

BACKGROUND PAPERS COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND  
RAW MATERIALS FOR FEEDINGSTUFF, HELD AT TOKYO, JAPAN.

12th to 16th May, 1970.

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Rapporteur : M. V. Madane

Report of the  
**COMMODITY CONFERENCE**  
on Fruits and Vegetables and Raw Materials  
for Feeding-Stuff in South-East Asia

**Tokyo (Japan)**

May 12 - 16, 1970



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INTERNATIONAL COOPERATIVE ALLIANCE  
Regional Office & Education Centre for South-East Asia  
43 Friends Colony, New Delhi-14, India

REPORT OF THE  
COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND  
RAW MATERIALS FOR FEEDINGSTUFF, HELD AT TOKYO, JAPAN

12th to 16th May, 1970

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A/16th September, 1970

REPORT OF THE COMMODITY CONFERENCE ON FRUITS AND  
VEGETABLES AND RAW MATERIALS FOR FEEDING STUFF,  
TOKYO, JAPAN. - 12th May to 16th May, 1970.  
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A Commodity Conference on Fruits and Vegetables and Raw Materials for Feeding Stuffs was held in Tokyo, Japan, from 12th to 16th May, 1970, under the joint sponsorship of the ICA Regional Office and Education Centre for South-East Asia and the Central Union of Agricultural Cooperatives (CUAC), Japan. The Conference was held at the Institute for the Development of Agricultural Cooperation in Asia (IDACA), Tokyo. Representatives of cooperative trading organisations from Ceylon, India, Iran, Japan, Korea and Pakistan from the Region and from USA and USSR from outside the Region attended the Conference. Observers from Malaysia, ILO, FAO, ECAFE also participated. Delegates attending the conference made opening statements outlining the present position of production and trade in raw materials for feeding stuffs as well as fruits and vegetables. Opening statements were also made by the representatives of the International organisations.

Mr H. Yanagida, Managing Director of the Central Union of Agricultural Cooperatives of Japan, who presided over the inaugural session stressed the importance of joint efforts both by the ICA and the CUAC for strengthening the marketing activity in agricultural products in the region. He was happy that there was good representation of cooperative movements in the region at the Conference and expressed the hope that the delegates would take this opportunity not only for discussing the problems concerning international cooperative trade but also would study at first hand the development of agricultural marketing activity in Japan. Mr. Yanagida also referred to the discussions at the meeting of the Agricultural Sub-Committee which was held in Seoul, Republic of Korea during the first week of May 1970 and the discussions held therein

concerning the development of marketing of agricultural products in the South-East Asian Region. Mr P.E. Weeraman, Regional Director of the International Cooperative Alliance, New Delhi, briefly reviewed the ICA activities in recent years with special reference to the work in the field of international cooperative trade and expressed the hope that the Commodity Conference will help further in bringing together the various cooperative trade organisations in the world. He added that some of the advanced cooperative movements in Europe would also be interested in developing trade relationships with cooperatives in the Region.

Mr. H. Togawa, Managing Director of the IDACA, welcomed the delegates to the Conference and stressed the importance of collaboration between the ICA RO and EC and the IDACA. He hoped that the joint activity sponsored by the two agencies would provide a good forum for deliberations on the subject of international cooperative trade in the commodities to be discussed.

Mr B. Venkatappiah, Chairman of the ICA Advisory Council for South-East Asia, while inaugurating the Conference, stressed the importance of developing close relationship between the developed and the developing movements in the Region. He stated that the ICA Advisory Council was at present seized with the problem of international cooperative trade and had discussed its various aspects at its meeting recently held in Seoul. Mr. Venkatappiah stated that there were two major aspects concerning international trade viz. the international aspect and the national aspect. While the international aspect should normally deal with the market situation, the total demand, specifications and other requisites, the national aspect should be concerned with production of the exportable commodities, to meet the quality and standard requirements of the importing countries. He added that it may be necessary for exporting organisations to rationalise their production with a view to improving these requirements. The cooperative organisations should have a deliberate export policy in order to be competitive in the international market and for this should develop an efficient infra-structure for the internal operations, viz. normal required for handling international trade. He was of the opinion

that unless the ultimate consumer is treated as the focal point in international trade the export policies would not have a chance to success.

### Section I - Raw Material for Feeding Stuffs

#### The Present Position

The delegates attending the Conference briefly reviewed the present position concerning foreign trade in raw materials for feeding stuffs (animal feed). The main fact that emerged out of the brief review was that Japan was the main importer of such raw materials in the Region and that most of the other countries were exporters of some of the commodities used as raw materials. The demand in Japan for large quantities of raw materials has been steadily growing over a period of years due to the changing food habits of the population and the consequential increase of the livestock industry. Most of the raw materials used for manufacturing animal feed is imported by Japan from several exporters spread all over the world; in addition purchases are also made from suppliers in Japan. The total imports of raw materials into Japan in 1968 were to the tune of approximately 10 million metric tons out of which 36% was imported by Zenkoren, the National Purchasing Federation of Agricultural Cooperatives of Japan. Zenkoren has at present 59 feed mills located in various parts of the country and about 40% of the total feed requirements of the farmers are met through the supplies made by agricultural cooperatives. For meeting the varied needs in respect of animal feeds, the feed mills manufacture more than 50 types of compounds for the livestock industry. With a view to facilitate the speedy handling of raw materials and the feed, Zenkoren has created port facilities, storage tanks at harbours and also storage facilities at the receiving ends in the villages. For importing item like maize, grain sorghum, Zenkoren has built seven bulk handling carriers which are at present used for importing these cereals from the USA.

#### Sources of Supply

The bulk of the total requirements of the Japanese agricultural cooperatives is met through imports from countries outside the region of S-E Asia. The main supplying centres at

present were located in the USA, South Africa, Australia and Thailand. In addition purchases were also made from Mexico and Argentina. The Thai cooperatives are exporting maize to the agricultural cooperatives in Japan under the Thai-Japan Agreement on the promotion of Inter-Cooperative Trade. Under this Agreement, assistance is being provided by Japanese agricultural cooperatives for the production and procurement of maize to facilitate timely supplies to the coops of the quantities agreed upon between the two parties. The livestock industry in the Republic of Korea is also growing from year to year and there is an increasing demand for animal feed. The present requirements were to the tune of 200,000 metric tonnes. To meet the present requirements, raw materials such as maize, soyabean, fish meal, meat and bone meals, were imported into the country. Modern facilities are being constructed to facilitate the handling of the increasing volume of feed and raw materials. At present there were 17 plants for the manufacture of feed.

Besides Thailand, other countries in the region were not at present able to export cereals as most of them did not have an exportable surplus. Even in the case of countries producing these primary products the demand in the domestic market does not allow them to undertake any exports. Some of the other commodities used raw material for animal feed, however, are in surplus in a few countries. These are groundnut meal, kardi meal, cottonseed meal, rice bran, fish meal, alfalfa, etc. Cooperatives in some countries such as India have already started exporting some of these commodities and are planning to expand gradually the volume of these exports. The representative from Pakistan informed the Conference that the trading in animal feed was a new industry and was mostly handled by private concerns. Most of the ingredients required by the industry were produced in Pakistan and possibilities are being explored to export at a future date some of the raw materials such as maize, wheat bran, molasses, fish meal, bone meal, etc.

#### Possibilities of Regional Supplies

As the major sources of supply for the raw materials imported into Japan were from outside the region, the Conference



discussed the possibility of gradually obtaining these supplies from within the region as it was felt that the importing countries would equally benefit if the commodities were secured from the regional cooperative organisations. The climatic and geographical conditions of the countries in the region were favourable to the production of most of the commodities required for the manufacture of feed.

The Conference reviewed the present position of exportable surplus in the Region and felt that the quantities were far from adequate. The situation is, however, likely to change if improved methods of production, procurement are developed and continuous supply is assured, by the developing countries. The exports of the raw materials, when feasible, could be of the primary product itself or in the processed or semi-processed form. The Conference stressed the need of the cooperative organisations in the region organising their production activities on a long-term basis with a view ultimately to create export surplus for these commodities. The products which could become potential exports from the region were maize, grain sorghum, wheat bran, rice bran, vegetable oil cakes, alfalfa, fish meal and similar other products. The possibility of using cassava as an alternative raw material was also discussed and it was felt that when other materials were not readily available it could be used for manufacturing the feed without lowering the quality of the finished product.

#### Production according to the need of the Importing Countries

The Conference devoted considerable attention to the question of organising production activities with a view to meet specific needs of the export markets. It was felt that the standards laid down by the importing countries should be kept in view in organising productivity. Quite often, considerable difficulties were experienced by some of the cooperative organisations as it was difficult for them to reach the standards so prescribed. It was also mentioned that in respect of certain commodities the standards prescribed by Japan were higher than the average international standards. While in some cases it was not possible to reach the standards so prescribed there were several

items in which the exporting cooperatives are able to meet the specifications of the importing countries including Japan. While discussing the production activity at the exporting end the conference stressed the need of maintaining uniformity to be reorganised not only to increase the yield but also to improve in the quality and export quantities. Often considerable difficulties are being experienced by importing cooperatives because of the variations in the quality and the desired standards of the products.

#### Facilities

The delegates discussed the lack of facilities as one of the serious handicaps in handling export trade. They stressed the need of creating owned facilities for channelling export products at various stages with a view to ensure economic operations and timely delivery. In this connection the example was given of the facilities created by the Japanese agricultural cooperatives at the receiving, processing and distributing centres. These facilities, which consist of silo and other installations at various ports, storage tanks at receiving centres including at the farms of individual members and transport equipment, have enabled Zenkoren to ensure the continuity in production and timely delivery of the feed at the door of the farmer. The difficulties faced by Zenkoren earlier in obtaining timely deliveries from abroad in respect of raw materials such as maize and grain sorghum have by and large been removed as a result of the present availability of bulk handling cargo ships at its disposal. These ships have considerably reduced the total expenses incurred on freight, and have also helped in economising the total costs. A point was made that Zenkoren was not in a position to utilize the full capacity of its cargo ships since the ships were built exclusively as grain bulk carriers and most of the ships sail from Japan to USA without any cargo on their way out except in a few cases where cargo of the goods which were exported to the USA was accepted. In this connection the importance of utilizing the spare capacity of these ships was discussed. One method of utilizing the full capacity was through the possibility of exporting Japanese products to the countries from which raw materials were imported by Zenkoren.

A suggestion was made that for handling commodities other than cereals, the possibility of constructing small ships may be explored. However, it was pointed out by a representative of Zenkoren that economically it was not a practical proposition.

The Conference discussed the situation of shipping facilities in general and the availability of shipping space for cooperative products in particular. As the exports of developing countries are increasing the governments of these countries are now seeking greater share of the total tonnage for their exports. It was likely that in the future, the cooperatives may have to pay more for their exports if they have invariably to rely on shipping facilities controlled by other agencies or governments. Although, such facilities may have to be used, the need felt of creating shipping facilities by cooperatives themselves with a view to be self-reliant and reduce the total expenses on cargo. The Conference felt that development of facilities should be the main responsibility of the exporting cooperative organisations. The importing cooperatives should also collaborate, wherever feasible, with the exporting organisations in creating facilities for speedy handling of the commodities. If cooperatives are to continue successful trading in International markets they will have to ensure timely delivery of the commodities as provided in the trade agreements.

#### Terms of Trade

The question of various terms and conditions under trade agreements was discussed with special reference to prices, delivery schedule, terms of shipment and the letters of credit. The Conference stressed the need of cooperative organisations being able to offer competitive terms and conditions in exporting their products. As the importing countries will normally prefer to buy from sources offering the lowest price, it was felt that the exporting organisations must try to maintain the price which will enable them to face such a competition. However, the delegates were aware of the fluctuation in prices, which are faced by several exporting cooperatives owing to drought, and other unavoidable conditions. A suggestion was made that this could be remedied through

creation of stabilisation funds at both the ends from which the deficiencies created by such fluctuations could be met. Funds could also be created for compensating the exporting organisation for the loss which it may incur due to fluctuations in the prices while fulfilling the contract. This could be done by balancing losses against the gains by the importing cooperatives on the basis of law of averages. A suggestion was also made that in order to enable the exporting organisations in the region to provide advances to the farmers before harvesting, the importing organisations should open letters of credit in the exporting country for providing finance for this purpose. It was generally felt that the FOB basis was the most acceptable system of shipment for both exporting and importing countries.

#### Trade on a Long-term basis

The delegates were unanimous in their opinion concerning the need for developing trade agreements on a long-term basis among cooperatives in the Region. It was felt that such agreements would not only enable the importing organisations to ensure the continuity in supplies and organise productivity on a systematic basis but also assist the exporting cooperative in organising its production. It was felt that the exporting organisations should try their utmost in fulfilling the terms and conditions of the contract although, it was conceded that owing to the vagaries of nature and such other unforeseeable circumstances, difficulties may sometimes be experienced by the exporting organisations in fulfilling the contractual obligations. However, it was generally agreed that with a long-term planning at both the ends it should be possible to avoid such situations. The need was also stressed of the exporting organisations developing a direct relationship with the producing organisations in their countries so that difficulties in the way of fulfilling a contract could be minimised.

### Joint Ventures

The question of evolving joint ventures among cooperatives of the Region was discussed with special reference to the relationship of the exporting and importing cooperatives. It was felt that if such organisations were able to evolve trade agreements on a long-term basis and develop the volume of trade on a continuing basis the possibilities of establishing joint ventures for mutual benefit could be explored. A suggestion was made that Zenkoren should consider the import of manufactured feed from the countries where joint ventures may be established in future. As there was no possibility of Japan importing such feed in the near future, this proposition was considered as a long-term possibility. In this connection the present pattern of import of animal feed by different countries was discussed and it was noted that a majority of the countries importing raw materials for feed prefer to manufacture their own feed according to local requirements and specifications. It was pointed out that owing to the nature of this commodity, the import of processed feed would also be difficult to handle from a technical point of view. However, the possibility of having such imports on a marginal basis at a future date could not be ruled out in the light of the technological progress that may be achieved in handling such products. It was stated that with the growing demand for animal protein foods in some countries like Japan, it may be difficult to develop the livestock industry on a matching basis. It may, therefore, be necessary at some stage to consider also imports of the finished products such as meat and poultry.

In discussing the possibility of joint ventures mention was made of the present agreement between Japan and Thailand under which maize is exported by the Thai cooperatives to Japan and some technical assistance and guidance is provided to Thai cooperatives by the Zenkoren in Japan. Joint ventures are also being developed under this agreement. A recent example was the establishment of a jointly owned company for the manufacture of agricultural chemicals. The Conference felt that the possibility of evolving such agreements between developed and developing countries should be explored.

## Role of Government

While discussing the assistance by the developed cooperative movements to the developing cooperatives with a view to increasing their export capabilities, the Conference also discussed the possible assistance from government or government-sponsored agencies. It was felt that cooperative organisations should not only explore possibilities of assistance on a cooperative to cooperative basis, but should also involve their respective governments in both developed and developing countries for providing assistance which is available through government agencies or through multi-lateral sources. In addition, government assistance could also be sought in stabilising prices and obtaining export subsidies.

## Section II - Fruits and Vegetables in Foreign Trade

The conference discussed for two days the present position concerning foreign trade in fruits and vegetables and explored the possibilities of further development of such trade on a cooperative to cooperative basis. While there was a great potential in developing foreign trade in respect of these commodities, there was a general feeling among the delegates that many of the countries in the Region are producing the same type of fruits and vegetables and it may be difficult to find outlets for all the exportable surpluses of the cooperatives. There was not much scope for exports to countries within the region and markets in Europe and America would have to be explored. There have been a few instances where cooperatives in the Region have succeeded in exporting certain vegetables such as onions, chillies, garlic, etc. to a few countries within the Region. The Conference felt that with proper organisation and publicity it should be possible for the cooperatives to get into international markets only if they would be in a position to produce quality goods on the basis of the specifications and requirements of the potential markets.

While reviewing the present position concerning exportable commodities in the Region, the conference noted a number of items which are potentially exportable. Mention was made of pineapples from Ceylon, substantial quantities of which are already being exported to UK and Germany. Efforts are also being made in Ceylon to export fresh vegetables by air such as cashew-nuts, passion

fruits, wood-apple etc. Cooperatives in Ceylon were now planning to establish a pineapple processing plant with the ultimate object of exporting the finished products.

The National Agricultural Cooperative Marketing Federation of India (NAFED) as well as a few state marketing cooperative federations in India are exporting bananas, onions, chillies, garlic, potatoes and a few other items to a few countries viz. Malaysia, Hong Kong, Persian Gulf countries and to the U.K. Difficulties are being experienced in exporting bananas because of the problem faced in preserving the Indian variety for a longer period. Although there was a potential market for bananas in Japan, mention was made of the severe competition from other producers and the resistance in Japan for larger banana imports by producers of apples. It was felt that with proper packaging and storage system it may be possible to increase banana exports from India. The formation of a Banana Export Corporation in India was mentioned. The potential export items from India were mango juice, fruit jellies to the USSR and several East European countries, potatoes and green chillies during winter to Korea and green chillies to Japan.

Cooperatives in Iran were not at present engaged in export on a very large scale but there were many commodities such as dry fruits and fresh grapes which could be exported to other countries. These cooperatives are at present engaged in strengthening the national marketing structure after which exportable commodities will be given special attention for developing international markets. The potential trade in the immediate future which was mentioned was the export of grapes to the USSR.

The National Marketing Federation of Agricultural Cooperative Associations in Japan (ZENHANREN) is at present intensifying its efforts to export fruits and vegetables to many countries. Through the head office in Tokyo as well as through its branch office in Hongkong, Zenhanren is developing markets in the nearby countries as exports to far away countries such as Europe and America are difficult owing to the high cost of transport. The commodities exported at present are mandarin oranges to countries in America Western Europe, USSR, North Korea and Hongkong; apples and pears to

Formosa, Hongkong, Vietnam, Singapore, Philippines, Indonesia USSR and USA; potatoes to a number of countries in the Region; onions to a number of countries in the Region as well as to the USSR and Australia. Unicoop Japan is importing fruits and vegetables from a number of sources. A number of non-liberalised and liberalised items are imported. The most important of non-liberalised items are oranges, grape-fruit, apples, fruit juices, canned pineapples and dates. The liberalised items are bananas, lemon, fresh pineapples, chestnuts, dry grapes, walnuts and jams. The vegetables are (non-liberalised) peas, beans, devil tounge chillies, processed tomatoes, etc. and the liberalised ones are fresh vegetables such as onions, green beans, canned bamboo, canned green peas and canned asparagas. Japan is a potential importer of a number of tropical and temperate fruits and Zenhanren is in a position to import some of the commodities if the products meet the requirements and specifications prescribed by the Government of Japan. A number of cooperatives in the Region especially in countries such as Malaysia, Singapore, Thailand and Indonesia, are also potential importers of processed fruits and vegetables from Japan.

The delegate from Malaysia informed the Conference that cooperatives at present were not engaged in exporting fruits and vegetables. However, pineapples and other tropical fruits from Malaysia are being exported by several agencies to a number of countries in Europe and other regions. The Cooperative Union of Malaysia is at present planning a number of projects for agricultural production and processing and it may be in a position to undertake exports at a future date.

In Pakistan the cooperatives were not at present engaged in exports of fruits and vegetables. However, there was a great potential as Pakistan was producing a number of fruits both temperate and tropical. The delegate from Pakistan made a special reference to the high costs of packaging the goods for export and the consequential rise in prices which make it difficult for the country to compete in the international market.



The observers from the USA and USSR also made brief statements on the subject. The USA was one of the largest importers of fruits and vegetables in canned form. USA is already importing canned pineapples especially from the Philippines and Formosa. The observer from USSR mentioned the variety of fruits and vegetables produced by his country and the present imports of bananas from India and raisins from Iran. Centrosoyus in the USSR has also inter-cooperative trade with Japan.

#### Problems faced by Cooperatives

Most of the cooperative intending to export fruits and vegetables did not possess the organisational set up for undertaking various marketing functions required for efficient export performance. Facilities for grading, packaging and processing were not properly organised. In the absence of a proper market information analysis, they are not able to determine the commodities required by the export markets. The managerial experience required for handling exports is also not available with most of the organisations. Consequently, the present efforts made to find markets in foreign countries are not always rewarded.

The conference discussed the ways and means to improve the export performances of cooperative organisations in the Region. In this connection mention was made of the regional study conducted by the Indian Institute of Foreign Trade which gives considerable information concerning export possibilities for the various commodities in the Region. The observer from the FAO pointed out that while attempting to develop exports in the Region consideration must be given to the exports from mainland China which are at present competing in Hongkong and a few other countries in the Region on a very large scale. The cooperatives must make use of the opportunities of developing other markets whenever such opportunities are provided and must make every effort to strengthen their organisational structure to meet the increasing competition from established export agencies. Mention was also made of the joint ventures by major international trading companies through which they have obtained a command over production in the exporting countries. The processed products of these joint ventures are invariably exported to the country providing assistance for such ventures.

### Promotion of Foreign Trade

The conference paid considerable attention to the question of effective marketing organisation and strategy with a view to increase export performance by cooperatives in the region. It was emphasised that earlier marketing methods were no longer relevant to the present competitive set up and it was necessary therefore to reformulate the marketing strategy. It must be remembered that international market at present were a buyer's market and it is no longer possible to sell what is produced at home without taking into consideration the needs and tastes of the buying countries. In other words the requirements of importing organisations must be taken into consideration while organising production and processing.

### Advertising

In export marketing advertising and labelling plays an important part as quite often in the advanced countries purchases were made not only for the sake of utility and prestige but on the basis of accepted brands. Example was given of the Sunkist products sold everywhere. Several examples were also given of the organised production in America where the producers were willing to produce any variety of fruits and vegetables accepted in international markets provided a long-term contract was made for the supply of such products. The discussion on this subject laid great emphasis on a clearcut analysis of the present market position and the capacity of the exporting organisations to deliver the goods. While defining the business strategy it was necessary not only to determine the nature and quality of products but also of the mechanism through which high returns could be obtained by the producer members. The infra-structure provided for organising export marketing must be efficient enough to plan a strategy on a three to five year basis.

### Selected Markets

The Conference emphasised the need for a selective approach in determining marketing strategy. It was felt that the cooperatives must aim at particular markets, make a very thorough investigation concerning the demands of these markets, analyse the present position of the competitors in the field, obtain very

detailed information on the specifications required in the importing country and review the ability of their own organisations to meet the situation. There was no point at aiming at the world market in general as it will be unrealistic to diversify the use of the limited capacity of the cooperative organisations in the Region.

#### Market Research & Intelligence

There was a unanimity of opinion that any export strategy must be based on effective marketing research and market intelligence. Market intelligence from several sources must be obtained on a regular basis and there should be a continuous evaluation of the performance from year to year. It was also necessary to develop marketing intelligence through a direct linkage between the cooperatives in different countries. In this connection mention was made of the various sources such as the UNCTAD/GATT International Trade Centre, and ECAFE Trade Promotion Centre and the various non-governmental agencies in the field which are potential suppliers of market information to cooperatives in the Region. A suggestion was made that the cooperatives in advanced countries should act as contact agents for the countries in our Region not only for publicising the exports but also providing contacts to locate potential importers. There was a feeling that so far the cooperative organisations in the West have not been very positive in developing direct relations with trading organisations in the Region. The ICA was asked to make every effort to seek channels for publicising regional products among western cooperative organisations. For this purpose it may be necessary to obtain display facilities for the products as well as channels through which publicity could be obtained for such products.

The Conference discussed the role of government sponsored agencies in export promotion. It was felt that the cooperatives should work in close collaboration with such institutions. Even if the actual legal contract is to be signed by such agencies, it was felt that the cooperatives should play a very important role in channelling exports through the government agencies for commodities exported by them and which are required by cooperatives in other countries.

### Role of International Agencies

The Conference stressed the need of strengthening the efforts made by international agencies in developing export potential of the cooperatives in the Region. Mention was made of the efforts made by the ECAFE International Trade Division and its Trade Promotion Centre as well as through the commodity conferences organised by the FAO. The UNCTAD/GATT International Trade Centre in Geneva is already providing trade information and documentation to intending exporters from the developing countries. The Conference felt that the cooperatives should make increasing use of the facilities provided by the UN and other specialised agencies interested in trade promotion.

While discussing the present role of the ICA RO & EC as a clearing house, the Conference stressed the need for further strengthening these clearing house functions. A number of delegates felt that the information and documentation provided by the RO was of considerable importance to trading cooperatives and the ICA should continue to provide this assistance in future. A suggestion was made that a Regional Cooperative Trading Organisation should be established to assist cooperative organisations to develop trade contacts and undertake direct trading activities on behalf of these organisations. However, it was felt that it was too premature to think of such an organisation at this stage. Several difficulties in implementing this suggestion were mentioned. However, there was a unanimous agreement on the need for an international clearing house for servicing the trading cooperatives. As the ICA was already working as a clearing house, the strengthening of this activity was the most acceptable solution at present. Mention was made of the discussions at present being held by the RO & EC with some of the leading cooperative organisations concerning the possibility of establishing a Trade Exchange in Hongkong or Singapore with a view to providing facilities for trade representatives of cooperative organisations in order to develop trade relationships with importers and exporters functioning in the two markets. The delegates suggested that on the basis of the information collected through the documentation and the discussions in the Commodity Conference, the ICA should try to further strengthen the trade promotion activity in the Region.

COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND FEEDINGSTUFFS  
IN SOUTH-EAST ASIA, TOKYO (JAPAN) : 12th May to 16th May, 1970

PROGRAMME

(Daily timings of the Conference will be from 9 a.m. to 1 p.m. with a Coffee Break for 30 minutes from 10.45 a.m. to 11.15 a.m. Afternoons will be used for bilateral trade discussions)

SECTION - I : FEEDINGSTUFF RAW MATERIALS

Tue, 12th May, 1970

- A. Inauguration of the Conference.
- B. Opening Statements by delegates.
- C. Review of present position of foreign trade in respect of raw materials for feedingstuffs in the Region.

Wed, 13th May, 1970

- A. Total needs and specifications of the feedingstuff raw material required by importing cooperatives (Discussion to be based on presentation of a paper by a delegate from Japan).
- B. What cooperatives in the Region are doing to export feedingstuff raw material (Discussion on the basis of paper prepared by exporting cooperatives).

Thu, 14th May, 1970

- A. Measures needed to eliminate obstacles in the trade concerning feedingstuff raw material.
  - (a) Through improved production methods.
  - (b) Through strengthening of the bilateral relationship by expanding the scope of mutual collaboration.
  - (c) Through provision of facilities and ancilliary services (such as credit, shipping, insurance, containers, etc.)
  - (d) Through quality control.
- B. Future prospects of trade in raw material for feedingstuffs.

SECTION - II : FOREIGN TRADE IN FRUITS AND VEGETABLES

Fri, 15th May 1970

- A. Review of present position of foreign trade in fruits and vegetables in the Region.
- B. (a) Requirements of importing countries in fruits and vegetables in the Region. (Discussion based on papers prepared by delegates).
- (b) Efforts of the cooperatives in exporting fruits and vegetables (Discussion based on papers presented by exporting cooperatives)

Sat, 16th May

- A. Measures necessary to modify production and processing to suit terms and conditions of the buyers through:
  - (a) steps to be taken to modify or rationalize production, processing and grading;
  - (b) reorganization of the marketing structure in the cooperatives;
  - (c) organizing sales promotion and market intelligence services;
  - (d) improved packaging, labelling, etc.

SECTION - III : ROLE OF THE ICA

- B. Role of the ICA Regional Office and Education Centre in further promoting import-exports of these commodities.
- C. Conclusion.

