to that market. In recent years the New Zealand Meat Producers' Board has joined with the American Sheep Producers' Council in an effort to promote jointly lamb as a consumer meat for the U.S. market. The Council is no longer hostile to the New Zealand lamb imports and is optimistic over prospects of reversing the decline of the U.S. sheep industry. The Board has also linked with the French Sheep Producers' Organisation in a move to promote lamb and to persuade local producers that the importation of frozen lamb would not be injurious to their industry.

Through some eyes these gestures appear naive. Time alone will confirm or refute this view. But if such actions have the effect of promoting sales of both the imported and the local product or reducing some of the pressures that local producers place on their governments for increased protectionism, the efforts and expenditures involved will have been justified.

In some developing markets the dairy industry has established or helped to do so, local reconstituting plants partly as a means of overcoming barriers to the entry of their product and/or reducing the cost of transporting water over long distances.

USE OF INTERNATIONAL NON-GOVERNMENT ORGANISATIONS

In efforts to persuade the non-farm sectors of importing countries of the need for a reduction in non-tariff barriers to the entry of New Zealand farm products, some of the New Zealand primary producer bodies have joined organisations such as the Pacific Basin Economic Co-operation Committee (PBEC). PBEC is essentially a non-government organisation comprising businessmen and financiers from the United States, Canada, Japan, Australia and New Zealand. Its aim is to promote trade, investment and economic development in the five member countries and in developing countries in the Pacific area. The New Zealand farm industry representatives have utilised every opportunity at annual conferences of PBEC to draw to the attention of the influential business and financial leaders from countries such as Japan that New Zealand's ability to increase its imports of industrial raw materials, capital and consumer goods is dependent largely

on it securing greater access for its primary produce in Japan. Here again the strategy may appear naive, but for a mini economy such as New Zealand the view is taken that every possible opportunity to improve access for our farm produce must be exploited.

NAFTA

In 1965 the New Zealand Australia Free Trade Agreement was negotiated. It made provision, inter alia, for the sale annually of some New Zealand cheese and lamb in the Australian market. Since then there have been some years in which the full amount of cheese has not been shipped to Australia, while in respect of lamb, shipments have been more the exception that the rule; it is understood that by an understanding between the two statutory producer meat boards, the lamb quota would not be taken up. While the importation of New Zealand butter into the Australian market was quota free and subject only to a tariff, the message appears to have been made clear by a former Australian Minister of Trade, the Rt Hon John McEwen, that if New Zealand did take the initiative in moving to take advantage of open entry for its butter, immediate action would be taken by the Australian Government to impose import controls. It is interesting to speculate whether this implied threat still exists.

IMPORTANCE OF NATIONAL ECONOMIC SELF INTEREST

Kojima makes the point that it is not only important that liberalisation of international trade in agricultural products should be implemented in the interests of agricultural exporting economies. It is in the interests of the industrialised nations themselves and in the final analysis this is the only really effective motivating force.[13]

> "Unless the mistaken philosophy that exports are gains and imports losses is abandoned and a shift is made to a philosophy that the removal of non-tariff barriers works for national interest in order to optimise resource allocation, to eliminate deviation between social and private costs and to maximise social gross product, there will be no solution to the non-tariff barrier problem.

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13 Kiyoshi Kojima - Non-Tariff Barriers to Japan's Trade - The Japan Economic Research Centre, 1971 - pp.80-81.

Japan, which has ample surplus of international payments, should set such an example."

The most effective New Zealand initiatives in reducing levels of agricultural protectionism in the future could be in convincing both farm and non-farm sectors of important agricultural importing countries that an adjustment is in their own long-term interest. Such a policy, while a protracted process, could be, in the long-run, effective if New Zealand takes further initiatives in co-operation with local interests in the countries concerned. New Zealand's small size, the agricultural expertise and standing it has build up and its ability to be vocal amongst the large trading countries could assist it in such an operation.

C. SUMMARY AND CONCLUSIONS

In the period 1960-1976 international trade in agricultural products has lagged behind the other two major groups (minerals and manufactures) in both value and volume. Agricultural protectionism has been an important cause of this failure to expand as rapidly as other products. Whilst the GATT has been responsible for significant reductions in tariff levels it has so far failed to bring about any reductions in the non-tariff barriers behind which the agricultural products of industrial nations shelter.

The E.E.C.'s common agriculture policy is from New Zealand's viewpoint one of the most restrictionist forms of protection. It is a type of regionalism that has harsh effects on agricultural exporters such as New Zealand. The influence of farm blocs on Government import policies is, despite the decline in numbers engaged in agriculture, very strong - indeed their power appears to be inversely proportional to their declining numbers. Failure to adjust electoral boundaries is in several countries the reason for the continued potent influence of the agricultural sector. There are however signs that the consumer groups are protesting at the unjustifiably high food prices that result from the excessive levels of agricultural protection. Some of these protests are coming from former farming families now residing in urban areas. Other concerns are from Governments charged with maintaining reasonable price stability as measured by the consumer price index.

Non-tariff barriers are becoming increasingly complex and will consequently be more difficult to dismantle. Veterinary regulations appear to be in the complete control of veterinarians whose aim is to multiply the existing rules of entry. Bureaucracies such as the E.E.C. Headquarters have a vested interest in the perpetuation of barriers to international trade in agricultural products.

New Zealand has been responsible for many initiatives in GATT and other international forums in an endeavour to achieve a liberalisation of entry for agricultural produce. There are no prospects of International Dairy Agreements as envisaged in Protocol 18 of the U.K.'s access to the E.E.C.

The Tokyo Round of Trade negotiations promises to produce some

reductions in N.T.B.'s to agricultural trade but success is still in doubt.[14] Through its own initiatives New Zealand has tried to acquaint leaders in the important industrial nations with its dependence on agricultural exports. It has also exploited opportunities in non-government organisations such as P.B.E.C. to emphasise the necessity for better international access for farm products. It has entered into a series of bilateral agreements with numerous trading nations and achieved a limited improvement in the prospects for its agricultural exports. In some cases (NAFTA) it has not always exploited fully the opportunities it secured. Its own agricultural industry, as a result largely of excessive internal inflation and as a compensation for the increased production costs due to industrial protection in New Zealand has been given considerably expanded financial support from Government. In the view of some this could compromise its position as an advocate for reduced levels of agricultural protection in the major trading countries.

New Zealand has embarked on some schemes aimed at assisting local producers in importing countries. These are achieving success and have helped modify protectionist pressures. Finally, it is the contention of this paper that although negotiations are important, satisfactory solutions to the serious problems that result from present excessive levels of agricultural protection in industrial economies will only really be achieved if important groups such as consumers, industrialists and producers realise that a moderation of protectionist policies will be to their own advantage. New Zealand, in respect to countries such as Japan, should shape its policies with this ultimate aim in view.

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[14] Note: The G.A.T.T. Tokyo Round finally yielded in April 1979 for New Zealand some minimal gains for its agricultural exporting industry. These included a cheese quota of 9,000 tonnes in the previously blocked United Kingdom cheese market, some small additional quotas for its dairy product in the United States market and the promise to establish an International Agricultural Trade Committee to undertake functions which are supposed to be carried out by existing institutions.

APPENDIX A

WORLD EXPORTS 1960-1976

A. Value (billion dollars f.o.b.)

	1960	1970	1973	1974	1975	1976
Total	128	312	576	836	878	(992)
Agricultural Products	40	64	121	148	150	(167)
Minerals (a)	21	51	96	215	208	(240)
Manufactures	64	190	347	459	500	(562)

B. Volume (1960 = 100)

Total	100	213	280	295	283	(314)
Agricultural Products	100	149	152	149	165	(179)
Minerals (a)	100	198	230	209	199	(221)
Manufactures	100	254	347	370	360	(403)

(a) Includes fuels and non-ferrous metals.

Source: International Trade 1976-77: GATT, Geneva 1977, p.2.

TARIFF AND NON-TARIFF BARRIERS TO NEW ZEALAND MEAT EXPORTS

COUNTRY	TARIFF	NON-TARIFF
AUSTRALIA	None	N/A
AUSTRIA	Veal and other bovine carcases, sides or quarters (bone-in): 3.85 schillings per kilo. Other meats of bovines (including boneless and cuts): 32% with a minimum of 2.65 schillings per kilo. Sheep and lamb carcases, sides or quarters: 1.25 schillings per kilo. Other meats of sheep and lamb: 20%. Fancy meats (sheep and goats only): 10%. Other fancy meats: 24%.	8% import turnover tax on all meats. All items subject to import control.
BARBADOS	Chilled, fresh or frozen meat: Duty-free. Canned corned beef: 15%. Canned other beef: 5%.	Package tax: 25 cents per 56 lbs on each package. Import licences required.
CANADA	Beef and veal: 3 Canadian cents per lb. Mutton and lamb: ½ Canadian cent per lb. Pork and fancy meats: ½ Canadian cent per lb.	Individual import permits are required for imports of fresh and frozen beef and veal from New Zealand. Import permits for beef from New Zealand are tied to specific shipments authorised for export by the New Zealand Meat Producers Board in line with agreed levels in understandings reached under voluntary restraint agreements.
CHILE	At present an F.O.L. ban on shipping to Chile affects all New Zealand meat exports.	
CYPRUS	Free of duty.	Imports of meat require a special permit issued by the Director of Veterinary Services.
EEC COUNTRIES	GENERAL NOTE: Under the new EEC import regime (which commenced April 1, 1977), beef and veal from third countries will be allowed entry under three different import arrangements: (1) Live cattle, also fresh, chilled and frozen beef and veal will be subject to a variable import levy calculated monthly and will be adjusted weekly to reflect fluctuation in the average Community market price in relation to the guide price. (2) A "Balance Sheet" arrangement provides for the importation of 75,000 tonnes of beef for manufacturing, viz: (a) 25,000 tonnes may be imported levy-free for use in certain preserved food products. (b) 50,000 tonnes may be imported for other manufacturing purposes at 55 per cent of the levy applicable on day of importation. (3) The annual levy-free quota as set by GATT. Except where specifically stated, duty rates apply in addition to levy. Sheepmeats are now subject to a tariff rate set by GATT not exceeding 20 per cent, and also to a safeguard clause which, if used, will control the importing of sheepmeats into the EEC.	
Benelux	Beef and veal, fresh, chilled or frozen: 20% plus variable levy. Mutton and lamb: 20%. Fancy meats: Beef livers 11%, other beef fancy meats, 7%. Sheep fancy meats: 4%.	Import licences required. Added Value Tax of 4% calculated on import value plus duty.
Denmark	Beef and veal, fresh, chilled and frozen: 20%, plus variable levy according to Common Agricultural Policy of EEC. Mutton, lamb and goat: 20%. Fancy meats: Beef livers 11%, other beef fancy meats 7%, Fancy meats of mutton, lamb and goat: 2.4%.	Import licences required. Added Value Tax of 15% calculated on import value plus duty. Sheepmeats subject to quota.

COUNTRY	TARIFF	NON-TARIFF
France	Same as for Benelux except sheep fancy meats 3%.	Import controls and licensing, plus Added Value Tax of 7% of duty paid value. Sanitary tax on fresh, chilled or frozen meat: 0.03 francs per kilo. Sheepmeats subject to quota.
Federal Republic of West Germany	Same as Benelux.	Import licences for frozen beef and veal are subject to both Common Market approval and German marketing laws. Import of lamb carcases up to 44 kg now liberalised subject to importer reporting shipment to Ministry in Frankfurt together with a certified copy of Bill of Lading within a specified time. An import equalisation tax of 5.5% of duty paid value is also levied. Suggest importers first contact Trade Commissioner.
Italy	Same as Benelux.	Import licences required. Added Value Tax 6% Sanitary tax on frozen beef: 5 lire for retail and 3 lire for industry per kilo. Other meats 10 lire per kilo.
Netherlands	Beef and veal: Same as Benelux. 20% EEC Common Customs Tariff on all sheepmeats. Sheep fancy meats: 4%.	Value Added Tax 6%. There are no import licences required except a registration form to be completed by the importer.
United Kingdom	Beef and veal, fresh, chilled and frozen, subject to a system of fixed import duties and variable levies as laid down by the Common Agricultural Policy of the EEC. Duty rate 20%. Duty of 20% applicable to all mutton and lamb imports. Fancy meats: 4%.	Import licences required for beef only, and must be obtained from the Intervention Board for Agricultural Produce. Imports must be accompanied by hygiene certificate.
EGYPT, ARAB REPUBLIC OF	Meat and fancy meats, except pig meats: No import duty. Marine duty calculated at 0.2% of c and f value.	Imports subject to open general licence (O.G.L.).
FIJI	Free.	N/A.
FINLAND	No duty.	Variable import levies. Turnover tax at 12.4% assessed on dutiable value plus duty. Global quotas apply.
FRENCH POLYNESIA	All fresh, chilled or frozen meat and fancy meats: free. Canned meats: 1%.	Mutton, beef, veal: import tax 7%. Pork: import tax 22%. Statistic tax: 40 Pacific francs/100 kilo. Import controls: Nil.
GIBRALTAR	Free.	Frozen meats subject to import licence.
GREECE	Frozen bone-in and boneless beef, veal, mutton and lamb are subject to basic import duty of 20% of c.i.f. Other charges amount to approximately 4%. Fancy meats prohibited. Imports of fresh meat have been banned as from June 30, 1976.	Import licence required.
HONG KONG	None.	Import licences are automatically available.
IRAN	Beef, buffalo, veal, sheep, lamb, goat: exempt. Fancy meats: 5%.	Importers are required to obtain an import permit from Ministry of Health on recommendation of the Iranian Meat Organisation.
ISRAEL	All beef, chilled or frozen: 1.05 Israeli pounds per kilo. Lamb and sheepmeat, chilled or frozen, with bones: 6.50 Israeli pounds per kilo. Liver and tongue: 4.50 Israeli pounds per kilo.	Import licence issued by Ministry of Commerce and Industry. Frozen and chilled meat is subject to special requirements concerning packing, marking, refrigeration and transport.
JAMAICA	Meat and fancy meats, fresh, chilled or frozen: No duty.	Specific import licences required subject to quota restrictions.
JAPAN	Beef and veal: 25% plus variable levy. Mutton and lamb: 7.5%. Pigmeat: 10%.	Beef imports, including certain fancy meats, are subject to quota allocations based on the GATT formula. Mutton and lamb can be imported freely.

COUNTRY	TARIFF	NON-TARIFF
JORDAN	Fancy meats and meats of bovine and ovine animals: free of duty. Pigmeat: 14%.	Import licences are required, issued by Ministry of National Economy. Import Fees: Import licence: 4%. Veterinary tax: 20 fils per kilo. Municipal tax: 3%.
MALAYSIA	None on bovine, sheep, goat or pig meat.	Imports subject to open general licence. 5% surtax is levied on c.i.f. values.
MALTA	All meat and fancy meats: 2 Maltese pounds per 100 kilos.	Import licences necessary but may be freely obtained. All meat is subject to government price controls, except rump and tenderloin when for catering, and fancy meats.
NIGERIA	All meat and fancy meats (including salted): 25% duty.	Import licences required.
NORWAY	Beef, veal, lamb and mutton: 1.20 kroner per kilo. Fancy meats: 1.20 kroner (except tongues, 3.00 kroner per kilo).	Meat, fancy meat and products thereof are subject to licensing restrictions administered by the Ministry of Agriculture, which will permit imports during periods of shortage in local supplies. Sales tax applicable.
PANAMA	Meat, fresh, chilled or frozen: Beef 0.50 Balboas per kilo. Sheep and lamb: 0.35 Balboas per kilo. Pigs: 0.50 Balboas per kilo. Meat preparations in airtight containers: 0.40 Balboas per kilo.	No import controls. Surcharge 5% of f.o.b. value.
PHILIPPINES	Fresh, chilled or frozen meat and fancy meat — beef and veal, mutton and lamb, pork, goat and horse: 10%.	All meat and fancy meats importable under letter of credit terms. Food Terminal Inc. has sole authority to import briskets and approve importations of other beef items priced below 50 US cents per lb c.i.f. A uniform revenue duty of 10% is also imposed.
SINGAPORE	No duty.	Import licences required. Veterinary fee: 1.50 Singapore dollars per 50 kilos.
SWEDEN	Free.	Variable import levies. Added Value Tax: 20.63%. Importers of food should be registered at National Food Administration.
SWITZERLAND	Official duty on frozen beef, veal, mutton and lamb is 40 Swiss francs per 100 kilos, but since December 1959 this has been provisionally reduced to 10 francs. Frozen fancy meats: 40 Swiss francs per 100 kilos.	Veterinary inspection tax is 13 Swiss francs per 100 kilos. Prior import permits are required from Federal Department of Public Economy. Quotas depending on domestic production. Import licences not required.
TRINIDAD	Meat and fancy meats, fresh, chilled or frozen: free. Canned corned beef: 5%. Other canned meat: 15%.	Import taxes are variable — no specific details. Most goods require import licences.
USA	Beef and veal: 3 US cents per lb. Beef prepared (portion control) 10%. Mutton and goat: 2.5 US cents per lb. Lamb: 1.7 US cents per lb. Fancy meats valued not over 20 cents per lb: 0.5 cents per lb. Fancy meats values at over 20 cents per lb: 2.5%. Beef and veal, prepared or preserved (except sausage) and beef in airtight containers: 7.5%. Other than pickled, cured, or in airtight containers and valued not over 30 cents per lb: 3 cents per lb. Valued over 30 cents per lb: 10%. Other meats and fancy meats, and prepared or preserved (other than frog), valued at not over 30 cents per lb: 1.5 cents per lb. Valued over 30 cents per lb: 5%.	No import licences required. Global quota on beef, veal, mutton and goat.
USSR	N/A — State trading.	N/A — State trading.

Source: The New Zealand Meat Producer, May 1978.

APPENDIX C

NON-TARIFF BARRIERS AGAINST NEW ZEALAND DAIRY EXPORTS

Australia		
	Butter	Informal Ban
	Cheddar Cheese	Quota
Canada		
	Butter	Import Permits only Issued during Periods of Domestic Shortage
	Cheese	Quota
	Buttermilk Powder	Quota
	Skim Milk Powder	Embargo
	Wholemilk Powder	Embargo
E.E.C.		
	Dairy Products	Protocol 18 Special Arrangement for Butter and Cheese to U.K. Variable Levies
India		
	All Imports	Licensing
	Milk Powder	Banned
Japan		
	Skim Milk Powder	Quotas/LIPC* Control
	Butter	Quotas/LIPC* Control
Korea		
	Butter	Restricted Import/Prior Deposit
	Milk Powder	Imports Restricted to Bakery Demand
Malaysia		
	Butter	Import Licensing
Peru		
	Butter	Import Licensing
Portugal		
	Dairy Products	Annual Quotas
Spain		
	Dairy Products	Import Licensing and Tariffs
U.S.A.		
	Dairy Products	Quotas

* Livestock Industry Promotion Corporation - Semi Government

Source: Department of Trade and Industry

JAPANESE AGRICULTURAL POLICY - OBJECTIVES AND DIRECTIONS

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JAPANESE AGRICULTURAL POLICY - OBJECTIVES AND DIRECTIONS

1. INTRODUCTION

Before developing the discussion of Japanese Agricultural policy too far I think it is pertinent to ask the questions why is Japanese agricultural policy of particular concern to us in New Zealand and what, if anything, makes Japanese agricultural policy distinctive enough to warrant special attention.

The first question is answered briefly by noting the growth in New Zealand's export trade with Japan and the future prospects for this growth. From about 2% of New Zealand exports going to Japan in 1958 this percentage has grown to about 14%. In quantitative forms this growth has obviously been much greater than implied. While much of this growth over recent years has been occurring in non agricultural commodities such as aluminium and iron sands, and the largest single component is forest products, a high proportion of this trade has been in agricultural commodities, but not unfortunately in some agricultural commodities for which New Zealand would like to see growth. This refers particularly to dairy products and to a lesser extent beef. Reasons for lack of growth in these commodities of course relate largely to questions of access and protection for Japan's domestic beef and dairy cattle industries. Another reason for New Zealand interest in Japanese agriculture and its policies is that the Japanese market for food has in the past, principally as a result of a very high rate of income growth from a low base in both income and food consumption, shown every indication of strong expansion. This contrasts with many of our more traditional markets.

A number of people have made estimates of possible food import requirements based on projections of market expansion. Eric Saxon is one. Another is Professor Kenzo Hemmi whom many here will have met when he visited New Zealand last year. Appendix I to this paper indicates Professor Hemmi's view of prospects for imported livestock products and contrasts strongly with official projections especially in the areas of greatest interest to New Zealand. You'll note from this table that Professor Hemmi's estimates indicate imports of milk and milk products of 3,142,000 metric tons in 1985 against official projections of only 462,000 metric tons the latter being a decrease from 1972 import level of 775,000 metric tons. For beef the story is similar although not quite so dramatic in its contrast. Professor Hemmi estimates 770,000 metric tons of beef imports in 1985 against official projections of 117,000 metric tons. This in turn compares with

maximum beef imports of about 120,000 metric tons in 1973. You'll also note that the differences between estimated import requirements from these two sources for milk and milk products are made up entirely of differences in estimates of supply capacity. For beef Professor Hemmi expects as well as difficulties in supply that consumption will be considerably above that shown in official estimates.

Professor Hemmi's estimates diverge considerably with MAFF and others who see considerable potential for improvement in land productivity in particular. One such person is Mr Hotairocho Takeda of the New Agricultural Policy Research Institute. In a recently published book Mr Takeda noted in particular differences between present crop yields and potential yields. His view is that with sufficient research and farm scale increases actual yields could much more nearly approach potential yields. This would mean roughly a 2 - 3 fold production increase and a very small import requirement. Some details of differences between actual and potential yields for specific crops are shown in Appendix II.

Most observers however, even those close to the sources of official projections of food supply and consumption in Japan, are agreed that these are overly ambitious with regard to Japan's capacity to supply and that supply projections should be viewed essentially as "targets" and targets which are subject to considerable political manipulation. More realistic assessment of these targets indicates that resource limitations will make the possibility of their achievement very small. I would refer you to work done by Eric Saxon for more detail on this.[1]

Principal resource limitations relate to land and labour (note Appendices III and IV) but include substantial bottlenecks such as effluent disposal problems and feedstuff supplies.