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COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND  
RAW MATERIALS FOR FEEDINGSTUFF, TOKYO, JAPAN.  
12th to 16th May, 1970

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COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND FEEDINGSTUFFS  
IN SOUTH-EAST A.S.L., TOKYO (JAPAN) : 12th MAY TO 16th MAY, 1970

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P R O G R A M M E

(Daily timings of the Conference will be from 9 a.m. to 1 p.m.  
with a Coffee Break for 30 minutes from 10:45 a.m. to 11:15 a.m.  
(Afternoons will be used for bilateral trade discussions)

SECTION - I : FEEDINGSTUFF RAW MATERIALS

Tuesday, 12th May, 1970

- A. Inauguration of the Conference.
- B. Opening Statements by delegates.
- C. Review of present position of foreign trade in respect of raw materials for feedingstuffs in the Region.

Wednesday, 13th May

- A. Total needs and specifications of the feedingstuff raw material required by importing cooperatives (Discussion to be based on presentation of a paper by a delegate from Japan).
- B. What cooperatives in the Region are doing to export feedingstuff raw material (Discussion on the basis of paper prepared by exporting cooperatives).

Thursday, 14th May

- A. Measures needed to eliminate obstacles in the trade concerning feedingstuff raw material.
  - (a) Through improved production methods.
  - (b) Through strengthening of the bilateral relationship by expanding the scope of mutual collaboration.
  - (c) Through provision of facilities and ancilliary services (such as credit, shipping, insurance, containers, etc.)
  - (d) Through quality control.

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Thursday, 14th May (Contd.)

- B. Future prospects of trade in raw material for feedingstuffs.

SECTION - II : FOREIGN TRADE IN FRUITS AND VEGETABLES

Friday, 15th May

- A. Review of present position of foreign trade in fruits and vegetables in the Region.
- B. (a) Requirements of importing countries in fruits and vegetables in the Region. (Discussion based on papers prepared by delegates).
- (b) Efforts of the cooperatives in exporting fruits and vegetables (Discussion based on papers presented by exporting cooperatives)

Saturday, 16th May

- A. Measures necessary to modify production and processing to suit terms and conditions of the buyers through:
- (a) steps to be taken to modify or rationalize production, processing and grading;
- (b) reorganization of the marketing structure in the cooperatives;
- (c) organizing sales promotion and market intelligence services;
- (d) improved packaging, labelling, etc.

SECTION - III : ROLE OF THE ICA

- B. Role of the ICA Regional Office & Education Centre in further promoting import-exports of these commodities.
- C. Conclusions.
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COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND RAW MATERIALS  
FOR FEEDING STUFF, TOKYO, JAPAN, 12th to 16th MAY 1970

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COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND FEEDINGSTUFFS

- I. Demand and Supply Situation of Feedingstuffs in Japan and Import of Materials thereof
- II. Present Situation of Feedingstuffs Business or Agricultural Cooperatives
- III. Present Position of Inter-Cooperative Trade

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Organized jointly by

International Cooperative Alliance  
Regional Office & Education Centre  
for South-East Asia

Central Union of  
Agricultural Cooperatives  
Japan

Held at

The Institute for the Development of  
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I. Demand and Supply Situation of Feedstuffs in Japan and Import of Materials Thereof

1. Demand and Supply Situation of Feedstuffs

(1) As the high rate growth of Japan's economy since 1960 and the increase of the national income have brought about improvement to the people's diet, the demand for livestock products has expanded year after year. (Compared with the 1960 figures the demand in 1970 is estimated to be as much as 2.5 times for milk and edaniku (unprocessed meat); 5.5 times for broilers; and 3 times for chicken).

(2) This increased demand for livestock products has been accompanied by a rapid growth of livestock industry. Especially remarkable was the multiplication of small and medium sized livestock such as pigs and chickens which are raised on concentrated feed. (Compared with the 1960 figures there are in 1970, 3 times as many chickens and pigs; 2.5 times as many dairy cattle; and 80 percent as many beef cattle.)

(3) Now looking at the demand and supply situation of feedstuffs to size up the progress made in this area of the industry, it is learned that the overall consumption of feedstuffs in 1970 comes to 20,580,000 tons on the TDN basis. And this means that annual consumption of feedstuffs has been doubled over the past decade. As a result of a sharp increase in number of chickens and pigs, the proportion of concentrated feed to the total demand of feedstuffs

grew from 54 percent of 1960 to 65 percent of 1970.

As to the supply situation of concentrated feed there has been a distinctive upward trend in the volume of imported feed, while the turnover of domestic products has been in stagnant tendency. The proportion of imported feed to the total supply was 34 percent in 1960, and it is expected to become about 70 percent in 1970. (Wheat bran and soybean meal gained from the processing of imported materials in Japan are categorized as domestic products. (See Table 1.)

(4) Table 2 shows the volume of supply of concentrated feed with a reference to types of supply. In 1970 the proportion of commercial feed accounts for 92 percent of the total supply of concentrated feed. A sharp decrease in the volume of self-supplied feed is attributable to the low productivity of the feed crops, the shortage of farm-hands and the trends of the government's agricultural policies.

From a comparison between the columns of compound mixed feed and non-compound feed in Table 2, it is known that the proportion of the former is in the steady increase. It is expected to reach 80 percent in 1970 exceeding 14 million tons in quantity.

From what is seen above we may conclude that the expansion of use of concentrated feed, especially that of commercial feed has been made possible through the increased supply of compound mixed feed.

(5) The output of compound mixed feed in 1970 is almost five

times as large as that of 1960. The factors contributed to this growth may be: a) the improved raising the technic particularly for rearing small and medium sized livestock; b) the shortage of farm hands; c) the relaxation of government restrictions against the import of feedstuffs.

Of all the kinds of compound mixed feed, poultry feed is ranked top in the order of output, sharing as much as 62 percent of the total production. Production of pig feed has also marked a noticeable growth recently. (See Table 3.) These trends reflect the fact that the more the numbers of pigs grow, the more the inclination to depend on compound mixed feed is intensified. Recently both poultry and pig breeding industries are being rapidly deversified into groups of various sized enterprizers, and it seemed that the proportion of large scale farms is in the increase. Thus bringing up the ratio of compound mixed feed as well.

(6) The enlarged production of compound mixed feed naturally requires for so much more raw materials for it. In 1968 the most needed raw materials were corn, 37.6 percent; and grain sorghum, 20 percent. Soybean meal and wheat bran are among the less required items.

The point out a few characteristic features in the trends since 1960:

- a) Larger consumption of corn, grain sorghum and other grain feed; less use of wheat bran, rice bran and vegetable oil meal.
- b) Increased use of soybean meal and decreased use of fish

scrap and fish meal

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- c) An exceptional expansion of the ratio of grain sorghum to the total use of feed grain.

## 2. Status of the Import of Raw Materials

The tremendous growth, as mentioned above, of compound mixed feed is accompanied and supported by the growth of the import of raw materials. Almost all the demand for materials such as corn, grain sorghum, wheat, alfalfa meal pellets, skimmed milk powder, and molasses are met by means of import. Even, some of the domestic products such as wheat bran and soybean meal are being made depending 100 percent on imported raw materials. Including these "indirect imports" about 85 percent of the raw materials used to produce compound mixed feed is brought from abroad. Table 5 shows trends of import of each kind of raw material (the figures are taken from the actual import custom statistics). Note an upward trend in the volumes of overall annual import. It reached as high as 9,648,000 tons in 1968 more than quadrupling the amount for 1960.

When compared item-wise, corn ranks top with the sum of 4,128,000 tons; followed by grain sorghum with 2,277,000 tons - the same order as in the case of proportions of the raw materials used to produce compound mixed feed. The combined sum of these two items takes 66 percent of the total volume of import. Looking at the 1968 volumes of import in reference to the countries of origin, the U.S. comes atop the rest with the sum of 4,546,000 tons (53 percent); then comes,

South Africa with 1,221,000 tons (14 percent); then, Australia - 864,000 tons (10 percent); and then, Thailand - 681,000 tons (8 percent).

As to the import of corn and grain sorghum, the two largest items, it is again the U. S. A. taking the first place with a share of 65 percent.

## II. Present Situation of Feedstuffs Supply Business of Agricultural Cooperatives

### 1. General Situation

(1) Feed handling business by the agricultural cooperatives has remarkably grown in recent years. Table 7 shows the turnovers of feedstuffs in each level of the cooperatives. As the supply volume of feedstuffs increases every year, the importance of the feedstuffs business in the whole business activities of the cooperatives has also enhanced. And more and more farmers have come to utilize their cooperatives. In 1968 the "utilization percentages" were 83 percent in the case of the unit cooperatives, and it was 88 percent in the case of the prefectural level federations. The overall coop utilization average by farm households is growing every year. It reached 50 percent in 1968. Further improvement of this border is considered fundamental to strengthen the tie between the farmers and the cooperatives.

Table 8 indicates the turnovers of compound mixed feed by the

cooperatives of each level.

The pattern of utilization percentages in each level is similar with that observed in the table showing the overall turnovers of feedstuffs (Table 7). In the case of ZENKOREN utilization for purchases of compound mixed feed in prefectural level, the percentage is very near 100 percent. This is because the prefectural federations are holding shares and the management of all the coop owned compound feed manufacturing factories, and because the entire supply of raw materials is provided by ZENKOREN through its central procurement system which is playing crucial roles in securing stabilized supply of raw materials.

(2) ZENKOREN's part in the Japanese feedstuffs industry has become more and more important. In 1968 Zenkoren turned out 4,250,000 tons of compound mixed feed, as compared with total national production of 11,367,000 tons for the same year. Its market share then was 37.4 percent, and this was more than five times as much the output by NIHONHAIGO, the largest maker out side the cooperative system. From a subdivision of the ZENKOREN's gross market share by the kinds of animals it is learned that while the pig feed and the cattle feed are enjoying rather high percentages, the chicken feed stays below average. This stagnation on the part of the chicken feed is because a majority of the large scale poultry farmers are staying outside the cooperative system for reasons particular to this industry.

## 2. Measures to promote the Feedstuffs Business

The remarkable progress in the feedstuffs business of the agri-



cultural cooperative system during these past years has been made possible by the establishment and through the effective application of the following measures:

(1) Improvement of the production system of compound mixed feed

Plans have been carried out to improve the production system in response to the ever increasing demand for compound mixed feed. Measures have also been taken for the betterment of the distribution system to ensure effective supply of high quality, Kumial (cooperatives) brand product. As of the end of March, 1970, as many as 60 factories have come to cooperate in this program. And through repeated examinations, improvement has been resulted on the production system of solid type feed (pellet feed), and progress is being made toward the completion of centralized production system integrated with facilities for premixing feed additive.

(2) Improvement of the Raw Materials Purchase System and Rationalization of Products Transport System

a) To secure a long lasting and stabilized supply of raw materials from abroad, the purchase system has been changed; avoiding agency of trading firms, and starting purchasing on the FOB basis through direct negotiations with the growers concerned.

b) Rationalization measures as to ways of transporting raw materials from abroad have been carried out by means of employing seven grain carriers to serve the purpose of stabilizing shipping freight; and also by means of establishing improved port facilities such as silos.

## (3) Technical guidance in an enlarged scale

ZENKOREN has amplified the function of the livestock and feed department of its Agricultural Technology Center in order to provide a good supply of highly qualified technologists in its personnel. It has at the same time promoted a plan to staff each livestock cooperative with a specialist; and to staff each prefectural level federation with technologists - at least one specialist per one specialized field of livestock.

## (4) Medium-range Plans for promotion of Feedstuffs Business

Following "The Five-Year Plan for the Development of the Feedstuffs Business of the Agricultural Cooperatives" which was put into effect in 1963, ZENKOREN set out another 3 year range movement. The aim of this 3 year plan movement centers around development of feedstuffs business.

## a) Exclusive Use Registration System for Farm Household

To strengthen the tie between the livestock farmers and their agricultural cooperatives, a registration system has been adopted in which the member farmers submit their annual plan for purchasing compound mixed feed from the cooperatives. This system is expected to form a solid base for livestock and feedstuffs business of the cooperatives.

## b) Group Sanitation Measures

For prevention of the spread of animal epidemics, movement has been launched calling for an establishment

of an organization in each level of the cooperatives system, which assumes the responsibility of carrying out group sanitation programs in cooperation with public authorities concerned. In this connection, ZENKOREN is providing aid by training personnel to help them get themselves legally qualified for the job which involves handling some medical instrument and medicines. It also offers financial help sharing part of costs of necessary equipment.

c) Expansion of Bulk Delivery System

In order to economize the delivery costs, ZENKOREN has started a bulk delivery service by using specially designed hauling trucks. To facilitate the implementation of the new system, ZENKOREN is encouraging farmers to build a storage tank by partially sharing the costs.

d) A Special Fund for Stabilization of Compound Mixed Feed Supply

The purpose of establishing this fund is to protect the livestock farmers from the impact of fluctuation of feedstuffs prices. It works on the theory that both the member farmers and the cooperatives build up supplementary reserves by depositing money during normal time, and in case of a rise in the price the reserve money will be utilized to make up the extra costs. At present as many as 70 percent of all the cooperative members are participating in this program although entry is limited to those members who are registered as "exclusive users of the cooperatives."

### III Present Situation of International Cooperative Trade

Japan is entirely dependent to the foreign market for the supply of major raw material items needed for its feedstuffs production. Our greatest concern in this direction, therefore, is how to secure stabilized supply of the raw materials. Zenkoren, the leader of the domestic feedstuffs industry and the largest purchaser of raw materials in the overseas market, has been making investigations in search for an ideal purchasing method which would most effectively prevent various impacts originated in the foreign countries where our purchases are being made, by the demand and supply situations of the countries; or effects of drastic changes in shipping service situations. And, now we are trying whenever possible to make dealings directly with the growers organisations concerned. Already, we have started, since several years ago, direct dealings with cooperative organisations of America, Argentina, Mexico, Thailand and others.

Brief reports on the trade with coops of each of the above countries are presented below:

1. The United States of America

- a) Direct purchase of grain sorghum are being made since April 1967, from Producer's Grain Cooperation (Abbreviated as PGC) Texas.

Annual quantities and price setting methods are provided by the Agreement. Special grain carriers are being utilized for shipping of the purchased materials.

The following shows the actual result of the trade with the coop:

<u>YEAR</u>	<u>QUANTITY</u>
1967	125,000 M/T
1968	187,500
1969	335,500
1970	262,000

b) Direct purchases of corn are being made since October, 1968 from Farmers' Export Cooperation (F.E.C.), Kansas. Trade are based both on "Annual Quantity" agreement and "Spot Contracts." The pricing method agreed on is based on separate application of "FOB Premium" and Chicago Future." Shipping is being made, by the most part, by special grain carriers. The turnovers are as follows:

<u>YEAR</u>	<u>QUANTITY</u>
1968	50,000 M/T
1969	299,000
1970	429,000

c) Direct purchases of alfalfa pellet are being made since 1966 from Pacific Alfalfa Export Cooperation (PALEX), California. Agreed amount of trade for this year is 96,000 tons. Special grain carriers are being employed in purpose of rationalization of transportation.

(2) Argentina

Direct purchases of corn and grain sorghum are being made since 1964 from the following three organizations:  
 Asociacion De Cooperativas Argentinas (ACA)  
 Federation Argentina De Cooperativas Agrarias (FACA)  
 Agriculturas Federados Argentinas (AFA)

The amount of trade for this year is decided by an agreement, but as to the price, a separate contract for each purchase is to be concluded in consideration with market situation of Argentina of the time of contract.

(3) Mexico

Direct purchases of corn and grain sorghum are being made since October, 1963 from Compania Nacional De Subsistencias Populares (CONASUPO). Amount of trade for this year is decided through an agreement. Trade for 1969 was stagnant winding up with a result of 26,260 tons for corn; 42,000 tons for grain sorghum. This is attributable to unfavorable crop situation of the year, which in turn reduced the export power of CONASUPO.

(4) Thailand

We have been making trade with Thailand since 1962. But it is only since 1965 that we have begun purchasing agricultural products mostly corn, from Bangkok Coop Farm Product Marketing Society. Export is being made by concluding contracts through "KK Cooperative Trade" based on and within the framework of Japan-Thailand Maize Agreement. The result so far is as follows:

<u>YEAR</u>	<u>QUANTITY</u>
1965	41,500 M/T
1966	50,500
1967	32,100
1968	23,300
1969	51,000

PRODUCTION AND MARKETING OF FEEDING STUFF MATERIAL IN INDIA

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COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND RAW MATERIALS FOR  
FEEDING STUFF IN SOUTH-EAST ASIA, TOKYO, JAPAN : May 12 - 16, 1970.

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE  
Regional Office & Education Centre  
for South-East Asia, PO Box 3021,  
43, Friends' Colony, New Delhi-14.  
India

CENTRAL UNION OF AGRICULTURAL COOPERA-  
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Japan.

## PRODUCTION AND MARKETING OF FEEDING STUFF MATERIAL IN INDIA

By : Mr. G.K. Sharma

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### Land and People

India is the seventh largest and the second most populous country in the world. Bounded by the Himalayas and other snowy mountains in the north, the country stretches southwards and, at the Tropic of Cancer, tapers off into the Indian Ocean between the Bay of Bengal on the east and Arabian Sea on the west. Lying entirely in the northern hemisphere, the mainland extends between latitudes 8° 4' and 37° 6' north and longitudes 68° 7' and 97° 25' east, measures about 3,219 km. from north to south and about 2,977 km. from east to west and cover an area of 32,68,090 sq. km. It has a land frontier 15,168 km. long. Its population was estimated at 511.124 millions in 1968. The density of population in 1967 was 156 per sq. km. India is a sovereign Democratic Republic with President of India as the Head of the State and Prime Minister of India as Head of the Government elected on adult franchise. Its territory consists of 18 States and 8 Union Territories administered directly by the Central Government.

2. About 70 per cent of the population is dependent on land for their living. Agriculture and allied activities account for nearly a half of the country's national income. Agriculture supplies raw materials for some of the major industries such as cotton and jute textiles and sugar and provides a large proportion of the country's exports. Out of the total area of 326.8 million hectares, 154.90 million



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hectares is cropped area as per figures available for 1965-66.

Out of the total area under cultivation 19% was irrigated in 1965-66. The two outstanding features of agricultural production in India are the wide variety of crops and the preponderance of food over non-food crops. The table below shows the area under major crops in 1950-51, 1960-61, and 1967-68:-

AREA UNDER PRINCIPAL CROPS

(in '000 hectares)

Crop	1950-51	1960-61	1967-68
Cereals:	7,82,30	9,20,18	9,88,18
Pulses	1,90,91	2,35,63	2,26,66
Total Food-grains.	9,73,21	11,55,81	12,14,84
Potatoes	2,40	3,75	5,04
Sugarcane	17,07	24,15	20,37
Black Pepper	80	1,03	1,02
Chillies	5,92	6,67	7,60
Ginger	17	19	22
Tobacco	3,57	4,01	3,98
Groundnut	44,94	64,63	75,53
Castorseed	5,55	4,66	3,90
Sesamum	22,04	21,69	26,87
Rapeseed and Mustard	20,71	28,83	32,04
Linseed	14,03	17,89	16,71
Cotton	58,82	76,10	80,47
Jute	5,71	6,29	8,85

: 3 :

(in '000 hectares) 19

Crop	1950-51	1960-61	1967-68
Mesta	N.A.	2,74	3,14
Tea	3,14	3,31	3,48
Coffee	91	1,14	N.A.
Rubber	58	1,29	N.A.
Coconut	6,22	7,17	N.A.

N.A. : Estimates not available

Live Stock & Poultry:

3. India has more than one fourth of the total livestock of the world. On the basis of provisional census of 1966 the number of livestock is estimated to be as under:

- i) Cattle : 176 millions
- ii) Buffaloes : 52.9 millions
- iii) Sheep : 42 millions
- iv) Goats : 64.5 millions
- v) Others like  
Horses, Ponies,  
Donkeys, Camels  
and Pigs. : 8.2 millions
- vi) Poultry : 115 millions

4. The Government of India have taken a number of development programmes for animal husbandry which have three-fold objectives viz., to increase the supply of protective foods, to provide draught power for farm operations and to improve the output of certain products of commercial importance, such as, wool and hides.

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5. In view of this very large number of cattle in India, the internal consumption of cattle feed material is very high. In the pre-independent era, very little attention was paid for the development of live-stock and for their proper feeding. However, since last two decades greater attention has been paid to improve the condition of live-stock and their standard of nutrition. Usually, in addition to feeding the cattle on the grazing fields and fodder various oil cakes, cotton seed, wheat bran, gram and other pulses by-products are used to be the important cattle feed. However, very little attention was paid to the balanced nutrition for cattle feed. In last few years much attention is being paid for the balanced nutrition for cattle and a number of cattle feed plants have been installed in the private sector. Very recently some of the cooperative institutions have also taken up installation of cattle feed plants. Thus the exports of feeding stuff from India depends on the available surplus after meeting the internal requirements. Due to very large demand within the country very often the prices available internally are higher than the international prices and, therefore, it is not economical to export any feeding material. Still India being an important country producing about 3 million tonnes of oil cakes every year, it can always manage to export certain quantities of various cakes.

6. Oilseeds production  
India's share in the export trade of the world is little less than 10 per cent of the total exports of oil cakes. In 1967-68 Groundnut and Cotton Seed Meal accounted for nearly

90% against total oil cakes and meals exported from India. **21**

Estimates of production of oil cakes built up primarily on the basis of production of oilseeds, giving due allowance for seeding, direct consumption and exports are as under:-

Estimated Production of Oil cakes in India

(for selected years)

('000 tonnes).

Type of oilcake	1960	1963	1966	1967
Groundnut	1358 (52.7)	1493 (51.5)	1328 (47.1)	1407 (48.1)
Rapeseed/Mustard	629 (24.4)	773 (26.6)	762 (27.0)	744 (25.5)
Sesamum	156 (6.0)	199 (6.9)	181 (6.5)	173 (5.9)
Linseed	257 (10.0)	253 (8.7)	196 (6.9)	160 (5.5)
Cottonseed	85 (3.3)	85 (2.9)	263 (9.3)	342 (11.7)
Copra	93 (3.6)	98 (3.4)	91 (3.2)	96 (3.3)
Total(excluding castor)	2578 (100)	2901 (100)	2821 (100)	2922 (100)
Castor	58	52	41	41
Grand Total	2636	2953	2862	2963

(Figures in brackets indicate percentages to total).

No recorded figures for Kardi Cake and Kardi Extraction Meal are available.

Directional Pattern in Exports:

7. The study of the directional pattern of India's export trade in oil-cakes reveals that the share of West European

countries in our export of oilcakes has declined from 84% in 1960-61 to 25% in 1967-68 and during the same period India's oil-cake exports to East European countries has increased by seven hundred per cent. Fall in exports to West Europe is attributed partly to a fall in export to U.K. But the flow of exports to these places is expected to pick up again. Two major oilcakes viz. Groundnut and Cotton seed cakes are expected to continue to figure largely on the oil cake export map of India for many years to come. Both the present and potential demand for oilcakes in U.K. West Europe and Japan is very large and growing. Increased flow of exports to East European countries is due to higher prices owing to low shipping cost.

Qualitative demand:

8. 50% of oil cake of groundnut expeller are used by extraction mills and 30% of cottonseed is used for crushing. Foreign demand is only for the decorticated cotton cake, while groundnut cake with lowest fibres percentage are preferred. A problem which worries India is the quality of Indian oilcake vis-a-vis the quality required by the buyers. The quality, apart from the technical characteristics of Indian oilcakes, often vary for different lots obtained from different producing areas. In the West European markets as well as in Japan demand for high quality oilcake and meal is very much in evidence. In some countries, Government regulations on quality are very rigid. For example, the Belgian laws define detailed quality specifications for imported oilcakes. Japan, like the U.K. and

other important buyers, has always been insisting on the international specifications for these items which India finds difficult to fulfil. The reasons are not always due to the system of processing or handling, but more so due to the nature of the crop itself.

9. The following gives a comparative study of the international specifications for the above items and the Indian specifications for the above items and the Indian specification as specified by the Indian Standards Institutions:

#### I. KARDI EXTRACTION MEAL

<u>Factors</u>	<u>International Specification</u>	<u>Indian Specification.</u>
1. O & A	20% minimum	20% minimum
2. Mesh content	100% through 44 mesh guaranteed.	90 to 95% Mesh.

#### II. GROUNDNUT EXTRACTION MEAL

1. O & A	45% minimum	42-45% minimum.
2. Moisture	13% maximum	10% maximum.
3. Crude fat	0.9% minimum	1-1.5% minimum
4. Fibre content	7.0% maximum	10-12% maximum.
5. Ash content	8% maximum	2.5% maximum
6. Sandsilica	2.5% minimum	(Acid Insoluble Ash).

Note: The requirements for items excepting Moisture content are on Moisture free basis.

#### III. COTTON SEED EXTRACTION MEAL

1. Moisture	13% maximum	10% maximum
2. O. & A	34% minimum	40-42% minimum
3. Crude fat	0.9% minimum	1.5-2.0% minimum
4. Fibre content	15% maximum	16-18% maximum
5. Ash content	7.0% maximum	2-2.5% maximum (Acid insoluble ash)

—The extraction meal should be from

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IV. RICE BRAN EXTRACTION MEAL

1. O & A	16% minimum	14-15% minimum
2. Crude fat	2% minimum	1-1.5% minimum
3. Fibre content	10% maximum	8-12% maximum
4. Ash content	14% maximum	8-12% maximum

Note: 1. No admixture should be there.

2. The requirements are on Moisture free basis.

10. As stated earlier, these differences in Indian specifications and the international specifications are mainly due to the natural content of the Kardi, Groundnut and Cotton seeds themselves. The quality of the crop, depends on the quality of the soil, climatic condition, agricultural operations, period of production etc. It is, therefore, found difficult to bring the specification standard to the international level in a general way, without extra care which again will be reflected on the ultimate price. Besides, process like hand picking and shelling will slow down the production rate.

11. According to the present practice, Japan, U.K. and other countries have been accepting these extraction meals from India according to the Indian standard but have been claiming a rebate on each unit difference in the specification as compared with the international specification. This sometimes leads to avoidable complications and misunderstandings. It will, therefore, be worthwhile to consider whether the esteemed foreign buyers would accept the Indian goods according to the Indian standard fixed by the Indian Standard

Institution sponsored by the Government of India at prices to be mutually agreed, rather than insisting on the international standard and afterwards claiming rebates for the difference in specifications. It would not be out of place to mention in this context that agricultural commodities vary in quality and contents from place to place within the same country depending upon the geographical and climatic situation. It is, therefore, quite likely that there may be slight difference in the quality of the goods supplied at different times. It will be very much helpful if these aspects are not lost sight of. As mentioned earlier Groundnut and Cotton Seed are the two main extraction meals exported from India. The position regarding production of rural processing as well as rural cooperatives is given below:

Groundnut:

12. India is the largest groundnut growing country in the world. It accounts for 36 per cent of the world's groundnut acreage and 34% of production. Among the oilseeds produced in India, more than 75 per cent consist of groundnut, covering 50 per cent. of their acreage. Gujarat, Andhra Pradesh, Tamil Nadu, Mysore and Maharashtra are the major groundnut growing states accounting for about 85 per cent of the country's total groundnut production. In 1966-67, India produced 4.411 million tonnes of groundnut from 7.299 million hectares.

13. Groundnut is a cash crop mainly of small farmers. It is a rain-fed crop and, therefore, its acreage and production varies from year to year. Variation in its production causes price fluctuations. These fluctuations have been violent for the last



26 few years on account of the gap between the demand for oil seeds and the level of their production. The production and acreage of oil seeds have been more or less stationary for the last few years. As a result the gap between their demand and supply is widening. In absence of any price regulation, there is speculation in the groundnut market which has jeopardised the interests of the growers and of the consumers. This is one of the reasons why the growth of marketing and processing of groundnut and also of other oil seeds is slow in the cooperative sector.