Despite Japan's resource supply problems in the longer term the fact remains that agricultural policy is still geared towards achieving the production targets set for agriculture. The most obvious manifestations of this from the New Zealand point of view are of course the trade restrictive policies which apply to beef, butter and skim milk powder. These give rise to official concern in New Zealand that Japan will merely become another EEC with a highly protected domestic agriculture which will continue to build up huge production surpluses at great economic cost, principally for reasons of political expediency. This view, while understandable does, I think, underestimate the severity of Japan's resource shortage and the fact that unlike most EEC countries price elasticities

1. Saxon, E.A., Recent Developments in Good Consumption and Farm Production in Japan. Bureau of Agricultural Economics, Canberra, Occasional Paper No. 43, 1978.

are quite high (see Appendix V).

A further point that makes Japanese agricultural policy unique from New Zealand's point of view is that its livestock industry is based predominantly on imports of animal feedstuffs. While this has resulted in substantial benefits to other temperate agricultural producers such as Canada, U.S.A. and Australia, it has not been advantageous for New Zealand which is endowed with factors which favour a grassland rather than a grain producing agricultural economy. Consequently it is much more clearly in the interests of New Zealand than other suppliers of temperate agricultural commodities to Japan that Japan be supplied not so much in the form of animal feedstuffs as inputs for her livestock industry but in the form of finished livestock products. Thus any element of Japanese agricultural policy which promotes the importation of dairy products and beef rather than maize and grain sorghum etc. is of vital interest to New Zealand.

Consequently there is a need in New Zealand to be much more sensitive to the objectives of Japanese agricultural policy and the way in which this policy is determined. If we are to have any influence in the direction this policy will take we must be well informed about it.

2. JAPANESE AGRICULTURAL POLICY OBJECTIVES

Japanese agricultural policy has two principal objectives. The first is ensurance of adequate levels of income for farmers and farm families. The second is to promote self sufficiency in food supply in Japan.

Current agricultural policy is based on the Basic Agricultural Law of 1961 and amended policy guidelines of 1970. The most interesting of the latter amendments was that the objective of enabling farmers to raise incomes to achieve parity in standard of living with non farm people laid down in 1961 became watered down somewhat so that it provided for an ensurance that the total of farm and non farm income, earned by farmers be comparable with incomes of non farm families. With a high proportion of the income of farm families being earned off the farm this is a considerable concession and in 1976 the annual income per member of farm households substantially exceeded that of nonagricultural wage earning households. This particular amendment was also an admission of course of the need to transfer resources out of agriculture. This was also spelt out as an aim of the 1970 policy guidelines. Both the 1961 Basic Law and 1970 guidelines stressed the need for modernisation, rationalisation and increased agricultural productivity with the 1970 guidelines being more specific in noting the need to promote the creation of large scale viable farms. This again implies that a shift of labour resources in particular is desirable.

In fact some agricultural policy researchers see the movement of labour resources out of agriculture and the increasing average age ofthose remaining in agriculture as Japan's opportunity to restructure agriculture in such a way as to create large farming units. I would refer you to Appendix VI to examine this further. This shows that the number of young people entering the farming industry each year has fallen dramatically from 420,000 in 1930 to only 18,000 in 1973 thus increasing agricultural land available per person and allowing greater opportunity for larger scale farming especially when older farmers move out of agriculture.

The impact of larger scale farming on self sufficiency is difficult to assess with any accuracy although logic would suggest that the principal impact might be to improve farmers income rather than boost total production so that the policy objective of income sufficiency might be achieved at lower cost to the tax payer without necessarily improving food self sufficiency.

The principal instrument for implementation of agricultural policy is through national budgetary appropriations for agriculture. Reference to Appendix VII provides some indication as to the form of assistance provided. This table indicates that price stabilisation measures, in fact production subsidies, provided nearly 47 per cent of budget appropriations in 1976 and of this cereals, mainly rice, received nearly 84 per cent. This has the effect of making rice subsidies the pivotal and most politically sensitive element in the execution of Japanese agricultural policy so that despite the greater subsidies offered to other crops such as wheat, barley and soyabeans over recent years there has been a general reluctance to move out of rice production. In fact rice crop areas actually increased between 1973 and 1976 although production declined in the latter year mainly because of poor yields resulting from a very cool summer. This adherence to rice production is indicative of the strong preference of Japanese farmers to growing this crop and perhaps the inconvenience of changing to other crops. There is in fact now an expectation that farm income sufficiency policies will be administered mainly through the medium of rice subsidies and attempts to reduce support via this mechanism have brought swift and vehement action from rice producers. Furthermore rice production fits in better with the winter off farm employment of a good deal of the farm labour force than many of the alternative crops some of which could be grown in the winter.

Although production subsidies from the national budget are the largest single element of farm support much of the budget is devoted to other production measures. This refers particularly to agricultural infrastructure activities such as irrigation, drainage, etc. and selective expansion of particular types of agricultural activity.

Nor is the general budget the only means of support for agriculture. Funds

are also channelled into agriculture via Prefectural governments, through profits on LIPC Import purchases including butter, SMP and beef which are resold at domestic wholesale prices, and also via the administration of special accounts such as the Foodstuffs Control Special Account.

3. ATTITUDES TOWARDS FOOD SELF SUFFICIENCY

Japan's aspirations for food self sufficiency continue to attract great attention from outside of Japan. Appendix VIII provides details of trends in self sufficiency and targets. It is probably true to say that a good deal of the thinking with regard to this policy and indeed resource policy in total can be linked to the xenophobia many observers assign to the Japanese. They suggest that a fundamental distrust of foreigners has lead to the adoption of resource policies which are unique. Certainly national concern in Japan over resource access and indeed over national well-being reaches levels which seem to be unparalelled in western societies. Predictions of imminent doom as a result of a number of recent events illustrate this sensitivity. For example the American devaluation of 1971, the oil crisis of 1973 and more recently the growing strength of the yen on the World currency market have all resulted in national soul searching which involves Japanese at all levels. The involvement of all Japanese of course is the great strength of Japan in resolution of problems of the sort outlined.

National concern about food supplies and the drive for self sufficiency in food received a great boost in 1972 when President Nixon announced an embargo on the exports of soya beans, a crop of great dietary significance to Japan, 90% of which came from the United States. Although the embargo did not reduce Japan's soya beans imports greatly its psychological affect was enormous. "Foreigners", even close friends, "could not be relied upon". The self sufficiency lobby has received further support from subsequent events such as the world food scare, the oil crisis and more recently the worldwide annexation of territorial waters by coastal states. These measures, although they apparently increase Japanese reliance on food imports also appear to do a great deal to stimulate other avenues of production. For example, it has been estimated that activities such as fish farming, more efficient utilisation of fish in processing and development of new resources, even apart from antarctic krill development, could increase fish available for consumption by considerably more than potential losses from loss of access to the World's 200 mile economic zones. In exploring such alternatives cost factors are apparently less important than sensitivity about heavy reliance on foreign suppliers.

It is interesting also to reflect upon the origins of the Japanese xenophobia and the history of Japanese attitudes towards food. Professor Hemmi has outlined the background to Japanese anxiety about food supplies. This is reproduced in graphic form in Appendix IX. This chart indicates clearly that Japan's food history is distinguished principally by long periods of food supply pressure with only between about 1960 and 1972 being a period of relative food security. Even the slack provided by rapid increases in rice yields in the period from 1867 to 1918 was quickly taken up by growth in per capita consumption and population and this period culminated in rice riots in 1918. Against this background and given the strong inclination of Japanese to identify themselves as a race completely distinct from others, a characteristic reinforced by a long period in Japanese history of complete isolation from the rest of the world, national preoccupation with food and other resource security is not surprising.

Furthermore when this preoccupation becomes institutionalised with the bulk of political muscle lying with the rural sector despite the dominance of city dwellers in Japan, and where consumers for national security reasons, appear willing to accept the high cost of supporting a viable agricultural industry the problem of market access for agricultural commodities is not likely to have an easy solution. Against this background the principal of comparative advantage in negotiating access for agricultural commodities is not likely to have a great deal of appeal. New Zealand's access plans have to provide answers to Japanese concern about income sufficiency for farmers and to Japan's concern about access to food supplies for strategic reasons. To some extent it is possible that the income sufficiency question will resolve itself as the opportunity for Japanese agriculture to restructure into larger scale operations grows. This will not however be achieved in the short term and in the meantime new constraints to New Zealand's access may emerge.

On the question of strategic self sufficiency New Zealand's best hopes seem to lie in a change in form of Japan's current import dependence. That is lessening Japanese dependence on imported feedstuffs and increasing her dependence on finished livestock products, or at least achieving a better balance to Japan's imports of these alternatives. For New Zealand this requires a much closer consideration of the relationship within Japanese agriculture between the livestock industry and the imported feedstuffs industry. To what extent for example does an increase in livestock product production imply greater reliance on imported animal feedstuffs? How do Japanese agricultural policy makers and food strategists view the livestock product feedstuff relationship?

Professor Hemmi provides some clues by observing that 68 per cent of the 15 million tonnes increase in annual grain imports between 1960 and 1973 was in feed grains and that 91 per cent of this increase was due to increased consumption and only 9 per cent due to decreases in domestic production. In the beef and dairy sectors more detail is shown in Appendix X. This table shows trends in the reliance of each sector on animal feedstuffs as inputs. For milk production this reliance increased steadily until 1972 and since then has fallen slowly probably largely as a result of expanded pasture production in Hokkaido. For beef the picture is one of substantially greater reliance on feedstuffs per tonne of beef production and even greater reliance per animal. The latter is largely as a result of increased slaughter weights. These grew from 196 kg/animal to 278 kg per annum between 1967 and 1974.

When we relate the ratios of feedstuffs input for output of milk and beef to official 1985 targets for domestic production of these commodities, feedstuffs requirements for dairy products increase from 1.960 million tonnes in 1976 to 2.803 million tonnes in 1985 and for beef from 2.004 million tonnes in 1976 to 2.743 million tonnes in 1985. This represents a total increase of 1.582 million tonnes per annum. This also means that feedgrains use in the beef and dairy sectors would increase from 29.3 per cent of total feedgrain use in 1976 to 32.7 per cent of projected feedgrain use in 1985. It is also of interest that the increased feedgrain requirement in 1985 calculated for beef and dairy of 1.582 million tonnes is very similar in total to Japan's total increase in feedgrain imports indicated by official projections for 1985.

Put in its simplest terms one alternative Japan has then is to import an additional 1.582 million tonnes of grain per annum for feeding beef and dairy cattle, or a total of 2.310 million tonnes of milk equivalents per annum of dairy products and 198,000 tonnes per annum of beef. Viewed in terms of the relative cost of importing the two alternatives the finished product imports would be around 3½ times more expensive (¥284 billion vs ¥79 billion). Viewed however, in terms of the cost involved in distortions resulting from sub optimal allocation of resources and the welfare losses suffered by consumers having to pay inflated prices for beef and dairy products the solution would just as clearly favour the importation of the beef and dairy products in finished form.

To elaborate on this latter point I would like to refer you to a recent article by two American economists Bale and Greenshields who have estimated the welfare costs associated with current, and future agricultural trade and production policies relating to eight major cereal and livestock commodities in Japan. [2]They estimate that the total loss (1975/6) to consumers

2. Bale, M.D. and B.L. Greenshields, "Japanese Agricultural Distortions and their Welfare Value". Am. Jnl of Ag. Econ., Feb. 1978, pp.59-64.

through price distortions was $276 million, the greatest loss being for dairy products at $104 million. For beef the estimate was $41 million. On the production side total losses based on the 1975/76 situation were $110 million (dairy $34 million and beef $6 million). However, if 1985 production targets were to be achieved the losses incurred by distortions in resources being used in domestic production compared with importing would increase no less than 68 times according to this study. The total cost in this case would be $7.6 billion. For dairy products this would be $585 million and for beef $1.21 billion. The highest cost in 1985 would be for pork ($3.70 billion). This study effectively provides a measure of the current and future cost of the level of protection Japanese farmers enjoy.

These costs both in consumption and production are greatest for dairy products and for beef. In spite of the enormous costs it is significant however that Japanese policy makers seem willing to bear them. If New Zealand is to find a way to establish a stronger presence in the Japanese market for livestock products or even decide on alternative policies it needs a very clear understanding of how the Japanese really perceive their own food supply status. Dr Yuize in a recent discussion on Japanese agriculture and food policies notes the objective of Japanese agricultural policy of raising the income of Japanese farmers but considers an additional objective of providing low price food to consumers.[3] He suggests while these goals seem incompatible, in the longer term, given time to develop large scale farming, costs can be reduced sufficiently to render these objectives complementary. In the short term however, some compromise in these objectives has been necessary. This has taken the form of selection of particular products to provide income sufficiency for Japanese farmers and others to provide relatively low cost food to Japanese consumers. In the former category are rice, vegetables, fruit, eggs, dairy products and meat. Policies which promote high self sufficiency rates for these products have therefore been followed. In addition, all products in this list are well suited to the Japanese climate and, except for beef and dairy products, can be produced reasonably economically. It is notable that beef and dairy products were also included in this high self sufficiency farmer income promotion category "in order to supplement farm income".

The other group of low self sufficiency items chosen principally with the consumer in mind includes wheat, barley, coarse grain cereals, beans and sugar.

It is notable that the planned reconstruction of Japanese agriculture into larger scale economic units envisaged in the Basic Law on Agriculture in

3. Dr Yuize, Japanese Agriculture for Japan Advisory Committee, December 1978.

1961 has met with very limited success and the significance of this should not escape us. The expectation that the introduction of mechanisation into farming would release labour and allow for property amalgamation and larger scale farming operations backfired. Effectively all it did was to release labour from existing small holdings to work for a good part of the year in non agricultural activities. Much of the machinery developed was especially adapted to small scale farming so that farming activities could be continued by female and older family labour. The result has not been a reduction in agricultural production costs through larger scale farming as was originally envisaged, but merely a situation where part time farming households which earn more from non agricultural activities than agricultural activities, represent 62 per cent of total farm households and occupy about 40 per cent of total land under cultivation. In 1960 winter crops were produced on 34.4 per cent of paddies but by 1975 this had fallen to only 8.7 per cent.

It is interesting to reflect at this point on the history of New Zealand's discussions of agricultural trade with Japan. The essential thread of these discussions, beginning with Prime Minister Ikeda in 1963, was that New Zealand would have good market prospects in Japan when Japanese farming became sufficiently competitive. This presumably meant when the scale of farming was increased sufficiently to lower Japanese farmers' production costs. This also raises the question of whether or not New Zealand for its part was sufficiently well informed or perceptive to observe that scale was not increasing significantly and the implications of this for trade prospects and relationships with Japan.

4. FUTURE COURSE OF JAPANESE AGRICULTURE

Given the relative failure of efforts to enlarge the scale of Japanese farming, the question of what course agriculture is likely to take in the future becomes particularly pertinent. The possible future courses of Japanese agriculture can probably best be seen lying on a continuum between attempts to achieve greater self sufficiency given the existing structure of agriculture, and rationalisation of agriculture to meet objectives dictated by present day constraints. The course of Japanese agriculture within the existing structure will attempt to meet targets of the sort laid down in official 1985 projections but will almost certainly fall short of these because of resource constraints. Results may possibly be of the type that Professor Hemmi has suggested with substantial gaps for importation of beef and diary products although imports are more likely to continue to be limited by the various non tariff barriers of the sort that we are currently familiar with, in order to protect an increasingly inefficient

livestock industry. The result in this case would be a EEC type of situation. At the other end of this continuum, future courses will be decided by reassessment of the realities of present day food strategy options and would require substantial change. The likelihood of a course based on wholesale liberalisation of imports of agricultural products is very small.

Future courses will also be influenced by various pressure groups, especially the farmers themselves and agricultural co-operatives. It is clearly not in the interests of the ruling Liberal Democratic Party to see a reduction in the numbers of part-time farming households in order to enlarge the scale of farming in Japan. This party draws about 60 per cent of its voting support from people in agriculture, forestry and fishing. Nevertheless there is a strong feeling in Japan that rationalisation of Japanese food and agricultural policies is overdue and a future course for Japanese agriculture which involves this rationalisation is a strong possibility. In most policy reassessments the dominant objective still seems to be the question of food security. As pointed out earlier there is great sensitivity to the fact that, despite officially quoted food self sufficiency figures of a little over 70 per cent, about 1000 of Japan's daily per capita calorie consumption of 2500 originates outside of Japan.

Of interest from New Zealand's point of view is the emerging body of opinion that the pattern of Japanese food production should be improved. This essentially means a better balance in Japanese agriculture between animal feedstuff production and livestock production, and therefore a lower reliance on imported feedstuffs as inputs for the livestock industry. A strong livestock industry in Japan has appeal because of its strategic flexibility. Food resources can be stockpiled for example through animals on the hoof, through the grain the animals use, and through land fertility storage with excrement return to pastures.

Dr Yuize has suggested that the way to achieve better balance between livestock production and animal feed production might be to establish an integrated system ranging from feed production to livestock production linked within a crop rotation which would include rice in the summer time. He has estimated that about 6 million tonnes of barley could be produced from suitable paddy fields in the winter, that better use could be made of rice straw for cattle roughage and that grass varieties suitable for Japan's climatic extremes could be developed. Such a system would require the solution of a number of technical problems and would still have to be supported by a more active programme for developing large scale management systems. This would in turn require a solution to the political difficulties noted before which have inhibited the development of large scale management systems.

If rationalisation of Japanese agriculture along these lines were to occur what would this mean for New Zealand? In fact greater imports of livestock

products is seen to perform useful functions for Japan. On the one hand, given a certain base level of domestic supply from the integrated system outlined, imports of livestock products provide additional calorie requirements at relatively high unit cost compared to feedstuffs (although at cheaper total cost than domestic production costs). This means that foreign exchange expenditure per calorie would be greater for livestock products than animal feedstuffs. This would serve to run down Japan's exchange reserves and strengthen Japan's lagging competitiveness in manufactured products. Putting this another way import of livestock products rather than animal feedstuffs uses exchange reserves while at the same time satisfying Japan's strategic objective of not being too reliant on foreign sources for total calorie supply. Furthermore the system outlined provides for balance in food supply further satisfying the strategic objective.

New Zealand's interest of course lies in discovering exactly at what level this balance is likely to be determined and for which livestock commodities will the balance be sensitive. For example what is the precise land use relationship between feedstuff production and livestock production in Japan? It is probable that because of differences in management systems beef and dairy production would be depressed more by greater animal feedstuff production than pork and chicken production. The answers to questions such as these are critical for New Zealand in assessing its longer term agricultural relationship with Japan and indeed for the future of its own agriculture. The opportunity exists for New Zealand, through much closer and more permanent association with people in Japan who formulate agricultural and food policy to not only be better informed about this policy, but also make sure New Zealand's interests and her potential role as a reliable partner are borne in mind when this policy is being developed. I would like to think that what New Zealand may lack in economic clout she may be able to make up for in the vision of her decision makers and the quality of her people who can take advantage of these opportunities.

APPENDIX I

SUPPLY AND DEMAND OF SELECTED FOODSTUFFS IN JAPAN (1972 and 1985)

A. MINISTRY OF AGRICULTURE FORESTRY AND FISHERIES PROJECTING AND TARGETS

(units 1000 M.T.)

	1972			1985		
	Consumption	Production	Imports	Consumption	Production	Imports
Wheat	5,372	284	5,088	5,899	553	5,346
Milk and Milk Products	5,719	4,944	775	8,142	7,680	462
Beef	367	290	77	625	508	117
Pork	883	793	90	1,335	1,325	10
Chicken Meats	668	640	28	915	914	1
Eggs	1,848	1,811	37	2,206	2,205	1
Concentrated Feeds	15,516	5,628	9,888	20,609	5,837	14,772
Sugar	3,052	621	2,431	3,821	1,064	2,757

B. PROFESSOR HEMMI'S REVISION

(units 1000 M.T.)

	1972	1985			(B) / (A)
	Imports (A)	Consumption	Production	Imports (B)	x 100
Wheat	5,088	5,899	180	5,719	112.6
Milk & Milk Products	775	8,142	5,000	3,142	405.4
Beef	77	1,005	235	770	1,000.0
Pork	90	1,585	800	785	722.2
Chicken Meats	28	1,085	1,085	0	0.0
Eggs	37	2,206	2,205	1	2.7
Concentrated Feeds	9,888	15,609	5,437	10,172	102.9
Sugar	2,431	3,390	700	2,690	110.7

APPENDIX II

POSSIBLE YIELD INCREASES IN JAPANESE AGRICULTURE

Units % Kg/10 Aru

	Rice	Wheat	Soya Beans	Potatoes	Sugar Beet	Cabbage	Mikan	Pasture
Present Yields	470	270	140	2,500	3,000	3,500	3,000	5,000
Possible Yields	900	900	500	8,000	8,000	8,000	8,000	15,000 30,000

Source: Shokuryo Kiki to Nippon Nogyo No Tenbo (The Food Crisis and the Outlook for Japanese Agriculture) Takeda Hotairochi

APPENDIX III

AREA OF AGRICULTURAL LAND

As at 1 August

Item	1965 (a)	1973 (a)	1974	1975	1976	1985 Target
	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha
Paddy Fields	3391	3274	3209	3170	3144	
Upland fields						
- orchards, etc. (b)	526	632	637	628	615	
- grass	140	431	457	485	506	
- other	1948	1310	1312	1289	1271	
Total Agricultural Land	6005	5647	5615	5572	5536	5846
Total area planted	7342	5663	5752	5755	5750 (e)	6684
	%	%	%	%	%	%
Cropping ratio (c)	123.8	100.3	102.4	103.3	103.8(e)	114.3
Agricultural land as proportion of all land	16.2	15.3	15.1	15.0	14.9	15.5

(a) Excluding Okinawa. (b) Includes tea and mulberry plantations.
(c) Planted area as percentage of agricultural land. (e) Estimated.

SOURCE: Recent Developments in Food Consumption and Farm Production in Japan. Bureau of Agricultural Economics-Occasional Paper No 43, E.A. Saxon, 1978.