14. The cooperatives have made a beginning in the marketing and processing of groundnut about a decade back under adverse conditions. During the Second Plan period 50 decorticators and 64 oil mills were organised in the cooperative sector. To this, 3 decorticators and 112 oil mills were added in the Third Plan period. By the end of December, 1969, the total number of decorticators and oil mills went upto 54 and 188, of which 47 and 133 units were installed respectively. The present milling capacity of the cooperative sector is of the order of 3 lakh tonnes of groundnut in shell which accounts for approximately 6 per cent of the country's existing level of groundnut production. It is expected that during the Fourth Plan, another 100 to 110 oil milling units may be added, raising the milling capacity of the cooperative to over .5 million tonnes i.e. about 9 per cent of the targetted Fourth Plan groundnut production.

15. It has been experienced that creating a net work of primary processing units, namely decorticators and oil mills is not sufficient. On account of violent fluctuations in the prices of groundnut, groundnut oil, oil cake etc., many of these units have not been able to procure adequate raw material and fully

adversely the capacity of these cooperatives to offer attractive<sup>27</sup> prices to the growers from their milling operations. This has weakened the confidence of the growers in the cooperative enterprises of this nature. In a situation where the cooperatives have not been able to procure raw material from their grower members mainly on account of price fluctuations, they are forced to enter the open market. Entry into the open market by the cooperatives is against cooperative discipline and involves business risks as the prices fluctuate sharply.

16. The prices of groundnut oil and groundnut, etc. of late have showed great variation as would be seen from figures given below:

Fluctuations in Groundnut Oil Prices in  
between January-September, 1969

(Rs. per tonne)

Station	Lowest Price	Highest Price
1. Indore	3,200	5,100
2. Bombay	3,150	5,600
3. Calcutta	3,325	5,350
4. Delhi	3,250	5,550
5. Madras	3,120	5,300

As a result, the profitability in this industry is determined more in relation to the purchase of its raw material than its operational management efficiency. This situation can not be considered congenial for growth of this industry in the cooperative sector.

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17. One of the important measures that the cooperatives could adopt to overcome partially, the hazards arising from price fluctuations is to integrate primary processing, namely oil milling, with secondary and tertiary stages of processing and by-product industries, such as, solvent extraction, vanaspati, cattle/poultry feed, detergents, etc. and thereby make efforts to bring in the market the end-products, the demand and prices of which are usually more stable. While planning individual oil mills, it is, therefore, desirable to increasingly plan them as a part of an integrated groundnut processing complex. Such an arrangement alone would help to enhance the operational efficiency and economic viability of the individual oil mills and in turn create possibilities of offering better prices to the growers on their produce by the cooperatives.

18. A beginning has already been made in this direction. So far as cooperatives have set up solvent extraction plants of oilcakes at Sangli, Latur and Khanna, 2 cooperatives have set up cottonseed processing plants at Gadag, Yeotmal and Chorwad, 2 cooperatives have set up rice bran oil plants at Tiruvarur and Mandya and 2 cattle/poultry feed plants have been set up at Sangli and Mandya. 2 rice bran oil units are under installation at Vijayawada and Durg while one cattle feed plant is being set up at Jaipur. The solvent extraction plant of Latur is already having a vanaspati plant, which is being expanded. The plant of Khanna is being integrated with a vanaspati factory and cattle feed plant. At Budaun, an oilseed processing complex with oil mill, solvent extraction plant and vanaspati factory is also being set up. The solvent extraction plants at Sangli,

Latur and Khanna were in production during 1968-69. All these 3 plants improved business during that year as compared to the preceeding years and had almost overcome the teething troubles.

Cotton-seed:

19. India is one of the important cotton producing countries in the world. At present, cotton is grown over 8 million hectares of land in the country. In the year 1968-69, 5.8 million bales of cotton and about 2.2 million tonnes of cotton seed were produced. Of this, hardly .5 to .6 million tonnes of cotton seeds utilised for the purpose of extracting oil. Cotton seed contains about 18 to 20 per cent of oil. Based on the existing level of production of cotton, about 1.8 million tonnes of cotton seed could be used for production of edible oil.

20. Till recently, cotton seed crushing did not take root in India, because quality oils from groundnut, sesamum, rape seed, mustard and coconut were available in sufficient quantities in relation to their demand. The tradition in India is to use raw oils which have characteristic flavour. Cotton seed oil in raw form does not possess this flavour and its colour is also not ordinarily acceptable to the Indian consumers. As a result, cotton seed oil could not compete with other edible oils. However, since the development of oil refining and hydrogenation industry, cotton seed crushing has started picking up market.

21. Due to shortage of fats prevailing in the country, the Government of India have already taken a few steps to encourage crushing of cotton seed for producing edible oil. Compulsory

utilisation of cotton seed oil in manufacturing of vanaspati is one of such steps which has helped to develop cotton seed crushing industry. During the Second Five Year Plan, production of edible oils from cotton seed was of the order of 19,000 tonnes which in the year 1968-69 went to one hundred thousand tonnes, a major portion of which was used by the vanaspati manufacturers for production of hydrogenated oil. The plan-wise production of cotton seed oil was as given below:-

	Cottonseed (in milli- on tons)	Cotton used for crushing (1,000 tons)	Cotton seed oil (in tonnes)
I Plan	1.4	72	9,000
II Plan	1.9	136	19,000
III Plan	2.1	600	75,000
IV Plan *	3.3	1,200	1,50,000

\* Estimated figures.

22. At present, there are 24 cotton seed processing plants in the country with .421 million tonnes annually installed capacity.

Their state-wise break-up is as mentioned below:

(in thousand tonnes).

S.No. State	No. of Plants	Annual installed capacity in terms of cotton seed	Cotton Seed pro- duced in 1968-69.
1. Andhra Pradesh	2	28	50
2. Tamil Nadu	4	25	179
3. Mysore	2	49	222
4. Maharashtra	8	230	517
5. Gujarat	2	36	507
6. Madhya Pradesh	5	43	210
7. Punjab	1	10	406
8. Rajasthan	-	-	109
Total:	24	421	2200

In the cooperative sector, so far only 3 cotton seed processing units have been organised one each in Yeotmal (Maharashtra), Charwad (Gujarat) and Gadag (Mysore). The annual capacity of all these three plants put together is approximately 60,000 tonnes of cotton seed. Of these, two have gone into production and one is in the process of installation. In the IV Plan, 5 more such plants are likely to be organised in the cotton processing belts of the country which may add to the annual cotton seed processing capacity of the cooperatives by about .150 million tonnes.

23. For developing cooperative cotton seed processing, the base is already laid down by establishing cooperative cotton ginneries. At present, 226 cotton ginneries have been organised in the cooperative sector of which, 203 have been installed.

Their state-wise details are as under:-

S.No. States	No. of cotton ginneries organised.	Ginneries installed
1. Andhra Pradesh	4	1
2. Assam	1	1
3. Gujarat	94	85
4. Madhya Pradesh	10	9
5. Tamil Nadu	14	14
6. Maharashtra	82	74
7. Mysore	14	12
8. Punjab	5	5
9. Rajasthan	2	2
	<u>226</u>	<u>203</u>

These 226 cooperative ginneries have annual ginning capacity of over 1.7 million tonnes of raw cotton from which about .5 million tonnes of cotton seed would be available. In the

IV Plan, it is expected that another 150 ginneries will be organised in the cooperative sector which would raise the capacity of the cooperatives to process 2.8 million tonnes of raw cotton and thereby add to supply of cotton seed by about .9 million tonnes.

24. In the states like Gujarat over 90 per cent of cotton procured is cooperatively ginned and marketed. In North Mysore also, cooperatives have developed strong base in cotton ginning and marketing. Similarly, in Vidharbha (Maharashtra) cooperatives are doing fairly well in cotton ginning and marketing. In the context of the existing net work of cooperative ginneries in these regions, there should be no difficulty for the cooperatives to develop cotton seed processing industry in a big way.

OTHER CATTLE FEEDS:

25. Apart from oilcakes, India has a large export potential in at least two other animal feeds, viz., deoiled bran and compound feeds. The quality of rice bran which is obtained during the process of rice-polishing, depends on the degree of polishing. It is supposed to be a good cattle feed, containing albumin, vitamins and oil to the extent of 15 to 20 per cent. The deoiled rice bran is normally used as an ingredient for mixed feed for poultry and pigs in more advanced countries like U.K., Japan, and U.S.A. India's production of rice bran is estimated at 36,00,000 tonnes annually, while production of deoiled rice bran is estimated at 80,000 tonnes as in 1967. India exports on an average 55,000 tonnes

of deoiled rice bran every year valued at Rs.120 millions. The 33  
 U.K. is the largest market for Indian deoiled rice bran and represents over 90% of India's total export of deoiled rice bran. Quantum of deoiled rice bran exports is given below:-

Exports of deoiled rice bran from India

(Quantity in tons)  
 (Value in '000 rupees)

	1965-66		1967-68		1968-69	
	Qty.	Value	Qty.	Value	Qty.	Value
Japan	1544	284	102	29	220	62
Malaysia	1103	201	100	30	---	--
Germany	119	84	...	..	...	...
U.K.	58554	11275	51673	11925	54986	10616
Singapore	...	...	1010	247	3355	703
Others	...	...	585	132	11026	2646
<b>Total</b>	<b>61400</b>	<b>11844</b>	<b>53470</b>	<b>12363</b>	<b>69618</b>	<b>14032</b>

26. The comparative study of the directional movement of de-oiled rice bran during 1968-69 and 1969-70 reveals that its exports to Malaysia and Germany have diminished to negligible quantities, while to Belgium, Sweden, Poland, Bulgaria and Czechoslovakia have increased steeply owing to favourable trade. De-oiled rice bran has a potential import demand in almost all important compound feed manufacturing countries. The important factors inhibiting the growth of rice bran extraction exports in new markets are, namely, high proportion of Sand-silica-fibre in the Indian de-oiled rice bran, import levies is especially the West European countries and high incidence of freight cost.



COMPOUND FEEDS:

26. Compound or mixed feeds are complete feeds prepared by mixing a variety of such materials as oilcakes, grains, brans minerals, vitamins, anti-biotics, etc. The resultant feed provides for requisite proportion of **proteins**, fats and other nutrients necessary for rapid and efficient growth of animals. The demand for mixed feed has rapidly expanded in the world owing to increase in demand for livestock products, advance in feeding technology and improvement in livestock management and marketing practices. The United States is the leading compound feed manufacturing country in the world, followed by U.K. and Japan.

27. Compound feed industry in India is in a developing stage. The total installed capacity in private sector is estimated to be around .5 million tonnes. A commodity study report on '**Animal Feeds**' prepared by the Indian Institute of Foreign Trade revealed that India is in a position to export one hundred or two hundred thousand tonnes of compound feeds per year. The Institute feels that there is scope for exporting compound feeds from India especially in view of the fact that India is a source of so many raw materials, which other countries have to import. The East European countries have a large market potential for compound feeds for poultry, cattle and pigs as the demand for dairy and meat products in these countries is rising rapidly. A few compound cattle-feed plants are shortly coming up in the cooperative sector in India.

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PROMOTION OF FOREIGN TRADE

Wesfarmers' Export of Granny Smith Apples

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COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND RAW MATERIALS FOR  
FEEDINGSTUFFS IN SOUTH-EAST ASIA, TOKYO (JAPAN): 12-16 May, 1970.

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A/28th April. 1970

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PROMOTION OF FOREIGN TRADE

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By: I.H. Hunter  
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The Product: Characteristics, Advantages and Problems

The major apple type exported from Western Australia is the Granny Smith, a palatable green all-purpose apple ideal for both eating and cooking. The climate of Western Australia is particularly suited to the production of Granny Smiths. The quality is high relative to those apples produced of highly coloured red varieties.

The special advantages of the Granny Smith variety are:

1. They find ready acceptance in world markets, especially the U.K., the Scandinavian countries, Germany, Singapore and Malaysia. Early and mid-season shipments are sent to East Africa and the type is now finding acceptance in the Arabian Gulf countries.
2. They grow perfectly under West Australian conditions. (The climate of W.A. is not suitable for most existing highly-coloured red varieties and they are not up to the standard of other States. Work is being undertaken in improving and propagating the red varieties and they are now being sold on local markets as a preliminary to being sold on world markets.

Meanwhile, growers are being encouraged by the Company into specialised orchards, mainly Granny Smiths - producing more fruit per acre and better quality.

3. The economics of the Granny Smith are excellent. The type is more economic to produce, showing very heavy crops, especially each second year, and it commands premium prices. This is not to suggest that Western Australia has the Granny Smith market to itself. In fact, the competition is extremely fierce from other States in Australia. Strong overseas competition comes mainly from New Zealand and South Africa, who sell hard in the U.K. and on the Continent; the Argentine also sells actively in Scandinavia and in European markets.

Both South Africa and New Zealand have a trading advantage that stems from the control of Government Marketing Boards capable and willing to subsidise prices to gain entry into new markets or retain existing ones.

Argentina is the third major competitor. In recent years competition from this direction has become fiercer and, in fact, Argentina, with the advantage of better shipping programmes and trading terms, has captured the bulk of the Scandinavian markets. Although the Argentinian growers, like Australian growers, operate as a private market, certain manipulations of the currency rates of exchange are worked to their advantage at times.

Australia is at a big disadvantage, particularly with South Africa and the Argentine. Both countries are within a fortnight's sailing time of European markets; their sailing and, above all, arrival times, are unvarying. Australian fruit is afloat for six weeks from W.A. ports. Vessels 'bunch', so that several may be discharging at U.K. or German ports at the same time. Arrival times cannot be forecast with accuracy - a great disadvantage to buyers.

This long voyage and the amount of handling between grower and consumer makes the matter of product quality of vital importance.

Another major export marketing problem is the biennial cropping characteristic of apples - in normal conditions there is an unevenly

heavy crop each second year. Placing crops in glut years calls for special efforts by Wesfarmers' representatives overseas. The Company's technical officers are working with the Department of Agriculture to try and prevent such fluctuations - often up to 1,000,000 bushels from one season to the next - especially by means of artificial thinning techniques. Experiments have proved encouraging but so far results have been minimal over the industry as a whole.

a) Improving the Product Quality

Wesfarmers have always jealously guarded the image of their "Black Swan" brand, which has an excellent reputation in the world fruit trade. The fruit packed under this brand is noted for its uniform quality.

In 1957, the Company first decided to appoint a technical adviser to the industry - a step still unique in the industry. This officer, stationed at Bridgetown, acts as a spearhead for the Company's drive to step up standards within the industry. The services of Wesfarmers' technical adviser are available free to growers. To some extent they act as an extension of the services offered by the Department of Agriculture, and Wesfarmers' adviser works in close association with the Department and its officers. Advice is given on such diverse aspects as orchard location, planting, drainage, irrigation, pruning and the proper application of sprays and fertilisers. The adviser is highly qualified and has won the confidence of the growers, who have reacted favourably to his advice. Even growers who do not yet market their fruit through Wesfarmers are prone to seek his advice.

His influence extends to the Company's packing sheds. In the initial stages of the Wesfarmers' switch to carton packing, the Company's adviser played a significant part in ironing out the problems encountered in setting up the new system of handling. As part of the Company's overall policy, officers are sent interstate to check packing and handling methods elsewhere in Australia.

b) Increasing Acreages under Granny Smiths

The adviser's main area of influence has been to encourage an increase in acreage under Granny Smiths, but they are also active in

the ~~work~~<sup>39</sup> that will result, within the next decade, in an improved quality of the highly-coloured red varieties. This development will help open up markets such as West Africa and the Philippines, where the red varieties are preferred.

c) Packaging

In 1961 the entire West Australian apple crop was marketed in wooden cases. In 1966, 72.4% of the West Australian apple crop was marketed in cardboard containers. This dramatic change was to some extent a direct result of the Company's marketing leadership. For some years the United States apple growers had dispensed with the traditional method of packing apples in wooden cases, and although the distinctive West Australian redwood case was well-known and liked by overseas buyers, the case had many disadvantages. The major problem was one which has always plagued fruit industries - bruising. The intensity of competition in world markets for prime fruit had stepped up so much that the high proportion of bruised fruit landed in overseas markets by West Australian growers was having an adverse effect on sales and, more important, on buyers' attitudes to buying Australian fruit.

During personal visits to these markets, senior officers of the Company noted the sharp trend in preference for the cardboard container, and it was decided immediately that the Company could not afford to ignore the trend. Although cardboard containers did not in fact cut overheads in terms of cost per pound of fruit, they had the supreme virtue of giving their contents far better protection from bruising and enabled fruit to be presented more attractively.

In close consultation with the Company's office, it was decided that, by the 1967 season, cases would be dropped entirely except for special deliveries of small quantities to fulfil special orders, and that the necessary steps would be taken to change attitudes within the industry itself.

A series of experimental shipments were undertaken with the close co-operation and with much assistance from the Australian Paper Manufacturers.

The reaction was immediately apparent and as soon as the Company was satisfied of the effectiveness and the acceptance of West Australian apples in cartons, the policy was adopted. Two types of packs were decided upon: the 'cell' pack (in which each apple is held in a complete cell of cardboard) and the 'traypack' (in which the apples are wrapped and held in trays).

It was decided that the cover of the cardboard pack should be distinctive and clearly present the contents in an attractive manner to increase its end-use at the point of sale. The design eventually decided upon received much praise throughout the industry and is considered to be one of the best in use.

The effectiveness of Wesfarmers' campaign to switch shipment over from cases to cartons can be demonstrated by the following figures for the Company and the industry as a whole.

In 1961 - no cartons. In 1965 - Wesfarmers' shipments to all European and the U.K. markets 77.7% cartons; 11% bulk bins and 11.3% in cases. This compares with the overall market figures for Western Australia, which were 70% cartons; 4.4% bulk bins and 25.2% cases. In other words, the Company set the lead in packaging and still holds it.

The effect on sales as a result of the introduction of cardboard containers has been positive. New orders could be traced immediately to the adoption of the new cartons, especially from Germany. Selling has become easier in the U.K. Most orders now received are specifically for apples in cartons.

It is not only in the switch to cardboard packs that Wesfarmers has maintained leadership in the field of packaging. The Company has always demonstrated willingness to undertake experiments in this field. Wesfarmers was one of the first companies in Australia to ship bulk bins for apples in quantity. These bins, which hold 25 bushels of apples, were specially designed to diminish bruising. Several experimental shipments proved their effectiveness in overcoming this problem. (Freight rates have affected this method of handling of late, although some apples shipped in bulk containers still find acceptance in Scandinavia. 11% of the total W.A. crop was shipped by this method in 1966.)

d) Handling and Treatment

The Company set about the business of improving handling methods by palletisation and the installation of modern graders with improved packing facilities for the speedier handling of fruit. This had a great effect on quality standards although much remains to be done. Improved methods of handling cartons into and out of vessels at loading and discharging ports must be devised. The problem calls for a much greater degree of hard thinking and closer co-operation between shipper and shipowner than has existed in the past.

Recently the Company has installed treatment units in all its packing sheds for prevention of scalding. This system allows simultaneous packing of treated fruit for the U.K. market and untreated fruit for other markets where post-harvest treatment is not permitted.

e) Mechanical Handling

The economics of mechanical handling are such that only the biggest packaging sheds can handle enough fruit to justify the installation of advanced equipment. The Company continued its own policy of concentrating production on its three main sheds in Manjimup, Bridgetown and Donnybrook and now fruit is handled in as highly mechanised a manner as the economics of volume allows.

f) Cold Storage

Adequate cold storage facilities are vital to the apple industry because of the necessity to pre-cool fruit before shipment. One of the recommendations of the Royal Commission on the West Australian apple industry was the establishment of another cold store in Bunbury, the main port for apple exports, since it was considered that available facilities were inadequate. Wesfarmers became a shareholder in the company that was formed for the establishment of this facility and now is its major user.

g) Shipping

Lack of shipping has been a problem which has plagued the industry, particularly in the alternate years when crops are especially heavy. Shipping from Australia is done on a nation-wide basis and negotiations on shipping rates are handled by the Australian Apple & Pear Board.



Wesfarmers is an active member of the W.A. Fruit Shippers' Committee, whose main function is to ensure that sufficient freight is available to lift the West Australian crop and the allocation of freight as between shippers. The turn-around of vessels on the W.A. coast is now being actively progressed by the Committee, which is currently working towards being able to ship upwards of 3,000,000 bushels in coming years. So that the Company's interest can be protected, officers of the Company have been prominent in shipping and Wesfarmers has always made a point of being deeply involved in the affairs of the industry as a whole.

Containerisation, which started in the 1969 season, has had a dramatic effect on improvement in quality of fruit arriving in the U.K. It is anticipated that 30-40% of fruit shipped to the U.K. by the Company in the 1970 season will be in containers, and this proportion should increase in the future.

#### Sales Organisation

Our fruit export markets are defined into four separate parts:

- 1) The United Kingdom and Europe
- 2) Singapore/Malaya
- 3) East Africa and the Arabian Gulf
- 4) Hong Kong and the Philippines

Each of these is a separate market and our sales organisation has been built up to take account of the particular characteristics and conditions applying in each market.

Headquarters of the Company's selling operations in Europe is the Overseas Farmers' Co-operative Federation Limited, a London company formed and owned by primary producer organisations in Australia, South Africa, Rhodesia and New Zealand. The basis of the company's European marketing operation is the maintenance of constant day-to-day contact with European importers through this company. The Overseas Farmers' representatives regularly travel throughout Europe, cultivating present markets and examining future prospects. All sales are made against irrevocable letters of credit to importers in European countries. To this extent the company's marketing operations are simplified in that no direct contact has to be made

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with retailers and consumers. This side of the marketing programme is left to importers, each of whom knows intimately his own particular region.

This comprehensive selling organisation is backed up by periodic visits from company officers who are able to deal first-hand with problems, and are able to make accurate assessments of trends and market potential.

Parallel with the increasing affluence of South-East Asian countries and the changing attitudes of Australians generally to the possibilities and the need to do business nearer home, the Company has been particularly active in pursuing business in places other than the traditional northern hemisphere markets.

The Singapore/Malaya market is the most important market for West Australian apples other than the U.K., Scandinavia and the Continent. The Company has always enjoyed a reasonable share of it, but in recent years keen competition from the Eastern States, with cheaper red varieties, and Granny smiths from New Zealand and South Africa, has severely affected Western Australian shipments.

It was decided to appoint a representative for the entire area. Wesfarmers was the first West Australian fruit exporting company to take this step. Since the appointment of this representative, sales have risen markedly. His efforts are backed by regular visits by the Company's own officers, sent to iron out the various problems that arise.

After importers are contacted by our representative, sales are made by direct contact, mainly by cable, between importers and the Company's Fremantle office.

#### East Africa and the Arabian Gulf

These markets are of growing importance to the Company and the services of an outside trade representative are used to make contacts in these areas. He makes an annual trip for a group of Australian exporters, visiting major trade centres in Mauritius, East Africa, Aden and the Gulf.

One aspect of the way in which the Company tackles the opening up of new markets is worth mentioning. Whenever a new market develops, one of the Company's officers is made personally responsible for exports to that area. His job is to follow up in close detail all correspondence with prospects. When the market is developed and has proved sufficiently

interesting to warrant a special trip to the area, it is this officer who will eventually make face-to-face contact with buyers in the market.

This method of handling new business has several advantages: firstly, it enables the Company to make the business of selling as personal as possible; secondly, it ensures that each new market is opened up with first-rate service, and thirdly, it is an excellent way to train the Company's officers for greater responsibilities in the future.

#### Hong Kong and the Philippines

These markets are at the very small stage but are developing consistently. Sales organisation is built around visits by Company officers and follow-up of correspondence on the same lines outlined above for East Africa and the Arabian Gulf.

#### Pricing

The Australian Apple and Pear Board, in consultation with licensed exporters, sets a base price for exported Granny Smith apples at the beginning of each season, taking into account cost of production and market competition from all other types of fruit. It is then up to the individual exporters to gain the best prices offering above this minimum in all markets.

#### Competition

Although 90% of the Company's fruit exports are Granny Smith apples, it considers its marketing policy in the broader context as part of the overall fruit industry. This is most important because the price and availability of other types of fruit has a significant influence on the season's market for Granny Smiths. For example, in the United Kingdom and Europe, the earliness of the strawberry and stone fruit crop has a vital bearing on how well the tail-end of the Australian apple crop sells. A further factor influencing competition has been the advent of gas storage in the northern hemisphere, whereby fruit is now carried over into the off-season for longer periods than previously.

#### Sales Promotion

Advertising is undertaken on an industry basis by the Australian Apple & Pear Board promoting apples to consumers and retailers. The Company follows up this promotion by regular visits to importers by representatives and periodic visits by Company officers.

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The Company misses no opportunity to display fruit in the potential markets and it has been represented in Trade Ships sponsored by the Department of Trade specifically to develop markets in South-East Asia, and in exhibitions in Kuwait in 1968 and Bangkok in 1969. Brochures accompanying displays dealt with the full range of the Company's various exports and were printed in various languages.

The Company firmly believes in the policy that the best way to advertise is to insist on the highest quality of fruit for export and to investigate continually ways and means of improving product quality. We feel that this policy, added to the principle of regular personal contact, leads to a highly efficient method of sales promotion.

#### Market Intelligence

This, a most important part of the total marketing environment, is undertaken through a number of channels.

- 1) The Australian Apple & Pear Board operates an information service which issues periodic bulletins analysing the previous season's crop and reactions to it in the various export markets. During the season exporters receive information on competitor countries and assessments of quantities and qualities of fruits to be exported in the coming season.
- 2) Coupled with this, the exporters receive information from Australian Trade Commission offices on potential markets. The Company then follows up these leads by personal contact and by correspondence.
- 3) The Company regularly gathers information from its representatives as to acceptance of the product, competition, expected market growth and potential markets.
- 4) This is added to by information gained in these spheres by visits by Company officers.

All this is compiled and collated to facilitate forecasting of demand and thorough analysis of trends in the different markets. The information is then disseminated to fruit growers through the Company's adviser. From this, growers can determine their course of action needed to satisfy future demand.

The Company does not initiate surveys with, or gather information from, consumers or retailers in our export markets because we deal directly with importers. It is left to these importers to determine this information by their own resources and to use it when ordering from us. However, they are encouraged to gather this data and to supply the information to us so we have accurate assessments of the future of our markets.

#### Summary

A basic fact of marketing strategy which the Company acknowledges is the necessity to adapt a marketing system for each different market. All marketing systems evolve over a long time period and the challenge to exporting companies, especially in South-East Asian markets, is the creation of a marketing system uniquely suited to their problems and culture. To this end, the Company has made use of distributors who are intimately concerned with the day-to-day problems in their own particular area, and are therefore better equipped to solve the many problems which arise than are officers of the Company who live thousands of miles from the market.

We believe that this system, coupled with frequent visits by our representatives and by Company officers, and regular flows of information between our Head Office and various export markets, is the most satisfactory method of expanding exports. This policy, together with heavy emphasis on product quality - because product quality is the best advertisement - we have found to be the most effective way of promoting foreign trade.