APPENDIX IV

WORK FORCE IN AGRICULTURE

(Calendar Years - 12 Month Average)

Item	Unit	1965 (a)	1973	1974	1975	1976
Persons Working in Agriculture and Forestry (b)						
Self-employed	Million	3.94	3.13	3.10	3.02	
Family helpers	"	5.93	3.14	2.90	2.86	
Employees	"	0.59	0.30	0.30	0.30	
Total	"	10.46	6.57	6.30	6.18	6.01
Persons working in forestry	"	0.37	0.21	0.20	0.22	
Persons working in agriculture	"	10.09	6.36	6.10	5.96	
Total Work Force						
At Work	"	47.30	52.59	52.37	52.23	52.71
Unemployed	"	0.57	0.67	0.74	1.00	1.08
Total	"	47.87	53.26	53.11	52.23	53.79
Percentage of Employed Work Force						
In agriculture & forestry	%	22.1	12.5	12.1	11.8	11.4
In agriculture	%	21.3	12.1	11.6	11.4	11.0
Annual Labour Input per Farm (c)	Man Hours	2987	2323	2276	2239	

(a) Excluding Okinawa. (b) Data from Labour Survey covering persons 15 years and above. (c) Data from annual farm surveys.

SOURCE: Recent Developments in Food Consumption and Farm Production in Japan. Bureau of Agricultural Economics Occasional Paper No 43. E.A. Saxon, 1978.

APPENDIX V

PRICE AND INCOME ELASTICITIES FOR SELECTED LIVESTOCK PRODUCTS IN JAPAN

	INCOME ELASTICITY		PRICE ELASTICITY
	CROSS SECTION (1976)	TIME SERIES (1963-76)	(TIME SERIES (1963-76)
BEEF	0.91	1.36	-1.69
PORK	0.48	1.52	-1.51
CHICKEN	0.52	0.84	-1.15
HAM	0.56	0.97	-0.84
SAUSAGE	0.60	0.99	-2.50
MILK	0.40 (R)	0.58	-0.88
BUTTER	1.28	-0.53	-0.58
CHEESE	1.02	0.49 (T)	-2.99
EGGS	0.20	0.30	-0.15

SOURCE: Ministry of Agriculture Forestry and Fisheries, TOKYO.

NOTE: R sign - R Value $\leqslant$ 0.8

T sign - T Value $\leqslant$ 1.0

APPENDIX VI

NUMBERS OF NEW GRADUATES ENTERING FARMING IN JAPAN

YEAR	UMBER
1930	42800
1935	41000
1950	44000
1955	26400
1960	12700
1965	5900
1970	3700
1972	2200
1973	1800

SOURCE: Shokuryo Kiki to Nippon Nogvo No Tenbo (The Food Crisis and Japan's Agricultural Outlook). Takeda Hotairocho.

APPENDIX VII

BUDGET APPROPRIATIONS FOR AGRICULTURE (Billion Yen)

Item	1960	1965	1970	1971	1972	1973	1974	1975	1976
Rationalisation of rice and cereals	0.7	1.0	83.2	186.1	205.1	211.8	202.2	126.3	113.1
Promotion of livestock output	1.9	5.5	13.8	18.4	23.0	27.9	39.6	40.0	50.0
Promotion of horticulture and silk	0.7	1.4	4.3	7.5	10.3	13.2	13.0	18.1	20.3
Total selective expansion	3.3	7.9	101.3	212.0	238.4	252.9	254.8	184.4	183.9
Measures to raise productivity	46.2	106.3	212.2	271.7	349.3	370.9	384.0	454.4	489.9
Natural disaster assistance	35.0	48.0	62.8	73.7	105.3	120.2	140.8	157.6	170.9
	84.5	162.2	376.3	557.4	693.0	744.0	779.6	796.4	844.7
Price stabilisation, marketing, income									
- cereals	29.0	120.5	374.6	292.4	327.4	613.3	870.3	811.4	823.0
- livestock products	0.4	4.1	15.6	12.4	13.8	14.0	25.1	31.8	35.5
- other farm products	2.3	4.0	4.1	6.0	12.7	17.0	16.6	18.0	32.4
- farm inputs	1.0	4.4	4.0	7.0	7.6	64.5	88.9	84.1	54.8
- other measures	3.5	6.6	18.6	23.6	27.6	28.3	31.1	36.2	37.7
Total stabilisation measures	36.2	139.6	416.9	341.4	389.1	737.1	1032.0	981.5	983.4
Structural improvement	4.0	20.1	34.4	40.3	49.7	62.6	64.6	77.1	95.3
Farm welfare	0.5	1.3	5.7	7.4	9.1	10.3	14.0	19.1	23.2
Agricultural co-ops and other	13.4	22.7	51.8	61.8	75.8	90.8	118.6	125.9	152.6
	17.9	44.1	91.9	109.5	134.6	163.7	197.2	222.1	271.1
Grand Total	138.6	345.9	885.1	1008.3	1216.7	1644.8	2008.8	2000.0	2099.2
Proportion of nation budget (%)	7.9	9.2	10.8	10.4	10.0	10.8	10.5	9.6	8.6

SOURCE: Recent Developments in Food Consumption & Farm Production in Japan. Bureau of Agricultural Economics Occasional Paper No 43. E.A. Saxon, 1978.

APPENDIX VIII

SELF-SUFFICIENCY RATIOS
COMPARISON OF PROJECTIONS WITH BASE YEARS AND 1974
(Percentages)

	Base Years				Actual	Projections			
	1959	1966	1970	1972	1974	1971 (a)	1977 (a)	1982 (a)	1985
Rice	101	101	106	100	102	107	100	100	100
Wheat	37	21	9	5	4	34	14	8	9
Barley	92	65	34	18	11	100	44	24	36
Soyabeans	28	9	4	4(b)	4	16	3	12	9(c)
Vegetables	100	100	99	99	98	100	100	100	100
Fruit	100	89	84	81	83	87	87	84	84
Sugar (incl. Okinawa)	18(d)	27	23	20	14	na	27	27	28
Meat (excl. whale)	97	89	84	81	84	80	89	89	86
Milk and Milk Products	94	80	89	86	83	72	92	92	94
Eggs	101	100	97	98	98	105	99	100	100
Total Agricultural Foods	90(d)	80	76	73	72	na	na	75	75
					SUPPLEMENTARY DATA				
Beef	96(d)	92	89	79	85	na	na	83(e)	81
Pigmeat	96(d)	106	98	90	93	na	na	97(e)	99
Chicken	100(d)	97	98	96	97	na	na	98(e)	100
Fodder (TDN basis)	82(d)	62	55	51	47(f)	80	55	43	51
Feed concentrates (TDN basis)	67(d)	40	33	36	30(g)	60	29	21	28

Source: Japanese Long Term Projections Relating to Food and Agriculture. Bureau of Agricultural Economics Occasional Paper No 38. E.A. Saxon, 1978.

APPENDIX IX

HISTORY OF JAPAN'S FOOD STATUS

YEAR		PHASES IN FOOD STATUS
1700		PHASE I 1) Fairly stable population 2) Stable rice yields 3) Food consumption at subsistence levels
1783	Famine	
1867	Meiji Restoration	PHASE II 1) Modern Industrial development 2) Rapid increase in rice yield 3) Increase in food consumption per head with growing affluence 4) Rapid population growth
1883	Famine	
1918	Rice Riots	PHASE III FOOD DEVELOPMENT PROGRAMMES 1) Rice in Korea and Taiwan 2) Sugar in Taiwan 3) Soyabeans in Manchuria 4) Fishing Industry Development
1946	War Lost. Loss of access to food from colonies	PHASE IV 1) Poor food supply situation 2) Successful rice production programme begun 3) Balance of payments difficulties
1960		PHASE V 1) Declining rice consumption 2) Increase in non rice food consumption 3) Increased imports esp. feed grains, meats, & oil seeds 4) Declining food self sufficiency 5) Expanding economy - abundant food
1972		PHASE VI 1) World food scare 2) Nixon soya bean export embargo 3) 200 mile EEZ era begun 4) Drive to increased self sufficiency

APPENDIX X

FEEDSTUFFS AND END PRODUCT PRODUCTION RELATIONSHIPS IN JAPAN FOR

BEEF AND DAIRY INDUSTRIES

Units: 200 Tonnes: 000 Head

Year	Feedstuffs Used In Dairy Industry	Production	Feedstuffs Used Per Tonne Milk	Feedstuffs Used in Beef Prod.	Total Beef Prod.	Total Beef Cattle No.	Feedstuffs Used Per Tonne Beef	Feedstuffs Used Per Animal
1967	1067	3566	0.299	234	146	1551	1.60	0.151
1968	1301	4016	0.324	448	160	1666	2.80	0.269
1969	1521	4509	0.337	600	216	1795	2.78	0.334
1970	1741	4762	0.365	876	260	1789	3.37	0.490
1971	1812	4820	0.376	1203	276	1759	4.36	0.684
1972	1945	4939	0.394	1453	317	1749	4.58	0.831
1973	1907	4896	0.389	1835	246	1818	7.46	1.009
1974	1792	4876	0.368	1665	321	1893	5.19	0.879
1975	1833	5008	0.366	1544	349	1859	4.42	0.831
1976	1960	5370	0.365	2004	295	1819	6.79	1.101
1985 projecting	2803	7680		2743	508			

Note: 1985 projections are based on MAFF official projections of beef and milk production in Japan and 1976 feed to product output for dairy products and a weighted average of these ratios for 1974, 1975 and 1976 for beef.

JAPANESE AGRICULTURE

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JAPANESE AGRICULTURE

1. A CONTRASTING PICTURE OF SELF-SUFFICIENCY

By some strange circumstance Japanese agricultural products would appear to fall into two distinct categories (see Table 1). The first group includes rice, vegetables, fruit, eggs and dairy products, and some types of meats. In these items Japan enjoys nearly 80 percent self-sufficiency and in some cases more. Wheat, barley, beans and sugar form the opposite category. For these products Japan depends more than 80 percent on foreign sources of supply. Japan produces a mere three percent of the soybeans and four percent of the wheat consumed by her population. Self-sufficiency figures for concentrated animal feeds are also extremely low with those for corn, milo and other coarse cereals being below two percent. Domestic production statistics on bran and oil cake, ingredients in the manufacture of concentrated feeds, would appear to indicate a large degree of self-sufficiency, however, both items are byproducts of wheat and oilseed, neither of which are grown in large quantities in Japan.

The major reason for the existence of these two contrasting groups of agricultural products is climatic. The Japanese archipelago, located on the fringes of the Asian monsoon region, is admirably suited to the wet paddy cultivation of rice. Japan's temperate climate also allows for the easy cultivation of fruits and vegetables.

A secondary reason for the discrepancy between high and low self-sufficiency agricultural products is an economic one. The growing of products in climates for which they are suited is usually inexpensive and this fact contributes to the above items being in plentiful supply.

Animal husbandry in Japan depends heavily on foreign imports of concentrated feed or raw materials for feed. As long as Japanese farmers can obtain cereal feed inexpensively, however, they find that they can make good profits raising various kinds of livestock. Pigs, broilers, and egg-laying

hens can be kept on Japanese farms on feed lots and do not take up space.

When such agricultural product export nations as the United States were suffering from an oversupply of agricultural products, the import of low priced feed for Japan's livestock production was a prudent method. Particularly in the raising of pigs and chickens in which only a small amount of space is necessary, this method met with great success. Operations producing more than 300 head of pigs make up 36 percent of the total pig production, and those producing more than 10,000 egg-laying hens make up 53 percent of the total hen production and those producing more than 10,000 broiler chickens make up 43 percent of the total chicken production. The larger scale of these operations has made Japanese prices more competitive in international markets.

However, due to the unusual weather conditions since 1972, as soon as there is turbulence on the international agriculture produce market, especially in prices, Japan's livestock industry is immediately endangered. Also as the urbanization of Japan progresses, city people and farm people find themselves in closer contact than ever before, with "livestock pollution", such as contamination from livestock excreta, disagreeable smells and noises, becoming a problem.

2. AGRICULTURAL IMPORT POLICY

There is another reason for the discrepancy between high and low rates of self-sufficiency in Japanese farm products. This factor is one of policy. Japan's postwar agricultural policy has had two major objectives, one of which was to raise the income of farming families to levels in other sectors; the other was to provide food at low prices to Japanese consumers.

These two goals do not have to be mutually incompatible in the short period. A compromise solution resulted in creating two distinct categories of farm products, one to provide cash for the farmer and the other to make sure consumers have inexpensive food to eat. In order to increase farm income it is necessary to raise the price of agricultural goods, however, to provide

consumers with cheap food, prices must be lowered. Consequently any attempt to achieve the two objectives in the short run is bound to result in certain inconsistencies.

The items chosen to bolster the standard of living of farming families were rice, vegetables, fruit, eggs, dairy and meat products. With the exception of rice, it was felt that demand would increase with diversification in the diet and therefore these products are the ones most encouraged under Japan's basic law on agriculture. Most of the items above are suited to the Japanese climate and can be produced economically. Thus self-sufficiency can be reached with no great difficulty. Dairy and beef, however, are exceptions, but it was considered that these should be supported in order to supplement farm income. For these reasons the self-suffciency rate was kept high in these products as well as in rice.

The second group of farm products have been chosen with the consumer in mind. These are wheat, barley, coarse grain cereals, beans and sugar. Self-sufficiency rates in these commodities are low and it is far cheaper to import them than to attempt to meet local demand through domestic production. The consumer is the chief beneficiary of this policy.

To go one step further, one can say that the unit price of high self-sufficiency farm produce tends to be high, whereas the opposite is true of low self-sufficiency items.

Subsidies have resulted in making Japanese rice very expensive, and inasmuch as this particular type (Japonica) of rice enjoys limited appeal overseas its market price is high in comparison to other cereals as well. Fruit and vegetables rely on labour-intensive means of production in order to be marketed fresh. Thus they can become very expensive. In the case of fruit, long periods may be required before trees actually begin to produce and the cost of this initial investment raises the cost of production. With livestock, it is necessary to produce feed and then raise the animals. This roundabout method tends to

increase the cost of production. (Table 2 shows import prices in Japan for 1972 prior to runaway inflation.)

When foreign exchange reserves remain constant, one can import a greater numerical quantity of an item by aiming at low unit prices. Common sense would dictate that cheap imports both please the greatest number of people, and foster a healthy domestic economy. Until recently Japan has suffered from current accounts deficits causing importers to aim for low-price items. At the moment, Japan is suffering from exactly the opposite conditions and this has resulted in a necessity to aim for higher price imports.

3. RESTRICTIONS ON RAISING CATTLE IN JAPAN

Dairy cows and beef cattle cannot be maintained in Japan in great numbers because of the lack of grazing land. One would have thought that an increase in Japan's dairy cattle numbers might have been impossible but thanks to a decrease in the number of horses on Japanese farms, dairy cows increased from 824,000 head in 1960 to 1,888,000 in 1977. Horses were used either as draft animals on the farms or by the military, however, with the advent of mechanisation there was no longer any need to keep the animals, which have been replaced with dairy cows. Beef cattle too, whose number in 1977 stood at 1,987,000 were required for work on the farm and numbers have declined because of mechanisation.

The Japanese traditionally consider beef that has pure white fat here and there throughout the red lean meat to be of the highest quality. In order to get this meat, the weight of the cattle must be increased to 650 kg, with the result that 50% more feed than that required for the normal raising is said to be necessary. This special beef was produced by using the cattle in agricultural work for several years and then keeping them completely still for six months to a year to fatten before butchering. But with the introduction of cultivators and tractors, the function of these cattle as farm animals was completely lost. Around 1965, the number of cultivators and tractors exceeded

the 2,000,000 mark, and a great number of farm cattle were slaughtered. The number of work cattle decreased from 2,337,000 in 1963 to 1,457,000 in 1967. In a mere four years, an actual 920,000 head of cattle disappeared and Japan's beef source literally dried up. This is the reason for today's high beef prices. It is only natural that the raising of beef cattle over a long period of time without utilizing them as work animals results in higher production costs under small scale management.

Due to the influence of Buddhism and for other historical reasons, Japan's livestock market has a very special social character. The complex distribution structure caused by this situation and the shortage of beef together make it difficult to lower Japan's beef prices.

The great slaughter of work cattle due to the spread of the use of cultivators and tractors seems to have been in direct opposition to government policies which have since 1961 been directed towards promoting the production of livestock.

4. COUNTERMEASURES FOR THE PROBLEM OF THE 200 MILE SEA LIMIT

In 1976, 79.4 grams of protein per capita per day was consumed in Japan. Of this figure, 45.7 percent was animal protein, and a breakdown of this percentage shows that 23.2 percent was livestock products and 22.5 percent was fishery products. The livestock products include eggs, dairy products, and meat. Considering the fact that from 1934-1938, livestock products represented only 3.6 percent and from 1956-1960 only 7.9 percent of the total protein consumption, the 1976 ratio of livestock product consumption shows an outstanding increase. But the consumption of fishery products still maintains approximately the same standard as livestock products. The ratio of fishery products in the overall protein consumption level averaged 20.5 percent between 1934 and 1938, which is only slightly different from the present day ratio. Of course, the per capita daily consumption of protein in general shows an increasing tendency, so that the amount of fishery products consumed has

also increased, but the importance of fishery products in the Japanese diet has changed very little over the years.

However, if the protein that the Japanese people are at present obtaining from fishery products were to be produced from livestock products, it would require all the agricultural land at present in use in Japan to produce the feed necessary to raise that livestock.

Japan's production of fishery products was 10,545,000 tons in 1975 - 15 percent of the total world production for the same year. And of this amount, 39.1 percent was taken from seas within the 200 mile sea limit of foreign countries. Therefore, as the restrictions on the 200 mile sea limit of foreign countries are intensified, the Japanese people will find it progressively difficult to obtain their traditional source of protein.

Various countermeasures could be utilized to solve this problem. The first would be the maintenance of the fishing grounds in the northern seas that have been developed by Japanese fishermen. But due to the strong insistence of the Soviet Union, the United States, and Canada that these resources must be preserved, there is a limit to the effectiveness of this countermeasure. The second is to develop new fishing grounds in New Zealand and Patagonia. However, the problem here is complicated by the demand of New Zealand that Japan reciprocate by importing livestock products as a condition of granting permission for use of their waters. The third is the importation of fishery products, but Japan is already the second largest importer of fishery products in the entire world, and this tendency will more than likely continue in future. Also there is a problem in the fact that imported products may involve far higher costs than those of catching fish with domestic fishing vessels.

As a fourth countermeasure, the utilization of Antarctic krill and other deep sea fish has been proposed, but aside from production expenses and transport expenses, there is the further problem of publicity expenses necessary to introduce these as yet untried resources. As a fifth countermeasure, there

is the promotion of cultured fish. This method could produce as much as 10 to 20 tons per one km^2 of sea area, and Japan has more than 120,000 km^2 of available sea area that could be thus utilized. However, this would entail great amounts of money for artificial incubation, for construction of man-made gathering places for fish, for the making of artificial bait, and for the technical development to carry out these various projects. The sixth countermeasure is to utilize fishery products, that have hitherto been used as animal feed, as food for human beings, and to improve the consumption system by reclaiming the waste fluids from ground fish products, which would result in an increase in the utilization of the effective protein content of fishery products from the present figure of only 9.3 percent to 12.5 percent. However, for this purpose, development of techniques for processing and preparation would become necessary.

5. SPOTTY PROSPERITY OF THE LIVESTOCK INDUSTRY

Since only a short time has passed since the 200 mile sea limit has become a problem, countermeasures have not yet become stabilized. However, no matter which countermeasure is taken, the rising tendency of supply costs for fishery products will be the same, and the Japanese people will not be able to continue to increase their consumption of fishery products as they have in the past. Thus the possibility of turning part of the demand for fishery products towards utilization of livestock products and processed vegetable protein products will appear. Also, since the Second World War, the younger generation is taking over a larger ratio of the total social structure, therefore it is expected that the consumption of livestock products will increase in Japan.

Of course, since the per capita consumption of eggs, one of the livestock products, was approximately 16 kg per year in 1976 in Japan, a figure which is within the highest world standard along with Israel, New Zealand, West Germany, and the United States, there will more than likely be no further increase in this particular field (see Table 4). Converting the consumption of dairy

products to the milk ratio, we find that an annual 54.6 Kg per capita is consumed in Japan. This ratio is a little less than 1/5 of that of the United States, less than 1/7 of that of Sweden, and only 1/4 of that of Italy which is considered particularly low among the countries of Europe. Because the Japanese traditionally did not use dairy products in cooking, dairy products were always nothing more than luxury items on the tables of Japan. Since about 1970 when dairy products began to be more widely used, consumption ratios for dairy products began to decline with the exception of drinking milk and cheese, the former of which has become competitive to other beverages. However, if dairy product prices are lowered, the younger generation may begin to use dairy products in Europe and American style cooking and this may result in a raising of the rate of consumption in the future. Intake of several kinds of vitamins and minerals in the Western countries has relied heavily on dairy products (Table 5). It is worth noting that the Japanese have been using dairy products to supply an increasing share of the abovementioned nutrients with the result that consumption of cereals, potatoes, beans and fish has decreased (Table 6).

Among livestock products, the demand is strongest for meats, and since the annual per capita meat consumption volume in Japan is only 26.3 Kg, the standard still stands at a low of only 1/4 of that of the United States, and less than 1/3 of that of West Germany. However, when meats and fishery products are totalled together, the annual per capita consumption volume in Japan is 61.1 Kg, which is not so very low when compared with Italy's 75.7 Kg. But, as mentioned earlier, the supply rate of fishery products cannot be expected to increase in the future. Thus there will more than likely come to be a greater demand for meats. A breakdown of the meat consumption shows pork is highest with 41.3 percent, followed by chicken at 31.2 percent, and beef at 14.6 percent, and all others including mutton at 12.9 percent. In spite of the fact that the retail price of beef is five times that in the United States, the demand for beef in Japan is strong.

The total amount of beef on the dressed carcass weight in Japan in 1977 was 450,000 tons, of which 134,000 tons were imported. The beef production volume for the same year was 306,000 tons, but 57 percent of this figure was the raising of milk cow bulls and the slaughtering of milk cows that no longer produce milk. The Japanese consider both milk cow beef and imported beef to be of inferior quality, but in actual fact, over half of the beef consumed in Japan is from these sources. If the supply of low-fat, high-protein fishery products is suppressed, imported beef may come to be used in its place.

6. DIVERSIFICATION OF THE DIET

Generally speaking as economic development advances and per capita real income increases, there occurs a modernization of all aspects of daily life and dietary habits also are not immune to change. Changes in this area seem to fall into three categories. Firstly, there is a diversification of raw materials. Diets which heretofore have depended on a few staples for their bulk begin to include larger numbers of basic materials. Secondly, there is a diversification of secondary products; the diet begins to include numbers of newly developed products made from the same traditional basic materials. Finally there is a diversification of consumption habits; accompanying the diversification of living patterns, there is a diversification and liberalization of eating habits, whether in terms of mealtimes, eating places, or the composition of the party; the tradition of always eating at home begins to break down.