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COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND FEEDINGSTUFFS

"Efforts of the Cooperatives in Exporting"  
Fruits and Vegetables

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Organized Jointly by

International Cooperative Alliance  
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Japan

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9-24-6 Funabashi Setagaya-ku, Tokyo

## Commodity Conference

## 'Export efforts on Vegetables and Fruits by Cooperative'

How Japanese cooperatives, especially Zenhanren (National Marketing Federation of Agricultural Cooperative Associations) are making efforts for the export of Vegetables and Fruits is stated below. The main export market for the Japanese Vegetables and Fruits is South East Asia. This is because Japanese products will not be accepted in the point of price in the countries far away from Japan as the cost of a refrigerating ship counts very high if they are exported by such vessel. For this reason, Zenhanren support an office in Hong Kong and are making efforts for the export to the South East Asian markets with Hong Kong in its central position. The main items presently being exported are Apples and Pears in the respect of fruits and Onions and Potatoes in the respect of Vegetables. For the export, Zenhanren gives Hong Kong office in advance the information on the domestic cultivation and production situations. This information is then advised to the business partners as the preparatory knowledge for smooth transactions. More important in the export of Vegetables and fruits is how to prevent excessive competition for the maintenance of proper export price making neither exporters nor importers suffer losses. For reference, some cases are mentioned below to explain the practice of this arrangement for export.

1. Measures on the export of Pears.  
Among many Japanese Pears, 'Nijusseiki' is a special species of Japan. This is exported to Hong Kong in a large quantity. To prevent underselling, all cooperatives at the production areas cooperate with each other, set up single selling route and sell their products to several designated exporters for the given quantity and price decided by those cooperatives. This measure has been well received both at home and overseas markets.
2. Restriction on the export of Apples.  
Concerning the export to the South East Asia, an agreement on the quantity and price is practised by Japan Export Association for Agricultural products and the exporters respectively, which makes the export carried out smoothly.
3. Restriction on the export of Mandarin Orange to Canada.  
The restriction in paragraph No.1 is practised which makes the export to Canada much smoothly.  
In brief, to make the export of Vegetables and Fruits practised smoothly, it would be important to always have the right information on overseas market situations and to practise arrangements for delivery by cooperatives when the farmers or cooperatives sell their products to exporters or to practise export restrictions by export associations for the prevention of underselling.

Table No.1 Export of Manderine Orange by Destined Country (M/T US\$1,000)

Country	1967		1968		1969	
	Quantity	Value	Quantity	Value	Quantity	Value
Canada	13,970	3,919	15,417	4,455	14,054	3,839
America	53	16	677	221	693	199
Ryukyu	5,484	1,202	7,102	1,308	7,712	1,744
U.S.S.R.	20	5	103	20	560	94
Holland	9	4			18	4
U.K.					16	4
W. Germany			14	6	38	25
N. Korea			19	5	14	4
H. Kong					10	2
Total (incl. others)	19,537	5,146	23,332	5,994	23,129	5,920
Comparison over previous year (%)	105	108	119	116	99	99

Note: By Statistics of Custom Clearance



Table No.2

Export of Apple by Destined Country

(M/T US\$1,000)

Country	1967		1968		1969	
	Quantity	Value	Quantity	Value	Quantity	Value
Ryukyu	2,875	776	3,712	908	3,862	926
Formosa	2,656	606	4,730	1,121	4,148	1,109
H. Kong	2,301	476	2,129	476	2,560	545
S. Vietnam	769	211	1,269	368	2,522	699
Singapore	425	88	170	32	137	19
Philippin	7,905	1,183	8,697	1,249	6,101	817
Indonesia			6	2	26	9
U.S.S.R.	2,080	247	2,880	369	3,098	405
Total (incl. others)	19,108	3,613	23,607	4,529	22,487	4,545
Comparison over previous year (%)	103	114	124	125	95	100

Note: By Statistics of Custom Clearance

Table No.3

## Export of Pear by Destined Country

(M/T US\$1,000)

Country	1967		1968		1969	
	Quantity	Value	Quantity	Value	Quantity	Value
Ryukyu	814	212	859	212	927	262
Formosa	368	92	252	61	105	30
H. Kong	2,474	648	1,869	438	1,342	343
S. Vietnam	271	67	707	211	181	50
Singapore	1,321	320	1,012	208	733	166
Malaysia	145	33	55	11	61	14
Philippine	243	66	436	107	262	57
U.S.S.R.			100	26		
U.S.A. (Hawaii)			4	2	94	29
Total (incl. others)	5,695	1,459	5,313	1,283	3,735	962
Comparison over previous year (%)	150	180	93	88	70	75

Note: By Statistics of Custom Clearance

Table No.4 Export of Potato by Destined Country

(M/T US\$1,000)

Country	1967		1968		1969	
	Quantity	Value	Quantity	Value	Quantity	Value
Ryukyu	7,744	493	6,294	349	5,630	744
Formosa	385	42	385	43	272	32
H. Kong	369	44	986	58	785	79
Singapore	6	1			1,610	77
U.S.S.R.	228	18				
R. Korea			50	5		
Malaysia					241	12
Total (incl. others)	8,884	619	7,719	455	8,655	961
Comparison over previous year(%)	110	84	87	74	112	211

Note: By Statistics of Custom Clearance  
Total of Seeds and Foodstuff

Table No.5

Export of Onion by Destined Country

(M/T US\$1,000)

Country	1967		1968		1969	
	Quantity	Value	Quantity	Value	Quantity	Value
Ryukyu	2,172	298	2,255	226	3,828	276
H. Kong	865	64	1,708	100	2,474	115
Thailand	313	32	416	42	320	30
Singapore	232	17	815	58	975	52
Australia			190	19		
Formosa			615	68	8	1
U.S.S.R.					60	5
Malaysia					35	5
Total (incl. others)	3,614	412	6,035	516	7,747	487
Comparison over previous year (%)	70	115	167	125	128	94

Note: By Statistics of Custom Clearance

COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND FEEDINGSTUFFS

Position of Import of Fresh Fruits and  
Vegetables in Japan

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Organized Jointly by

International Cooperative  
Alliance Regional Office &  
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Central Union of  
Agricultural Cooperatives  
Japan

Held at

The Institute for the Development of  
Agricultural Cooperation in Asia  
9-24-6 Funabashi Setagaya-ku, Tokyo

Position of Import of Fresh Fruits and  
Vegetables in Japan

In Japan, in regard to import of agricultural, forestry and marine products, two ways of system are taken; one is Import Quota System under which free trades are restricted by Government and items are non-liberalized the other is Automatic Approval System under which items are liberalized. The items including these two systems are shown in Table I.

Onions, garlicks, cabbages, chinese cabgages, tomatoes, French beans, etc. on vegetables and bananas, lemons, fresh pineapples, chestnuts, dried grapes, etc. on fruits are included in liberalized items as main items. Of these items, there is one example which draws our attention that import control between exporting country and Japan (Importing country) is practiced in good order and obtains fairly good results. In this point, we wish to explain in more details.

In Taiwan, where is leading position in exporting countries of onions to Japan, Farmers' Association decides export quantity of onions to Japan every year and enter into contract farming with farmers, while, in Japan, Import Association of Vegetables was established and the association is authorized to allot import quantity of its members in accordance with their former import results by the law of "Export and Import Regulation Act" legislated by Japanese Government.

Under this way taken, the annual import quantity and the prices sre fixed through negotiations between the above mentioned two associations and the import is conducted only at the time after completion of marketing of onions grown in Japan. Consequently, the import effects little influence on domestic growers and also member importers of the Import Association can sell onions to secure resonable commission.

Of fruits and vegetables, onions is the only item that import is practiced without disturbing domestic order under this system in Japan. Other fruits and vegetables excluding onions are imported to Japan entirely at the risk of importers and demand and supply is in a badly unstable condition.

Import quantity of main agricultural, forestry and marine products is shown in Table II, and the annual changes of import amount in Table III.

Table I.

Main Non-Liberalized or Liberalized Items  
(Agricultural, Forestry and Marine Products)

Classification	Main non-liberalized items	Main liberalized items	
Agricultural products	Live-stock and dairy products	Horse, Cattle, Swine, Beef, Pork and its processed goods, Evaporated or condensed milk, Butter, Processed cheese	Fowls, Meat of sheep or lambs, Horse meat, Poultry meat, Beef tallow, Natural cheese, Birds' eggs, Natural honey, Raw furskins
	Silk yarn	Raw silk	
	Farm products		
	(Grains)	Cereals such as Rice, wheat, Barley, Processed goods of cereals such as wheat flour, Malt	Maize (Corn), Milo or Grain sorghum (for feedstuff, Wheat bran
	(Fruits)	Oranges, Grapefruits, Apples, Fruit juices, Canned pine-apples, Dates	Bananas, Lemons, Fresh pineapples, Chestnuts, Dried grapes, Walnuts, Jams
	(Vegetables)	Peas and beans, Devil's tongue jelly, Processed goods of tomato, Mentholated products, Manioc	Fresh vegetables such as Onions, green beans, Canned bamboo sprouts, Canned green peas, Canned asparagus
	(Sugar)	Molasses, Refined sugar Grape sugar	Raw sugar
	Luxury goods)	Confectionery, Black tea Coffee (other than in retail containers)	Coffee beans, Cocoa beans, Instant coffee, Cocoa powder (not sugared), Cocoa butter
	(Other preparations)	Starch, Margarine, Shortening	Spices, Mayonnaise, Peanut Butter
	(Oils and Fats and the materials)	Rape seed, Groundnut, Oil (Soyabean and Rape seed Oils, etc) (Soyabean and rape seed cake and meal etc.)	Soyabean, Cotton seed, Copra, Safflower seed, Sesame seed, Caster seed, Cotton seed oil (for mayonnaise)

Classification	Main non-liveralized items	Main liveralized items
Agriculture Products	Fish and shellfishes (raw, salted, dried, smoked) such as Nishin (genus clupea) Tara (genus gadus), yellow tail, Mackerel, Sardine, Mackerel pike, Cuttle fish, Hard roes of Tara and Nishin, Laver, Fish flour, Tang (Tangle)	Fish and shellfishes, such as Shrimp, prawn and lobster, Spanish mackerel, A hair-tail, Sea-Bream, Canned or bottled fish and shellfishes, agar-agar
Forestry Products	Wood charcoal	Wood, Lumber, Ply wood, Rosin, Varnish

Source: International Department of Economy Bureau  
for Agriculture and Forestry



Import Quantity and Amount of Main Agricultural, Forestry and Marine Products

Item Ranking Standard Year: 1968	1964		1965		1966		1967		1968	
	Quantity 1,000 CM M/T	Amount Dollars	Quantity 1,000 CM M/T	Amount Dollars	Quantity 1,000 CM M/T	Amount Dollars	Quantity 1,000 CM M/T	Amount Dollars	Quantity 1,000 CM M/T	Amount Dollars
1. Log	14,317	394,247	15,953	453,165	20,735	618,151	26,299	837,556	31,030	1,035,860
2. Maize	3,228,987	208,673	3,433,501	231,458	3,597,727	243,284	3,960,229	270,961	5,144,500	307,656
3. Wheat	3,591,789	261,998	3,645,096	251,092	3,916,835	278,745	4,129,649	307,621	4,072,588	289,333
4. Soybean	1,607,160	184,509	1,847,469	225,756	2,168,467	271,985	2,169,802	272,016	2,420,767	274,120
5. Sugar	1,541,056	249,346	1,722,956	155,850	1,738,313	126,478	1,816,159	122,128	2,053,323	147,072
6. Grain Sorghum	953,036	56,850	1,430,582	84,066	2,247,072	132,005	2,583,645	161,282	2,313,855	136,431
7. Lumber	985	44,331	968	39,366	1,214	58,410	1,981	96,801	2,537	125,039
8. Bananas	351,847	56,169	357,613	60,640	416,246	65,119	481,072	74,959	637,793	101,060
9. Shrimp	18,167	33,292	21,047	36,007	36,174	60,109	44,466	79,733	35,211	78,111
10. Cattle and Calf hides and Skins	150,770	45,655	144,187	49,970	162,098	84,672	158,205	62,012	184,577	63,269
Sub-Total (A)	1,534,071	1,587,370	1,938,958	1,938,958	2,285,069	2,285,069	2,558,001	2,558,001	2,558,001	2,558,001
Ratio against total import		66.9%		63.3%		63.3%		66.0%		67.6%
1. Rice	415,059	58,344	967,285	144,700	811,701	131,290	509,382	82,232	270,866	50,207
2. Meat of Sheep	61,321	22,703	53,794	22,010	92,369	38,960	97,489	40,626	109,187	41,141
3. Barley	470,973	29,295	635,458	40,954	447,323	30,724	602,666	39,922	634,363	38,341
4. Beef Tallow	192,247	33,042	190,913	41,664	224,120	45,676	218,881	35,235	245,826	34,740
5. Molasses	553,477	22,990	749,328	20,192	925,201	23,116	924,300	32,991	828,922	31,929
6. Coffee beans	21,873	15,275	18,648	13,932	46,135	29,067	40,723	26,278	45,298	27,646
7. Copra	85,561	15,599	94,231	18,963	107,612	19,390	112,059	20,165	126,066	27,186
8. Rope Seeds	76,141	9,161	101,299	13,081	211,461	25,012	215,398	26,367	249,898	25,616
9. Cocoa beans	32,202	16,833	25,298	10,164	37,313	18,193	32,539	19,318	35,461	23,279
10. Cotton Seeds	205,540	15,106	217,069	17,147	265,783	23,597	216,213	19,695	245,805	21,330
Sub-Total (B)	238,348	342,807	385,025	342,807	342,829	342,829	321,415	321,415	321,415	321,415
Grand Total (A + B)	1,772,419	1,930,177	2,323,983	2,323,983	2,627,898	2,627,898	2,879,416	2,879,416	2,879,416	2,879,416
Ratio against total import		77.3%		76.9%		75.8%		75.9%		76.1%

Table III. Annual Changes of Import Amount of Agricultural, Forestry and Marine Products (Unit 1,000 dollars)

Year	Agricultural Products			Marine Products	Forestry Products	Total (A)	Total Import Amount (B)	(A) / (B)
	Live-stock products	Farm products	Sub-total					
1964						(2,351,602)		
Ratio against previous year	219,796 (114.7)	3,308 (124.1)	(1,579,231) (118.1)	89,628 (150.9)	459,639 (108.3)	2,292,263 (116.6)	7,937,543 (117.8)	28.9
1965								
Ratio against previous year	257,872 (108.2)	9,148 (276.5)	(1,692,989) (107.8)	103,950 (116.0)	519,429 (113.0)	2,509,403 (109.5)	8,169,019 (102.9)	30.7
1966								
Ratio against previous year	349,662 (147.0)	25,841 (282.5)	(1,887,224) (110.6)	167,588 (161.2)	709,370 (136.6)	3,139,685 (122.1)	9,522,702 (116.6)	32.2
1967								
Ratio against previous year	347,225 ((99.3)	37,616 (145.6)	(1,966,251) (104.5)	191,573 (114.3)	992,620 (139.9)	3,535,285 (113.0)	11,663,087 (122.5)	29.2
1968								
Ratio against previous year	355,839 (102.5)	29,101 (77.4)	(2,020,956) (103.2)	200,374 (104.6)	1,243,742 (125.3)	3,783,345 (109.2)	12,987,243 (111.4)	29.1

Remarks (1) Cotton, Rubbers, Tabaccos and Alcoholics are not included in Agricultural products.

(2) Figures in ( ) show the amount including Tabaccos and Alcoholics.

Agricultural products  
 Live-stock Products:  
 Beef, Meat of Sheep or lambs, Pork, Poultry meat, Powdered skimmed milk, Cheese, Casein, Beef tallow  
 Cattle hides and skins  
 Silk yarn:  
 Raw silk  
 Farm products:  
 Wheat, Rice, Barley, Maize (Corn), Grain sorghums (Milo) Lemons  
 Bananas, Canned pineapples, Peas and beans, Raw sugar  
 Molasses, Syrups, Coffee beans, Cocoa butter, Groundnut, Copra, Soybeans, Linseeds, Cotton seeds, Rape seeds, Jute, Wheat brain, Lucerne (alfalfa) meal and pellet  
 Marine products:  
 Bonito, Tuna, Salmon, roes, Dried laver, Fish flour, Forestry products:  
 Log, Lumber

COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND FEEDINGSTUFFS

"Outlook of Export quantity and the Problems"  
in Fruits and Vegetables Trade

Submitted by Mr. Tsutomu Ishii  
Chief, Food Export Section  
Fruits and Vegetables Department  
Zenhanren

Organized Jointly by

International Cooperative Alliance  
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Central Union of  
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Japan

Held at

The Institute for the Development of  
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9-24-6 Funabashi Setagaya-ku, Tokyo

Outlook of Export Quantity and the Problems arising  
from its Trades of Fruits and Vegetables

The domestic production output and the export quantity of apples, oranges, potatoes and onions as main items from Japan are shown in the attached Table.

In 1969, for instance, the percentage of the export quantity against the total output is apples 1.73%, oranges 1.24%, pears 0.76%, potatoes 0.17% and onions 0.65% and it is found out through these figures that the export is relatively lower.

It is, primarily, thought that export of fruits and vegetables will play a big role in, not only adjustment of domestic production and the marketing, but also maintenance of the domestic market prices. However, it does not apply to Japan from the fact that export quantity of fruits and vegetables is decreasing and the status quo is far from carrying out the above mentioned primary function.

Such being the reasons, in fact, the prices have tendency to rise due to the strong domestic demand for the fruits and vegetables in Japan. In other words, this means higher prices than the international prices along with competitive countries and makes a big cause of decrease of export of fruits and vegetables from Japan.

On the other hand, concerning oranges, etc. of which productivity, it is anticipated, will be elevated to great extent in the future, accordingly, supply will exceed domestic demand considerably and the export policy is now studying.

Output, Export Quantity and Export Ratio

	1968			1969			1970		
	Output (A)	Export (B)	Export Ratio (B/A)	Output (C)	Export (D)	Export Ratio (D/C)	Output (E)	Export (F)	Export Ratio (F/E)
Apples	1,136,000	25,415	2.24	1,084,000	18,802	1.73	1,100,000	31,450	2.86
Oranges	2,352,000	23,826	1.01	1,870,000	23,129	1.24	2,500,000	28,000	1.12
Pears	469,000	5,340	1.14	489,000	3,735	0.76	538,000	5,000	0.93
Potatoes	4,050,000	10,435	0.257	3,700,000	6,396	0.172	4,000,000	6,400	0.160
Onions	1,030,000	6,606	0.641	1,110,000	7,227	0.651	1,100,000	7,000	0.636

COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND FEEDINGSTUFFS

"The Present Situation of Japan's Trade of  
Vegetables and Fruits" (Export)

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Chief, Food Export Section  
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### The Present Situation of Japan's trade of Vegetables & Fruits (Export)

Japan's export of Agricultural products had kept the share of 10 percent in the total export until 1963. But it decreased to 5-6 percent in 1967 and further to 5 percent in 1968. This is because the total export by Japan is more expanding than that of agricultural products. Some of the agricultural products can undergo physical conditions. Some undergo fairly large price fluctuations. Consequently the export of these products inevitably increases and decrease year by year. However, when it viewed from the long-ranging standpoint, the fact that the export of agricultural products has been decreasing recently cannot but be construed as the weakening of the international competitive power of Japanese agriculture and its relevant industries.

The main market for the export of Manderine Orange is Canada. 15,417 M/T and 14,054 M/T were exported in 1968 and 1969 respectively. Efforts were also made on the export to other regions. In 1968, export to America was recovered after the interval of 28 years under a strict quarantine system. The shipments to the eastern part of USSR are increasing. In 1969, experimental exports were made to West Germany, England, Holland and Sweden. But large domestic demand makes it difficult to secure the quantity for export. The hike of materials also constitutes a factor to raise the price. To meet this tendency, carton boxes were newly used for the substitute of wooden boxes bound by ropes. Apples are mainly exported to South East Asian countries but because apples of high quality are in competition with those of America, Canada and Australia and other grades in competition with P.R. China, export is not easily attained. However, the fixation of Japanese apples in the foreign market has advanced and with the raising volition for export due to little increase in the domestic demand in the background, 23,607 M/T and 22,487 M/T were shipped in 1968 and in 1969 respectively.

When the trade of Apples is viewed by country, Philippine, for example, imports 700,000 to 800,000 boxes in a year from America, Australia and Japan. But Japanese apples, the main species of which is "Kokko", has been fixed in Philippine market as a popular species and are enjoying the largest share. The export to Hong Kong was 2,560 M/T in 1969. This was about 40 M/T increase over 1967 and 1968. To U.S.S.R., "Kokko" was exported mainly through the channel of coastal trade. The export to South Vietnam is rapidly increasing both in quantity and value. The species of high quality like "Indian Delicious" is the main. In the case of Formosa, export is done in compliance with the tenders to Taiwan Central Agency for Trust. It is in the competition with "Taiwanese Kokko" but

"Star King Delicious" is the main species from Japan. Moreover, there is a difference in quality, which, it can be said, makes Japanese products keep better position though despite the existence of a problem to keep the products in cold storage for a long time to meet the demand centered between October and the New Year's Day of the old calendar. As to the export of Pear, Japanese products increased greatly in 1967, for Chinese products reduced in the South East Asian markets. In 1968, China recovered the share in accordance with its structural adjustment at home. Consequently, the export amount of Japanese pears decreased in Hong Kong and Singapore who hold more than 50 per cent of Japanese export of this product. In 1969 1,342 M/T was shipped to Hong Kong and 733 M/T to Singapore. It was a further decrease over the previous year. Besides, the export to South Vietnam, which had been very brisk due to "Special Procurements" in the main, abruptly decreased to 181 M/T down 707 M/T in 1968. As long as the export of Japanese pears is confined to South East Asian countries, it would inevitably be in competition with Chinese product. To keep and expand the market in the future, further competitive power with quality, packing and price would be needed. Chinese product seems to be supplied with schedule in accordance with the demands of consumption areas while Japanese products are delivered in negligence of market situations and forced into the storage at the destinations. As a result, freshness and quality are destroyed ending up in the weaker intention for the businessmen in these areas to handle Japanese products.

The export of potatoes is on the downward tendency. This is due to the raise of self-support in the south East Asian countries. Besides, the pressure of Chinese products is more and more strengthening. In 1968, 7,719 M/T (seeds and foodstuff totalled) was shipped and 8,655 M/T in 1969 as a result of slight recovery. Potatoes for seeds were destined to Formosa, R. Korea, Mauritias Island and so on.

Onions, due to the very abundant crop, were exported in 1968 for the first time in many years to the South East Asian markets for the quantity of 6,035 M/T and for the amount of 516,000 dollars. In Hong Kong and Singapore, it made severe competition with Chinese products but it displayed the merit of good crop. In 1969 the export increased further to 7,747 M/T. It was due to a fairly large part of carryover involved from the previous year.



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for all



for each

**Report on**  
**Foreign trade in fruits, vegetables**  
**and raw materials for food.stuffs**  
**in India**

By

Sri P. Narasa Reddy B A,LL.B.,M.L.A.,  
President

The  
Andhra Pradesh State Co-operative  
Marketing Federation Limited,

5-2-68, Jambagh, Hyderabad.

ANDHRA PRADESH  
INDIA

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ANDHRA PRADESH

**INDIA**

INDIA is predominantly an agricultural country endowed with diverse geographical and climatic conditions. India produces a wide range of fruits and vegetables in addition to food-stuffs like rice, wheat, maize, bajra, etc. Important among the chief fruits are Oranges, Mangoes, Bananas, Grapes, Pineapples and Apples, etc. The annual production of fresh fruits in the country is estimated at 10 million tonnes. Onions, Potatoes, Tomatoes, French beans, Cabbage, Carrots, Radish, Cauliflower and other temperate and tropical vegetables are grown in India. The estimated production is of the order of 11 million tonnes.

Fresh and processed fruits and vegetables constitute a very important item in the International Trade. Average annual turnover on global scale is estimated at \$.7 billion. Fresh fruits and vegetables account for \$.5 billion and the processed foods for the rest. Important items which enter international trade include Bananas (4 million tonnes), Citrus (4.3 million tonnes), Apples (2 million tonnes), Potatoes (3.5 million tonnes), and Tomatoes (1 million tonnes).

India's exports of fresh fruits and vegetables represent a small proportion of the total production in the country. Among vegetables Onions constitute a major share, and Bananas among fruits. Industry for preservation of Fruits and Vegetables in India is fast developing, its production having increased fivefold during the last decade. There are nearly thousand units in the fruit and vegetable processing industry. Mango juice, Mango pickles and Chutneys constitute a major share in exports of processed fruits and vegetables.

As per the Survey under taken by Indian Institute of Foreign Trade, New Delhi in 22 selected countries it has been estimated that the exports of fresh and processed fruits and vegetables can be

stepped up from Rs. 67 millions in 1967-68 to Rs. 110 millions in 1970-71 and Rs. 500 millions by 1975-76.

For large scale expansion of exports an organisation to perform the following functions is quite essential.

1. Organisation of production, including determination of appropriate varieties.
2. Establishment of rapport with growers/producers for securing supplies on long term basis.
3. Provision of necessary in-puts, financial assistance and credit to the growers, Cooperatives and Producers.
4. Organisation of effective promotion and publicity campaigns.

In view of enormous export potential available in fruits and vegetables and to ensure to growers of fruits and vegetables a remunerative price for their produce, a beginning has been made in the Cooperative sector to start processing units of the growers. 36 units with capacity of 20,000 tonnes which amounts roughly  $\frac{1}{5}$  to of the total national



capacity have been started in various states as detailed below, out of which 21 units have already gone into production :

Sl. No.	Name of the State	Number of fruit and Vegetable processing units	
		Organised	Installed
1.	Assam	1	1
2.	Bihar	6	4
3.	Gujarat	1	1
4.	Kerala	4	3
5.	Maharashtra	7	5
6.	Tamilnadu	2	-
7.	Mysore	5	1
8.	Punjab	1	-
9.	Uttar Pradesh	4	2
10.	West Bengal	2	2
11.	Himachal Pradesh	1	1
12.	Manipur	1	1
13.	Delhi	1	-
TOTAL :-		36	21

In the 4th plan period it is programmed to set up 40 units more with a capacity of 35,000 tonnes. These units process Oranges, Lemons, Lychees,

Mangoes, Pineapples, Tapioca, Tomatoes, Bananas, Grapes etc.

Preservation of fruits and vegetables is another important feature as fresh fruits are liable for early spoilage. Hence a net work of Cold Storages is needed as an adjunct to fruit and vegetables marketing and processing Cooperatives. A chain of Cold storages in the Coop. sector will bring bulk of fruits and vegetables within the hold of Cooperatives without much difficulty. With this end in view, 93 Cooperatives have taken steps to set up Cold Storages with a capacity of 1.14 lakh tonnes. In this connection Andhra Pradesh State is installing three Cold Storages in Cooperative sector with a capacity of 2,000 tonnes. In the 4th plan, 45 more Cold Storages with a capacity of 50,000 tonnes are being set up in Coop. sector. India exports 2,813 tonnes of Bananas valued at Rs. 192 lakhs. Since Japan is one of the largest importers of Bananas, Japan should consider India as a suitable steady source of supply of Bananas in view of Equador's long distance and frequent occurrence of typhoons in Taiwan which are the largest suppliers of Bananas.

Indian Mangoes are renowned for their taste and flavour. Andhra Pradesh is the major producer

of Mangoes next to Uttar Pradesh in India with an area of 1.21 lakh acres and a production of 36 lakh tonnes. Now the Indian Mangoes are being exported mostly to East European countries and U.S.S.R. There are as many as thirty four varieties of Mangoes grown in India and the most popular varieties like Khadar, Rumani, Peddarasam, Mulgoa, and Neelam are grown in A. P. The exports of Mangoes are very negligible and there are only two processing units in Andhra Pradesh run by Private agencies one by Sun Sip Ltd., Hyderabad and the other by Foods & Fruits, Visakhapatnam. The Mango jelly manufactured by Food & Fruits will cost \$ 2,140 per M. tonne. In addition Mango squash and Mango slices in sirup are being manufactured. Raw Mango slices in brine are being exported which is posing a threat to the pickles and chutneys Industry in the Country. Government should restrict the export of raw mango slices. Proposals are under way to start some processing units in Coop. sector near Rajahmundry in Andhra Pradesh. A. P. S. Coop. Marketing Federation is willing to undertake supply of Mangoes and Bananas to Japan.

#### **GRAPES**

Cultivation of Grapes in Andhra Pradesh on a commercial scale is of recent origin. The area

around 30 to 40 miles of Hyderabad is the major centre for Grape cultivation. The main variety produced is Anab-e-Shahi which is of large size and useful for table purposes. A total area of 3,000 acres in the State is under Grape cultivation, producing about 24,000 tonnes of grapes. The Grapes are perishable commodity and hence the prices fall in the season. The inadequate Cold storage facilities around the area are causing great hardship for the growers. The Government are considering setting up of Cold Storages in Coop. sector for this purpose.

Grapes are available in International Markets mainly between July and October. The Grapes in Andhra Pradesh are available from February to April. Hence Grapes from Andhra Pradesh should have a good International market during the months of February to April. But Andhra Pradesh is not able to make much headway in exporting Grapes due to (1) Non-availability of Cold Storage facilities & (2) Suitable transport facilities. In this connection, it is better Andhra Pradesh copies the scheme adopted by Israel which airlifts its fruits in air-conditioned planes to East European markets. Such advance action by Government will push up the sales in foreign markets resulting in better price realisation by the grower.

**TURMERIC**

India is the largest exporter of Turmeric in the world. Exports during last three years are given below:

	<u>Quantity (in tonnes)</u>	<u>Value (in Rs. lakhs)</u>
1964—65	9,400	154.0
1965—66	10,400	138.0
1966—67	9,600	140.0

Andhra Pradesh accounts nearly for 29% of total area and 32% of total production of the crop. Nearly 43.5 thousand acres are under cultivation. Roughly 20% of turmeric produced in the state is used for internal consumption and 80% is exportable surplus i. e. 24,900 tonnes in the year 1965-66. Even though the varieties grown in the state are of superior quality, direct export from the state is negligible. One of the reasons is said to be non-availability of processing units to process the turmeric to the required tastes of foreign markets. Turmeric is used for different purposes in different countries such as for dying carpets in Iran and for tanning and dying in Belgium, for vegetable dyes and tanning in France etc. At present, pre-shipment inspection in exportation for turmeric is available only in principal ports and these facilities have

to be extended to other ports nearer to the Andhra Pradesh.

### CHILLIES

India is one of the most important Chillies-producing countries in the world. Average production is estimated to be about 4.14 lakh tonnes. Andhra Pradesh is the largest producer of chillies in the country with average production of 1.26 lakh tonnes. In Andhra Pradesh number of varieties of Chillies are grown in almost all the districts both as irrigated crop and rainfed crop. The irrigated crop has thicker pericarp, and less hot. The dry land varieties are pungent and they withstand storage better. The different types of chillies grown in Andhra Pradesh are given below:

- (i) *Gollaprolu—Orange Chilli*: Fruits long  $2\frac{1}{2}$ " to 3" apex, thick heavily seeded, Orange or yellow colour calyx persistent, very pungent, short and conical fruits or thin, long fruits with wavy margin.
- (ii) *Baruvumirapa*: Long duration variety (10 months). Irrigated. Pods medium long with glossy surface. Heavy seeded, prolific bearer, highly pungent and grows to 4 to 5 feet.

- (iii) *Lanka Warangal Kesankurru Chilli*: Large, very broad, extra long, 3" to 5" thick-skinned, deep red shining pericarp, calyx with weak attachment, low seeded, mild in pungency, highly valued for pickles, turns blackish-red on storage.
- (iv) *Chagaland Variety* Pods 3" to 4" long stout with thick pericarp, low seed content and mild pungency. Calyx saucer shaped, apex blunt.
- (v) *Guntur Chilli (G.2)*: Pods medium long and thin, heavily seeded, highly pungent, pericarp thin and light red, calyx cut shaped, apex pointed, prolific yielder.
- (vi) *Nellore Chilli*: Pods medium 2" to 3" medium thick heavily seeded, fruited-apex, very pungent, heavy yielder.
- (vii) *Sadasivapet Chilli*: Pods long, thin, slender wrinkled pericarp, dark red, low seed content, mild in pungency, similar to the varieties of Bhanisha and Dharwar.
- (viii) *Parigai Chilli*: Pods medium long and stout, pericarp thin and leathery with dark shining red colour.

- (ix) *Bapatla Green Chilli*: Pods short and stout (1-1½") broad based, low seeded, thin skinned, less pungent, average yielder, highly valued for green in summer.

Chillies from Andhra Pradesh are mainly exported to Cylone. The exporters of Andhra Pradesh have to spend more to transport to the Tuticorn port as the ports in Andhra Pradesh are not yet developed. Andhra Pradesh produces better quality chillies and hence their prices are a little higher when compared to the minimum qualities required for Agmarking. In this way traders from Andhra Pradesh are out priced in chillies trade. Among other principal importing countries, U. S. A., ranks first and chillies without stalks are preferred. The processes of stalk removal on commercial basis has not come up in Andhra Pradesh and hence it has not been able to compete in International Market. It is understood that Japan exports chillies without stalks to U. S. A. and the technique may have to be obtained from them. Even though Japan produces sufficient quantity of chillies, the imports also are on increase recently and hence India can explore the Japanese market. It is quite essential that a strong organisation like National Agricultural Coop. Marketing Federation, New



Delhi should be entrusted with the exploring of foreign markets for various agricultural commodities and our State Federation will be too willing to export these commodities to any country through the NAFED.

The trade in processed items is highly competitive and unless established importers can be persuaded to take interest in the products of new entrants like India, it will be difficult to gain successful entry into already—crowded external markets.

India is mainly a rice-growing country in which Andhra Pradesh stands foremost. It is considered to be the granary of the south. Milling industry constitutes the largest section of food industry. Rice Milling is the largest single food industry consisting of 48,000 units of different sizes. Most of the units are small units of uneconomic size and equipped with outmoded machinery resulting in heavy losses in the form of broken and powdered rice. To avoid wastage and to improve milling, 700 modern mills have been established in Coop. sector out of which 112 have been set up through A. P. S. Coop. Marketing Federation in Andhra Pradesh. All these mills are of one tonne—per-hour capacity. These mills are run by the Primary Marketing or Agricultural societies which are assis-

ted by the Marketing Federation by way of working capital and technical guidance. The milled rice is purchased by Marketing Federation and marketed in other parts of the state. The Federation is now erecting a Solvent extraction plant for extraction of edible oil from rice bran which is the most promising by—product of the rice milling industry. The bran will be obtained from the Primary societies for extraction of oil and deoiled bran will be sold. In this connection A. P. S. Coop. Marketing Federation is prepared to supply rice bran oil and deoiled bran to other countries. In India it is estimated that if available bran is procured, it will yield about 2 lakh tonnes of edible oil valued at Rs. 60 crores.

In addition to the rice bran and rice bran oil, A. P. S. Coop. Marketing Federation is prepared to trade in the following items like Chillies, Turmeric, Maize, Green gram, and Moong which are grown in abundance in Andhra Pradesh. Some samples are herewith placed for your perusal.

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**INDIA**

EXPORT POTENTIALITY OF FRUITS AND VEGETABLES (FRESH AS WELL AS PROCESSED)  
FROM INDIA

By : Mr. G.K. Sharma  
Manager (Foreign Trade)  
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COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND RAW MATERIALS FOR  
FEEDING STUFF IN SOUTH-EAST ASIA, TOKYO, JAPAN : May 12-16, 1970.

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INTERNATIONAL COOPERATIVE ALLIANCE  
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EXPORT POTENTIALITY OF FRUITS AND VEGETABLES  
(FRESH AS WELL AS PROCESSED) FROM INDIA:

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Introduction:

India produces numerous varieties of fruits and vegetables, tropical, as well as temperate. Their annual production is estimated at over 20 million tonnes. Fruits and vegetables are a valuable supplement to the food resources in India in view of a large section of its population being vegetarian in food habits as also a sector offering considerable export potential, increasing attention has been paid in the recent years to gear up the industry to achieve these dual objectives.

2. India's export of fresh fruits and vegetables was of the order of 109,932 tonnes during 1967-68, represent an insignificant fraction of the total production. Onions alone account for about 93% of the total exports. India's experience in the field of export marketing of fruits and vegetables is limited and against the vast potential available in the world market for fresh as well as processed fruits and vegetables, there is a need for evolving effective measures for strengthening the horticultural base and developing appropriate marketing machinery for building up a sizeable export trade.

Production

3. With the change in cropping pattern induced by economy of returns the cultivation of fruits and vegetables have become profitable industry in recent years. The area and production under various fruits and vegetables, especially citrus fruits has increased considerably. The following table indicates the

estimated annual production of fresh fruits and vegetables:-

Table - 1

Production of fruits & vegetables  
(fresh and processed) in India  
for 1965: (Qty. in '000 tonnes) (in million gallons)

	Fresh quantities Qty.	Processed products Qty.	Fruit Juices Qty.
<u>A - Fruits:</u>			
Citrus	1250	0.2	0.2
Banana	2700	-	-
Pineapples	76	1.5	0.2
Mangoes	7000	2.5	0.5
Grapes	130	-	-
Apples	49	Neg.	-
Peaches	7	0.1	-
Pears	32	0.1	-
Others	Neg.	0.5	0.1
<u>B - Vegetables:</u>			
Onion	1102		
Potatoes	3668		
Beans	23		
Peas	171		
Tomatoes	464		
Cauliflower	413		
Cabbage	288		

Exports:

4. According to a study made recently by the Indian Institute

of Foreign Trade, average annual trade turnover of Fruits and Vegetables is estimated at dollars 7 billions, fresh fruits and vegetables accounted for 5 billion and processed products for the rest.

5. Main fruits and vegetables entering international trade include Bananas, Citrus, apples, potatoes and tomatoes and canned fruits mainly fruit juices and tomatoes products among the processed products.

6. India exported fresh fruits and vegetables amounting to 109,932 tonnes valued at Rs.48.8 million during 1967-68 representing a small proportion of the total production of the country. Onions valued at Rs.41.8 millions of the total exports mainly directed towards South-East Asian markets followed by Banana, oranges and potatoes. Out of the total production of processed fruits and vegetables of about 47000 tonnes, India exported 6180 tonnes (Rs. 18.4 millions) in 1967-68.

7. Directional movement studies conducted by various institutions reveal that western Europe is the single largest importer of horticultural commodities amounting to dollars 3 millions per annum. Major portion of its imports are accounted for by intra-European trade, over 40% of the supplies originate from non-European sources. USA is the second largest buyer of fresh and processed fruits and vegetables followed by West Asia and South-East Asia.

8. Exports of fruits and vegetables, both fresh and processed from India are directed mainly to Bahrain islands, Kuwait, Qatar, U.K., U.S.S.R., Saudi Arabia, Ceylon, Somalia, France, Malaysia,

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Singapore and Japan. India's performance in the field of horticultural exports is insignificant. It has hardly made use of the off-season advantages it enjoys in the European markets in respect of certain fruits and vegetables and the geographical proximities to the markets in West Asia and South-East Asia.

9. Recent survey of India's export potential of fresh and processed fruits and vegetables conducted by Indian Institute of Foreign Trade in collaboration with USAID reveals that onions, bananas, mangoes, lychies, grapes, strawberries, French beans, capsiums, mango products, canned vegetables like peas, beans and mixed vegetables and pickles and chutneys have been identified as the items having maximum export potential in short term. Citrus fruits, wide fleshed onions, potatoes, canned peaches, pine-apples, apricotes and juices especially citrus concentrates and tomato products offer good prospects. Yearwise export of different fruits and vegetables (fresh and processed) is given in table 2:

Table 2

Q : Quantity in tonnes  
V : Value in '000 Rupees

Year	COMMODITIES		
	Fresh fruits	Fresh vegetables	Canned fruits & vegetables.
<u>1965-66</u>			
Qty.	10176	101727	4944
Value	5513	26877	10938
<u>1966-67</u>			
Qty.	9234	93660	4843
Value	5425	45572	15260
<u>1967-68</u>			
Qty.	4367	105565	6189
Value	4809	43941	18376
<u>1968-69</u>			
Qty.	12172	107781	6517
		50122	22201



Commodity-wise export of different fruits and vegetables both fresh and processed is given below:-

a) Bananas

Among fresh fruits, banana is the major item of exports. Though India is the third largest producer of bananas and its yields are fairly high, its exports represent an insignificant volume of total world exports. During 1968-69 India exported 10,000 tonnes of Bananas amounting to Rs.5 millions. Import of bananas into West-European countries aggregate about 2.2 million tonnes representing approximately 50% of the world's imports. Other principal exporters are Ecuador, Colombia, Honduras, Ivory coast and Somalia. It is estimated Japan can offer a good market followed by West Europe, U.S.S.R., Yugoslavia and gulf countries for Indian bananas.

Banana products particularly banana powder, chips, canned slices and banana puries form the major export items. West Germany and Japan offer large markets for developing India's export trade.

b) Citrus fruits:

Fresh citrus fruits mainly classified in three different groups i.e. (i) oranges Mandarins, Tangerines, Clementines (ii) Limes and lemons, (iii) Grape fruits. The major producer of citrus fruits are U.S.A., Brazil, Spain, Japan, Italy and India. West Germany, France, U.K., Netherland, Belgium, Sweden, Switzerland, Australia, Eastern Europe and U.S.S.R. absorb about 90% of the total fresh Citrus import. Outside Europe, major importing countries include Singapore, Malaysia and Hong Kong.

At present India's share in the world citrus exports is

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negligible. Current trend indicate that adequate potential exists for Indian fruits in European, West Asian and South-East Asian countries. India can take the potential available in neighbouring countries such as Singapore, Malaysia and Hong Kong, total import of which amount to 90,000 tonnes. During 1968-69 India exported about 700 tonnes.

Among the Citrus products juices concentrates, frozen juices, peels and pulps are the most important processed Citrus products. USA is the largest manufacturer of both fresh and frozen Citrus juices followed by Israel. U.K. and West Germany constitute the largest markets both single strength and concentrated juices followed by France, Denmark, Netherland, Swizerland and Norway.

Prospects for India exist for export of Citrus product mainly citrus juices and mandarin orange segments.

c) Mangoes:

India is by far the largest producer of mangoes accounting for 7.5 million tonnes of the estimated world output of 9.5 million tonnes. Other producing countries include Pakistan, Thailand, Philippines, South Africa, UAR and Cuba.

Bulk of India's exports are followed by U.K. and other European countries. India's exports of mangoes have been relatively insignificant mainly due to lack of adequate knowledge about usage among the European countries. During 1968-69 India exported fresh mangoes about 1200 tonnes valued at Rs. 2.5 million. Indications are that its potential is immense and it is estimated that the demand may go up as high as 50,000 tonnes in the next decade in Europe alone. India can hope to

secure a sizeable share of this potential demand given adequate support.

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10. Slices in syrup, juices, nectar, pulp, jam and pickles and chutneys form the main items of processed mango-products. India being the largest producer of mango-products accounts for 11,000 tonnes of 15,000 tonnes of the world-production. U.K. represents the largest market for India mainly of pickles, chutneys and nectars. Appreciable scope exists for augmenting the exports of canned slices to Singapore and Malaysia. Bulk of exports of mango nectar are directed to U.S.S.R., and Kuwait. Considerable scope is envisaged in South-East Asia and European markets. During 1967-68 the export of mango products was 5103 tonnes valued at Rs.13 million.

Fresh and processed vegetables:

11. Onion is the biggest item which enters the international trade. U.A.R., Netherland and Spain figure prominently in addition to India. Important importing countries are U.K., West Germany, France, Ceylon and Malaysia. During 1968-69 103,000 tonnes of onions were exported mainly to Singapore, Malaysia and Ceylon. Indian onions command a premium not only by virtue of their colour but also because of their taste, especially the pungency. There is a distinct preference for the purple onion of the Nasik variety in Malaysia, and Singapore.

Potatoes:

Japan, India, North and South Korea and Pakistan are the most important potato producing countries in the Asian continent. During 1967, potato production in India was estimated around 3.5 million tonnes.

Hong Kong, Singapore, and Malaysia in South-East Asia and Iraq and Kuwait in West Asia are major importing countries. Singapore and Malaysia can be developed as potential markets for Indian potatoes. Scope for export of processed potatoes is limited as the domestic production generally equal the demands.

Role of cooperatives:

12. With the development of horticulture, due to increase in area under various fruits and vegetable and evolution of high yielding varieties and very nature of perishability of fruits and vegetables, development of fruits preservation industry has become inevitable. The cooperatives in the production of apples and potatoes have become prominent. To bring the equilibrium in the production and distribution, development of cooperative marketing needs no emphasis.

13. Export of fruits and vegetables both fresh and processed has been taken up by cooperatives in India very recently and is insignificant. However, a beginning has been made by cooperatives of Gujarat and Maharashtra in the last few years, particularly, in exports of Bananas. A separate Federation of Fruits and Vegetable Growers has been organised in Gujarat State, which is doing some good work. The National Agricultural Cooperative Marketing Federation has also taken up export of Onions, Garlic and Potatoes in the last few years. A number of canning factories has been installed in the Cooperative Sector in the last two or three years and it is expected that in the years to come cooperatives will be able to play an increasing role. The table given below shows the exports of fruits and vegetables done by

cooperatives during the last 5 years:-

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Table 3

Export of fruits and vegetables from India  
through cooperatives:

Rs. in millions

Item	1964-65	1965-66	1966-67	1967-68	1968-69
Bananas	4.370	5.374	2.916	6.016	7.101
Oranges	-	-	.020	.023	.010
Mangoes	.013	.031	.142	.672	.831
Pine-apples	-	-	-	-	.030
Other fruits & vegetables	.015	-	.009	.002	.016
Onions	.964	.920	.882	2.095	2.471
<b>Total:</b>	<b>5.362</b>	<b>6.325</b>	<b>3.969</b>	<b>8.808</b>	<b>10.459</b>

To percolate the benefits of higher prices prevalent in foreign markets, efforts are being made by cooperatives to increase the export of fruits and vegetables from India.

EXPORTS OF FRESH FRUITS AND VEGETABLES  
A. FRESH FRUITS

Appendix I

Product Group	1965-66 (Act.)		1966-67 (Act.)		1967-68 (Prov.)	
	Qty	Value	Qty	Value	Qty.	Value
Bananas	8,391	3,768	8,062	3,721	2,813	1,928
Mangoes	636	853	810	1,126	1,072	1,818
Citrus	<u>138</u>	<u>157</u>	<u>205</u>	<u>318</u>	<u>240</u>	<u>416</u>
a) Oranges	91	90	180	275	169	298
b) Limes & Lemons	46	64	22	40	64	110
c) Grape fruits	Neg	Neg	3	3	3	3
d) Others	1	3	-	-	4	5
Lychees	-	-	-	-	-	-
Grapes	48	115	2	5	3	8
Strawberries	37	20	40	22	12	7
Melons	-	-	-	-	-	-
Sapota (Chickoo)	5	5	4	4	9	18
Pineapples	16	22	1	2	5	7
Apples	7	29	3	10	2	7
Peaches	5	7	-	-	-	-
Apricots	52	77	8	16	3	10
Pears - Quinces	8	3	-	-	Neg	Neg
Papaya	-	-	-	-	-	-
<b>4</b>	<b>10,176</b>	<b>5,513</b>	<b>9,234</b>	<b>5,425</b>	<b>4,367</b>	<b>4,809</b>

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B. FRESH VEGETABLES

<u>Product Group</u>	<u>1965-66 (Act.)</u>		<u>1966-67 (Act.)</u>		<u>1967-68 (Act.)</u>	
	<u>Qty.</u>	<u>Value</u>	<u>Qty.</u>	<u>Value</u>	<u>Qty.</u>	<u>Value</u>
Onions	93,830	25,226	91,919	44,357	103,362	41,331
Potatoes	2,173	1,065	977	588	547	465
Seed Potatoes	Neg	Neg	11	20	-	-
Cabbages	Neg	Neg	1	1	2	2
Carrots, Turnips, Raddish, Knolkhol	Neg	Neg	1	1	2	1
Cauliflowers	3	4	1	1	1	2
Other Fresh Vegetables: (Tomatoes, French beans, Aubergines, Capsicums, Okra, Tinda, Parwal, Karela, Salad type vegetables etc)	721	582	751	605	1,651	1,640
Total	101,727	26,877	93,660	45,572	105,565	43,941
Grand Total	111,904	32,390	102,894	50,997	109,932	48,750

C. EXPORTS OF PROCESSED FRUITS AND VEGETABLES

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	1965-66 (Act.)		1966-67 (Act.)		1967-68 (Act.)	
	Qty.	Value	Qty.	Value	Qty.	Value
<u>Canned Fruits</u>	<u>89</u>	<u>251</u>	<u>131</u>	<u>506</u>	<u>151</u>	<u>566</u>
Orange Segments	-	-	-	-	-	-
Pineapple Slices	-	-	-	-	-	-
Mango Slices	89	251	131	506	151	566
Peaches	-	-	-	-	-	-
Pears	-	-	-	-	-	-
Lychee Wholes	-	-	-	-	-	-
Grapes	-	-	-	-	-	-
Chickoos	-	-	-	-	-	-
Fruit Cocktails	-	-	-	-	-	-
<u>Juices/Nectars</u>	<u>1,917</u>	<u>3,412</u>	<u>2,050</u>	<u>4,878</u>	<u>3,302</u>	<u>8,765</u>
Mango	1,357	1,977	2,010	4,792	3,338	7,935
Others (Tomato, Orange Pineapples, Guava, Peach, Apricot, Papaya, Lychee, Tropical Cocktails, etc)	560	1,435	40	86	464	830
<u>Pulps and Concentrates</u>	-	-	-	-	-	-
Mango Pulps *	-	-	-	-	-	-
Citrus Concentrates	-	-	-	-	-	-
Tomato Concentrates	-	-	-	-	-	-
Other Pulps (Papaya, Melon, Guava, Apricot, etc)	-	-	-	-	-	-

\* Figures upto 1967-68 are included under Mango Juice/Nectar.



EXPORT OF FRESH FRUITS FROM INDIA  
FOR THE YEAR 1968-69

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(Qty. in M/tonnes)

	<u>Quantity</u>	<u>Value (in '000 Rs)</u>
Bananas	10235	5144
Mangoes	1204	2457
Citrus :		
(a) Oranges	112	154
(b) Grapes fruits	1	2
(c) Limes & lem-ons	599	855
(d) Others	Neg	Neg
Litchies	-	-
Grapes	2	4
Strawberries	-	-
Melons	-	-
Sapota (Chickoo)	2	4
Pine-apples	8	14
Apples	3	9
Peaches	-	-
Apricotes	4	14
Pears-Quences	2	3
Papaya	-	-
	<u>12172</u>	<u>8660</u>
<u>Fresh vegetables:</u>		
Onions	103,094	45,730
Potatoes	2,043	1,303
Cabbages	1	1
Cauliflowers	1	2
Others	1,542	1,848
	<u>107,781</u>	<u>50,437</u>

	1965-66 (Act.) Qty.	1965-66 (Act.) Value	1966-67 (Act.) Qty.	1966-67 (Act.) Value	1967-68 (Act.) Qty.	1967-68 (Act.) Value
Jams, Marmalades, etc.						
Mango Jams	203	403	71	235	91	361
Other Jams (Strawberry, Guava, Mixed, Orange, etc)	164	333	51	178	76	280
	39	70	20	57	15	81
<u>Canned Vegetables</u>	467	970	362	1,173	512	1,943
Peeled Tomatoes	-	-	-	-	-	-
Canned Mushrooms	-	-	-	-	-	-
Other Vegetables in air-tight containers	118	207	31	68	48	166
Others	349	763	331	1,105	464	1,777
<u>Dehydrated Vegetables</u>	11	28	3	19	1	8
Onions	-	-	-	-	-	-
Soup Powders	-	-	-	-	-	-
Others (Cabbage, Cauliflowers, Okra, etc.)	11	28	3	19	1	8
<u>Mango Pickles and Chutneys</u>	1,582	5,143	1,709	4,257	1,389	4,087
<u>Mango Slices in brine</u>	548	613	273	615	149	249
<u>Dried Mushrooms</u>	25	1,817	34	2,539	18	2,169
Total (including others)	4,944	10,938	4,843	15,260	6,189	18,376

EFFECTIVE MARKETING ORGANISATION AND STRATEGY  
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by

Donald M Taylor  
Director, Korea  
Wheat Associates USA

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## EFFECTIVE MARKETING ORGANISATION AND STRATEGY

by

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The one essential that must precede any marketing effort is an understanding of and a commitment to the marketing concept. What is the marketing concept, where did it come from, and how can it be applied?

Typically, the economic history of almost any nation traces a path from self-sufficiency and barter with people producing the bulk of their own needs at home and trading a portion of their production for the remaining necessities; to a rudimentary money economy where there is still a degree of production self-sufficiency but specialization has set in and more necessities must be purchased; to a high degree of specialisation and money economy, with the majority of people purchasing their needs but the demand for goods still outrunning the production of goods and the bulk of income spent on necessities. The demand pattern in this latter stage when there is still a shortage of goods sets up a trading atmosphere which is commonly referred to as a "seller's market".

The final stage of market development, which has been reached by the economically advanced countries today is characterized by productive ability that outpaces demand, at least for basic necessities such as food, shelter and clothing; the promotion of more products other than these basics to the ranks of necessities; the ability of consumers to exercise considerable personal discretion in their choice of consumption items; and fierce competition between products and product classes for consumer discretionary income.

While a seller's market may still exist to a large degree in the domestic markets of developing countries, these countries face a buyer's market for their exports. This is particularly true when marketing feedstuffs. While there is still considerable incidence of malnutrition and even actual hunger in the world today, the struggle to obtain and keep cash export markets is fiercely competitive. This is another reason why the marketing concept must underpin successful efforts to sell in the world marketplace.

Establishing the marketing concept as a guiding precept for a business organisation can be difficult, particularly in countries which are still oriented to a seller's market. Industries in these countries are

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traditionally production oriented. Firms concentrate their efforts on the products that have successfully produced in the past, or products which they feel they are particularly well suited to produce. They put these products on the market secure in the belief that a buyer will come forward to purchase their wares.

Application of the marketing concept requires a complete reversal of this historic focus on production. Attention is concentrated on the potential customer, his needs, problems and desires. A product is looked upon as a means of solving a consumer's problems or satisfying his needs and desires; needs and desires which may be realised by the consumer or which may be created through advertising and promotion.

The marketing oriented organisation realises that a product is not just the generic object. A product is a bundle of attributes, a system of values with at least a portion of values created by the attitude of the customer toward the product, or the product image.

People do not buy products. They buy the expectation of benefits. Charles Revson, the driving force behind the success of the Revlon Company, says that in his factories, they produce cosmetics - but in the stores, Revlon sells hope. It is not so much the product itself that sells, but the prospect of beauty, youth and glamour.

Perhaps glamour does not sell industrial products, but a quality image, on time delivery, training in the most effective use of the equipment, after sales service, all of these elements make up the package of attributes that persuade the customer to buy. Computer makers have learned this lesson well, offering complete packages of software, or systems for utilising the computer more effectively, as a means of boosting their market share and actually enlarging the market.

It may seem more difficult to apply the marketing concept to agricultural products, but it can be done. Even though a cooperative may not sell directly to the final consumer, it can find attributes that enhance its product image to the broker, agent or distributor. Some cooperatives, such as Sunkist in the United States do go to the consumer with advertising and promotion campaigns.

Selling fertilisers may not be a very glamorous business either. But a firm such as International Minerals and Chemicals outsells its competitors by offering more than just nitrogen, phosphate and potash. IMC also offers the dealers who buy its fertilizers a specialised business consulting service that enables the dealers to increase their own sales volume and profits and in the process, create more satisfied customers for IMC.