As life styles change, the Japanese have more opportunities to eat out, not only for entertainment, but also for meals, such as in the office, meeting, school, hospital, sports, theatre, travel and the like. Frequency of eating at home is gradually declining, while households, particularly the so-called two income families, are becoming less able to supply meals. This stimulates the development of the food service industry and the institutional

food industry, which in turn increases the use of processed and semi-processed foods from the view point of labour-saving. Therefore, the processing food industry is prosperous in Japan, as long as stable economic growth is kept constant.

Moreover, economies of scale are no longer working in Japanese households, because the family size is becoming smaller than before. In 1975 an average family consisted of 3.4 persons, the number of families under four persons accounting for about 80 percent of the total families in Japan. Such nuclear families do not have the advantage of reducing diet expenditure by bulk purchase, mass cooking and waste reduction. Their eating at home has resulted in the need for cooked and semi-cooked foods, which the processing food industry can provide with large scale economy. Urbanization is now penetrating all the rural areas in Japan. It may be considered as a symbol of this phenomena that about 90 percent of the members in farm households have been able to find part-time jobs. Thus urbanized society itself seems to be transforming the fundamentals of our dietary habits so that dining both at home and at eating places will be supported by the processing food industry.

The economics of the processing food industry depends on the costs, that is, wages and prices of foodstuffs. Since the yen has been highly valued, labours and materials in Japan have become internationally very expensive. It is no doubt to be more profitable that the food service industry uses various kinds of imported processed foods while in the processing food industry capital is flowed out to seek for cheaper labour and cheaper foodstuffs in foreign countries. This will surely put serious pressures on Japanese agriculture, because most processed foods are liberalised in trade. For instance, the rice cake and the biscuit have been freely imported, in spite of the restrictions on the trades of rice and wheat. Again, though importing skimmed milk powder and butter is strictly controlled, trading of the cocoa preparation and the oil preparation has been liberalised; so you can export

skimmed milk powder and butter to Japan, only if you add a little bit of cocoa and vegetable oil. To help improve the balance of payments the inflow of processed foods (to the Japanese diet) and outflow of capital from the Japanese food industry will be encouraged.

7. PROBLEMS IN LIBERALIZING TRADE

It has been suggested both at home and abroad that Japan buy even more so as to compensate for her exports of manufactured goods. Japan's agricultural policies, however, have so far been predicated upon the above mentioned complementary relationship between high and low self-sufficiency products. As Japan already imports great quantities of agricultural goods which fall into the low self-sufficiency category, the only way this country can satisfy such demands is to start importing products which farmers already produce in great quantities.

The share of agricultural products - excluding cotton, wool and natural rubber - in Japan's imports has been decreasing over the years. While in 1965 the figure was 23.7 percent, in 1970 it was 17.2 percent, and by 1976, it had declined to 15.1 percent. To put an end to this trend and ameliorate Japan's accounts surplus, it might be desirable to promote imports of high unit price agricultural commodities.

A problem that arises in this connection is one that concerns changes in the elements of production. For example, as a result of cheap agricultural imports local production suffers and farm income declines. Workers move away from farms to more profitable industries thus making it possible to reorganize agriculture along more efficient lines. A realistic examination of the problem will show though, that a shift of labourers from farms to other industries is not likely to take place smoothly. Labourers who remain on the farms to eke out a living will have to be supported with social welfare outlays.

There is great danger of environmental damage if Japan's farms are allowed to deteriorate. Man came to till the soil at a very early stage in his development, and, inasmuch as agriculture is his first industry, it is the one that exists in the closest harmony with nature. The experiences of farmers through thousands of years of cultivating the soil are contained in modern agriculture

In this sense, farming does play an important role in preserving the environment. Although it may be true that Japan must make industry the backbone of her economy, this is not to say agriculture must be driven from these islands. Were one to compensate with tax revenues agriculture's beneficial effects to the environment, the bill would come to a colossal figure.

When fluctuations in world prices occur, producers cannot respond quickly to sudden changes. Japanese especially remember 1973, when in the wake of the oil crisis the United States and other producing nations placed limitations on agricultural exports. At the same time the distribution costs of agricultural commodities skyrocketed. The experience has served to make Japanese wary of relying too much on international markets, lest important sources of supply dry up in an emergency.

It is frightening to consider just what would happen if Japan was unable to obtain food from abroad. At present the average daily per capita calorie intake in Japan is 2,500, of which 1,000 calories are obtained from food that in some way originates from a foreign area - that is to say, the commodity is imported directly, or it may be meat fed on grain bought overseas, or else fish caught by Japanese or other fishing vessels operating in the 200 mile zones of foreign countries. Japan can provide a mere 1,500 calories per day for each of her population, and, considering that the human body uses exactly 1,500 calories when it is in a state of rest, should Japan's foreign sources of food be cut off, the Japanese people will have no other choice but to lie down and sleep.

Even though the likelihood of all Japan's food imports being cut off is somewhat remote, the Japanese people are beginning to feel a sense of crisis concerning the present situation. On the other hand, there is little doubt that Japan's international standing would improve with wise purchases of agricultural products from abroad. The question confronting Japan today is how to revamp the nation's agriculture while maintaining both bargaining edge and secure sources of foreign food supplies

8. THEORETICAL IMPROVEMENT MEASURES

In the past, Japan's food policy has been operating on the presumed basis of a balance of interests among the farmer, the consumer and the taxpayer. However, Japan's strenghtening of international trading capacity and the guaranteeing of security in food supply for the nation have become major factors in policy determination, as a result of a sharp spiralling of international prices of farm products and the oil crisis that Japan has experienced in recent years. These factors will vary in significance, depending on how one assesses the outlook for the world food supply-demand situation and for international relations. As long as such an assessment is uncertain, meanwhile, Japan's food policy should be so steered as to strengthen its international trading capacity in normal times and to guarantee the security of the nation's food consuming pattern in abnormal times so as to provide against the worst situation.

From this point of view, livestock raising has at least three stock-piling functions. Firstly, unlike the case of crop growing, livestock can be slaughtered at any time to produce meat for food. Accordingly, stock raising has the function of stockpiling meat. Secondly, stock raising requires constant amounts of feed, including grain which can also be consumed by human beings; so feed stocks also represent stockpiles of grain for food. Thirdly, land fertility is maintained in pastures by excrement of livestock: hence stock raising also has the function of stockpiling land for tilling through

grazing.

On the other hand, the total calorie content of feed required for stock raising is said to be seven times that of livestock products on average. Therefore, as long as Japan's stock raising continues to rely on imported feed, there is a possibility of Japan's share of the world feed market expanding rapidly with its feed import volume assuming enormous proportions (Figure 1). This would increasingly expose Japan's livestock industry to the trends of overseas markets and at the same time increase the incidence of "livestock pollution" (due to excrement, smells, noise, etc.) in Japan. As a result, Japan would have to spend huge sums of money in coping with such pollution.

A conceivable solution would be to establish an integrated system ranging from feed production to final production of livestock food and to link it with an agricultural crop rotation system including rice. Of course, such an integrated system alone would not suffice to support the stock raising industry as a whole, in view of the limited land area of Japan. Even so, it is worth striving for, at least to some extent. For instance, there are about 2,000,000 hectares of paddy fields free of snow or limited in snowfall during winter. If barley for feed was grown on this land, approximately 6,000,000 tons of grain would be available: equivalent to about half of the feed grain now being bought from abroad. Moreover, Japan's annual rice crop totalling 12,000,000 tons also produces much the same volume of straw, which could conceivably be used as raw feed for cattle. And excrement of livestock could be used to fertilize farmland naturally.

In this way, if Japan's livestock industry shifts emphasis from feed import to feed self-sufficiency, farmland in Japan will be put to better use and the costs of coping with "livestock pollution" will be reduced. This shift would not only protect domestic stock raisers from fluctuations in the international prices of animal feed, but also would help to guarantee the

security of food supply for the nation.

Meanwhile, the demand for livestock feed which exceeds domestic production could be met appropriately through the further import of livestock products. Since the unit prices of livestock products are higher than those of feed, their import value would come out favourably in terms of their quantity. This would reduce the surplus of foreign exchanges and serve to strengthen the international trading capacity of Japan in manufacturing goods.

If imports of those farm products for which Japan has high self-sufficiency ratios have to be increased due to strong international pressures, in addition to increases of imports of those for which Japan's self-sufficiency ratios are low, Japan's agriculture might go to ruin unless appropriate counter-measures are taken. Thus the self-sufficiency ratios of farm products that have dropped sharply should now be raised to some extent. And one of the possible means to that end would be such a change of direction as I have suggested above. Of course, I am not arguing for complete self-sufficiency in animal feed.

Japan's grain self-sufficiency ratio in 1976 was 34 percent as against 64 percent for Britain and 80 percent for West Germany in 1975. In particular Japan's ratio for coarse grain was a mere two percent in contrast to Britain's 71 percent and West Germany's 74 percent. This is abnormal by any standard, and Japan must do something to correct it.

Assuming the policy I suggested is taken, consideration should be given to at least the following three points.

To start with, the underground water level of paddy fields must be adjusted freely so that they can be used not only for rice growing but also for dry field farming. For this purpose, land improvement through culvert drainage will be necessary. Moreover, in the case of grazing in mountainous areas, measures must be taken to prevent soil erosion from the heavy annual rainfall in Japan.

Secondly, assuming that the abovementioned foundation of production is established, it will be necessary to develop a new system of crop rotation. Such a system would vary from region to region, but a common characteristic would likely be inclusion of paddy rice. Also, grass for grazing suitable for Japan's climate would have to be developed.

Thirdly, on the basis of the abovementioned production foundation and technical systems, it is imperative to set up a new form of diversified management. But since this will be economically impossible in the case of present small-scale management (Figures 2 and 3), farms of individual farm households must be merged for large-scale management.

At present the farming population accounts for 11 percent of Japan's total working population. But it includes a large proportion of older people (Table 7), raising the possibility that it might plummet to only about four percent by the end of the 20th century due to retirement and death. In that case it will become relatively easy to enlarge the scale of agricultural management. In the meantime, however, the retirement and death of old farmers could result in a diversion of farmland to other purposes and slaughter of livestock, eventually bringing about a collapse of the foundation of agricultural production.

Accordingly it is necessary to embark on proper countermeasures without delay. Any effort to overcome the current difficulties by pursuing "macro-economic rationality" probably would conflict with farmers' desire to protect their "mircoeconomic rationality" and consequently would produce an impasse politically. Nevertheless, a policy of maintaining the status quo would isolate Japan from the international community and antagonize domestic consumers and taxpayers as well. If Japan continues to take only temporizing measures to stave off pressures from abroad, Japanese agriculture will not be able to achieve sound growth.

APPENDIX I

EMERGENCE OF MANY PART-TIME FARMING HOUSEHOLDS

Japan's farming population, which stood at 11,960,000 in 1960, plunged to only about half, or 5,720,000 in 1976. However, the number of farming households dwindled by only 18 percent, from 6,057,000 to 4,953,000 during the same period. This was due to the emergence of many part-time farming households. Since farmland showed a slight decrease in the period, the average farmland per household displayed little change, rising from one hectare to 1.1 hectares.

In 1975, part-time farming households accounted for 87.6 percent of the total farming households. The dai-nishu (Category II) part-time farming households which earn more from nonagricultural jobs than from agriculture represented 62.1 percent of the total, tilling about 40 percent of the total land under cultivation. Nowadays Category II part-time farming households can cover most of their living expenses with non agricultural income (Figure 2 and 3).

Since small agricultural machines usable for small-scale management have been developed, farmers have saved labour by purchasing them and have diverted the surplus labour to nonagricultural sectors. If only agricultural income is taken into consideration, investment in agricultural machinery usually does not pay in Japan. But if nonagricultural income and the increasing value of assets (land and houses) which can be maintained through continued farming are taken into account, the investment is economically reasonable. Moreover, manual labour of women and old men, which cannot become the core of industrial labour in urban areas, is fully used in Japanese agriculture. This is a sort of advantage from a technical point of view, but is unreasonable economically in that production cost cannot be

lowered while the use of small machines makes the benefits of large-scale mechanisation impossible.

So as to take nonagricultural jobs, farmers have naturally chosen paddy rice growing for technological reasons. And this is also natural due to the fact that the most suitable kind of production for Japan's climate is paddy fields. Although the Government has encouraged output of livestock products, fruit and vegetables in view of the increasingly diversified eating habits of the Japanese people, most farmers have not given up paddy rice growing. Hence when an income gap has emerged between agricultural and non-agricultural workers, making it politically necessary to prop up farmers' income, the Government has done so by means of price support for rice. This has resulted in deepening the farmers' attachment to paddy rice growing, leading the Government to be harassed by an overproduction of rice. Thus the emergence of part-time farming households has had an economically unreasonable result in the crop planting pattern as well. In 1976, disposable annual income per member of farming households stood at ¥849,000 as against ¥756,700 for nonagricultural wage-earning households; that is, farmers earned a bigger income. This tendency became evident from around 1971 or at about the same time that the proportion of agricultural income in farm households' income began to fall below 30 percent. When the Basic Law on Agriculture was enacted, it was anticipated that agriculture would supply labour to other industries. But few people expected that such supply would be through part-time farming households, and that this would serve to close the income gap between farming households and nonfarming households.

APPENDIX II: TABLES AND FIGURES

Table 1. Self-Sufficiency Rates in Various Edible Agricultural Products

(unit: %)

	1960	1965	1970	1976
Rice	102	95	106	100
Vegetables	100	100	99	98
Fruit	100	90	84	82
Eggs	101	100	97	97
Dairy Products	89	86	89	85
Meats	91	90	89	76
Wheat	39	28	9	4
Barley & Rye	107	73	34	9
Beans	44	25	13	8
(Soybeans)	28	11	4	3
Sugar	18	30	23	19
Concentrated Feed	67	44	33	28
(Coarse Grains)	50	19	9	2

Source: Agriculture and Forestry Ministry "Supply and Demand of Food."

Table 2. Import Prices of Main Agricultural Products

(unit: yen per kg)

	Price		Price
Polished Rice	50	Wheat	24
Peas	94	Barley & Rye	19
Oranges	119	Soybeans	41
Beef	162	Raw Sugar	38
Eggs	181	Corn	24
Butter	222		

Source: Finance Ministry "Annual Statistics of Foreign Trade."

Table 3. Per Capita Land Area of Major Nations

Nation	Population	Total land, per capita	Total land exclusive of forests, per capita	Land used for agriculture, per capita	Cultivated land, per capita	Grassland, per capita
	thousand	are	are	are	are	are
China	800,708	119.9	107.9	36.0	13.9	22.1
India	562,995	58.1	47.0	31.7	29.3	2.5
USSR	247,345	905.9	537.8	245.6	94.1	151.5
United States	209,170	447.7	301.4	208.8	92.0	116.8
Indonesia	129,752	146.8	52.9	21.6	13.9	7.7
Japan	107,055	34.8	10.8	6.0	5.1	0.9
Brazil	98,444	864.7	338.6	139.2	30.3	109.0
Bangladesh	80,339	17.8	15.0	12.1	11.3	0.8
Pakistan	66,220	121.4	118.6	36.6	29.1	7.6
West Germany	61,290	40.4	28.7	22.1	13.2	8.9
United Kingdom	56,122	43.5	40.0	33.6	12.9	20.7
Italy	54,489	55.3	44.0	32.4	22.8	9.7
Mexico	54,336	363.1	282.7	189.4	43.9	145.6
France	51,721	105.8	78.7	63.9	37.0	27.0
Canada	22,135	4,507.0	2,505.2	310.2	197.8	112.5
Netherlands	13,359	27.5	25.3	16.0	6.4	9.6
Australia	13,031	5,898.9	5,631.4	3,796.3	342.4	3,453.9
Belgium	9,770	31.3	25.1	16.3	8.7	7.6
Sweden	8,170	550.5	272.5	46.0	37.4	8.7
Switzerland	6,367	64.9	49.5	34.2	6.1	28.2
Denmark	4,998	86.2	76.8	69.1	53.3	5.8
World total	3,760,745	356.2	248.7	118.2	38.8	79.5

Source: FAO "Production Yearbook 1972."

Notes: 1. Population figures are mainly for 1972 and land figures for 1971.
2. National land figures include inland waters.
3. Land used for agriculture includes orchards and fields in cultivated land and long-term plant fields and grazing lands are included in grasslands. (In the case of Japan, cultivated land and fixed land figures have different values in land statistics.)

Table 4. **Annual Per Capita Food Supply (Kg)**

	Year	Grains	Potatoes and Starch	Sugars	Beans	Vegetables	Fruits	Meats	Eggs	Fishery Products	Milk and Milk Products	Oil and Fats
United States	'75	61.8	47.9	50.1	8.1	94.7	72.3	110.1	16.0	6.9	247.5	22.5
Sweden	'75	61.2	81.0	42.5	2.4	42.0	81.1	60.5	12.7	21.7	358.5	13.4
Canada	'74	68.5	60.4	46.7	9.4	68.3	79.7	76.6	12.9	6.2	307.6	18.4
West Germany	'75	64.2	90.1	38.0	3.3	68.5	110.9	82.2	17.2	9.0	270.3	19.2
Denmark	'74	64.8	76.5	51.0	2.0	48.4	52.0	64.0	10.9	34.5	335.0	17.8
France	'75	76.1	90.8	35.6	1.3	118.6	74.2	95.5	12.9	18.8	321.6	19.1
Switzerland	'75	70.1	48.6	39.7	5.1	84.4	121.8	74.4	11.3	4.6	372.2	16.1
Netherlands	'75	65.7	76.6	42.8	11.1	80.1	110.8	72.5	...	11.7	265.2	25.1
New Zealand	'75	76.2	51.8	36.0	3.2	128.0	73.3	116.8	17.1	4.7	402.9	6.7
United Kingdom	'75	74.6	90.4	48.9	4.9	60.5	47.1	73.5	13.8	7.9	344.6	15.1
Japan	'76	120.5	26.4	25.3	10.8	127.3	55.2	26.3	16.0	34.8	54.6	11.7
Italy	'75	167.0	36.7	30.5	8.1	155.7	100.8	65.2	11.3	10.3	204.4	21.9
Argentina	'69	94.5	108.8	35.4	3.3	79.2	96.4	122.3	6.6	2.2	123.4	18.6
Brazil	'70	99.3	196.0	46.7	29.6	14.6	54.8	30.7	4.0	2.6	71.2	6.6
Philippines	'69	132.1	32.1	18.3	6.6	28.8	47.8	16.1	3.7	19.7	19.7	2.9
Korea, Rep. of	'73	221.0	37.8	7.6	8.4	67.7	15.3	9.2	4.0	27.6	3.3	2.1
Pakistan	'69/'70	181.0	17.2	18.3	5.8	18.6	29.2	4.0	0.4	1.8	75.9	5.1
India	'69/'70	140.2	17.5	17.9	9.3	3.7	17.5	1.5	0.4	1.1	42.3	3.7

Source: OECD (materials), FAO "Production Yearbook 1971" and other materials from abroad (Korea). However, in the case of Japan, "1976 Food Supply and Demand Chart" was used.