The business-organisation as the first step in application of the marketing concept must analyse its own capabilities. Does it have specialised knowledge in a particular field, knowledge that puts it ahead of the competition? Does it possess a low priced source of supply for a particular commodity? Does it have a technological lead in some area? Whatever advantage the firm possesses will help it determine where it should concentrate its efforts.

Next step is to determine what business the organisation is really in. Failure to correctly define the role of a business in terms of its own environment is one of the most common pitfalls and one of the surest routes to business disaster.

This definition of the business a firm is really in is not as easy as it may sound. One of the most famous examples of this is the railroads in the United States, who for many years defined their business as "running a rail-road". If rail company executives had defined their business as something like "providing inexpensive, reliable and rapid transportation from point to point for goods and people" the growth of competition from the trucking and airline industries might not have resulted in the long decline which US rail-roads have undergone.

In recent years, railroads have begun to apply the marketing concept with the resultant development of innovations such as the "Piggyback" carriers built to transport truck trailers across country on rail cars, with the trailers unloaded and hooked to highway tractors for transport to their final destination. Now, though, a Canadian railroad, the Canadian National Railways System, has taken advantage of the booming growth of ocean container shipping and is in a position to score an end run around US railroads.

The CN has instituted an integrated container service to connect sea lanes with interior cities, and has begun experimenting with development of integrated service and incentive rate reductions tied to guaranteed annual volume. Using this market oriented approach to solving customer problems by taking advantage of a new concept in transporting goods, the US subsidiary of CN is in a good position to cut sharply into the business done by US railroads, which have been largely uninterested in taking similar steps.

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Once the business organisation has determined its own capabilities and defined the role it is actually suited to play, the next step is to isolate those market segments which fit the defined capabilities and role. The firm must determine the problems, needs and desires which exist in the selected markets, whether these problems, desires and needs are realised by the potential customer or not. Then it must determine whether it can supply products or product systems that will solve the problems, satisfy the needs and desires. The ultimate focus must remain on the customer. This must guide the type and range of products, but it must also determine the organisational set up.

Organisational make up however, is only one of the problems that concern a marketing department. Problems of marketing organisations - as well as other types of organisation - fall into three general categories. We can conveniently classify these as setting objectives, selecting strategies and organising for action.

Resolution of the first two areas will help determine the solution to the third. Since the type of organisation selected will depend partially on objective and strategies, it might be helpful to discuss these two areas before actually taking up organisation of the export marketing department.

It has been truly said that "if you do not know where you are going, any path will take you there". The essential first step in the marketing effort is to set targets, or objectives. These objectives should be as concrete and specific as possible. They should wherever practicable be quantifiable. The organisation which states as its objective "making money" or as the old saying goes, "buying cheap and selling dear" does not have any objectives. Even the firm that sets its objectives something like this, "increasing sales of our product to the United States and Europe" really is not saying anything meaningful.

An example of concrete objectives for a food marketing firm might be "to gain a five percent share of the import market for our product X in country by the end of year two and to expand that to a 10 per cent share by the end of year five; to sell X number of cases (or X per cent of total production) in markets, X Y and Z; to earn an average net profit of X per cent on all products exported".

One of the benefits to be gained from setting specific targets is a base line for measurement of results. Optimum performance usually demands planning objectives and setting strategy on a long term basis, with three to five years a common planning period.

This does not mean that a plan must be rigid and unyielding. Every plan should incorporate various strategies to take into account possible eventualities. As circumstances change, the plan must be modified to meet these changes. In addition, there should be a regular review of the plan every six months or at least once a year. But the existence of a general plan specifying objectives and strategy is an absolute necessity for planned progress to occur.

Next organisational step is to select optimum strategy for achieving the objectives spelled out in the plan. Marketing strategy should reflect both the internal and external environment of the firm.

Selection of strategy must be realistic in terms of the capabilities and resources which the firm possesses or can obtain. Mounting a massive consumer advertising campaign may be patently impossible for any but the largest marketing organisation. The smaller firm may instead utilise its limited resources in an attempt to influence brokers, purchasing agents or other middlemen.

Marketing strategy must also reflect external constraints in potential markets. The food processor who wishes to export his products may face legal limitations such as specified can size, label designations, percent of sugar or other additive allowed, as well as quotas, tariffs, and other trade barriers. In addition, local customs or environmental conditions may pose constraints on the form or type of product, colour of label, advertising message and others.

A convenient way to organise strategic planning is to utilise the elements of the marketing mix as a framework. Dr Lincoln Armstrong Associate Director of International Marketing Institute, divides these elements into three points, shown on the chart as the internal environment, ie the manpower, financial, technical, physical and distribution elements; the marketing mix elements which include branding, channeling, personal selling, advertising and public relations, promotion, packaging, merchandizing and displaying, servicing, physical handling, marketing research, product planning, pricing; and the external environment, economic and social, consumer behaviour and attitudes, trade behaviour and attitudes, market structure, government regulations, and competitors position and behaviour.



105 Using this framework as an outline, strategic moves can be worked out to meet the requirements of the market situation. Also, the relative importance given to various elements of the marketing mix will help determine the form and type of organisation decided upon.

There are several common organisational patterns for export marketing. All have advantages as well as disadvantages. Export marketing objectives and strategy by the organisation will at least partially determine optimum organisation. There is also the probability that the organisational make up of the firm will be modified as its moves from a novice position in exporting with perhaps only a few outlets to a large scale operation with interests in many countries.

The simplest export organisation is actually no organisation at all. This is the case where a firm which is marketing its products on the domestic market decides to expand into export marketing with no change in the organisational pattern. As a result the various export marketing functions are assigned to those employees of the firm who are already performing the same functions for the domestic market.

This is an easy and relatively inexpensive way to approach export marketing. This can also have serious disadvantages. The domestic marketing staff may not have the competency nor knowledge to carry on the activities necessary to successfully market the firm's products in other countries. The staff may consider the export marketing function a minor portion of their duties and not give it the emphasis and attention it deserves. This attention is particularly important at the outset when the firm is new to export marketing.

Another alternative is to set up an international marketing manager with total responsibility for export marketing development and implementation. In most cases this marketing manager will report to the vice-president for marketing or to an executive in a comparable position.

The international marketing manager is expected to integrate his functions into the remainder of the marketing department, coordinating with the accounting, transportation, procurement and other departments. This is a good system for the smaller organisation which does most of its business in the domestic market but which is also involved in some export marketing and wishes to become more deeply involved.

The third and in my opinion the preferable alternative for <sup>106</sup>the organisations which are genuinely serious about exploiting export marketing opportunities is the separate international marketing department with its own staff of qualified specialists to handle all details pertaining to the export side of the business. The head of the international marketing department should be of equal stature with the head of the domestic marketing department, and carry a title such as "vice-president, international marketing". In some organisations a portion of total production is allocated to this international marketing department. Regardless of the demands of the domestic market, the export marketing side will be able to depend on a certain percentage of total product for the markets it develops under this system.

If the decision is made to establish a separate international marketing division, the operational design of such a division must be considered. Here again there are three common alternatives. First of these is the functional design with each function such as sales, transportation, pricing etc. assigned to the appropriate staff and with that staff carrying responsibility for their particular function for all commodities on a worldwide basis.

For the small organisation with limited staff resources this is the most feasible organisational pattern. But it carries the danger that areas of opportunity may be overlooked because of the necessity of taking an overall approach, or conversely that the staff will not be able to become sufficiently acquainted with all markets and products to operate with maximum effectiveness.

Another approach is specialisation on a commodity basis. Product managers are assigned responsibility for a group of products and market these products throughout the world. Closely related is assignment of responsibility on a geographic basis - a staff member is responsible for sales of the complete product line a particular area of the world.

A marketing framework which incorporates a modified version of all three approaches would seem to be most appropriate for the cooperative marketing organisation. In this case, staff functions are centralized. A central staff is responsible for billing, accounting, transportation, product procurement, general supervision, administration etc.

107 Actual marketing activities are organised on a modified geographical basis. Commonly geographic organisation means assignment to marketing managers of certain areas of the world based on geographical groupings such as Asia, North America, Latin America, Europe etc.

My own suggestion would be to attempt to make the breakdown on the basis of characteristics other than location. That is, to select certain measurement criteria for grouping countries, that take into account the present state of the market. These criteria might include per capita income, size of market, tastes and preferences, and other aspects that are significant for the firm's product line.

Under this system, for example, there might be an area which includes several countries in Latin America as well as several Asian countries. By making the division of geographic responsibility in this manner, the same or similar marketing strategies can be followed in different countries where the market is at approximately the same stage of development. For example, the approach to marketing a product in Mexico should probably be quite different from the approaches used in Peru, even though both countries are in the same geographical area and both speak similar languages.

If the product line is sufficiently diversified, there may be some advantage in further division of the marketing function by product. This could probably not apply in most cases to cooperatives in developing countries.

Whatever organisational pattern is selected, the personnel assigned responsibility for the export marketing function should be skilled professionals. If this type of person is not available locally, it may be necessary to obtain outside assistance for training marketing personnel.

This can be done in several ways. Staff members may be sent to other countries for training or foreign specialists can be brought into the cooperative from outside to train marketing personnel.

One good example of a training opportunity that is internationally recognised is the summer session held each year at Harvard Business School by International Marketing Institute, Cambridge, Massachusetts. This three month course brings together middle level business and government executives from throughout the world for a concentrated course in marketing, taught through the famous Harvard case method by Harvard business school professors.

International Marketing Institute has also provided resident experts to help develop marketing competence for various countries either under contract with the US Agency for International Development, other international assistance agencies, or on a direct government contract basis. I had the good fortune to work with the IMI on one of these programmes in Korea in 1968.

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Several of us are presently attempting to set up a new organisation, Agri-Marine Marketing Associates, to provide consultation on development of marketing institutions and training of marketing personnel. AMA will be affiliated with International Marketing Institute and will provide marketing experts on a short or long term basis, to work with agri business and marine products marketing problems. Any assignment accepted by AMA will incorporate a definite and integral training component.

One of the specialised marketing functions that should not be overlooked is market and marketing research. According to an old saying "knowledge is power" and this is doubly true in marketing. Knowledge of the market and its requirements is an essential underpinning for any successful marketing effort.

According to a survey commissioned recently by the American Management Association, the most difficult problems encountered in export marketing were researching the potential markets, selecting reliable distributors and agents abroad, employing and training suitable salesmen and servicemen and determining the most efficient type of marketing organisation. It is highly significant that the area of marketing research is placed at the top of the list.

Market research is not enough. Marketing research is also essential. In other words, it is not enough to know the population, income, tastes and preferences of your market. You must also determine appropriate channels, find out how well your products meet local needs compared with those of competitors, chart distribution and trade structure, pricing policies and the other factors that help determine your marketing strategy.

In researching a potential market, secondary sources should be used for the preliminary screening. Such sources include statistics published by United Nations and its various sub-organisations, publications of the General Agreement on Tariffs and Trade, UNCTAD reports, US Department of Commerce and others. In addition foreign chambers of commerce, banks, embassies and consulates of your country

109 The preliminary screening should cover aspects such as existing import totals for the same or similar products; trends in such imports; geographic proximity; availability of shipping services; special trading relationships; domestic production and consumption; commercial policies affecting imports; quantitative import restrictions such as quotas, licensing requirements; import taxes, sanitary and other regulations; accepted trade practices including pricing, credit terms etc. distribution and marketing channels; and other pertinent variables. During this preliminary screening, attempts should be made to evaluate potential markets in terms of their relative attractiveness. This might be done by setting up a scale with points assigned to various factors. Those markets with the highest total points would be the initial markets selected for market penetration attempts.

It is usually advisable to start with a few markets first, rather than diffusing the marketing resources among a great many markets. While rating markets as to priority, attention should not be focused exclusively on the so-called developed countries. Neighbouring "developing countries" could become important market outlets for certain products.

Once secondary information is scanned and markets which will receive first priority are selected, then and only then should a personal visit be made to the selected market countries by marketing executives. This visit is essential but it should in no event be made before a complete preliminary analysis of the market has been made through secondary sources.

When the first visit to a potential market is made, the marketing executive should have in hand a profile of the market with pertinent data noted as well as a tentative plan for marketing the firm's products there. He should also have introductions to trade sources, agents, brokers, possible customers and others obtained through his own country's embassy, commercial representatives, branches of indigenous banks doing business in the other country, and other sources. Thus armed, the marketing executive is in a position to make every moment of his visit count.

Completion of the market survey does not mark the end of the market research task, however. At this point, a continuing campaign of market surveillance should be undertaken to generate market intelligence for organisational use. This market intelligence is often as important for countries where the firm is not yet marketing its products as in market countries.

In present markets, a viable system should be instituted 110  
 for generating from brokers, agents, distributors and others with whom  
 the exporter comes into regular contact, information as to trade activities,  
 customer preferences, political and economic changes and any other factors  
 which might have an impact on present or future sales of the firm's  
 products. In addition, principals of the firm should make periodic visits  
 to each market country to visit the distribution network and resurvey  
 the market. Additional information is available through trade and general  
 publications and from some of the same information sources utilized  
 during the initial market survey.

In non-market countries, a continuous scan should also be made  
 to spot trends or changes in the marketing environment that might open  
 opportunities for market penetration. Information in this instance will be  
 gleaned from various trade and commercial publications and similar  
 sources. Again, representatives of the firm's home country, such as  
 banks, consulates, external trade organisations, etc. will be useful  
 sources of information.

Other sources will include organisations within the  
 potential market country which also have an interest in promoting trade  
 or disseminating economic information. In Japan, most of the major  
 banks issue monthly reports in English, detailing economic conditions,  
 trends etc. A major Japanese economic daily, Nihon Keizei Shimbun,  
 issues a weekly edition in English.

In the United States, the Commerce Department publication  
 International Commerce often provides valuable market leads and reports  
 on trading countries throughout the world.

Regardless of the source and form of market intelligence,  
 this information is absolutely useless unless an effective system  
 exists to receive, sort, evaluate and use the information. Specific  
 responsibility for this function should be vested in a staff person  
 or persons with direct access to the head of the international  
 marketing department.

The importance of receiving, evaluating and basing marketing  
 strategy on a constant flow of market and marketing intelligence cannot  
 be overstressed. Any firm that markets a product operates within  
 a constantly changing environment. It is difficult at best to maintain  
 contact with environmental changes affecting the domestic market.  
 When the environment differs geographically, culturally, economically

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**111** Yet it is only by anticipating changes and acting on these changes as they occur that a firm can maintain and improve its market position. The organisation that waits to react to changes after they become obvious eventually loses out to more perceptive competitors.

The market intelligence apparatus is actually the "early warning system" for the international marketing department. As this early warning system signals changes in the marketing environment, the marketing department must readjust policy and practice to meet these changes. To be of maximum assistance to the marketing department, market intelligence must fulfill three conditions. It must be timely, it must be accurate and it must be relevant. Timeliness means getting the information to the marketing department while there is still time to make marketing or product changes to reflect changing marketing conditions.

Accuracy of information as well as completeness should not be sacrificed for speed, however. Misguided decisions based on incomplete or misleading information can be as damaging as failure to make decisions in time. These conflicting demands must be balanced.

The mass of information available through communications media as well as other sources today makes it imperative that the persons responsible for gathering marketing intelligence have a well developed sense of what is really pertinent to their marketing situation. It is easy to bury the marketing department beneath a deluge of irrelevancies that make it impossible to spot the significant items.

Ideally the firm or organisation should have one of their own men stationed in important market countries responsible for gathering market intelligence as well as conducting marketing programmes. If this is impossible, then the staff charged with gathering market intelligence should be sufficiently informed of actual conditions within the market country to enable them to correctly interpret the information they receive. This knowledge does not come from books or hearsay reports. It must be gained through some actual exposure to the market country.

The National Export promotion organisations set up in many countries such as JETRO in Japan and KOTRA in Korea can play an important role in gathering and disseminating market intelligence. 112

Part of the task to be performed by initial market research and continuing market intelligence activities is to provide guidelines for determining the most appropriate and effective means of promoting the firm's products in overseas markets. Product promotion is an art rather than a science, and tends to be an inexact art at that. This is particularly true when promotion measures are adapted to the marketing of a product in a completely different environment, such as that of another country. It is particularly difficult to evolve promotion practices for food products in export markets, since food is both a necessity of life and closely linked to habits and preferences rising from social, cultural and perhaps geographical environment of the consumer.

There are certain predominant market factors that determine sales volume and influence opportunities for expanding volume. These include the size of the target market, consumer purchasing power, competition from other products and consumer preferences. Promotion represents an attempt to shift consumer preferences in favour of the promoted product. Promotion is an organised attempt to communicate product advantages to consumers, trade channels or both.

Promotional efforts are designed to increase consumer preference for a product, produce favourable reactions on the part of trade channels, and lower marketing costs through increasing sales volume. Promotion takes many forms, including but not limited to personal selling, trade and consumer advertising, use demonstration, point of purchase activity, various incentives to buy or sell more of the product and others.

Promotion is most successful with branded, manufactured, or processed products. When products such as agricultural bulk commodities are marketed, promotion must take different, often more indirect forms.

One means of promoting a product or product line that is sometimes not given enough emphasis is through building of a product image that embodies uniform high quality, dependability of delivery and reliability of service. This type of indirect promotion must be fostered through



a deliberate policy of quality control backed by follow-through to make sure that the ultimate customer receives the product he has contracted for, at the time place and in the form he desires, and that he is satisfied with the performance of that product. This type of promotion in the long-run is one of the best guarantee of market maintenance and is a good example of how to adhere to the tenets of the marketing concept.

Promotion must be closely coordinated with other elements of the product package, or marketing mix. Choice of type and form of product, packaging and labelling, advertising and promotion, channels of distribution, must all work together to reinforce the product image chosen for emphasis.

Follow-up attempts to monitor and evaluate the effectiveness of product promotion provide important guidelines for marketers. One of the most difficult problems in evaluating promotion is estimating what sales levels would have been in the absence of the promotion. However, attempts should be made through contacts with distributors, agents, wholesalers and retailers to gain as much knowledge as possible of the actual effects of promotion.

In the areas of promotion and market intelligence, as well as other marketing activities carried on by cooperatives in developing countries, it would seem that there is a considerable opportunity for more cooperation not only between separate organisations within the same country, but also between countries. While the developing countries of Asia compete in many export markets with similar products, there are many instances where cooperative effort on a broad scale would enable even competing organisations to gain a greater share of the market.

For example, joint procurement and use of shipping facilities, joint warehousing in market countries, even joint sales agencies, might help cooperatives from a number of countries do a more effective job of marketing than they could do on their own. The functions of gathering market intelligence, setting product standards and similar functions could be performed through joint efforts.

Perhaps the concept of carrying cooperation that far is idealistic and impractical. But when you are dealing with markets of the size and sophistication of the United States, the European Common Market and Japan, it may be necessary to band together to provide the necessary muscle to penetrate these markets successfully.

To sum up, then, there are many and growing opportunities for marketing food and fiber products throughout the world. We need look only at the examples of the growth in exports of pineapples, mushrooms and asparagus from Taiwan; or the success of Thailand in exporting feed grains to see what developing countries can do.

Success in international marketing, however, does not come automatically. It must be earned, through well planned, well organised professionally staffed efforts. Competition is growing keener, as more countries enter the race to find export/for their agricultural /outlets products.

Success will demand understanding and application of the marketing concept, a dedication to finding and meeting the needs of the marketplace, needs which may not even be evident now, but which are presaged by conditions that already exist. The organisation that can shift from production orientation to reliance on the marketing concept is the organisation that will satisfy those marketing needs during the 1970s.

DEVELOPMENT OF ECONOMIC RELATIONSHIPS AMONG COOPERATIVES THROUGH  
INTERNATIONAL TRADE

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COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND RAW  
MATERIALS FOR FEEDINGSTUFFS IN SOUTH-EAST ASIA, TOKYO, JAPAN  
12th May - 16th May, 1970.

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE  
Regional Office & Education Centre  
for South-East Asia, P.O. Box 3021,  
43 Friends' Colony, New Delhi-14,  
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A/17th March 1970

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SECTION - I

1. The subject of economic relationships among cooperative organisations in different parts of the world has been receiving considerable attention from both national and international agencies concerned with cooperative development. While the United Nations Agencies, such as the UNCTAD and the Regional Economic Commissions are discussing international trade as a whole, the ICA and the IFAP are devoting their attention to the development of trade by cooperatives. In this article, an attempt has been made to review, very briefly, the role of the ICA in trade development and the import-export activities of the cooperatives in the Region of South-East Asia.

Part I

Role of the ICA

2. Since the beginning of the last decade, the International Cooperative Alliance (ICA) has been paying greater attention to promoting and expanding cooperative trade and a concrete expression to this objective was given at the

1960 Lausanne Cooperative Congress which emphasized the development of foreign trade as a part of the Long-Term Technical Assistance Programme formulated by the Congress. The Tokyo Cooperative Ministers' Conference, which discussed the role of cooperation in social and economic development, recommended to the ICA to initiate an enquiry into the present position of cooperative trade and take suitable measures for its expansion. The ICA accepted the recommendation of the Ministers' Conference and through the services of an expert, Mr. Walter Eisenberg, conducted the regional survey which has now been published under the title "Trading of Cooperatives - South-East Asia" in 3 volumes. The survey conducted by Mr. Eisenberg has revealed that there was considerable scope for cooperative trade expansion in the South-East Asian Region.

3. The First and the Second Asian Agricultural Cooperative Conference, which met in Tokyo during 1962 and 1964, had discussed the question of foreign trade and had made a number of recommendations. The Third Asian Agricultural Cooperative Conference, which had cooperative trade as its main theme for discussion, made a number of suggestions to governments and to international agencies for actively assisting the expansion of foreign trade by cooperatives and in the establishment of export-oriented industries.

4. The ICA Regional Office in New Delhi has already initiated follow-up action on the basis of the recommendations contained in the Trade Survey Report. The Regional Office functions as a clearing house for providing market information, documentation and training facilities for trade personnel. It has already published a Cooperative Trade Directory for South-East Asia giving details on the organisations active in the field of trade and the commodities dealt with by them. A Conference on International Cooperative Trade in South-East Asia was organised by the ICA in Tokyo during June 1968 in collaboration with the Central Union of Agricultural Cooperatives in Japan. The main purpose of the Conference was to enable managerial personnel of the cooperative trading organisations to come together and discuss possibilities of trade by cooperatives in the South-East Asian Region. With a view to give wider publicity to cooperative products, the ICA has recently secured a Stall in the Second Asian International Trade Fair and cooperative

trading organisations in a number of countries have agreed to participate in the Fair. These and other efforts by the ICA have resulted to some extent in bringing together cooperative trading organisations in different parts of the world. In a few cases, import-export transactions have been started as a result of the links provided by the Regional Office.

## Part II

### Trading by Cooperatives

5. Imports and exports by cooperatives form a very small proportion of the total foreign trade of the countries of South-East Asia. Most of the imports and exports by cooperatives have been in the past through private traders already established in international trade except in a few countries such as Australia, New Zealand and Japan. Almost all Australian exports of wheat and dried fruits are handled by or through cooperatives. A large proportion of Australian exports of fresh and canned fruits and dairy products are supplied by cooperatives. In the field of imports, cooperatives also account for a sizeable percentage of a limited number of commodities. For instance, ZENKOREN, the National Purchase Federation of Agricultural Cooperative Associations of Japan, accounts for about one-third of the total national imports of Rock Phosphate and maize into Japan.

### Role of the State Trading Corporation

6. In some countries, cooperatives export or import through government marketing boards or state trading corporations. In New Zealand, for example, the dairy cooperatives export through the New Zealand Dairy Board. In India, the leather footwear manufacturing cooperatives export through the State Trading Corporation of India. The National Agricultural Cooperative Marketing Federation of India has been granted monopoly rights by the State Trading Corporation of India for the export of pulses to Ceylon, U.K. and Mauritius. The Federation has also imported fertilizers, seeds and other farm requisites through the State Trading Corporation of India.

During 1967, the National Federation of Cooperative Sugar Factories, which entered into an agreement with UNICOOPJAPAN for the export of molasses, had to channel its export through the State Trading Corporation of India as it was not possible to fulfil this agreement direct at that time.

7. In some countries, cooperatives are sometimes given monopoly rights for the export of certain commodities. The Maharashtra State Cooperative Marketing Federation and the Gujarat State Fruit and Vegetable Marketing Federation in India are the main exporters of bananas from Maharashtra and Gujarat States respectively. In Ceylon, the Northern Province Fishermen's Cooperative Societies Union has been granted monopoly in the export of Beche-de-mer (Sea-slugs) and Conch-shells. During March 1969, the Society exported 40 bags of Conch-shells to the West Bengal Industrial Corporation in Calcutta valued at about US \$4,000. This was the first time the Society exported Conch-Shells to India.

8. International trading between two cooperatives is much more limited than international trading by cooperatives as a whole. Trade between the Cooperative Wholesale Society of England and the New Zealand Dairy Cooperatives dates back to 1921 and is conducted through the New Zealand Produce Association, London. In Australia and New Zealand, the agricultural producers' cooperative wholesale federations do a considerable amount of trade in U.K. through the Overseas Farmers' Cooperative Federation Limited, London. In the Philippines, the Central Cooperative Exchange, Inc. imported during 1965 fertilizers from Japan, jute bags from India and hand-operated sprayers from Japan. Efforts made by the CCE to export tobacco to West Germany and copra to Sweden have not yet resulted in any trade.

9. The Japan Cooperative Trading Company does a considerable amount of trade with the Soviet Consumers' Organisation "Centrosoyuz". Under a barter trade agreement between POLCOOP of Poland and the Japan Cooperative Trading Company, the latter imported 20 tons of Horse Meat in 1968, and an additional quantity of 20 tons during April, 1969. ZENHANREN, the National Marketing Federation of Agricultural Cooperative Associations of Japan, exports canned oranges to Nordisk Andelsforbund (NAF), the Scandinavian Cooperative Wholesale Society and the G.E.G. in West Germany. UNICOOPJAPAN does a considerable amount of trade with cooperatives in Thailand, the Republic of

Korea, U.S.S.R., Czechoslovakia, Argentina and Peru. Early in 1970, a contract was signed between UNICOOPJAPAN and a marketing cooperative in India for export of feedingstuff material to Japan. The Sydney Dept of the Cooperative Wholesale Society exports canned fruits to Cooperatives in West Germany, Iceland and Sweden.

#### Trade between Europe and South-East Asia

10. A few cooperative wholesale organisations in the Region import consumer articles from Europe. However, direct imports by consumers' cooperative organisations in South-East Asia from the production departments of European Cooperative Wholesale Societies are not significant. The Philippine Federation of Consumers' Cooperatives (now named as Filipino Cooperatives Wholesale Society, Inc.) imports canned fish, meat and fruits, dairy products etc. for consumer cooperatives from the U.S.A., Australia, New Zealand, Holland, Denmark, Argentina and Japan. Its annual imports amount to US\$ 200,000. From the same countries, it imports woodcraft machines and tools, shoe-making machines, chemicals, leather and rubberised canvas, radio and T.V. parts for service and industrial cooperatives at an yearly average of US\$400,000. The European Cooperative Wholesale Societies import substantial quantities of commodities available in the Region, but very rarely from the cooperatives. For instance, the Nordisk Andelsforbund imports fresh, dried and canned fruits, rice, coffee and other commodities from South-East Asia. In July 1966, a delegation from the Cooperative Wholesale Committee bought £ 60,000 worth of knitwear in Hong Kong on behalf of cooperatives in Britain and West Germany, and, £ 200,000 worth of knitwear in the Republic of Korea on behalf of consumers' cooperatives in Sweden, West Germany and Switzerland. All these purchases were made from private suppliers.

#### Obstacles to cooperative trade

11. Although the above description is not comprehensive, it certainly outlines some of the important foreign-trade activities undertaken by cooperatives in the Region. As already mentioned, except in the case of Australia, New Zealand and Japan, the trade is very insignificant compared to the total national export-import trade in the respective countries of the Region. This should not, however, lead us to believe that the cooperatives alone are to blame for this unsatisfactory state of affairs. While analysing



the growth of foreign cooperative trade, we have to bear in mind the difficulties faced by these organisations in entering a field which was and which, by and large, is still the exclusive operational area of the private companies and government agencies.

12. One of the most important reasons for the failure of cooperatives to make any significant contribution to foreign trade is their lack of experience in this field. Even a powerful private organisation may find it difficult to enter trade in commodities in which other companies are already trading for a long time. In such a situation, the cooperatives are bound to face greater difficulties as they lack the experience as well as the strength which is needed to compete effectively against strong combines and monopolistic groups. The only possibility of getting a foothold in a foreign market would therefore be, at least in the initial period, by a direct contact with the cooperative in another country. There again the terms and conditions of trade will have to be at least on par with those offered by other agencies to the cooperatives with whom the trading activity is to be undertaken. The cooperatives desiring to enter foreign trade markets must be prepared not only to improve their own managerial and business ability to gain an entry into the market but also make sure that the terms and conditions offered by them are not less favourable than those of the competitors in the field.

#### Government restrictions.

13. Another important reason for insufficient coverage by cooperatives is, we are told, the restrictions placed by government on cooperatives trying to enter foreign trade. These restrictions normally relate to certain commodities or groups of commodities, to the quotas in certain commodities or to countries with which trade cannot be undertaken by cooperatives. The governments will certainly have their own reasons for imposing the restrictions and the cooperatives will have to deal with and seek approval of the governments in order to obtain, wherever possible, the necessary permission. They must accumulate sufficient experience to convince the governments that they will be able to efficiently fulfil their obligations under foreign trade agreements. While it is true that bureaucratic practices make the small restrictions placed by government appear larger and more

difficult, some of the restrictions may be such that with a proper approach the effect of a number of them can be eased to facilitate operations by cooperatives.

14. Although we would be wrong in under-estimating the difficulties encountered because of government restrictions, it would not be correct to say that the restrictions placed by government would be permanent impediments in undertaking foreign trade. Mr. Walter Eisenberg, discussing government restrictions in his Trade Survey Report, states :

"Considerable though the restrictions and impediments created by official policies are - and I would not wish to minimise the difficulties involved in becoming established and accepted as a **bona-fide** foreign trader in the eyes, and with the authorisation, of national governments - I am under the impression that On BALANCE these problems are perhaps less formidable than those posed by the short-comings of some of the cooperative organisations themselves. Business efficiency is likely to be the most effective weapon in the struggle to overcome both legislative restrictions and economic barriers."

15. Another difficulty is the question of balance of payments which has been the main reason for cooperatives not being allowed to import consumer and other commodities in their countries although this does not relate to exports. The foreign-exchange difficulty will continue to hamper trading activities until the position of the respective countries is improved or a solution is found, through payments arrangements initiated by international agencies like the World Bank or the Asian Development Bank or perhaps the International Cooperative Bank in such a way as to minimise the foreign-exchange difficulties.

#### Lack of experience

16. Quite often foreign trade operations by cooperatives are undertaken without the existence of necessary pre-requisites, namely, an efficient internal market structure in the country, a strong national cooperative marketing organisation, the availability of efficient trained personnel required for handling trade, the availability of services such as market intelligence, market research and finally, the availability of finance for import and export. The competitive field of foreign trade entails the existence of a very vigilant and efficient cooperative organisation capable of handling

all the intricate operations involved. The ever-changing scene of international trade demands on the part of the cooperatives trying to enter it, a very high degree of efficiency and skills. Most of the trading cooperatives may have to reorganise their structures so as to develop the above services and to adopt an aggressive policy of salesmanship, to be able to make an impact on the market.

17. In addition to the above, the difficulties mentioned in the Trade Survey Report are : High cost of production; lack of quality control; failure to maintain agreed standards, or to adhere to arrangements made in other respects of the product; lack of adequate transport and storage facilities and consequent inability to collect, store and ship produce on a competitive basis and/or at the appropriate time; corresponding short-comings relating to receipt, handling and processing of incoming goods or materials; insufficient cooperative processing facilities for many commodities, thus making cooperatives, and their ability to fulfil contracts, dependent on private firms at some vital stage; limited knowledge of, or even attention to, the development of modern techniques in many fields, such as protective and attractive packaging, bulk handling and collection of many types of products (including liquids), food and produce preservation, control of stocks and of costs, improvement of yields, market intelligence, etc.

### Part III

18. The International Cooperative Alliance Regional Office and Education Centre is anxious to develop bilateral trade relationships between two cooperatives in different parts of the world. It is quite likely that in many cases a mutuality of interest could be found amongst cooperatives of different countries. This could be in two directions; one would be that the cooperatives in other country require the commodities exported by the cooperative from the first country. In this situation, not much difficulty can be encountered in entering into a trade agreement provided their terms and conditions are at par with others in the field. The other possible area of collaboration would be that the two cooperatives could enter into a broader agreement which can encompass both trade and technical

assistance activities as in the case of Thailand and Japan, if one of the trading cooperatives is in an advanced stage of development. In this case the developed cooperative movement can assist in the establishment of a processing industry for agricultural and other products and later import the processed commodities required for its own members. The assistance provided earlier can be repaid in the form of goods processed and exported to the developed countries. In addition, efforts could be made to find private contacts for imports or exports if a counterpart cooperative organisation is not available for the purpose.

19. The activities of the Regional Office are being extended to meet the growing demand of the cooperative organisations for international assistance in developing their foreign trade. A Commodity Conference is being planned in Tokyo for 1970 in which representatives of exporting and importing organisations will be meeting to discuss mutual trade. A Trade Information Bulletin is also being planned to disseminate trade information to interested cooperative organisations.

#### Part IV

##### The Commodity Conference

20. The efforts of the I.C.A. in developing trade relationship among cooperatives, on a bilateral basis, would not be effective unless international effort is geared to bring about discussion among cooperatives on specific commodities which are of interest to the South-East Asian Region. The general discussion must now percolate down to specific items in which trade is likely to develop among cooperators. These discussions will also help in a realistic appraisal of the present position concerning trade in certain commodities and will help develop a business like approach to future trade activities. Keeping this aim in future the ICA, through its Agricultural Committee organised a Conference on Cooperative Trade in Animal Feedingstuffs in Paris during September, 1969. A number of representatives of leading cooperative organisations concerned with animal feedingstuffs participated in the Conference. The Paris Conference, which was organised on

a world-wide basis has now to be followed by regional conferences of the same nature with a view to bring about discussions on issues which are of importance to the various regions. It was, therefore, felt that a Commodity Conference for cooperatives of the South-East Asian Region is now necessary to ensure steady development of foreign trade in respect of those commodities which are of greater significance to the Region.

Fruits and Vegetables and Raw Materials  
for Feedingstuffs

21. After an examination of the various commodities dealt with by cooperatives in the Region, it was found that only two groups of commodities are of common interest to a majority of the cooperators. These are the fresh and processed fruits and vegetables and the raw materials required for manufacturing animal feedingstuffs of various kinds. The majority of the cooperative organisations in the Region are interested in the export of fruits and vegetables as well as raw materials for feedingstuffs. With the exception of Japan, quite a number of cooperators have surplus raw materials for feedingstuffs and it is in the fitness of things that Commodity Conference which is being held in May, 1970 for discussions on the above commodities, is being held at Tokyo. The Japan organisations are the biggest buyers of the raw materials in their own country as well as in the Region. For fruits and vegetables the importing countries are mainly outside the Region and we have made every effort to develop the interest among importing cooperatives in Europe and America for the discussions in the Commodity Conference. It is hoped that a result of this Conference, the trade in respect of these two commodities will expand at a much rapid pace than before. The I.C.A. will continue to play its role in assisting the development of foreign trade in these commodities as it has been doing for the past several years.

22. The factual position of present trade in respect of raw materials for feeding stuff is given in Appendix 'A' and the position in respect of fruits and vegetables is given in Appendix 'B' attached to this paper.

PRESENT POSITION IN THE REGION OF FOREIGN TRADE IN  
RAW MATERIALS FOR FEEDINGSTUFF

Cooperatives in India, Japan and Thailand are engaged in foreign trade in raw materials for feedingstuff in the Region. Cooperatives in India and Thailand are exporters while the importing cooperatives are mainly from Japan.

INDIA

Almost all the export trade in oil cakes, rice bran, etc. is in the hands of the private trade. Export of molasses is the monopoly of the State Trading Corporation of India. The government banned exports during July 1967 and lifted the ban only during February 1970 when an improvement in the supply position of molasses was noticed. A contract has already been signed by the State Trading Corporation of India with a private firm of importers in U.K. for the export of 100,000 Metric Tonnes of Molasses.

Only two cooperatives were engaged in the export of oil cakes from India during 1968-69. The Khanna Cooperative Solvent Oil Mills Ltd. exported groundnut extraction cake valued at Rs.4.3 million during 1968-69. The Alleppey Copra Producers and Crushers Cooperative Society Ltd. exported copra cake during 1968-69. (Export figures are not available for this Society).

Early in 1970, an Agricultural Cooperative Marketing Organisation has entered into an agreement with a cooperative agency in Japan for the export of 2,500 Metric Tonnes of Kardi Extraction Meal.

THAILAND

Only one cooperative organisation, namely the Bangkok Cooperative Farm Product Marketing Society Ltd. (COPRODUCT) was engaged in the export of maize to Japan. During 1968, the COPRODUCT exported 28,300 Metric Tonnes of Maize to UNICOOPJAPAN as against 32,000 Metric Tonnes in 1967.

In this connection, the Japan-Thailand Joint Committee on the Promotion of Cooperative Trade between Thailand and Japan deserves a special mention as it has been playing an important role in the development of cooperative trade between the two countries. The Joint Committee is comprised of the representatives of ZENKOREN (The National Purchasing Federation of Agricultural Cooperative Associations of Japan), UNICOOPJAPAN, COPRODUCT and the Ministry of National Development, Government of Thailand.

The first meeting of the Joint Committee was held at Bangkok during 1965 and the target for the collection of maize for 1965-66 was fixed at 30,000 Metric Tonnes for export to ZENKOREN through UNICOOPJAPAN. The target for the collection of maize for 1966-67 was 50,000 Metric Tonnes and both for 1967-68 and 1968-69 was 60,000 Metric Tonnes for each year.

Since August 22, 1969, a new organisation known as the Cooperative Marketing and Purchasing Federation of Thailand has been established by reorganising the former Cooperative Wholesale Society of Thailand Ltd. The Federation has taken over from COPRODUCT the task of exports of agricultural products. The operations of COPRODUCT have now been confined to the domestic trade in salt.

#### JAPAN

Japan is the main importer of raw-materials for feedingstuff in the Region. The Cooperative Organisations importing feedingstuff into Japan are the ZENKOREN and UNICOOPJAPAN.

The total national production of animal feed in Japan amounted to 10,323,687 metric tonnes in 1967 in which ZENKOREN's share was 3,687,363 or 35.7% in 1967. ZENKOREN's feed is produced by 47 associated feed mills throughout Japan which are under contract with ZENKOREN. Under this contract, the feed mills get their raw materials and specifications for final products from ZENKOREN and also sell their products to ZENKOREN.

The main ingredients in the manufacture of animal feed are maize, grain sorghum, alfalfa pellets, molasses, etc., which constitute about 85% of the raw materials and all these have to be imported. The total import volume

in 1967 reached 8,810,000 metric tonnes. Maize imports accounted for 3,305,267 metric tonnes and grain sorghum 2,541,181 metric tonnes. Together these commodities represented 66.3% of the total imports in 1967. ZENKOREN's imports of maize was 1,172,651 metric tonnes or 41.5% of the total maize imports in 1967, and that of grain sorghum 943,923 or 37.1% of the total imports of this commodity.

#### Feedgrain trade with U.S. Cooperatives

During December 1966, UNICOOPJAPAN and ZENKOREN entered into an agreement with the Producers Grain Corporation, Texas, through the Producers' Export Co., a trading organisation of grain marketing cooperatives of the USA, for the import of 125,000 metric tonnes of grain sorghum between April and December 1967. ZENKOREN imported 125,000 metric tonnes of grain sorghum in 1967 and 190,000 metric tonnes in 1968.

The Producers' Export Co. was dissolved early in 1969 and since then ZENKOREN is trading directly with the Producers' Grain Corporation.

ZENKOREN/UNICOOPJAPAN are importing maize and grain sorghum from the Farmers Export Co., Kansas, which was established in October 1968 by the seven leading American grain agricultural cooperatives. This Company was established to promote export of grain by the agricultural cooperatives themselves. During 1968, ZENKOREN imported 50,000 Metric tonnes of maize from this Company.

#### Import of Alfalfa Pellets from the USA

Since 1966, UNICOOPAJAPAN has been importing Alfalfa pellets on behalf of ZENKOREN from the Pacific Alfalfa Export Corporation in California on the basis of a long term contract. During 1966, 1967 and 1968, UNICOOPJAPAN imported 96,000 metric tonnes of Alfalfa pellets each year.

#### Feed-grain trade with Argentine Cooperatives

ZENKOREN and UNICOOPAJAPAN entered into an agreement in 1964 with three Argentine agricultural cooperatives, Asociacion de Cooperativas Argentinas (ACA),



Federacion Argentina de Cooperativas Agrarias (FACA), and Agriculturas Federacos Argentinas (AFA), for the import of maize, grain sorghum, etc. from Argentina. This agreement was renewed in March 1966. The following are the figures of import of feed grains by ZENKOREN from Argentina for 1966 to 1968:

<u>Year</u>	<u>Commodity</u>	<u>Quantity</u>
1966	Grain sorghum	71,000 Metric tonnes
1967	-	-
1968	Grain sorghum	14,000 -do-

#### Maize imports from Thai Cooperatives

The establishment of the Japan-Thailand Joint Committee on the Promotion of Cooperative Trade between the two countries gave a fillip to exports of Thai maize to Japan on a cooperative to cooperative basis since 1965. As against the import of 8,700 metric tonnes of maize by Japanese cooperatives, the following is the record of imports of Thai maize by UNICOOPJAPAN on behalf of ZENKOREN from the COPRODUCT:

<u>Year</u>	<u>Target quantity metric tonnes</u>	<u>Actual imports metric tonnes</u>
1965	30,000	20,371
1966	50,000	33,000
1967	60,000	32,000
1968	60,000	28,300

#### Other trade contracts for feed-grain imports

Towards the end of 1968, ZENKOREN concluded a trade agreement with CONASUPO, a Mexican Government corporation, for import of 50,000 metric tonnes of maize and 100,000 metric tonnes of grain sorghum during 1969.

Another contract was concluded during 1968 with the Victoria Oats Growers Pool and Marketing Company Ltd., an Australian producers organisation, for import of 80,000 metric tonnes of oats from Australia.

In addition to the above, UNICOOPJAPAN imports maize from China, fishmeal from Peru and S.Africa, Molasses from Cuba and wheat bran from S. Africa and the Philippines.

PRESENT POSITION OF FOREIGN TRADE IN FRUITS AND  
VEGETABLES IN THE REGION

AUSTRALIA

In Western Australia, the majority of fruit exported consists of apples, the production of which stands at between 2 million and 2½ million bushels annually. About two-thirds of the annual crop is exported to various overseas markets, and the cooperative organisations in Western Australia handle an average proportion of about 27% of the export crop.

Export of apples to overseas markets is regulated by the Australian Apple and Pear Board, which has statutory authority to control the quantities of apples and pears shipped from Australian states. The Board is not a marketing organisation controls trading by independent exporters through issuing of licenses to export fresh fruit and fixing a minimum price for such export, than those approved by the Board.

All fresh fruit and vegetables are closely inspected by Australian government officers prior to shipment and passed for export.

The cooperatives in Western Australia are involved in merchandising the fruit through buying from growers at a firm price and selling overseas. It is unusual for the cooperatives to ship overseas on behalf of individual growers.

The Westeralian Farmers Cooperative Ltd. (Wesfarmers) exports to most countries of the world serviced by direct shipping from Australia, including the U.K., Sweden and W.Germany, Singapore, Malaysia, West Africa, Tanzania, Kenya, Mauritius, Saudi Arabia, the Arabian gulf states, Aden, Hong Kong, Thailand and the Philippines.

Wesfarmers also exports substantial quantities of plums, peaches and grapes to markets in close proximity to Australia. The majority of the fruit is shipped to Singapore, although over the past few years the Wesfarmers has increased its export of grapes to East Africa, Mauritius and the Arabian Gulf.

The purchasing and marketing procedure is entirely different to that of apples and pears. All stone fruit and grapes exported and handled through two cooperative organisations in W.Australia, the Export Stone Fruit Pool and the Export Grape Pool. Both organisations comprise fruit grower members as well as fruit shipped and are voluntary pools.

In recent years, Wesfarmers have commenced exporting fresh vegetables mainly to Singapore and Malaysian markets and limited quantities to the Arabian gulf states.

The Australian Dried Fruits Control Board is authorised to export dried fruits. However, this applies only to commodities voluntarily placed in the hands of the Board for sale on behalf of the owners. The Australian Canned Fruits Board also has similar authority and, in addition, since 1963, the right power to purchase on its own account canned fruits for export overseas.

#### INDIA

The main items of fruits and vegetables exported by cooperatives in India are bananas, mangoes and onions. The other fruits and vegetables exported in small quantities are pineapples, oranges, potatoes, tomatoes and Garlic.

The cooperatives which are engaged in the exports of fruits and vegetables from India are the National Agricultural Cooperative Marketing Federation Ltd., New Delhi, Gujarat State Cooperative Fruits and Vegetable Marketing Federation, Bardoli, Jalgaon District Cooperative Fruit Sale Societies Federation, and the Maharashtra State Cooperative Marketing Federation Limited, Bombay.

Export performance during 1968-69 of some of the cooperatives in fruits and vegetables is given below:

Organisation	Commodities	Quantity M/T	Value Rs.	Countries of destination
National Agricultural Coop Marketing Fed.Limited.	Onions	3,761	2,023,000	Ceylon, Malaysia
Gujarat State Cooperative Fruits & Vegetable Marketing Federation	Bananas	3,417	3,123,000	Bahrain, Doha, Dubai, Kuwait, Iran.
	Mangoes	164	391,000	Kuwait
	Potatoes	307	96,500	-do-
	Tomatoes	7	16,500	-do-
	Pineapples	10	13,100	-do-
	Oranges	8	10,700	-do-
Maharashtra State Cooperative Marketing Fed.Limited	Onions	1,640	890,000	Malaysia, Singapore, Bahrain, Kuwait, Dubai France and E.Germany.
	Garlic	20	18,000	France.

The National Cooperative Consumers' Federation Ltd., New Delhi, imports dates from Iran, Muscat and Iraq and dried fruits from Iran and Afghanistan.

#### IRAN

During 1962-67, the Union of Rural Cooperative Societies of Maragheh, affiliated to the Central Organisation of Rural Cooperatives of Iran, exported 292.5 Metric Tonnes of raisins valued at US \$235,943 to the USSR. The Central Organisation for Rural Cooperatives of Iran is interested in the export of raisins and pistachio nuts.

#### JAPAN

ZENHANREN, the National Agricultural Cooperative Marketing Federation of Agricultural Cooperative Associations, exports mainly fruits and vegetables, fresh and canned mandarin oranges, apples, onions, etc. and these are exported to Canada, USA, USSR and to some countries in South-East Asia.

During 1969, ZENHANREN exported 129,250 cases of canned mandarin oranges to the U.K., Europe and North America (the cooperative organisations which imported these are GEG in W.Germany and the NAF in Denmark), 260,396 cases of fresh mandarin oranges to Canada, and 13,700 bags of onions to Hong Kong.

The Japan Canned Mandarin Orange Packers Association, which has been established under a special law, regulates processing and export of canned mandarin oranges. All the packers including cooperatives join this association each gets his processing quota. Since no member can process in excess of the given quota, annual processing volume is pre-determined for Japan as a whole. Canned mandarin oranges produced have to be sold exclusively to the members of the Japan Canned Goods Exporters Association of which ZENHANREN is a member. The members of this Association determine the quantity and the price of export of canned mandarin oranges.

The UNICOOPJAPAN exports fresh apples, fresh mandarin oranges, onions, potatoes and carrots mainly to the USSR.

#### KOREA

During 1968, the National Agricultural Cooperative Federation exported to Japan 700 Kgs. of dried mushrooms valued at US \$3,700 as against 11 metric tonnes valued at US \$50,693 in 1967 to Japan. The other items of fruits and vegetables that the NACF has available for export are canned mushrooms, walnuts, fresh apples and pears.

#### PHILIPPINES

The Filipino Cooperative Wholesale Society imports canned fruits from the USA. The Society is interested in offering its services for the export of bananas from the Philippines.

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Report

on Fruits and Vegetables and Raw materials  
for Feeding Stuff

by

Duk Hoon Lee

National Agricultural Cooperative Federation

Seoul, Korea

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Presented to

The Commodity Conference on Fruits  
and Vegetables and Raw Materials  
for Feeding Stuff

Tokyo, Japan

From May 12th to 16th 1970.

1. Present exports of fruits and vegetables ;

Korea produces variety of fruits and vegetables which are mostly sold within the country. Such situation for a long period have induced a stalemate in improving qualities, raising productivities and thus also in expanding marketing. Further, the contribution of fruit and vegetable farming to the development of rural economy has been quite minor in general up until recent years, when the export of these products started.

In the last ten years, exports of some fruits such as apples and pears were pioneered and trial exports were also made with dried mushrooms and garlies etc. Such activities historically marked beginning of export of fruits and vegetables from Korea. However, in the causes of promotion of export, we had to face at numerous problems and difficulties not only in the products themselves but also in auxiliary services such as packing, grading, storing, transporting and so on. In other words, marketing technics at this stage were almost absent, which forced us to struggle towards development of technology imperative to marketing and export.

Solution of these problems is being accomplished rather slowly and we still have much to solve in the days ahead.

The followings are a birdseye view of the present exports of fruits and vegetables from Korea.

FRUITS

- a) Apples fresh ; Mainly exported to Taiwan and Philippines. Total of US\$~~150~~1,000 or 3,105 M/T in 1968 and US\$737,000 or 5,055 M/T in 1969 were accomplished ; especially in 1967, export to Hong Kong covering US\$111,000 was newly added. Other than the countries mentioned above, small amounts are exported to Singapore, Thailand and Viet Nam etc.
- b) Pears Fresh ; This went mainly to Taiwan. To other countries such as Hong Kong, Philippines and Singapore, only 8% of the total of US\$51,000 was exported in 1969.
- c) Fruits and Nuts in Sugar ; Total of US\$101,000 to Okinawa, England and a few other countries in 1969.
- d) Other Fruits ; Peaches, various nuts and others, small as the quantities, are also started to be exported.



VEGETABLES

- a) Onions ; To Japan 110 M/T for US\$29,000 in 1968 but it decreased to only 33,000 in 1969. This was caused by the ample production in Japan.
- b) Carrots ; \$13,000 in 1968 and \$23,000 in 1969 to Japan and Viet Nam.
- c) Vegetables in Salt ; US\$59,000 worth of various pickles, unfinished products, were exported to Japan in 1969.  
A good portion was transacted between the National Agricultural Cooperative Federation of Korea and Japan Pickles Import Work Cooperative Union.
- d) Mushrooms Canned and Dried ; 106 M/T for US\$358,000 in 1968 and 287 M/T for US\$719,000 in 69 to Japan, HongKong, Thailand, Germany and several other countries. Export demands are rapidly increasing for these items.
- e) Other vegetables dehydrated ; Various dehydrated vegetables are also a new area of export development from Korea. Against total amount of US\$62,000 in 1968, export of this item in 1969 jumped to US\$119,000. The largest amount exported was to Germany being followed by Thailand, Hong Kong and Japan.
- f) Other vegetables prepared ; Export of these items are also increasing steadily : from US\$355,000 in 1968 to US\$977,000 in 1969.

This was exported to Germany, Japan and many other countries.

- g) Korean Pickles ; The typical Korean Pickles named "KIM CHI" are also being increased every year. In 1968 its export was US\$48,000 but it went up to US\$66,000 in 1969. Japan is the leading country importing these products.

#### SEAWEEDS

- a) Dried Laver ; Among the vegetables, this is the top tactical item for export from Korea. In 1968 total export was US\$13,719,000 and US\$12,614,000 in 1969. Almost total amount or 97% went to Japan and balance of 3% to Taiwan, Okinawa, Thailand and others.
- b) Fusiforme ; Main market for this product is Japan again where 96% or more of the total export amount of US\$284,000 in 1968 and US\$396,000 in 1969 were exported to.

Consequently, out of the country's total production of fruits and vegetables, estimatedly Billions of Dollars only very small portion has been exported, leaving a great potential of increase in export in the future.

#### 2. Exports made directly to cooperative organizations ;

- a) Hokkaido Agricultural Cooperative Union(HOKUREN) --  
Dentcorn Seeds,

- b) Shimane Prefectural Union --- Dentcorn Seeds.
- c) Japan Pickles Import Workers Cooperative Union ---Salted vegetables.
- d) UNICOOPJAPAN --- Fresh Mushroom

3. In general, as far as the items exportable to the cooperative organizations as indicated in the above paragraph 2, supply can easily exceed to the import demands. However, we still have great many products that can hardly meet with import demands. Such situations are caused by excessiveness of production costs and other expenses accidental to export activities including tariffs, packing materials, transportation, freight and storages, particularly when freezing process is included, such costs easily climb up.

4. Other markets exploring : Although, we are more occupied or concerned in expanding and enlarging existing markets, consideration is being made for European markets with particular interest for apples. Other products do not seem to have good potential markets other than those already established due to the fact that the most fruits and vegetable stuffs can hardly beat the extra transportation costs and losses which may be created by movement of longer distances.

5. Fresh vegetables directly to Japan markets. In consideration of close distance between Korea and Japan, and rapid expansion of industries in Japan absorbing rural farm labors, realization of this dream is very promising and feasible in the very near future. ~~To~~ enable this, lowering of tariffs and improving means of transportation must be preceded.
- 

7. A change in the pattern of production will help develop our exports. Since the production of quality products largely depends on the manners of production, we can never overlook the importance of production pattern. Through our experience, we have come to a conclusion that the successful exporters of fruits and vegetables will be the ones who can do best during production or farming stages. With this view we, with support of Korean Government, try to discourage rampancy of small export merchants who do not do anything during the period of farming and thus the method of production on prior contract is being encouraged.

8. Our organization, the N.A.C.F., is believed to be fairly well equipped to undertake further responsibilities in foreign trade of fruits and vegetables. This is because the N.A.C.F., being unlike other ordinary traders requiring government licenses issued by Minister of Commerce and Industry under strict restrictions, is authorized foreign trade business directly by the Agricultural Cooperative Act and further that the N.A.C.F. is one of the largest banking institutions in Korea where sufficient operational funds are always available. The nation wide cooperative net-works are also considered as an intangible but a big investment.
9. The problems and difficulties involved in exporting fruits and vegetables should be alike in any country. However, to our country, the followings are major problems with which we are struggling.
- a) Under development of marketing technics.
- (1) Grading and standardization systems are needed to develop further. As the Korean have neglected such exercises for a long time, abrupt changes to facilitate grading and standardization can not be expectable within short period.

(2) Packaging involves a great room for improvement both in quality and costs. In this connection, Korea needs doubled efforts to produce the most appropriate quality at the most ~~reasonable~~ <sup>reasonable</sup> cost; otherwise it will be still very difficult to export cheap bulky commodities such as fruits and vegetables, unless the tasks concerning packaging is accomplished.