TABLE 5

PERCENTAGES OF CALCIUM AND SOME VITAMINS BY ITEMS IN USA (1970)

	Calcium	Vitamin A	Vitamin B1	Vitamin B2	Vitamin C
Dairy Products	75.9	12.8	9.2	40.9	4.2
Butter	0.1	2.6	-	-	-
Other Oil and Fat	0.3	5.5	-	-	-
Meat and Fish	3.6	21.9	28.5	24.6	1.1
Eggs	2.6	6.5	2.4	5.7	-
Fruit	2.1	7.4	4.3	2.0	36.2
Vegetables	6.4	35.2	7.6	5.5	35.9
Potatoes	1.0	5.4	6.2	1.7	-
Pulses	2.5	-	5.0	1.7	-
Cereals	3.4	0.4	36.6	17.3	-
Sugar	1.1	-	-	-	3.6
Others	1.0	2.3	0.1	0.7	3.6
TOTAL	100.0	100.0	100.0	100.0	100.0

TABLE 6

PERCENTAGES OF CALCIUM AND SOME VITAMINS
BY ITEMS IN JAPAN (1955, 1961-72)

	Calcium	Vitamin A	Vitamin B1	Vitamin B2	Vitamin C
Dairy Products					
1955	13.9	10.5	14.6	5.6	0.9
1971-72	38.1	21.5	38.8	22.6	2.6
Meat					
1955	0.1	0.8	0.7	0.5	-
1971-72	0.3	0.9	4.9	10.6	-
Eggs					
1955	1.9	15.4	0.7	0.2	-
1971-72	5.0	26.2	2.0	0.2	-
Fish					
1955	14.0	8.5	4.4	10.2	1.1
1972-72	9.5	4.3	5.7	10.8	1.1
Fruit					
1955	1.0	5.1	1.4	0.5	7.5
1971-72	2.2	4.3	2.8	1.2	21.0
Vegetables					
1955	24.0	58.6	8.3	11.7	50.6
1971-72	21.5	42.0	9.2	19.4	67.3
Potatoes					
1955	6.7	0.4	10.4	29.2	29.9
1971-72	2.3	-	3.3	8.1	8.0
Pulses					
1955	23.4	0.4	16.6	28.9	-
1971-72	14.0	0.2	10.5	20.2	-
Cereal					
1955	12.7	-	44.4	13.2	-
1971-72	6.4	-	22.8	6.9	-
Sugar					
1955	2.3	-	-	-	-
1971-72	0.7	-	-	-	-
Oils					
1955	-	0.3	-	-	-
1971-72	-	0.6	-	-	-
TOTAL 1955	100.0	100.0	100.0	100.0	100.0
1971-72	100.0	100.0	100.0	100.0	100.0

TABLE 7

PERSONS ENGAGED IN AGRICULTURE AND FORESTRY

(1000)

Age Group	TOTAL		MALE		FEMALE	
	1970	1975	1970	1975	1970	1975
15-19	200	60	140	40	60	20
20-24	400	200	230	120	170	80
25-29	480	320	200	150	280	170
30-34	700	370	280	150	420	220
35-39	1000	550	420	220	580	330
40-54	3010	2500	1260	1080	1750	1410
55-64	1600	1350	830	660	770	680
65-	1030	820	660	520	370	300
TOTAL	8420	6010	4010	2950	4420	3230

Figure 1: Imports of Grains by Major Nations

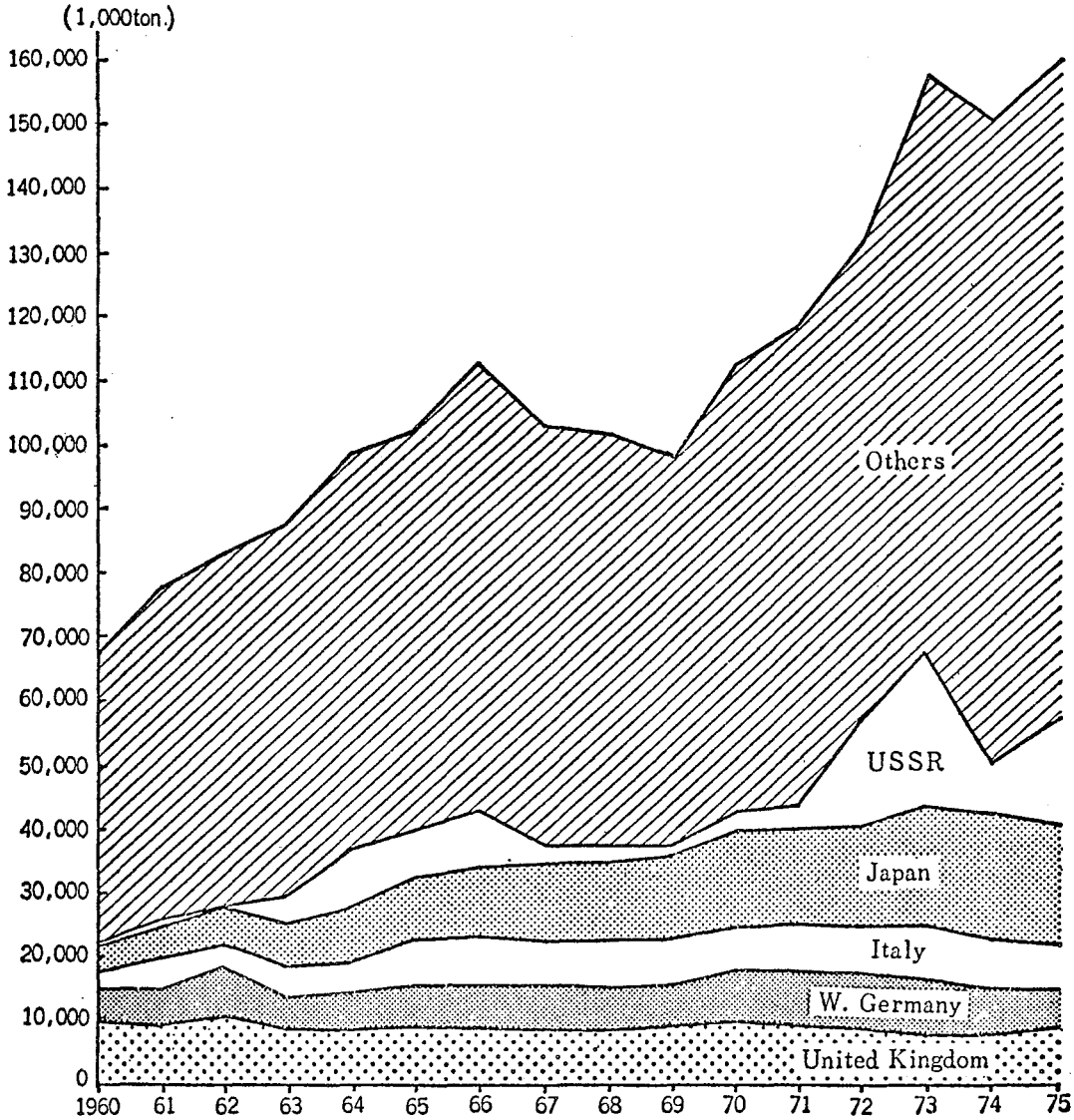
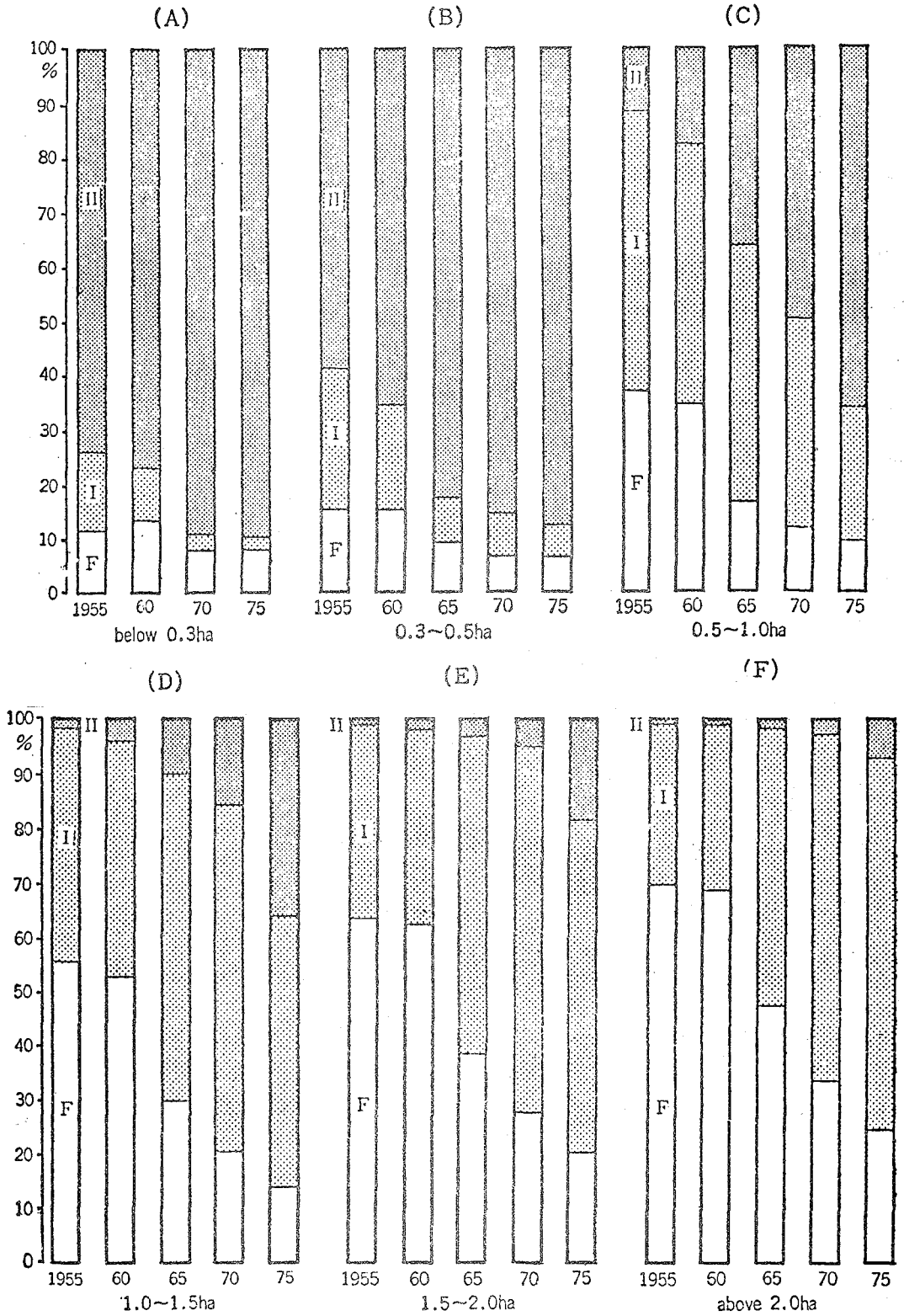


Figure 2: Proportion of Full- and Part-time Farming Households as Classified by Size of Farmland (excl. Hokkaido)

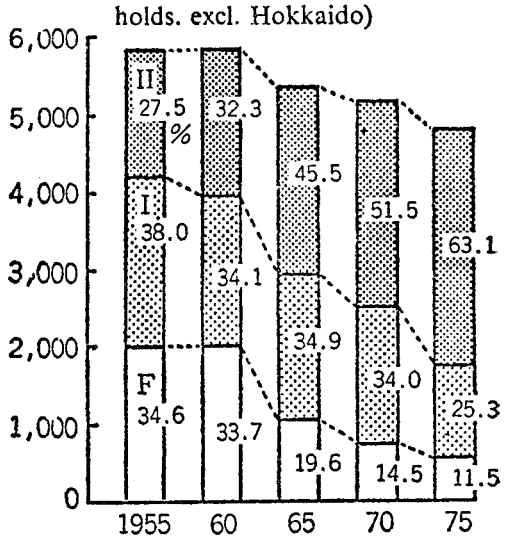


F…Full-time farming households.

I …Farming households whose income from farming is larger than from non-farming sources.

II…Farming households whose income from non-farming sources is larger.

Figure 3: Numbers of Full- and Part-time Farming Households (unit 1,000 households. excl. Hokkaido)



DAIRYING IN JAPAN

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DAIRYING IN JAPAN

SOME ASPECTS OF THE GROWTH IN THE JAPANESE DAIRY INDUSTRY AND THEIR RELEVANCE TO DAIRY POLICIES AND PRESSURE GROUPS

1. INTRODUCTION AND AIMS

To understand Japanese agricultural policies, whether they relate to domestic production, to imports or to both, it is necessary to be acquainted both with the basic situation of Japanese agriculture and the problems it faces, and with the political and institutional environment in which policy makers as well as farmers, consumers and other interest groups have become conditioned to operate.

To help achieve such an understanding, this paper aims

a. to look briefly at the growth of the dairy industry

b. to trace the origin of various problems in agriculture (including the dairy industry)

c. to note the responses to these problems by producers, consumers and the Government.

d. to examine the nature of farm pressure groups in general and dairy groups in particular

e. to discuss the influence of these pressure groups on policies relating to dairy products and the ways in which these policies are implemented

f. to consider the implications of these policies for exporting countries and to assess possibilities of modification

The actual policy measures which affect trade in dairy products will be known to most participants. This paper will therefore not discuss these in full detail but will concentrate more on the origins and rationale of policies, and the interaction of interested bodies in the process of policy formulation.

2. GROWTH OF THE JAPANESE DAIRY INDUSTRY

In Europe, the keeping of cows for milk production has a history of many centuries. In Japan a dairy industry worthy of the name is scarcely one century old. In 1920 milk production was little more than one litre per head of the population from a mere 50,000 cows. Production expanded slowly up to the time of World War II and in 1948 there were some 171,000 dairy cows, production being 2.3 litres per person for all end uses.

Subsequently production rose steadily to reach 5.7 million tonnes in 1977, (50 litres per person) from a national herd containing almost 1.9 million cows, 1.3 million being two years of age or more. Milk used for drinking has increased more than milk used in manufacture, and now accounts for more than 60% of the total. During the 1970s, consumption of milk in the form of manufactured products has stagnated, but consumption of fresh milk has continued to increase, though at a diminishing rate.

Thus the Japanese dairy industry is substantially a post-war development which has no parallel in other industrialised countries. The only parallels in the Japanese farm sector itself are in the pig and poultry industries.

The rapid growth of milk production in Japan was accompanied by some important changes in the structure and location of the industry. In the early post-war years, a large number of farmers decided to keep one or more cows for milk production. The number of such farmers grew from some 50,000 in 1946 to 280,000 in 1956, reaching a peak of nearly 420,000 in 1963. In more recent years dairying (like other livestock industries) has become increasingly a matter for specialists, and the number of farmers keeping a cow or two as a sideline has fallen considerably, the total number of farms with dairy cows in 1977 being 136,000. As a result, average herd size rose from 1.5 in 1949 to nearly 14 in 1977. This trend towards fewer and larger herds is likely to continue.

The relative importance of the principal dairy regions has also changed. Around 1960, about half total milk production was in areas close to

the principal cities. Output in these areas continued to grow up to around 1970 since when growth has stagnated and in some cases declined. However, output has continued to rise steadily in some of the more remote areas, especially Hokkaido, Kyushu and to a lesser extent Tohoku. Production in Hokkaido is now almost five times that in 1960; in Kyushu it is almost three times as great. Hokkaido now produces 30% of all milk compared with less than 19% in 1960. While most of the milk in Hokkaido is used for processing, in recent years increasing quantities have been shipped as fresh milk (in concentrated form) to large population centres to the south. The relative position of Hokkaido as a milk producing area is likely to continue growing in the future owing to the economies of scale possible on the larger farms where average herd size is more than twice the national average.

3. REASONS FOR GROWTH

When World War II ended, Japan was confronted by serious food shortages and considerable nutritional deficiencies. The U.S. Government assisted the Japanese to increase supplies of protein, calcium and other nutrients by making available quantities of milk powder, more especially for vulnerable groups such as children and mothers. This action established a taste for milk among school children and an appreciation of its nutritional value among parents.

The return of peace also initiated a widespread trend towards emulating western lifestyles and food consumption patterns, and this did much to reinforce the growing demand for milk products. At the same time the Japanese Government encouraged the expansion of existing industries and the development of new ones to meet the changes in demand. When U.S. food aid ceased, the Japanese continued to use scarce foreign exchange to import protective foods such as milk powder, so that both the growing domestic dairy industry and imported products contributed towards increased availability which nevertheless lagged behind demand for some years, causing relatively high prices for dairy products and the proliferation of farms keeping one or two cows mentioned earlier. Needless to say, these farms

tended to have high costs per unit of output.

A further factor helping to encourage the growth of the dairy industry in Japan was an increasing demand for beef coupled with the decline in the number of cattle kept for draught purposes which resulted from the spread of farm mechanisation. These draught animals were often dual purpose, being used for beef after a period behind the plough. Increasing demand for beef and reduced supplies from this source encouraged the development of a small specialised beef cattle industry. It also led to the development of a dairy beef industry which grew from a negligible size around 1950 to parity with beef herds in 1972, going on to produce 60% of total beef output in 1977.

4. ORIGINS OF FARM PROBLEMS

Japan is similar to other industrial countries in that its post-war development has been accompanied by an intensification of basic problems relating to agriculture.

One reason for this lies in the extremely small size of Japanese farms and the scattered nature of their component plots. This limits the scale of farm operations and inhibits increases in the productivity of labour and capital. Productivity of land is now among the highest in the world, so that the scope for further increases is limited, while increases in the productivity of all inputs taken together slowed to a halt about 1967.[1]

By contrast, productivity in most other sectors, especially in manufacturing, rose continually and rapidly in conformity with the outstanding economic growth achieved by the Japanese economy in the 1950s and 1960s. This facilitated both increased investment and rising real incomes. However, as incomes rose, the Engel coefficient fell from over 50% in 1951 to 30% in 1977. This means that consumers spent a declining proportion of their income on farm products. In fact, real expenditure per person on farm products in the nation as a whole declined slightly in 1974. It has since recovered approximately to the 1973 level, but increases in demand for some commodities

1 E.A. Saxon: Farm Production in Japan, BAE Occasional Paper No. 35, 1976, pp 52-54.

(especially livestock products) have been accompanied by corresponding declines in demand for others.[2]

These developments prevented farm income in aggregate from rising in proportion to national income, but the discrepancy was further increased by the fact that food demand increased beyond the ability of Japanese farmer to supply, so that a rising proportion of national expenditure on food was directly or indirectly attributable to imported products. As a result, despite some increases in population, the absolute amount of purchasing power in real terms surrendered by consumers in exchange for the output of Japanese farms has tended to fall.

Thus the small size of farms and the limited scope for increases in productivity and output in the early post-war years created a situation which, in a rapidly expanding free market economy, would have led to a drastic decline in the relative incomes of farmers and hence to a massive exodus from farming. This would have meant lower output, at least until agriculture had been completely restructured. Such an outcome was obviously unacceptable to the nation as it would threaten its post-war recovery by undermining its food security, its recently adopted democratic principles of equal opportunity, and the social stability which was an essential ingredient of the Japanese "economic miracle". Anything resembling a free market economy in agriculture was therefore clearly out of the question.

5. REACTIONS TO PROBLEMS

a. By Farm People

Faced with this situation, farm people themselves adopted several courses of action. Some left farming altogether, enabling their land to be absorbed by other farmers. However, the number taking this course was very few. Having achieved land ownership as a result of the land reforms of 1945 and 1946, few wished to forego the security which this land offered them.

A much more widespread reaction was to undertake off-farm employment. Rapid economic development created many opportunities for one or more farm

2 E.A. Saxon: Recent Development in Food Consumption and Farm Production In Japan, BAE Occasional Paper No 43, 1978.

family members to obtain employment within commuting distance of the farm. A smaller number took seasonal employment in more distant centres. Farm operations were often carried on undiminished by other family members, females and sometimes children. In other instances, farm activities were reduced, e.g. by elimination of double-cropping.

The extent of reliance on off-farm work is illustrated by the fact that in 1977 only 13.3% of farm households were classified as "full-time", while just under 30% of aggregate income of farm households came from the sale or household use of farm products. Since farmers' total returns from farming include a large component of government price support and other forms of assistance, the proportion of net farm income derived through the marketing chain from consumers of farm products is much below 30%, despite the fact that Japanese prices for many of these products are among the world's highest.

A further reaction by farmers was to join forces to strengthen the agricultural co-operatives and to exert political pressure to raise income from farming. The co-operatives enabled farmers to achieve economies of scale in selling farm produce and in purchasing farm requisites. They also often enable farmers to operate as monopoly sellers in order to increase prices received for their products. The role of co-operatives and other pressure groups in securing government price support and similar assistance for farmers is described in more detail later.

b. By the Government

Immediately after the war, the principal problem facing Japan was a widespread shortage of food. Thus the land reforms and other early post-war policy measures were designed to encourage farmers to increase output as rapidly as possible with little regard to cost.

By the latter half of the 1950s, the immediate post-war problems of food shortage and farm deterioration had been overcome and farm modernisation was well under way. However, the above-mentioned fall in relative incomes of farmers and changes in the commodity composition of the demand for food

were among the new problems which were emerging - problems which led to pressures for new directions in farm policies culminating in the enactment of the Agricultural Basic Law in 1961.[3]

This Law became the "chapter of agriculture" and has provided the backdrop to most subsequent policy measures. Space limitations preclude any detailed examination of the Law here, but the guidelines which it provided for policy formulation appear worth summarising. The preamble stresses the need to modernise agriculture to raise productivity and the need to give farm people the opportunity to obtain incomes comparable with those earned in other economic sectors. The main body of the Law contains provisions for:

(i) selective expansion of production (i.e. of commodities increasing in demand)

(ii) improvements in productivity and structure of agriculture

(iii) rationalisation of distribution of farm products and farm requisites

(iv) improved rural welfare and training of farm operators

(v) price stabilisation and income support

(vi) control of imports where these threaten domestic prices and production.

Although there is some flexibility in interpreting the provisions of the Law, it has provided effective guidelines to policy makers since 1961 and has limited their freedom to adjust to changing circumstances. It is perhaps significant that the Japanese press in recent months has on several occasions published hints that the Law is currently under review.[4] Further, in the light of surpluses of rice and some other commodities, the basis for agricultural policies is being reviewed within the MAFF. However, there is considerable doubt that any basically new guidelines will emerge, as both bureaucrats

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3 In addition, there was other more specialised legislation such as the Manufacturing Milk Producers' Deficiency Payments Law, 1965. The general effect of the legislation is to place severe limits on the Government's freedom of action relating to agriculture.

4 See, for example, Japan Economic Journal, October 10, 1978. "Agriculture Ministry sees urgency to revamp farming".

and politicians would prefer to continue using the current Law, making full use of the flexibility with which its provisions can be interpreted, rather than face a possible repetition of the political battles associated with the passage of the 1961 Law.

Two further interesting provisions of the Law are those which require the Ministry of Agriculture, Forestry and Fisheries (MAFF).

(i) to prepare long-term projections relating to the demand and supply of farm products.

(ii) to submit an annual report to the Diet (Japanese Parliament) on the farm situation and measures taken or to be taken in relation thereto (including measures to achieve supply projections).

In recent years, the supply projections have assumed the nature of production targets, and various special incentives have been introduced to encourage farmers to meet these targets.[5] In addition, prices of a number of commodities have been supported in various ways and to differing degrees by government measures which have the twin objectives of stabilising consumer prices at a "reasonable" level and enabling an average farmer to recover his production costs plus a reward for his labour equivalent to that earned by industrial workers (the so-called cost and income compensation approach).

Given the problems and reactions outlined above, the political strength of the farm sector ensured the passing of the legislation already mentioned and the adoption of policy aims to which all or most political parties subscribed. These general aims, which are clearly reflected in policies currently pursued or proposed, include (in addition to or in elaboration of what is included in the Agricultural Basic Law).

(i) maintenance of, and where possible, increase in farm output

(ii) opportunities for farm people to earn incomes comparable with

5 These projections and targets are discussed in E.A. Saxon: Japanese Long-Term Projections Relating to Food and Agriculture, BAE Occasional Paper No. 38, 1976. Price and other incentives relative to dairying are dealt with later in this paper.

those of non-farm people.

(iii) some improvement, but no radical change in farm structure

(iv) preservation of family farms and individual ownership

(v) preservation and improvement of the rural environment and rural welfare

These aims leave aside the question of increased self-sufficiency about which there are great differences of opinion, although at present the most influential groups, including the Federation of Economic Organisations (Keidanren), appear in favour of same, despite the acknowledged cost. The self-sufficiency aim provides an ideological justification for protectionist policies by blurring the distinction between the "national interest" of food security and the objective of protecting farmers. Self-sufficiency as a policy aim will be referred to again later in this paper.

Thus law, custom and the need to ensure that farmers are not disadvantaged by economic change have combined to subject Japanese agriculture to a large measure of government intervention and administrative control. As in other countries the electoral prospects of a democratically elected government would be seriously reduced if it failed to deal adequately with the needs of the farm sector.

6. POLITICAL AND INSTITUTIONAL BODIES ACTIVE IN POLICY FORMULATION

The preceeding sections have discussed some aspects of the Japanese farm situation, rural problems, and the policy goals which have been set in response to those problems. While the policy goals themselves are accepted without question by most Japanese and certainly are not amenable to pressures for change from outside, there have been some differences of opinion among Japanese as to the most appropriate means of achieving them.

This section will look at the political and institutional environment surrounding the Japanese farm sector in general and the dairy industry in particular. tracing the way in which different authorities and interest groups

interact in formulating measures designed to achieve agreed aims.

In the period since the end of World War II, policy decisions have generally been made within the framework of a triangular relationship between farmers' groups, the bureaucracy and the politicians. It therefore appears appropriate to consider each of these in turn, bearing in mind that the roles played by the bureaucracy and Diet members overlap to a considerable extent.

a. Farmers' groups

By far the most influential rural interest groups are the agricultural co-operatives. These are closely integrated through their national apex bodies and can for most purposes be considered as one powerful organisation, the Japanese name of which is abbreviated to nokyo. Practically every farm family is a member of at least one co-operative. Total membership is about 7.7 million, including 1.9 million associate members. Farm households number 4.8 million.

The nokyo organisation is arranged in three tiers - the local (or unit) co-operatives (tankyo), prefectural federations and national bodies. In addition, co-operatives are classified into two groups according to function - general or multi-purpose and specialist.

The general co-operatives have a wide range of functions, e.g. buying, selling, finance, insurance, processing These cater for producers of farm products in general. The specialist co-operatives cater for the requirements of those producing specific commodities (e.g. milk, poultry) and those with some other common interest (e.g. settlers' co-operatives). They provide specialised technical, advisory and marketing services, but not credit and insurance. Many farmers join both a general and a specialist co-operative to take advantage of a wider range of services.

The number of co-operatives expanded rapidly after the war, rising to a maximum of over 35 000 in the mid-1950s. Amalgamation and rationalisation have since reduced the number to just over 10 000. The specialist co-operatives make up rather more than half the total number, but in terms of employment

and business activities the general co-operatives are by far the most important.

In addition to the business functions mentioned above, the nokyo organisation provides a mechanism whereby farmers can focus their economic and political power in areas where they are likely to have the greatest impact on national policies. This mechanism is found in the central national bodies which are in fact federations of prefectural bodies and hence encompass local co-operatives also. The apex body is the National Central Union of Agricultural Co-operatives (abbreviated to Zenchu in Japanese). Zenchu provides leadership organisation and serves as the central guiding body for all agricultural co-operatives which it represents in negotiations with the Government on national policy matters of concern to farmers.

The National Federation of Agricultural Co-operative Associations (abbreviation: Zenno or Zen-noh) is the big business organisation of the co-operatives. The main functions of Zen-noh (and its component co-operatives) are marketing of farm products and provision of farm requisites. Other activities include overseas trading, research and extension, supply of living necessities (including housing) and processing of farm products.

Zen-noh is one of the largest trading organisations in Japan and is able to extend to farm people substantial economies of scale, providing highly organised collection and distribution channels and supplying through import, local purchase and manufacture, a wide range of goods for farm production and family living at highly competitive prices. For instance, it imports, processes and distributes some 60% of feed supplies (by far the major purchased input of Japanese farms) and operates eight special bulk carriers to import raw materials.

Other national co-operative bodies which provide services to farmers in general include Zenkyoren, the central insurance body which is the largest insurance group in Japan, and the Central Bank of Agriculture and Forestry

(Norin Chukin) which is one of Japan's largest banks.

While all these bodies provide services to dairy farmers, there are also some smaller organisations under the nokyo umbrella which are specifically designed for livestock producers in general or dairy farmers in particular. These include the National Federation of Dairy Co-operatives (Zenrakuren), the National Dairy Association, the Central Livestock Association and the National Federation of Livestock Co-operatives (Zenchikuren).

The principal specialist organisation for dairymen at the national level is Zenrakuren which is a marketing, purchasing and guidance organisation. Its activities include sale of fluid milk, manufacture and sale of dairy products and supply of feedstuffs to farmers. It also is involved in political lobbying on dairy issues.

The National Dairy Association is not a political organisation. It provided technical guidance to farmers in collaboration with Zenrakuren.

The Central Livestock Association comprises Diet members and representatives of producer organisation. It provides a channel whereby producers can petition Diet members on livestock policy issues.

Dairy farmers' interests are also promoted by several bodies which are strictly outside the nokyo organisation, although they preserve connections with it. These include the Central Dairy Council, the Japan Dairy Farmers' Political League and the Central Livestock Association.

The Central Dairy Council (Japanese abbreviation: Churaku) is made up of respresentatives of six central nokyo bodies and 46 regional federations. The Council has a legal entity and is able to undertake commercial activities. The 'designated groups' which comprise its members handle more than 92% of all milk sales. It is recognised as a nokyo-connected body, and many of its personnel also hold office in the nokyo organisation.

Activities of the Council include price negotiations for drinking milk, co-operation with Zenchu and other groups in pressing for higher prices for

manufacturing milk, measures to balance regional supply and demand, beef price stabilisation (as it affects producers of dairy beef) and promotion of demand for milk.

The Japan Dairy Farmers' Political League is the only nokyo-related body to include a reference to its political nature in its title. Most of its members are farm people who also belong to local specialist dairy co-operatives which are members of Zenrakuren. The League endorses candidates in national elections and acts as a political arm for these specialist co-operatives.

The Central Livestock Association is also an important political pressure group. Its membership includes all prefectural livestock associations as well as Diet members, some of whom have in the past been chairmen of the prefectural bodies and/or the Central Association. It is therefore able to maintain close links between the Government and producer organisations, and to petition Diet members on livestock policy issues. An important function of the prefectural livestock associations is the provision of extension services. These services are heavily subsidised by both the MAFF and prefectural governments.

Zenchikuren is important in that it concentrates on issues relating to production and marketing of meat, but it is of less relevance to dairying.

b. Bureaucracy and Government

While the political forces facing farmers may be thought of simply as 'the Government', it is necessary to distinguish the Diet which is nominally responsible for final political decisions and the bureaucracy which is required to implement these decisions. However, there is considerable interaction between politicians and bureaucrats before policy decisions are reached, while both are subject to pressures from the farmers' groups already mentioned.

To the dairy farmer, the bureaucracy means primarily the Ministry of Agriculture, Forestry and Fisheries (MAFF), which has a separate Milk and Dairy Products Division within its Livestock Industry Bureau. In some instances,

other ministries such as Finance, International Trade and Industry or the Prime Minister's Office may be relevant. In addition, there are extra-departmental bodies, especially the Livestock Industry Promotion Corporation (LIPC), which is responsible for administration and which also provides information and makes recommendations.

The various ministries exercise considerably more power in Japan than in Australia or New Zealand, especially in the wide-spread application of the administrative guidance system under which industry leaders are advised and encouraged to pursue courses of action which are in accordance with government policy objectives. Although different ministries may not initially agree on an issue, proposals are discussed and amended until a consensus emerges. In this way, important decisions may be made by bureaucrats rather than legislators. Further, the interpretation and administration of government decisions are in the hands of the appropriate ministries, hence pressure groups put their cases to bureaucrats as well as to those involved directly in the legislative processes.

The LIPC was created in 1961 to administer a price stabilisation scheme, but its functions have since been extended. More than 90% of its capital funds were provided by the government, but there is some private investment. For example, a milk processor wishing to take advantage of its guaranteed provisions must invest in it. The directors comprise mainly former officials of the MAFF together with representatives of the co-operatives, milk processors and other livestock interests. The structure of the LIPC is such that livestock interests have a further avenue which facilitates access to centres where policy measures are formulated.

Functions of the LIPC include:

(i) purchase, sale and storage of designated milk products and meat

(ii) import of designated milk products

(iii) payment of government subsidy (deficiency payment) to farmers for manufacturing milk

(iv) payment of government subsidy on milk for the school lunch programme

(v) promotion of demand for livestock products

The governing political party, the Liberal Democratic Party (LDP) is scarcely an independent force in the government-farmer relationship. Many former MAFF officials have secured seats in the Diet as LDP members, while other Diet members, both LDP and opposition parties, owe their election to the support of the co-operatives and the farmers.

It has been estimated by independent research workers that at least three-quarters of LDP Diet members come from rural electorates, and that the proportion of all members which nokyo can rely on for support in the Diet is as high as 40%.[6] At the same time it is well known that the number of voters enrolled in rural electorates is often much smaller than in urban electorates. Thus rural voters have a say in government proportionally greater than their numbers, as they do in many other countries.

7. INTERACTION OF BODIES IN POLICY FORMULATION

Linking the bureaucrats, politicians and farmers' groups are several important consultative bodies and committies. Some are formally set up by the Diet, others are quite informal. As some detailed studies of the composition and operation of these committies have been undertaken by other research workers[7], this paper will limit itself to a brief listing of the more important.

The body most directly involved in policy making is the Agriculture and Forestry Division (Norin Bukai) of the Policy Affairs Research Council of the LDP which has a sub-committee on livestock prices chaired by a livestock Dietman. It has between 150 and 200 members representing rural or semi-rural electorates, most of whom hold joint membership of this and of the Comprehensive Agricultural Policy Investigation Committee (Sogo Nosei

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6 Aurelia George: The Japanese Beef Import Controversy, N.Z. International Review, March-April 1978.

7 Ibid.
Aurelia George: Nokyo as a Pressure Group - The Strategies of Influence. Paper presented to a Seminar of the Committee for Japanese Studies, ANU, Canberra, October 1975.

Chosakai) which is concerned with the broader problems of agriculture, particularly rice. The leaders of these LDP agricultural committees are the most influential men in the party on matters of agricultural policy.[8] Among the other bodies, the following are relevant to the dairy industry:

a. The Livestock Industry Promotion Council (Chikusan Shinko Shingikai). This is distinct from the Livestock Industry Promotion Corporation (LIPC) discussed earlier. It is one of 15 advisory councils associated with the MAFF. It has up to 25 part-time members representing major producer and manufacturing groups, unions, consumers, journalists and academics.[9] Its business is normally handled by sub-councils or sub-committies, one of which is concerned with dairying. The Minister refers questions relating to livestock to this Council, and these are discussed by the relevant sub-committee and MAFF officials. A final recommendation to the Minister is made by the full Council. The Council provides a focus for discussion of matters such as the guaranteed price for manufacturing milk.[10]

b. The Agricultural Policy Research Committee. This consists of top nokyo officials together with over 90 Diet members, two-thirds of whom are from the LDP and the remainder from opposition parties. The Diet members in turn are mainly former officials of the MAFF or the co-operatives.

c. The Agricultural Policy Council (Nosei Shingikai). This Council was established by the Agricultural Basic Law. It is an advisory body within the Prime Ministers' Office which is required to report to cabinet members on policy matters referred to it. It has up to 15 members appointed by the Prime Minister from among "men of learning and experience" in relation to the policy issues in question.

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8. For further details of personalities involved in livestock policy formulation see Aurelia George: The Japanese Beef Import Controversy.op. cit.
9. This appears to be the only formal recognition of consumer interests in farm price formulation. The influence of consumer representation is minimal.
10. For further details see John W. Longworth: Institutions and Policies Influencing Japanese Beef Imports, University of Queensland, June 1976.

d. Nokyo committees, especially the Livestock and Dairy Policy Central Headquarters Committee which is a central policy-making body of Zenchu and which decides on demands relating to livestock products to be presented to the Government.

e. The Diet Standing Committees on Agriculture, Forestry and Fisheries. It is not uncommon for former MAFF officials to serve on these committees.

f. Informal groupings of Diet members, e.g. "rice Dietmen", "livestock Dietmen" (chikusan giin). This latter group devotes its energies to issues affecting livestock industries. There are sub-groups specially interested in beef, dairying, etc.

The activities of these committees and groups are too complex to examine in any detail here, although some further reference will be made when dealing with the mechanics of price determination. Other workers have examined these at greater length.[11] What has been said shows how strong pressure can be applied at many sensitive points at the same time by a highly organised farm lobby.

8. DAIRY POLICIES AND THEIR DETERMINATION

Having considered the institutional and political framework within which policy decisions are made, it seems appropriate to consider in more detail the major policy measures which apply specifically to milk and dairy products and the mechanism of price determination.

a. General Dairy Policy

In view of the rapid expansion of demand for milk and dairy products in the 1950s and 1960s (see Section 2), the government encouraged milk production by various means as part of its policy of 'selective expansion'. Research and extension were used to upgrade herd quality, investment was subsidised and a wide range of advice and assistance was made available to farmers through the co-operatives and through government financed extension

11 See Aurelia George, John W. Longworth, op.cit.

services (mainly prefectural). As a further spur to production, returns to farmers for milk were maintained at levels far above those in the world's leading dairy countries.

The official MAFF policy has been to raise Japan's self-sufficiency in dairy products as well as in many other foodstuffs, despite the fact that dairy production depends to an important degree on imported feed. Therefore increases in dairy self-sufficiency should be discounted to the extent that they are due to greater feed imports. This implies that for exporting countries as a whole, incremental exports of dairy products and dairy feedstuffs to Japan will tend to vary inversely.

b. Price Policies

(i) Drinking Milk

Fresh milk for direct consumption enjoys natural protection, and the Government does not intervene in price determination, although in 1975 the Nokyo Livestock and Dairy Central Headquarters unsuccessfully included a deficiency payment system for drinking milk among its demands on the Government. The price is decided in negotiations between the producers' representatives and the major milk bottling, packaging and distributing complexes. The producers' case is argued by the Central Dairy Council in collaboration with Zenchu and the National Designated Groups Milk Price Policy Committee.

Returns to farmers for bottled milk in 1977 (including costs of bottling) were around ¥160 per litre and the retail price ¥260 This is two to three times the corresponding prices in Australia and some four times the New Zealand price (excluding subsidy). Consumption per person has continued to increase but appears likely to stabilise soon, given these prices, at a level much below that in other countries of comparable income.

(ii) Milk for manufacture

Japanese milk production costs are among the world's highest, and the Government is required by the provisions of the Agricultural Basic Law to protect

producers if threatened by imports. Legal and other widely accepted policy provisions require the Government to enable producers to obtain a return for their milk which covers, on average, their cash costs plus an agreed reward for their labour, capital and land. If the manufacturers who buy the milk had to pay prices based on these costs, they could sell their products profitably only at prices very much above the c.i.f. prices of comparable imports. In this situation, the Government meets its obligations to protect producers in several ways:

(a) It guarantees farmers a price for raw milk which is related to average production costs. This price is somewhat lower than the average price received by farmers for drinking milk. (See Table 1).

(b) It provides a subsidy or deficiency payment to enable manufacturers to purchase raw milk at a price currently equivalent to about ten cents a litre below the price received by the farmer. Despite this subsidy, wholesale prices for dairy products in Japan are from about 1.5 to three times the corresponding c.i.f. prices.

(c) It imposes customs duties and quotas on imports of dairy products (see later).

The subsidy was introduced in 1965 by the Manufacturing Milk Deficiency Payment Law, and the amount of subsidy since has been progressively increased. This Law is administered by the LIPC which buys milk up to the 'maximum quantity' each year at the guaranteed price and resells to manufacturers at a 'standard selling price' (kijun torihiki kakaku).

The maximum quantity upon which the guaranteed price is payable is determined each year during the price negotiations. In practice the quantity of milk sold to the LIPC has rarely exceeded this quantity and then only marginally. A much lower price is payable on excess milk. Some relevant data

Table 1

MILK AND DAIRY PRODUCTS - PRICES, COSTS AND SUBSIDIES : JAPAN

	Unit	1966	1970	1973	1974	1975	1976	1977	1978
Cost of Production (raw milk) (a)	Yen/Kg	35.7	40.6	41.0	55.3	71.2	82.3	85.8	
Return to Producer:									
Milk for Drinking (b)	Yen/Kg	44.0	53.6	82.1	98.1	103.1	112.5	112.5	
Milk for Manufacture									
Guaranteed producer price	Yen/kg	37.03	43.73	48.51	70.02	80.29	84.41(c)	88.87(d)	88.87
Standard Selling price	"	31.81	37.10	40.49	53.41	57.57	62.34	64.29	64.29
Deficiency Payment	"	5.22	6.63	8.02	16.61	22.72	24.07	24.58	24.58
Stabilisation Indicative Prices									
Butter (kg)	Yen	573	647	698	914	999	1160	1253	1253
Skim Milk Powder (25 kg)	"	8458	9711	9711	11540	11540	12660	12660	12530
Sweetened condensed whole milk (24.5 kg)	"	4677	5292	5521	7730	8018	9463	8620	8620
Sweetened condensed skim milk (25.5 kg)	"	4204	4756	4756	6600	6600	8437	7610	7610
Maximum quantity (e)	Tonnes	993	1455	1501	1380	1380	1380	1580	1830
Total deficiency payments	Billion Yen	3.85	9.49	10.69	22.16	30.25	33.22	38.06	44.06(f)

(a) Assessed annually from a sample of about 1000 farms. Includes imputed cost of labour, rent and interest on capital. (b) Kanto area only. (c) Increased to 87.41 by addition of quality incentive of 1.00. (d) Increased to 90.62 by addition of quality incentive of 1.75. (e) The maximum quantity on which guaranteed price is payable. The actual quantity on which subsidy has been paid has generally been below this figure. (f) Preliminary estimate.

Sources: MAFF: Poketto Norinsuisan Tokei; Nogyo Hakusho; Rakuno Kankei Shiryo

are given in Tables 1 and 2.

(iii) Dairy products

The Minister of Agriculture, Forestry and Fisheries is required to determine each year a "stabilisation indicative price" (antei shihyo kakaku) for "designated milk products" (shitei nyuseihin).[12] These prices are designed to be "reasonable" for consumers[13] and to ensure that manufacturers can pay the standard selling price to the LIPC (and hence the guaranteed price can be paid to producers). If the price for any one of these products appears likely to fall below 90% of the stabilisation indicative price (s.i.p.) the LIPC is required to purchase at 90% of this price. If the price appears likely to exceed 104% of the s.i.p., the LIPC is required to sell sufficient stocks to keep the price below this level. Where stocks are inadequate, the LIPC, which has a monopoly over the import of designated milk products[14] calls tenders for imports. Although imports of dairy products are subject to quota restrictions, no actual quota is announced[15] so that importers or potential exporters cannot plan in advance.

Even if one accepts that in the Japanese situation this method of price stabilisation is reasonable in principle, the way it works in practice can pose problems for overseas suppliers. Owing to the perishable nature of milk

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12 For the purpose of the s.i.p. these comprise butter, skim milk powder, sweetened condensed whole milk and sweetened condensed skim milk.

13 The deficiency payment system has enabled dairy products to be sold at prices lower than would have otherwise been possible, given existing legislation. Increased productivity and efficiency on farms and in factories have also contributed to a restraint in price increases, so that prices of the principal dairy products, although still much higher than in most other developed countries, fell appreciably in the 1960s in relation to Japanese food prices in general. (See Table 3). Despite these price trends, consumption per person of milk products except cheese and skim milk powder has declined during the 1970s, consumption per person of all milk products in terms of whole milk increasing only slowly.

14 For the purpose of imports, whole milk powder, butter milk powder and whey powder are included, but skim milk powder for stock feed and for the school lunch programme is excluded. It should be noted that cheese and casein are not designated milk products and therefore are not controlled by the LIPC.

15 See K. Geard: Japanese Imports : The Dairy System : NZ International Review, Jan-Feb 1978.

Table 2

PRICES FOR MILK FOR MANUFACTURE

	Fiscal Years			
	1974	1975	1976	1977
Price demanded by Nokyo	88.43	102.93	105.86	106.11
Government calculated price	67.57	77.38	85.17	88.37
Political addition	2.45(a)	2.91	1.24	0.50
Guaranteed producer price	70.02	80.29	86.41	88.87
Quality incentive	-	-	1.00	1.75
Total producer price	70.02	80.29	87.41	90.62(b)
Deduct: deficiency payment	16.61	22.72	24.07	24.58
quality incentive	-	-	1.00	1.75
Standard selling price	53.41	57.57	62.34	64.29
Assessed cost of production	55.28	71.16	82.34	85.80

(a) Described as being for "collection and despatch". (b) Payment for above-quota milk to be 25.07 yen per kg, including 1.00 yen quality incentive.

Source: Zenchu: Nokyo Nenkan (various issues).

products, the LIPC is reluctant to hold large stocks and rarely has more than a few weeks' supplies. A shortfall in local production or a surge in demand can therefore rapidly erode stocks and cause prices to approach or exceed 104% of the s.i.p. well before the LIPC can hope to land imported supplies under its cumbersome and time-consuming procedures. Thus consumers can be denied supplies and exporters can be denied access to markets which exist despite the official Japanese policy of stabilising prices well above import parity.

c. Non-price Incentives

While the price paid to producers is the principal incentive to expand output, the Government also uses several other kinds of incentives to achieve "selected expansion" of products for which demand has been rising. These include investment subsidies and other measures to reduce production costs, incentive payments to raise herd quality, expansion of area of fodder crops, training of farm operators, general research and extension, and encouragement of joint farming arrangements (eino danchi) and other measures to enlarge the scale of management. These arrangements are usually operated by local co-operatives with government subsidies.

d. Import Policies

It has already been noted that Japan uses strict controls on imports as one means of supporting prices to milk producers. In effect, imports are only permitted as a means of preventing "undesirable" price rises - i.e. above the already very high prices by world standards which the Japanese seem to accept as "normal".[16]

The LIPC is the sole importer of dairy products except cheese, casein, skim milk for the school lunch programme, skim milk for feeding purposes and some very minor products. Cheese has recently accounted for more than 40% of value of all imports of dairy products, while if casein and skim milk powder for feed and school lunches are added, around 70% of dairy imports are not handled by LIPC.

16 There is general agreement that these import controls and price measures are essential in terms of the Agricultural Basic Law and other policy principles to which the Government is committed.

In addition to import quotas, most milk products are subject to customs tariffs, and natural cheese is subject to mixing regulations. A consolidated list of measures applied to imports is given in the Appendix.

e. Mechanics of Price Determination

All authorities and interest groups agree in principle that prices to producers should be based on the production cost and income compensation approach, although there is some flexibility in determining what is to be included and how costs etc. are to be defined. Any major differences that arise relate not to principles but to how they should be applied in determining prices for various categories of milk and milk products.

Relevant cost information is collected by the MAFF as part of its annual farm survey of a sample of nearly 1000 dairy farms.[17] This information is used to assess dairy costs per farm, per tan (0.1ha) and per 100 kg of milk. Since the survey results become available only some time after the end of the period to which they refer, the MAFF prepares preliminary estimates for the purpose of each year's price negotiations. In recent years these estimates have exceeded the costs subsequently derived from survey data. At the same time, nokyo does its own calculations which not surprisingly have consistently produced a "demanded" price higher than that calculated by the MAFF.

Negotiations relating to all government-administered prices (i.e. for milk for manufacture and for designated milk products) take place in March each year and the new prices operate as from April.

The prices which nokyo demands are worked out within Zenchū by representatives of the various nokyo-related bodies such as its Livestock and Dairy Policy Central Headquarters Committee, the Central Dairy Council and Zenrakuren. These price demands are then presented to the headquarters of each political party, to members of both houses and to the relevant MAFF officials. Meetings are then arranged of all political parties.

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17 The size of the sample has been falling in line with the number of dairy farms.

A week or two later, a large convention of representatives of the various co-operative organisations is called, and the Zenchu demands are presented for formal ratification.

Concurrently, the MAFF prepares its preliminary price calculations which are submitted to the Livestock Industry Promotion Council for consideration by its dairy sub-committee. Officials of MAFF and the Minister attend the meeting of this sub-committee where the price calculations are discussed. The Council can express views, but cannot alter the calculations.

A third series of concurrent meetings takes place within the LDP Agriculture and Forestry Division's sub-committee on livestock prices. This committee may make its own recommendations.

The final decisive negotiations take place between the Minister, MAFF officials and leaders of the LDP Agriculture and Forestry Division, particularly its dairy sub-committee.

In several recent years the guaranteed price for manufacturing milk finally accepted has been a little above that based on the MAFF preliminary calculations. This additional amount has come to be known as the "political addition" (seiji kasan). For presentational purposes, nokyo has sought to attach a reasonably sounding label to this addition (e.g. "collection and despatch"). More recently it has also negotiated an addition to the guaranteed price itself, referred to in the Nokyo Annual Report as a "quality incentive". This enables MAFF, for a given standard selling price and a given actual price to the producer, to record a lower deficiency payment. The deficiency payment appears in the MAFF budget under the heading "Price, Marketing and Income Measures", while incentives to increase output, quality etc. appear under the heading "Production Measures", and are hence politically more acceptable than a subsidy. Table 2 shows how these elements are reflected in the total price received by farmers.

The standard indicative prices for designated milk products are linked to the standard selling price for milk (which is in turn linked to the guaranteed price through the deficiency payment and quality incentive as indicated above) and are determined at the same time. Details are given in Table 1.

The nokyo demands usually include elements other than price, and these are dealt with in the same series of negotiations. These include demands for raising or removing the quantity limit on the guaranteed price, feed price stabilisation, increased school lunch milk subsidy, import restrictions and targets for greater self-sufficiency.

It is worth noting that the guaranteed price for manufacturing milk has not been increased in 1978, while producer prices for some milk products have been reduced since 1976 despite increases in prices of most inputs. The full story behind this price freeze is not yet clear, but it seems to be related to declines in consumption which policy makers feel could be linked with past price increases and also related to pressure on producers to share some of the fruits of increased productivity with consumers. A further possible reason is the build-up of stocks of butter and skim milk powder which has arisen this year, suggesting that no further production increases are desirable for the time being, despite the general policy of selective expansion.

9. IMPLICATIONS FOR EXPORTS FROM OCEANIA

a. Summary of the Current Situation

Having looked briefly at the Japanese dairy industry and the political environment in which it operates, it seems fair to ask "what does all this mean for us?"

Before attempting to answer this question, it seems appropriate to summarise some of what has already been said and perhaps introduce a few additional points relevant to this question.

Some key facts in the political and economic environment are:

(i) All political parties are committed to the support of agriculture and to the concept of income parity. Commitment to means of achieving this aim is not so absolute.

(ii) Means used at present are principally high domestic prices and subsidies, reinforced by import controls.

(iii) There is a widespread national concern about food security not limited to the governing party. Greater self-sufficiency in food is a widely accepted goal. In general, the nation has been induced to accept dear food as the price it must pay for this security.

(iv) The budget cost of farm price supports is high and there is strong pressure to reduce this cost. The only way this can be done within the constraints of the income objective is to reduce farm costs and/or increase product prices.

The power of the farm lobby as exercised through Dietman from rural electorates and through the tremendously powerful nokyo organisation cannot be overemphasised. In this situation, pressures from countries such as Australia and New Zealand for greater access to the Japanese market are likely to be successful only when Japanese producers and bodies concerned with producer interests can be convinced that such access will not adversely affect their returns.

Recent experience suggests that "resource diplomacy" is likely to achieve a significant increase in access to Japanese markets only where no legislative changes are involved. An example is the import of dairy products for re-export as foreign aid. The power of the farm lobby was demonstrated early this year in the vociferous opposition to U.S. demands (voiced by Robert Strauss) for greater access for beef and oranges. Some concessions were made, for example, a small share of the high quality beef market and an increase of 27,000 tonnes in the

fresh orange import quota. However, the impact of these on Japanese farmers would be very minor.

A study of trade statistics suggests that no individual country has been able to gain any substantially greater access to the Japanese market for farm products in exchange for concessions in other areas. Whatever has been gained has been very small relative to total trade although any Japanese concessions have been regarded as moral or political victories by their trading partners.

The relatively weak bargaining power of individual countries could theoretically be strengthened if several countries combined to present a united front. However, even if by so doing they could induce the Japanese Government to introduce new farm legislation more favourable to their interest as exporters of farm products, there is a possibility that the Government would be defeated in the Diet, and a new government would be elected on promises of more support for farmers, and/or greater self-sufficiency. Such an outcome would certainly not be in the interests of exporting countries who could perhaps lose markets they now take for granted.

b. Possibilities within the Present Legislative Framework

Given the existing political and legal restraints, the room for manoeuvre is limited but some possibilities do exist.

As mentioned earlier, Geard pointed to some of these.[18] Even within the existing control system, more dairy products and meat could enter Japan if the LIPC used less restraint in calling tenders for imports when prices were tending to rise. The fact that the Japanese market for natural cheese, which is not controlled by LIPC, is much more readily accessible to exporters supports this view.

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18 K. Geard : Japanese Imports : The Dairy System, op. cit.

The present LIPC control system permits imports of designated dairy products only if demand exceeds supply at the administered prices. Thus imports are unpredictable and tend to vary widely. At present, imports provide a cushion between supply and demand. If the system were modified to the extent of announcing regular import quotas, this role would have to be given to stocks. Theoretically, stocks would provide a good cushion but since storage facilities are limited, any regular quotas announced would take this into account and tend to be conservative, thus conferring little if any benefit on exporters. The Japanese would probably agree to transferring the equalising role from imports to stocks only if exporters carried the related costs, in which case some additional quantities would probably be imported but the extra revenue earned might be insufficient to cover the costs.

The most likely prospect for increased exports of dairy products to Japan under existing arrangements is as a result of a further widening of the gap between demand and domestic production. This is essentially a long-term prospect.

Demand for food in aggregate is likely to continue to grow, but at a rate much lower than in the past two decades.[19] Further changes in dietary patterns are also likely, with the result that consumption of some foods will increase at the expense of others.

Growth prospects for livestock products generally appear better than average, but growth in consumption of some dairy products has recently been very slow or even negative despite increases in incomes and falls in relative prices. (See Table 3). In the case of butter, consumption has declined, no doubt partly on account of the availability of margarine at a considerably lower price. Nevertheless consumption per person of all dairy products in terms of whole milk has continued to rise slowly except in 1974. Official projections assume some acceleration in this trend, but the recent slow-down in growth of milk usage casts doubts on these projections.

19 See E.A. Saxon: Recent Developments in Food Consumption and Farm Production in Japan, op.cit. pp23-30.

Table 3

RELATIVE MOVEMENTS IN AVERAGE RETAIL PRICES
OF DAIRY PRODUCTS AND MARGARINE : JAPAN

Calendar Year	Fluid Milk	Powdered Milk	Cheese	Butter	Margarine	C.P.I.
			a. Index Numbers : 1975 = 100			
1960	72	94	n.a.	90	n.a.	74
1965	100	100	100	100	100	100
1970	124	106	97	100	127	130
1971	144	113	99	105	135	138
1972	144	116	106	110	142	145
1973	159	123	113	116	145	162
1974	193	153	136	133	190	201
1975	207	174	151	160	239	225
1976	218	185	154	177	223	247
1977	221	190	155	182	210	266
			b. Index Numbers divided by C.P.I.			
1960	97	127	n.a.	122	n.a.	
1965	100	100	100	100	100	
1970	96	82	75	77	98	
1971	104	82	71	76	98	
1972	99	80	73	76	98	
1973	98	76	70	72	90	
1974	96	76	68	66	95	
1975	92	77	67	71	106	
1976	88	75	63	72	90	
1977	83	71	58	68	79	

Source: Derived from Bureau of Statistics : Annual Report on the Family Income and Expenditure Survey.

The last published MAFF production targets call for a rather quickly rising trend in output sufficient to raise the self-sufficiency ratio from 83% in 1974 to 94% in 1985.[20] Actual self-sufficiency ratios since 1960 are shown in Table 4. Hemmi dismisses these targest as unrealistic although he does not query the demand projections.[21] A study by the Australian Bureau of Agricultural Economics reaches a similar conclusion relating to the production targets[22] while some other Japanese also regard the targets as optimistic.[23] Hemmi's production projections indicated a fall in milk output, leading to substantially increased imports. In view of recent upward trends in output, such a fall seems unlikely. Also, if the demand projections prove to be too high, the scope for imports will fall even further below Hemmi's figures. It is felt that import requirements in 1985 may exceed those in the MAFF projections, but by a margin very much smaller than suggested by Hemmi.

An external avenue of approach which could increase the revenue of exporters even if not the quantity exported is the negotiation of a minimum price agreement through the multilateral trade negotiations. Such an agreement would not involve legislative change in Japan and would probably not be opposed officially.

c. Possibilities Involving Legislative Changes

While there seems to be little prospect of changes in farm legislation being forced upon Japan by outside pressures, this does not mean that legislation could not be amended in response to internal pressures. There are already

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20 E.A. Saxon: Japanese Long-term Projections Relating to Food and Agriculture, BAE Occasional Paper No. 38, 1976.

21 Kenzo Hemmi: Japanese Market - Hope or Illusion. Paper prepared for the International Seminar on the Role of Australia and New Zealand in World Agricultural Trade held at Massey University in February 1978.

22 E.A. Saxon: Japanese Long-Term Projections Relating to Food and Agriculture, op. cit.

23 For other views on the optimistic nature of the production targets see: Ogura: The Food Problem and Agricultural Structure in Japan, Japan FAO Association, 1977, p22.

Table 4

SELF-SUFFICIENCY RATIOS

MILK AND DAIRY PRODUCTS : JAPAN

Percentages

	All milk and milk products	Milk for manufacture (a)	Skim milk powder (b)	Cheese	Butter	Full cream powdered milk (c)
1960	89.1	76.5	24	80	92	100
1965	85.7	69.7	31	35	92	100
1970	89.4	77.6	82	19	100	100
1971	88.2	75.6	86	19	85	100
1972	86.4	71.6	76	21	80	100
1973	83.0	64.3	87	18	67	103
1974	83.0	63.6	72	16	79	93
1975	81.8	60.5	69	17	72	83
1976	84.8	66.3	91	15	83	104

(a) Imports of dairy products included at whole milk equivalent.

(b) For human consumption. Imports of S.M.P. for stock feed have recently exceeded imports for human consumption.

(c) Other milk products show similar trends. Japan is virtually self-sufficient, consumption and production being equalised by changes in stocks.

Source: Shokuryō Jukyūhyō (1976). (MAFF)

pressures for change, for example by consumer interests and other non-farm groups. However, these are still relatively weak. If exporting countries cannot merely wait for a larger supply deficiency to arise through the passage of time, the only way in which they are likely to increase access to any appreciable extent is through identification and collaboration with domestic interests.

To identify with domestic interests is no easy task. To begin with, it would require a comprehensive understanding of Japanese politics and farm policies far in excess of that revealed by this paper. Such an understanding could be achieved only by a person or persons with the necessary industry experience stationed in Japan on a long-term basis.

The domestic interests to be studied would include consumers, academics, industrialists, government ministers and farm organisations. The line of approach would need to contain at least three elements - (i) no reduction in income or other benefits accruing to farmers; (ii) no significant increase in budget costs, and (iii) a substantial reduction in prices to consumers.

This may seem a tall order, but studies along these lines have already been initiated in Japan. For instance, the Forum for Policy Innovation, established in 1976, published in April 1978 "A Plan for Beef Import Liberalisation" (Policy Proposal No 5). The Forum consists mainly of leading academics, with a sprinkling of industrialists, bankers and government planners. The basis of its proposal is to support beef prices by deficiency payments financed by customs tariffs and levies and to reduce retail prices, thereby increasing demand and imports (and hence revenue for deficiency payments). The Forum claims that this alternative scheme would not involve additional cost to the Government in the form of price support, but it does appear that revenue from tariffs would be channelled to farmers rather than to the Treasury.

While this proposal suggests a possible line of approach for dairy products also, it needs to be remembered that price elasticities for dairy

products in Japan are lower than those for beef. This could mean that the extra revenue derived this way from increased imports might be insufficient to make it a viable alternative as it stands. However, such possible alternatives deserve careful study in collaboration with sympathetic Japanese groups. The major task would be to convince the farmers' groups that any proposal would not be to their disadvantage, but would be to the advantage of the nation as a whole. An acceptable scheme could perhaps be worked out in collaboration with the nokyo organisation and with MAFF officials. Most Japanese farmers realise, (though they may be reluctant to admit it) that, despite their high output in relation to land, they cannot hope to feed the nation unaided.[24] Assistance from producers in other countries is therefore essential unless Japanese farmers are to dictate to the nation what it may or may not consume and in what quantities.

It will need something of a revolution in thinking before farmers and their government supporters will agree to major policy changes; yet such a revolution is not impossible. Some domestic interests are already moving in that direction, and it seems logical for exporting countries to join them. However, an intimate understanding of the Japanese scene would be an essential prerequisite, and to be successful, any plan would need to be seen as originating within Japan rather than outside. Collaboration rather than confrontation is required, and given the will to collaborate, farmers in both Japan and Oceania could perhaps be convinced, in due course, that the things they have in common outweigh those wherein their interests conflict. If so, it should be possible to work out solutions to their problems which are mutually acceptable and beneficial.

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24 This theme is developed in F.A. Saxon: Farm Production in Japan and Australia: Are Producers Partners or Rivals? Paper presented to Japan Agricultural Economics Society Conference, Sendai, April 1977.

Appendix

MEASURES TO CONTROL IMPORTS OF DAIRY PRODUCTS : JAPAN

Commodity	Tariff(a)	Non-tariff Measures(b)	
Fresh milk and cream	Free		
Condensed skim milk			
- sweetened	30%	Q	S
- unsweetened	25%	Q	S
Condensed whole milk			
- sweetened	30%	Q	S
- unsweetened	25% (30%)	Q	S
Skim milk powder			
- sweetened	35% (45%)	Q	S
- unsweetened	25% (45%)	Q	S
- for school lunch	Free	Q	S
- for stock feed	Fee (45%)	Q	S
Whole milk powder	30% (40%)	Q	S
Whey powder			
- sweetened	35%	Q	S
- unsweetened	25%	Q	S
Butter	35% (45%)	Q	S
Cheese - processed	35% (45%)	Q	
- natural for use in processing	Free (35%)	M	
- natural, other	35%		
Casein	Free		
Casein derivatives and glues	8%		
Miscellaneous processed milk products	25%	Q	

(a) Three rates of duty are shown for dairy products - general (or nominal), GATT and temporary. The rate shown here is that applicable to imports from Oceania. The rate in brackets is the nominal rate where this differs from that actually applicable.

(b) Q - Import quota applies
S - State trading applies (i.e. LIPC handles the imports)
M - Mixing regulations apply. At present, manufacturers of processed cheese may import 2kg of natural cheese free of duty for each kg of domestic cheese they mix with the imported cheese.
In addition, all dairy products must comply with the Food Sanitation Law.

Source: Japan Tariff Association: Customs Tariff Schedules of Japan.

JAPANESE AGRICULTURAL SUPPORT POLICIES AND TRADE IN LIVESTOCK PRODUCTS BETWEEN NEW ZEALAND AND JAPAN

AN INTRODUCTION

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JAPANESE AGRICULTURAL SUPPORT POLICIES AND TRADE IN LIVESTOCK PRODUCTS BETWEEN NEW ZEALAND AND JAPAN

In the light of what has been said by previous speakers and what I expect will be said by other speakers on this panel, I am not at all sure that there is anything left for me to say. I have therefore decided to comment in fairly general terms on the effects of Japanese support policies on New Zealand's trade in livestock products, and leave it to Messrs Blackmore and Calder to fill in the details on dairy products and meat.

It is sometimes claimed by critics of New Zealand's trade and marketing policies that we spend too much of our time and efforts in complaining about lack of access - in trying to secure improved terms of access - instead of concentrating more on improved marketing techniques to enable greater penetration of our products into chosen markets. In its most simplistic form, the advice is to research what the customer wants, produce to meet that specific requirement and employ modern marketing and promotion methods to ensure a satisfactory result. This is sound enough advice in theory and, in some cases, also in practice. For a high proportion of our export trade in livestock products it is, unfortunately, not a practicable proposition.

In general terms, the answer to the question "access or penetration" has to be "it all depends" - i.e. it all depends upon which product we are talking about. And I mean "product", not category of produce, such as dairy or meat. The situation varies quite markedly from dairy product to dairy product, meat product to meat product.

Stated simply, Japanese policy towards foreign livestock products is to allow them to be imported to the extent that, and only to that extent, they do not prejudice - or indeed, threaten to prejudice - the objectives of domestic agricultural support policies. In effect, imports are regarded as a necessary evil, to be tolerated only to the extent required to fill an estimated gap between domestic production and consumption of the product concerned. This, one might observe, is in marked contrast to the policy Japan expects other countries to follow in respect of Japanese manufactured goods! I am aware that it is regarded in some circles as rather old fashioned or naive to talk in terms of comparative advantage and international

specialisation when discussing the problems of access for New Zealand's pastoral products. I would certainly agree that such arguments, in themselves, will not open many doors and, in practice, we have always been prepared in trade negotiations to adopt a much more pragmatic approach than is implied by the principle of comparative advantage.

Nevertheless, I believe that it does no harm to remind our trading partners from time to time that the concept does have a basic validity in terms of making efficient use of the world's resources. It is, I suggest, particularly relevant in the case of a country such as Japan whose incredible economic growth over the past few decades has depended so heavily on the application of the concept of comparative advantage in international trade in industrial products. It does no harm to remind our Japanese friends that they have a role to play as responsible members of the international trading community - particularly when one considers the respective balance of payments positions of our two countries. (There are, of course, different views on the terms in which such reminders might be expressed!)

In conformity with the general Japanese approach to agricultural imports that I have outlined, we find that for products which are - or given the chance, would be - directly competitive with Japanese production, access is very tightly controlled. This is particularly so for products where one of the declared objectives of agricultural policy is to attain a higher degree of self sufficiency. Beef and most dairy products are prime examples of this. As one who has been closely involved in discussions with the Japanese authorities over the past two years, I have no hesitation in saying that as far as butter and skim milk powder are concerned, the major problem we face is unquestionably one of access - or, rather, lack of it. No amount of market developmental effort is going to produce results if we cannot get the product across the frontier. That is not to say that improved access would, in itself, provide all the answers to expanding sales of these products on the Japanese market, but it is an essential first requirement. Much the same situation exists with beef except that the greater shortfall in domestic production does provide greater opportunities for imports than in the case of butter and milk powder. There are other factors affecting the level of New Zealand beef exports to Japan which, no doubt, Mr Calder will enlarge upon.

On the other hand, for products such as lamb and mutton and, of course, wool, where in contrast to butter and beef domestic production is not a

factor, access is no problem. Promotion and market development are the main requirements. Even within the dairy sector, products other than butter and skim milk powder face fewer access problems - although again, there are other problems which I assume Mr Blackmore will enlarge upon.

I have referred to the underlying Japanese policy objective of increased self sufficiency in the supply of food and particularly livestock products. This is part of a more fundamental objective of ensuring adequate food supplies - an objective which no-one can quarrel with. We can and do question the means by which this policy objective is persued and the way in which its pursuit affects the import opportunities for different agricultural products.

In the first place, for Japan, self-sufficiency for its livestock industries is really an illusion. The production of beef and dairy products, as well as pork and poultry, is very heavily dependent upon imported feed-stuffs - notably maize and soyabean from the U.S.A. To illustrate the point, between 1960 and 1975 imports of feedgrains increased by 560% from 1.4 million tonnes to 9.3 million tonnes; and imports of soyabean cake and meal by over 2,000% from 790 million to 17,630 million tonnes. As New Zealand has found in a different context, the more a country attempts to reduce its dependence upon imports by switching from the finished product to the raw materials, the more vulnerable it becomes to constraints on the flow of such materials, whether of a physical or financial nature. At least, in the case of New Zealand, we can point to chronic balance of payments problems in justification for import substitution policies, whatever reservations might be held about the wisdom of particular aspects or instances of such policies in practice. This claim can scarcely be made by Japan and, in any event, it is doubtful whether in the case of beef and manufactured dairy products, there is much net saving of foreign exchange in importing feed-stuffs rather than the finished product.

Our second criticism of the Japanese pursuit of increased self-sufficiency for meat and dairy products is that it is being approached from both ends - high prices to the producer to encourage increased production, and high prices to the consumer to discourage increased consumption. Clearly, self-sufficiency is a much more attainable goal in any situation if demand is suppressed by pricing the product beyond the reach of most consumers. (Under such a policy, one could imagine New Zealand becoming self-sufficient even in such exotic foodstuffs as pineapples.) A major element in our approach to

the Japanese authorities has been to urge that the Japanese consumer be given a better deal - be given the opportunity to buy meat and dairy products at more reasonable prices. It is, I believe, well enough known that the Japanese import system - and internal distribution system - deny the consumer the advantage he might otherwise secure from such supplies of lower priced imports of, for example, beef and butter, as are allowed into the country. From the New Zealand exporters' point of view, it is additionally galling to know that the substantial profits made by the LIPC - which has a virtual monopoly on beef and butter imports - are used primarily to assist Japanese agriculture. In its effects, the Japanese system is therefore very much the same as the EEC's. And both systems are justified on the same grounds - the need for domestic, political and social reasons, to provide incomes for farmers and rural workers at levels similar to those earned by urban dwellers. Both systems pay lip service - but little else - to the interests of the consumer. Both have, so far, largely rejected the alternative of more direct support for the farmer instead of relying on a manipulated price mechanism. Both lead to the accumulation of surpluses although, so far, these have been of a temporary nature only in Japan. And so far, in the case of Japan, for livestock products, there has been no resort to the infuriating business of subsidised exports or surpluses to the detriment of exporting countries like New Zealand. It should be noted, however, that Japan has had to adopt special measures to reduce or dispose of rice surpluses, partly by aid and other external operations. Unfortunately for us, actions to deal with rice surpluses have also included incentives for farmers to switch from rice to livestock production.

The practical consequences for New Zealand of the Japanese support policies I have outlined are that the trading opportunities for several major New Zealand export products are not only severely restricted, but are spasmodic, largely unpredictable, and have been subject to large fluctuations. This is particularly so for butter and skim milk powder for human consumption. Our ability to gauge the prospects for imports of these products has been improved somewhat over the last year with the holding at approximately six monthly intervals of working level discussions on the Japanese supply/demand situation and prospects. But we have so far failed to persuade the Japanese authorities to acknowledge a continuing place for imports and establish on a regular basis even minimum quota levels. Fortunately, there are more encouraging developments in the case of beef where quotas are now announced on a six monthly basis and there are signs that the Japanese might screw up their courage to the point of setting an annual minimum quota before too

long. In this context, the term "quota" means "global quota" or, in effect, an announced intention to import from somewhere a certain quantity. The allocation of that quantity among supplying countries is another matter currently decided piecemeal at a later stage. I should perhaps make it clear that contrary to the impression that sometimes seems to be held, New Zealand has not been seeking discriminatory quotas for its own beef or dairy products. We have sought the establishment of global quotas within which we would compete with other suppliers. This is probably also the appropriate place to emphasise that we do not expect, nor have we asked, for unlimited access. Our requests have been, in our view, very modest and realistic.

We have never asked or implied that Japanese farmers should be "thrown to the wolves" - nor do we believe that our requests would have this effect. What we do not accept is that the present method of supporting Japanese farmers and the present pricing procedures for both domestic and imported farm products are immutable. The concept of deficiency payments is not a new one in Japanese agriculture; nor is the concept of using imports along with domestic product to benefit the consumer while protecting producer interests. The Japanese Government has acknowledged that in the case of beef, for example, consumption can be boosted and imports expanded by streamlining the distribution system - by reducing some of the "fat" taken by the middlemen. No doubt there are other possibilities. What is needed is the political will, ingenuity and organising ability. The Japanese are certainly not lacking in the latter two qualities.

As far as the third is concerned, we can find some encouragement in the increasing attention being focussed in Japan upon consumer interest, and the lessening general political influence of the rural sector over time. It is also a fact that a progressive restructuring in the rural sector has been under way for some years with a steep reduction in the number of farms, particularly the smallest and least viable. Policies to further this development which should lead to lower real unit costs of production and facilitate more moderate pricing policies, are being advocated in some quarters in Japan. And, of course, the Japanese Government is being subjected to a good deal of political pressure from outside to adopt more liberal trading policies. New Zealand is not alone in banging on the Japanese door! The Tokyo round of GATT trade negotiations is in its final stages and, it must be hoped, will reach a successful conclusion which will include some substantive improvement in our prospects in the Japanese market. The extent of the

improvement remains to be seen, but I have little doubt that we shall still need to keep pressing the Japanese Government with every means at our disposal to do even better. Equally, we must be prepared to make even greater efforts to take full advantage of the opportunities afforded by the Japanese market, particularly for products which are less politically sensitive and which accordingly face fewer barriers.

JAPANESE AGRICULTURAL SUPPORT POLICIES AND TRADE IN LIVESTOCK PRODUCTS BETWEEN NEW ZEALAND AND JAPAN

DAIRY PRODUCTS

BY: H.S. BLACKMORE

NEW ZEALAND DAIRY BOARD
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JAPANESE AGRICULTURAL SUPPORT POLICIES AND TRADE IN LIVESTOCK PRODUCTS BETWEEN NEW ZEALAND AND JAPAN

DAIRY PRODUCTS:

New Zealand is a major exporter of dairy products to the Japanese market, and as a major supplier we are both deeply interested in, and concerned to improve the level of consumption of milk and dairy products in Japan.

Although Japanese consumption has steadily expanded over the last two decades, consumption per head currently remains at levels which, by international standards, are exceptionally low. The attached table shows that the annual consumption of drinking milk in Japan in 1976 was under 32 kg. per person. This compares with 118 kg. in the United States of America; 165 kg. in New Zealand; and around 130 kg. in the USSR, and 18 kg. in India.

Butter and cheese consumption per head in Japan is well under 1 kg. per annum.

Undoubtedly traditional dietary habits have been a factor in restricting the growth in consumption, but the extremely high retail price level has also been a major contributing factor. The current retail price levels of over US$7/kg. for butter; US$5.40 for cheese; and over US$1/litre for milk (see attached table) are the highest in the world, and would place these nutritional products in the luxury class for consumers, both in Japan and in any other country around the world.

The basic cause for these high consumer prices in Japan is the relatively high cost of milk production which, in turn, is maintained and protected by Government intervention and price support. Japan is not alone in using Government intervention to support high cost dairy industries, but the level of the supported milk producer price in Japan is considerably higher than anywhere else in the world, and much higher than in the EEC or the United States of America.

On the other hand, there exists in Japan strong social, political, and even strategic reasons for maintaining dairy farm income and dairy production. We accept these reasons, both as a political fact of life in

Japan, and as a fellow dairy industry, even though we do not have such Government support in New Zealand. What we are concerned to achieve is not a decline in the Japanese dairy industry, but an expansion in the Japanese consumption of dairy products which would be, in our view, to the benefit of both New Zealand's and Japan's dairy industries.

Having analysed the Japanese support system for the local production of milk for processing into dairy products, we have concluded that there is scope under the existing arrangements to achieve a better stabilisation of the consumer price in Japan, while at the same time maintain the real value of the current milk price to Japanese producers.

Mechanisms exist under the present law that could be used more effectively to stabilize both the market price for dairy products and milk production in Japan. These existing mechanisms include:

(a) The LIPC's function of importing and releasing designated dairy products on to the Japanese market to stabilize the market price, and the LIPC's function of purchasing dairy products to support the producer price on the market.

(b) Government subsidies to producers on milk for processing which makes up the difference between the guaranteed price to farmers and the price paid by processors of dairy products, which in turn determines the price to consumers.

(c) The quantitative ceiling, fixed by the Government each year, on the total quantity of milk that receives this producer subsidy.

Our analysis of the use of the stock release, or "buying in" function of the LIPC over the last six years, shows that the stock release of some dairy products has often been quite inadequate to stabilize the market price; and the gap between this and the equivalent of the producer price has been reduced by lifting that producer price, rather than reducing the wholesale market price. As a result the average wholesale price of butter, for example, rose from ¥670/kg. in 1971 to ¥1233/kg. in 1977.

Over this period, the rise in the guaranteed price to producers for milk for processing was, by and large, justified by farm cost increases. But, over the period, more and more of the increase has been loaded directly on to the market price, rather than being absorbed by appropriate increases in the producer milk subsidy. Between 1972 and 1977 the guaranteed price to

farmers rose from ¥45.48/kg. to ¥88.87/kg., an increase of 95%. In the same period the subsidy rose by ¥16.88/kg., or by only 69%; and as a result the price of milk to processors rose by 132%, and this price hike was, in turn, transmitted on to the market for dairy products.

It could be argued that increasing the subsidy, as suggested above, would be too costly to Government and would not expand consumption significantly.

However, if over the next five years farm costs increased at 3.5% per annum (the average for the last three years), the cost to Government of matching the increase via the subsidy would be relatively small, both in absolute terms and relative to the size of the total agricultural budget. We calculate that in order to stabilize the price of milk to processors at the current level of ¥64.30/kg., over the next five years, the milk subsidy would need to rise from ¥24.57/kg. in 1978 to ¥41.25/kg. by 1983.

Assuming the 1978 quantitative ceiling for the subsidy of 1.83 million tonnes was maintained through to 1983, the total cost of the subsidy would rise from ¥44,963 million, or US$225 million in fiscal 1978, to ¥75,500 million or US$377 million in 1983. This gradual and relatively small increase in expenditure on the producer subsidy could achieve a stabilization of the market price for dairy products at current levels, while at the same time maintaining the real value of farm incomes.

In addition, the very high retail price level and the relatively high price elasticity of demand for dairy products in Japan, would indicate that even a small reduction in price, or at least a stabilization of price at current levels, could achieve a useful increase in consumption in dairy products over the next five years.

The existing power of the Government to fix the limit on the quantity of milk for processing that receives the producer subsidy, gives the Government the ability to control and stabilize the amount of milk produced in Japan,and to match it with demand and import requirements. Milk production above the quantitative limit by not receiving the subsidy is severely penalized in terms of return, and the Japanese authorities have in their hands a strong and effective method of preventing surplus production and influencing the level of production of milk for processing.

Finally, there is an important relationship between all three mechanisms in terms of stabilizing price levels and balancing supply and demand. For example, the higher the unit value of the subsidy, the stronger

the effect of limiting the standard amount will be, on controlling the volume of production of milk for processing. Also, the stock release mechanism which has always been under pressure to favour and ensure increases in the equivalent producer price rather than to stabilize the consumer price, could be supported by a greater use of the subsidy in holding down the price of milk to processors.

During the last two financial years, total milk production in Japan has increased heavily. Because the consumption of drinking milk has not absorbed this increase, supplies entering manufacturing have expanded. In the same period the quantitative ceiling for milk for processing receiving the subsidy rose from 1.33 million tonnes in 1975 to 1.53 million tonnes in 1976, and by 1977 was lifted, at the end of the financial year, to nearly match the total quantity of milk produced in Japan for processing. Also, in 1978, the quantitative ceiling was not used to contain production, and butter and skimmilk powder production expanded to the point where surpluses have been built up. As a result, imports of butter and skimmilk powder for human consumption have virtually ceased, and the immediate prospects for imports of these products are bleak indeed.

This collapse in butter imports is of direct concern to New Zealand. If, into the 1980s, milk production continues to be stimulated while consumption remains relatively stagnant, our exports of cheese and casein could also come under threat. This would have serious implications for the New Zealand dairy industry.

In our view, there is a direct link between the level of our dairy trade with Japan and the extent to which existing mechanisms within the dairy support system are more effectively used to stabilize the price of dairy products to consumers and the level of local production.

COMPARATIVE RETAIL PRICES AND CONSUMPTION PER HEAD

1978 Retail Prices (in US$)

	Butter (kg)	Cheese (kg)	Milk (kg)
Tokyo[1]	7.26	5.47	1.13
Washington[2]	3.42	5.38	0.56
London[2]	2.22	2.88	0.38
Wellington[2]	1.12	2.28	0.17

Consumption per Head (per year)[3]

	Butter (kg)	Cheese (kg)	Milk (litre)
Japan	0.6	0.5	31.4
United States	2.0	9.4	117.9
United Kingdom	7.6	6.1	144.2
New Zealand	14.2	7.1	165.3

Notes:

1 July 1978 - Source: Japanese Prime Minister's Office.

2 F.A.S. Survey of retail food prices - 5 July 1978.

3 1976 for Japan, United States and United Kingdom - Source: I.D.F.
1977/78 for New Zealand - Source: N.Z. Dairy Board.

JAPANESE AGRICULTURAL SUPPORT POLICIES AND TRADE IN LIVESTOCK PRODUCTS BETWEEN NEW ZEALAND AND JAPAN

MEAT PRODUCTS

BY: M.W. CALDER

NEW ZEALAND MEAT PRODUCERS BOARD

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JAPANESE AGRICULTURAL SUPPORT POLICIES AND TRADE IN LIVESTOCK PRODUCTS BETWEEN NEW ZEALAND AND JAPAN

MEAT PRODUCTS

Japan has long been considered as a potential alternative market for exports of New Zealand meats and efforts have been made to promote and develop sales of our main meat products to that market since the late 1950's. Some problems have been encountered with the volatility of the trade in mutton due to the nature of the product and its usage in Japan, while sales of lamb have improved as consumer prejudice against frozen products and their lack of familiarity with lamb have been gradually overcome by promotion activities and the development of products to suit the particular market requirements. Sheepmeats though are not subject to significant import regulations so these problems have been relatively minor when compared with the difficulties that have been associated with the development of beef exports to Japan and it is this product which is the principal item of concern in the context of this seminar.

The difficulties with beef relate not only to the direct effects of Japanese support policies and the unique conditions of access for imports, but also to the way in which other suppliers, principally Australia, have reacted to these restrictions in conjunction with access restrictions that have been applied to beef exports to other markets in recent years. The result has been that New Zealand exports of beef to Japan have not developed as consistently as could have been expected under the existing demand conditions; nor have the sales been improving as well as has been the case with lamb (see Table 1).

The attraction of Japan as an outlet for New Zealand beef exports is due to the extremely high prices that are charged for beef at retail in that market which leads to the conclusion that there is a strong demand for beef that cannot be satisfied by supplies from domestic producers. This was evident in 1973 when regulations were relaxed and beef imports increased by 120 per cent, to 181,000 tonnes, while domestic beef prices continued to increase. Generally, though, beef imports are limited by a global quota which is mainly controlled by the Livestock Industry Promotion Corporation (L.I.P.C), though a small proportion is allocated to private trade. The L.I.P.C. was established in 1961 and is "authorised to perform various functions of the Government with its ultimate objective directed towards the

price stabilisation of livestock products and the protection of both farmers and consumers". As far as beef is concerned, its price stabilisation activities are related to the purchase, storage and sale of imported beef, with the aim of maintaining prices for the higher cost domestic product.

These activities which maintain incomes of domestic producers through the market price support system are part of the overall policy on beef production which has been aimed at increasing the level of self-sufficiency in Japan. Apart from occasional lapses in 1973 and again in 1976, it is evident that this policy has been reasonably successful and the degree of self-sufficiency has been relatively steady at around 80-85 percent (see Table 2).

It is notable, though, that while the Japanese Government's "Forecast of Demand For and Supply of Selected Agricultural Commodities for 1985" (May 1975) indicates a substantial increase in production with the maintenance of the high level of self-sufficiency at 81 percent, the latest projections on meat from the F.A.O. ("Meat: Supply, Demand and Trade Projections 1985" June 1978) are much less optimistic in forecasting a self-sufficiency ratio of 69.5 percent.

It is recognised that because of the socio-economic and political structure of the beef industry in Japan, there is a need to maintain incomes of beef producers. However, the system of price support that is used can be likened to a two-edged sword being wielded for the benefit of the producers to the disadvantage of both consumers' and importers' interests. Under this system there is an artificial raising of prices to producers which can, at times and in certain circumstances, result in "surplus" production. This occurs mainly because of the policy of passing on high prices to consumers and the effect this has of reducing consumer demand. Thus high levels of self-sufficiency can be achieved by forcing down domestic consumption while artificially stimulating production, and restricting imports.

In addition, in aiming for a high level of self-sufficiency in beef production, great reliance has been placed on the need for imported feed stuffs, so in effect the high degree of self-sufficiency in beef has been won only at the expense of lower self-sufficiency in grain and feeding stuffs. In 1976, the self-sufficiency ratios for wheat, barley, other cereals (except rice) and soya beans were all less than 10 percent, which indicates the highly vulnerable position of the Japanese livestock industry to changes in world animal feeding stuff prices. The degree of reliance on feeding stuffs has been emphasised recently by a newspaper advertisement in Japan in which beef producers opposed the liberation of beef imports. This indicated that Japan imported 20 million tonnes of animal feed grain annually and that imported grain accounted for about 70 percent of the feed given to Japanese beef cattle.

As far as imports of beef are concerned, the policy has been to restrict imports only to such a quantity as is necessary to cover short domestic supplies. Quotas are announced at six-monthly intervals for general beef imports and for imports for special purposes such as the school lunch programme. The general quota is further divided into the "one touch" system, usually for chilled beef, and imports by tender which applies mainly to frozen beef; it is this latter system that has caused some difficulties for New Zealand.

The frozen beef imported under the quota is purchased by the L.I.P.C. from licensed importers by a tender system. These imports are subject to a 25 per cent duty and in addition the L.I.P.C. makes an adjustment to prices up to the equivalent domestic level when these stocks are released onto the market. These adjustments to the L.I.P.C.'s selling price can more than double the original c.i.f. price plus duty that was paid. The stocks are released onto the market at determined intervals as a means of stabilising domestic wholesale prices.

Tenders are announced at regular intervals (usually monthly), with the required tonnage being split into various specified items. The L.I.P.C. decides the successful tenders for each specified cut - usually by accepting the cheapest bids until the allocation for that particular cut is filled. There is, therefore, considerable advantage to importers to quote as cheaply as possible, and in these circumstances, in recent years at least, New Zealand exporters have faced considerable competition from low-priced offers from Australian suppliers. This partly reflects the significant quantity of beef that has been available in Australia, and also the indirect effect of the Australian system of allocating quota tonnages for the North American market. In the past, these U.S. quota entitlements were made on the basis of the exporter's sales performance to markets other than the U.S.A. and, considering that prices in the U.S. were substantially better than in other markets, there was an incentive for Australian exporters to obtain maximum volume to alternative markets like Japan, even to the extent of discounting prices. Consequently, the proportion of the various Japanese tenders allotted to New Zealand has been rather low. The Australian Meat and Livestock Corporation has introduced some controls by allocating quota tonnages for Japan among Australian exporters, but competition has remained strong. In the 1977/78 Japanese fiscal year, New Zealand gained 8.4 per cent of the total beef tenders accepted while, for the first three tenders for the 1978/79 fiscal year, the NZ proportion was 4.1 per cent, or 708 tonnes, out of a total of 17,100 tonnes.

In response to representations over the years, the Japanese have made some moves to improve the beef import system with a gradual increase in the quotas since their reintroduction in 1975/76 and an earlier announcement of the six-monthly quota tonnages which assists in exporters' planning to some extent. This year, they have maintained their stabilisation prices for beef at last year's levels which could mean some improvement in demand. There have also been some moves to rationalise and improve the fairly costly distribution system for beef in Japan.

The policy on beef imports has been and still is being debated in Japan, this debate being brought on by Japan's current large trading surplus and rising consumer dissatisfaction with high retail beef prices. In addition, there has been a substantial lift in the earnings of the L.I.P.C. from 15.1 billion yen in 1975 and 30.7 billion yen in 1976 to 40 billion yen in 1977 (fiscal years), reflecting mainly the substantial difference between imported and domestic beef prices.

Not unnaturally the policy has also been the subject of serious consideration in New Zealand, and it has been suggested that some alternatives to the current price support system and control of imports could be investigated. We consider that, as Japan has limited potential for increased beef production and a high income elasticity of demand, there is a requirement to develop a more consistent import policy which provides adequate assurance of long-term security of supplies. The prospect of lower supply availabilities of international markets in the next few years, coupled with the healthy state of the Japanese economy and the improving demand, particularly for protein foods, adds emphasis to this requirement.

We consider that a greater use of the policy and its existing system of deficiency payments to producers would provide the necessary assurance of income, while liberalisation of the L.I.P.C.'s import purchasing and sales mechanism would benefit consumers through lower retail prices. It would also provide for the stimulation of trade and a better continuity of supplies.

It is significant that not only exporters have been thinking of improved policies for imports. The influential group of economists in the Japanese Forum for Policy Innovation have stated that they consider that the dual goals of import liberalisation and the development of the domestic beef industry can be achieved simultaneously. They have suggested the abolition of the beef import quota to reduce wholesale and retail beef prices and expand consumption. The drop in income to domestic producers resulting from the decline in prices should be compensated by the use of deficiency payments as already practised in Japan for milk for processing. They have proposed that

this programme should be phased in over a transition period of 5 to 7 years, to allow producers, consumers, and exporting countries to adjust to the changed conditions.

We have also noted reports in the Japanese press that there has been some consideration of two alternative policies for beef imports. These are proposals for a stable expansion of beef imports or an expansion of imports as a percentage of increased demand. These proposals do not appear to be as attractive though as the general principles put forward by the Forum for Policy Innovation.

It is recognised that any change will take some time, particularly as Japanese farmers are sensitive to imports of beef, but we consider that, in the long term, an expanded market and a rising demand for beef will be an advantage to local producers, as well as to importers and to exporters like New Zealand.

As far as New Zealand is concerned, the maintenance of global quotas even if they are increased, will mean that we will continue to face competition, mainly from Australian supplies, in bidding for import tenders.

TABLE 1. NEW ZEALAND MEAT EXPORTS TO JAPAN

(September Years)

	Lamb	Mutton	Beef (tonnes)	Other	Total
1965/66	1604	59746	3023	470	64843
1966/67	1059	59690	3189	195	64136
1967/68	3044	74465	3099	1069	81676
1968/69	3864	64384	2224	1207	71678
1969/70	5847	65289	2573	1989	76206
1970/71	3060	60192	4197	2492	70390
1971/72	5781	63511	3421	2930	75639
1972/73	8153	64538	8355	2832	83878
1973/74	5703	46870	2294	3372	58238
1974/75	8214	46409	1097	3668	59390
1975/76	10499	20986	3057	5163	39705
1976/77	14305	25592	2263	3857	46017
1977/78 *	8544	9822	5543	3235	27144

* 9 months to June

TABLE 2. JAPAN BEEF PRODUCTION, TRADE, CONSUMPTION AND SELF-SUFFICIENCY

Calendar Years	Production (a)	Net Imports	Available for Consumption (b)	"Self-Sufficiency" (a/b) %
		(tonnes)		
1970	278010	33160	311170	89.3
1971	296173	59366	355539	83.3
1972	317445	82275	399720	79.4
1973	245769	181722	427491	57.5
1974	321071	76566	397637	80.7
1975	352664	64166	416830	84.6
1976	297881	134608	432489	68.9
1977	361213	120763	481976	74.9
1985 (1)	508000	117000	625000	81.0
Projections (2)	410000	180000	590000	69.5

Source: (1) The Meat Statistics in Japan (June 1, 1978)
(2) F.A.O. - Meat: Supply and Demand Projections 1985.

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