#### FEEDINGSTUFFS

##### 10. General Introduction

Livestock industries in Korea has been internationally brought up in the last few years. As you can see in the below list of feedstuffs importing records in the last four years, progress of livestock industries have really been an epochmaking. Particularly, the development of poultry operations have been most outstanding and that of dairy farming has been the next. Such rapid development of livestock industries greatly owe to the intensive policies of the government although it is doubtlessly a result of advancement of nation's economy.

In order to meet the rapidly increasing demands for feedstuffs, the government had to stop export of any products or bye products available for feeding animals and further import additional raw materials to meet the leaping demands.

Major items imported in this connection have been corns, soybean meal, fishmeal and others.

On the other hand, the government has placed strong emphasis and efforts in production of feedingstuffs at home even though such efforts alone did not solve situations domestically. Thus, Korea has been closed up as a feeds importing country.

#### 11. Estimates of demands :

As the increasing trends of feeds imports are too steep to forecast the extent of future import our estimate of demands for compost feeds in 1970 is 2,419,000 M/T of which 1,328,000 M/T is to be commercial feeds and the balance of 1,091,000 M/T is to be self supplying by farmers. Irrespective of the efforts of the government and concerned agencies, the domestic production of corn remains at 70,000 M/T a year only, and further, the production costs of it are higher by US\$30-40 than that of the imported.

Under such circumstances, import of raw materials for feedingstuffs to Korea has become definitely indispensable with the estimate of 200,000 M/T in minimum every year.

#### 12. Status of imports

- a. Total amounts imported by years (See breakdown information in the list below)

1966 ..... 2.875 M/T

1967 ..... 21,319 M/T  
 1968 ..... 129,739 M/T  
 1969 ..... 212,115 M/T

b. Countries imported from

Corns ..... U.S.A.  
 Soybean Meal ..... U.S.A.  
 Fishmeal / ..... Peru. S.A.  
 Meat and born meal ..... Australia

13. In view of raising efficiency in supplying feeds, the N.A.C.F. is to construct a modernized feed mixing plant at the shore of ~~the~~ port Pusan.

The capacity of this plant is to be 150 M/T a day and ~~the~~ that will supply approximately 5.3% of the nation's total needs. Other than this, the agricultural cooperatives own 17 feed mixing plants throughout the country and 55 large scale plants are also owned and operated by the private mills.

**STATUS OF IMPORT OF FEEDSTUFFS**

	<u>1966 years</u>	<u>1967 years</u>	<u>1968 years</u>	<u>1969 years</u>
Corn	2,875 M/T (US\$205,994)	21,319 M/T (\$1,555,612)	114,138 M/T (\$7,716,015)	192,913 M/T (\$12,856,679)



Fishmeal	13,241 M/T (\$2,019,585)	11,769 M/T (\$2,119,000)
Soybean Meal	2,360 M/T (\$ 279,996)	7,433 M/T (\$ 804,455)
<hr/>		
TOTAL	2,875 M/T (\$205,994)	21,319 M/T (\$1,555,612)
		129,739 M/T (\$10,015,596)
		212,115 M/T (15,780,134)

#### 14. Recommendations ;

It is believed that we have come to the point where we need <sup>a</sup> cooperative organization actually conducting business internationally. We therefore propose to look into feasibility for establishing <sup>a</sup> Regional Cooperative Association as a means to promote not only marketing of farm products within the region including foreign trade but also financing cooperatives to carry out their business effectively.

This idea is based on an observation that a regional organization, which may function merely as a clearing house of the trade informations, can hardly satisfy all parties concerned.

By injecting a little more positive function into such an information clearing house mentioned above, to deal with practical business exercises, much more efficient foreign

trading can be accomplished because the cooperative can pool their needs for cooperative actions and also can eliminate competitions among the homogeneous purpose cooperatives within the region.

PROSPECTS OF INTERNATIONAL TRADE IN ANIMAL FEEDING INGREDIENTS  
AMONG COOPERATIVES

By

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Presented at the  
CONFERENCE ON COOPERATIVE TRADE IN ANIMAL FEEDINGSTUFFS  
at Paris, France from 8th -10th Sept, 1969.

organised by the

THE INTERNATIONAL COOPERATIVE ALLIANCE AGRICULTURAL COMMITTEE

INTERNATIONAL COOPERATIVE ALLIANCE  
Regional Office & Education Centre  
for South-East Asia, P.O. Box 3021  
43 Friends' Colony, New Delhi, India

A/29th April, 1970

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PROSPECTS OF INTERNATIONAL TRADE IN ANIMAL FEEDING INGREDIENTS AMONG  
COOPERATIVES

By

Thomas J. Gorman

My appearance here today is in the dual role as the President of a Wholesale Marketing and Supply Cooperative and as a farmer who operates an 870 acre grain and livestock farm near Cincinnati, Ohio, U.S.A. This status causes me to be doubly interested in the subject that I have agreed to discuss at this time. Possibly some of my own production will be marketed through the Cooperative I represent and find its way to this part of the world, where we observe that appetites must be served in much the same way as they are at home.

Certainly we are all greatly indebted to Mr. Zlataric and his associates for having arranged for the accommodations that are made available for us here today. The idea for this meeting was conceived three years ago at the ICA conference in Vienna and there has been a substantial exchange of correspondence since that time, pertaining to the many arrangements for the facilities and program that brings us together here today. Furthermore Mr. Zlataric made a trip to our country to promote our mutual interests in Cooperative marketing and in obtaining first-hand information intended to make this conference interesting and informative.

It's always a pleasure to come to Paris. I am sincerely pleased that arrangements could be made to meet here in the city of beauty and hospitality. I am sure it will add immeasurably to the success of our conference.

Perhaps it would be appropriate to review some of the conditions that compel our Farmer Associations to seek out new markets; as well as to find new ways of marketing the products of our soil:

- (1) Over sixty million acres of our land is retired from grain production by Government programmes designed to limit the potential output to an amount that can be consumed in domestic and export markets, allowing for the maintenance of a reasonable inventory, carried forward.
- (2) Farm technology, including a greatly increased use of fertilizers, has brought about fantastic gains in our yields of all grains, per acre cultivated. For example, in our state of Ohio, we produced 42 million bushels of wheat on 1,960,000 acres in the year 1940 as compared to 45 million bushels produced on 1,227,000 acres this last year, 1968. Even more dramatically our corn yields moved from 38.0 bushels per acre in 1940 to 84.0 bushels per acre in 1968.

- (3) Exports of wheat are declining as world supplies are reaching large surplus inventories. We must realize, too, that a few countries have substantial increases in their production, even to the point where they are now exporters. And, we can expect still more nations to rapidly become self-sufficient in growing both cereal grains and feed grains as they adopt new technologies, improved seed, harvesting equipment, along with other labor saving devices.

Production controls in the United States will require 12% less planting for 1970 harvesting than was harvested this year; an all time low acreage since records were made available. This action is made necessary by the lack of export outlets, largely served by other surplus wheat countries.

- (4) Soya Beans and the derivatives therefrom (meal and oil) are in less demand, as other oil seeds and synthetics come into greater use. It is estimated that the use of Urea has displaced the need for 70 million bushels of soya beans in the manufacture of animal feeds. Similarly our use of U.S. production of soya oil is reduced as a result of the importation of palm oil on a duty free basis from Indonesia and Malaysia. It is estimated that we imported 200 million pounds this year, almost eight times more than was brought in, only four years earlier. Palm oil production increased 13% last year and an even greater increase is expected this year. Competition for oil markets will increase substantially as such other products become available. Only as an increased population consumes more meat and oils will there be need for additional soyabean production, or the many other substitutes that are coming into use.

- (5) Now we are reading about the results of a corn breeding technology that has been underway for several years. It is reported that a limited number of farmers have been furnished a new variety of seed corn for experimental use. It is expected to produce a crop containing 50% more protein than any type yet developed. This may bring about a major innovation in farming and in the feeding of livestock. Hogs that were fed the new high protein corn gained weight 50% faster than on normal corn. It will be tried on poultry too. The new corn may bring about a lower cost in pork and poultry production, the benefits of which will accrue to consumers at home and help reduce malnutrition in poverty-stricken lands abroad.

We mention wheat along with feed grains and oil seeds because the surplus supply of wheat makes it competitive in price with corn in recent weeks; and wheat has a feeding nutrient value of about 105% of corn. Acreage planted to corn has decreased over the last three years but increased yields per acre has caused the total production to remain at about the same level. The reduced planting was brought about by incentives offered by Government programs designed to discourage the use of substantial land that could have seeded if the grain was needed for domestic or export use. Inventories of corn that have been carried over from one year to another have been reduced because of a greater use each year than the production has been in a like period of time.

It should be stated here that the complaints about the quality of corn that was exported from the 1966 and 1967 harvests, and which aroused much criticism, was the best we had to offer. Weather conditions in the spring of both years caused late planting, resulting in a short growing season which brought a crop of very high moisture corn from the fields. This also accounts for the light test-weight, poor color and a generally lower nutrient value. Corn harvested in 1968 was a crop of good quality, well matured in the field without damage and did not break up badly in the drying and handling process. Our domestic users of this latest crop experienced very good results in their livestock feeding programs. Similarly, the quality of export corn should have been far more satisfactory during this year, providing no admixture was made with prior years corn.

This brings us to a point where this conference can set up the arrangements to do a real service for the participants represented here today and the farmer producers whose interests we serve. We have felt that the subject of grain quality among other problems, could be discussed and much could be gained by a face to face meeting of this kind. It seems to me that this question could be discussed more freely where representatives of one farmer cooperative is dealing directly with another similar organization. There should develop a new confidence of fair dealing that has not been possible when dealing through brokers, handlers and exporters. The original identity of good quality grain is sometimes diluted with lower grades in the exporting process, and we should be working toward a solution of this problem.

The thought occurs to me that the only foreign buyer of grain who have offices in the United States are those representing the Zenkoren Cooperative from Japan. May be we have something to learn from Mr. Tanaka (their manager of the Planning Department of Zenkoren, who appears on the Conference program tomorrow) as to their experience and reasons for having representatives located at the point of export on grain destined to Japan. Possibly this arrangement would eliminate some misunderstandings that seem to crop up, at times, about the various facets of international grain trade.

Our Farm Bureau Cooperative, along with three other similar Cooperatives own and operate a Terminal Elevator located at Toledo, Ohio on the Great Lakes waterway system. It has a silo capacity of 3 1/2 million bushels and has a vessel loading capacity of 50,000 bushels per hour. It is known as Mid-States Terminals, Inc., and receives grain directly from the farming area in reasonably close proximity to Toledo. More than 25 million bushels, representing a value of \$66 million, has been handled through this elevator in a single year. After having made an extensive tour of the Rotterdam harbor just three years ago, it is obvious that European facilities for handling large vessels are the finest in the world. Could the use of these facilities at origin and at destination not become a means for the physical handling of grains that would implement the purpose that bring us together in this Conference?

If only we could accomplish some direct trades between Cooperatives in our respective nations we would gain experience and trust in the way of providing quality products, credit accommodations and price advantages without the need for intermediate brokers and handlers. This would put us a long way toward providing a much needed constant market outlet for U.S. suppliers

of grain, oil seeds and meat or poultry supplies compatible with the supply needs of the importing nation. This is all designed to better serve the farmer members of all cooperatives, whether they be consumer or producer associations in your country or mine. These are the people that constitute the sole purpose for our existence as a Cooperative.

Then for the longer range considerations we probably need to understand what ultimate goal is being sought by both the buyers and the sellers. Specifically I refer now to the question of where the processing of grains will take place some ten years hence; or to go beyond that, we should be looking to where the feeding stuffs will be converted to livestock and poultry products.

At this point is it not proper that we appraise the role of Governments in the whole structure of the future developments of the considerations we propose here? Will there develop greater or less restrictions to international trade? What will be the future programs imposed upon producers of agricultural products by our individual Governments? Or is it possible that we will some time learn that Governments can't possibly manage farm production?

There is no doubt but what the economics of this whole process of harvesting grain from the fields until it is converted to meat on the table will decide that question, in time. I believe some choice and prime cuts of meat, amounting to only about a half million dollars in value, have recently been exported from the United States to one or two European countries. We are told the acceptance has been quite good, which means that as more people learn about it, that the demand is sure to increase. This trend will develop more and more with the better earning power now becoming more common in all the world. Where will this meat be produced? Will it be cheaper to ship the meat, or the feed to produce the same product at the point of consumption.

Then we in the U.S.A. become aware that we are not prepared to meet the price competition of other nation's vessels in the movement of freight cargo to Europe. You are experts in that field of knowledge, considering too that you are intimately close to the fixing of freight through the facilities of the Baltic Exchange in London. Or, should we be looking ahead to the ownership and operation of vessels by the cooperative participants in this program? Similarly, we in the United States avail ourselves of an insurance to prevent large losses in market fluctuations by making hedging trades in the Chicago Futures Market. It seems that the use of our combined knowledge along with the facilities that are available to each of us should accrue great benefits to a joint venture such as is proposed here.

My mention of these many facets of negotiating trade between our respective countries is intended, not to give answers, but to provoke thinking, in the hope we can bring technical people together to activate the concept of direct trading. This of itself would necessitate many confrontations of our Cooperative people in all nations, that surely will lead to a better understanding, resulting in mutual benefits to all participants. Beyond that, we have a responsibility to provide food to all people and it will take the best talents we can get together, working toward the goal of providing the best nutrition possible, at the least cost attainable.

PROSPECTS OF INTERNATIONAL TRADE IN ANIMAL FEEDING INGREDIENTS  
AMONG COOPERATIVES

By

Thomas J. Gorman  
President  
The Farm Bureau Cooperative  
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Presented at the  
CONFERENCE ON COOPERATIVE TRADE IN ANIMAL FEEDINGSTUFFS  
at Paris, France from 8th -10th Sept, 1969.

organised by the

THE INTERNATIONAL COOPERATIVE ALLIANCE AGRICULTURAL COMMITTEE



INTERNATIONAL COOPERATIVE ALLIANCE  
Regional Office & Education Centre  
for South-East Asia, P.O. Box 3021  
43 Friends' Colony, New Delhi, India

A/29th April, 1970

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PROSPECTS OF INTERNATIONAL TRADE IN ANIMAL FEEDING INGREDIENTS AMONG  
COOPERATIVES

By

Thomas J. Gorman

My appearance here today is in the dual role as the President of a Wholesale Marketing and Supply Cooperative and as a farmer who operates an 870 acre grain and livestock farm near Cincinnati, Ohio, U.S.A. This status causes me to be doubly interested in the subject that I have agreed to discuss at this time. Possibly some of my own production will be marketed through the Cooperative I represent and find its way to this part of the world, where we observe that appetites must be served in much the same way as they are at home.

Certainly we are all greatly indebted to Mr. Zlataric and his associates for having arranged for the accommodations that are made available for us here today. The idea for this meeting was conceived three years ago at the ICA conference in Vienna and there has been a substantial exchange of correspondence since that time, pertaining to the many arrangements for the facilities and program that brings us together here today. Furthermore Mr. Zlataric made a trip to our country to promote our mutual interests in Cooperative marketing and in obtaining first-hand information intended to make this conference interesting and informative.

It's always a pleasure to come to Paris. I am sincerely pleased that arrangements could be made to meet here in the city of beauty and hospitality. I am sure it will add immeasurably to the success of our conference.

Perhaps it would be appropriate to review some of the conditions that compel our Farmer Associations to seek out new markets; as well as to find new ways of marketing the products of our soil:

- (1) Over sixty million acres of our land is retired from grain production by Government programmes designed to limit the potential output to an amount that can be consumed in domestic and export markets, allowing for the maintenance of a reasonable inventory, carried forward.
- (2) Farm technology, including a greatly increased use of fertilizers, has brought about fantastic gains in our yields of all grains, per acre cultivated. For example, in our state of Ohio, we produced 42 million bushels of wheat on 1,960,000 acres in the year 1940 as compared to 45 million bushels produced on 1,227,000 acres this last year, 1968. Even more dramatically our corn yields moved from 38.0 bushels per acre in 1940 to 84.0 bushels per acre in 1968.

(3) <sup>152</sup> Exports of wheat are declining as world supplies are reaching large surplus inventories. We must realize, too, that a few countries have substantial increases in their production, even to the point where they are now exporters. And, we can expect still more nations to rapidly become self-sufficient in growing both cereal grains and feed grains as they adopt new technologies, improved seed, harvesting equipment, along with other labor saving devices.

Production controls in the United States will require 12% less planting for 1970 harvesting than was harvested this year; an all time low acreage since records were made available. This action is made necessary by the lack of export outlets, largely served by other surplus wheat countries.

(4) Soya Beans and the derivatives therefrom (meal and oil) are in less demand, as other oil seeds and synthetics come into greater use. It is estimated that the use of Urea has displaced the need for 70 million bushels of soya beans in the manufacture of animal feeds. Similarly our use of U.S. production of soya oil is reduced as a result of the importation of palm oil on a duty free basis from Indonesia and Malaysia. It is estimated that we imported 200 million pounds this year, almost eight times more than was brought in, only four years earlier. Palm oil production increased 13% last year and an even greater increase is expected this year. Competition for oil markets will increase substantially as such other products become available. Only as an increased population consumes more meat and oils will there be need for additional soyabean production, or the many other substitutes that are coming into use.

(5) Now we are reading about the results of a corn breeding technology that has been underway for several years. It is reported that a limited number of farmers have been furnished a new variety of seed corn for experimental use. It is expected to produce a crop containing 50% more protein than any type yet developed. This may bring about a major innovation in farming and in the feeding of livestock. Hogs that were fed the new high protein corn gained weight 50% faster than on normal corn. It will be tried on poultry too. The new corn may bring about a lower cost in pork and poultry production, the benefits of which will accrue to consumers at home and help reduce malnutrition in poverty-stricken lands abroad.

We mention wheat along with feed grains and oil seeds because the surplus supply of wheat makes it competitive in price with corn in recent weeks; and wheat has a feeding nutrient value of about 105% of corn. Acreage planted to corn has decreased over the last three years but increased yields per acre has caused the total production to remain at about the same level. The reduced planting was brought about by incentives offered by Government programs designed to discourage the use of substantial land that could have seeded if the grain was needed for domestic or export use. Inventories of corn that have been carried over from one year to another have been reduced because of a greater use each year than the production has been in a like period of time.

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Background paper

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Pakistan

FRUIT AND VEGETABLE INDUSTRY OF PAKISTAN : SOME BASIC FACTS

by

M Hasan Khan  
Managing Director  
West Pakistan Cooperative Consumer Society Ltd  
Lahore.

COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND RAW MATERIALS  
FOR FEEDING STUFF, TOKYO, JAPAN. 12th to 16th May 1970

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE  
NEW DELHI, India.

CENTRAL UNION OF AGRICULTURAL  
COOPERATIVES, TOKYO, Japan

## FRUIT AND VEGETABLE INDUSTRY OF PAKISTAN : SOME BASIC FACTS

by

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Pakistan emerged as sovereign state on August 14, 1947, consisting of two units separated by over 1000 miles of Indian territory. It is an island of great scenic contrasts varying from the snow covered peaks of Himalayas to the arid deserts of Sind and greenery of East Pakistan. Total area of Pakistan is 365529 sq miles, 85% constituting West Pakistan only. According to second census of 1961 population was 93.8 millions compared to 72 million in 1951. 54.3% people live in East Pakistan with density of population as 922 per 59 miles and 45.7% in West Pakistan with density of population as 138 per 59 miles. There is a marked trend in urbanisation, urban population increasing by 57% during 1951-1961. The percentage of literacy in East Pakistan is 17.6 as to West Pakistan which is only 13.6%. The population growth is 2.2% per annum, which has now gone up to 2.6%. According to revised estimate of 67-68 the population was 121.8 million.

The total land area of Pakistan is 233.9 million acres out of which 71% has been fully surveyed. The index of agricultural production rose from 100 in 1959-60 to 123 in 1964-65 (Second Five Year Plan Period). The index for Food crops rose by 21 points, non-food by 43 points and fibre by 12 points. Pakistan is an agricultural country and so its main exports are primary products. Lately however due to rapid industrialisation, there is a considerable advance in the exports of manufactured goods accounting for nearly 47% of total exports. Imports are dominated by capital goods, raw materials, fuels and manufactured goods. From 1948 to 1968 Pakistan had a favourable balance of trade for 5 years only.

The growth rate of economy in 1967-68 was 8.3% as compared to Second Five Year Plan rate of 5.2%.

Main objects of Third Five Year Plan are to increase the national income by 37%, to provide 5.5 million new jobs, to increase foreign exchange earnings to 4800 million in 1970 compared to 3050 million in 1965, to develop basic industries, to improve agriculture through master works programme, to arrest the growth of population and to have equal distribution of wealth.

### 1. Fruit and Vegetables produced in Pakistan

A large number of fruits and vegetables are grown in Pakistan. The total production of fruits during the year 1964-65 was 3.05 million tons for the period. Since 1964-65 the production of fruits and vegetables has increased. According to 3rd National Plan target, by 1970, the production of fruits and vegetables will increase by 26% and 35% respectively.

### 2. Procurement of Raw-material Vegetables and Fruits

The sources are :

1. Wholesale market
2. Contract or tender basis
3. Own orchards
4. Sending fieldsmen to buy at harvest time.

Existence of middlemen commission results in price increase.

The average wholesale prices of fruits and vegetables are as follows:

Peaches	all varieties	Rs. 40	per md.
Apricot	"	28	"
Apples	"	30	"
Mangoes	"	27	"
Oranges	"	5	per 100
Limes	"	30	per md.
Pomegranates	"	37	"
Pine apples	"	22.50	per 100
Vegetables	"	16	per md.
Cauliflower	"	12	"
Peas	"	15	"
Beans	"	15	"
Potatoes	"	22	"
Okra	"	21	"
Egg Plant	"	21	"

### 3. Processing Plants - Existing Position

At present there are 32 registered fruit and vegetable plants in Pakistan - East Pakistan 5 and West Pakistan 27. These plants are scattered all over the country. For most of the plants no professional study and feasibility - surveys were conducted before they were started and points like supply of raw materials availability of skilled labour, supply of power and water, the season of operations, cheap and fast communications were ignored. High cost manufactures due to lack of organisation and marketing facilities has resulted in many problems.

Besides registered plants, there are about 80 small scale fruit and vegetable processing units (mostly seasonal) catering market requirements.

Quite a variety of fruit and vegetable products are put on the market by registered fruit and vegetable processing factories. 11 registered factories recently surveyed produced 40-82 varieties. About 90% of the products are produced from fruit and only 10% from vegetables. Juice manufacturing plant produces mango, orange, pomigranate, strawberries, peach and apricot juices. Three plants produce essential oils, citerons, peels. One of the juice plants also manufactures concentrated orange and grape fruit juices.

#### 4. Quality and Standard of Products

The quality of products manufactured in Registered factories is satisfactory and is upto international standards, whereas in unregistered plants the products are inconsistent and artificial matters, essences and chemicals are extensively used.

There is only one grade of product produced.

#### 5. Type of Operation and Processing Methods

The large bulk of products is packed in bottles and jars. Canned fruit products are peaches, apricots, mango, pineapple, apples, grapes, and vegetable range is peas, okra, beans, egg plant, cabbage, carrots, cauliflower, marrow, bitter gourds, potatoes, moolies, round gourds, tomatoes, turnips and spinach. Sweet corn is also canned in two factories. Tomato ketch-up is manufactured by most of the registered plants.

Processing methods followed are based on international scientific methods. Except juice manufacturing plants, few have automatic, semi-automatic machinery and manual machinery. Auxilary machines e.g. can-sealers are locally made.

#### 6. Problems

Automatic imported machinery is very costly because home machinery had to be amended thus adding to already high cost capital. The financial resources are meagre and all these factors contribute to the high cost of finished product. Labour input-output ratios are very narrow, thus making labour costly.

#### 7. Sugar

Sugar constitutes 33% of total cost of raw materials, whereas fruits and vegetables costs account for about 28% of total cost.

#### 8. Containers

Three types of containers are used: cans, bottles and jars. The production mix-up is normally : cans 8%, bottles 70% and jars 22%.



Cost of canning in Pakistan is almost two times than as compared to developed countries because tin plate is all imported and can manufacturing plants are run under-capacity resulting in price build-up. Besides variety of can-sizers are used resulting to obstacles in flow production and thus high cost factors.

Bottles and jars are used mostly, 26 oz. and 6 oz. bottles are used and they are all made in Pakistan. When reused there is breakage during washing by 2.2%. The cost of bottles and jars are very high.

A 26 oz. bottle costs 70-78 rps. per gross. Ketchup 6 oz. bottles cost 36-40 rupees per gross.

#### 9. Packing Material

A high cost labelling is used Rs.70-80 for 1000 labels for squash bottles, but it can be reduced if size of order is increased. Products are packed in wooden cases or corrugated cartons. Inland transportation by trucks is economical, efficient and popular. Cost of wooden crate is Rs.2 to 24 per 24 containers package.

In general the volume of production of fruits and vegetables products in Pakistan is small. All the canning factories have been running under-capacity. The small volume of production effects the cost of raw materials. Labour and overhead costs also increase the price of finished product, thus making the cost beyond the purchasing power of prospective consumer.

#### 10. Marketing

A wide range of fruits and vegetables are packed and sold. These products are divided in main groups.

- i. Syrups, Squashes and Juices : is in 26 oz. bottle. Varieties are mango, lemon, orange, pineapple, grape fruits etc.
- ii. Jams, Jellies, Marmalades and Preserves : Packed in 16 oz. jars with metal seal or cover. Some preserves are packed in cans. Varieties are mango, orange, lime and lemon, pineapple, guava, apple, apricot, plum peach etc.
- iii. Fruits and Vegetables : Packed in cans usually of 8, 14, 15 and 30 oz. The varieties are mango, pineapples, peach, apricot, apple, pear, grapes, grape-fruit, plum and bean, ouva, eggplant, cabbage, carrot, cauliflower, bitter gourd, peas, potatoes, tomato turnip and spinach.
- iv. Ketchup, pickles and Chutneys : These are packed in jars of 8, 14 and 16 oz. The groups include tomato, ketch-up or sauce, mango, lime, pepper or mixed pickles and sweet chutneys made with spices, vinegar and mangoes.
- v. Vinegar, rose water and rose petal paste poured in green bottles of 26 oz. capacity and cans.

### Method of marketing

The manufacturer may sell direct to retailers or consumers, the commission agents or sales representatives. The manufacturer sometimes establishes his own wholesale or retail stores. The commission agents get 8-10% commission on sales. The wholesales discount average upto 8.5% of manufactures price. The credit facilities are very shy and local expenses are paid by retailers.

### 11. Export

A very small percentage of products processed in Pakistan are exported. The exports are generally made to UK to cater to the needs of Pakistan residents and middle east countries.

Export during 1963-64 of Rs.3.4 million are expected to increase to Rs.10 million by 1970. In keeping with 3rd plan target for increasing the production of vegetables and fruits from 4.45 million tons to 5.81 million tons, it is proposed to establish units of dehydrating and canning of fruits and vegetables allocating 24 million rupees.

Wholesale prices of some brands (rupees per doz) are attached.

### 12. Cooperative Sector

There is no plant under cooperative sector worth mentioning except Turbat dates packing factory started with government loan of Rs.200,000.

At Lyallpur recently a fruit cooperative board has been constituted to investigate into the ills and help in their eradication.

West Pakistan Cooperative Consumer Society Ltd (COOP) has been recently constituted to open a chain of cooperative supermarkets all over the province of West Pakistan supported by integrated productive units including vegetables, fruits and meat, fish and dairy products distribution etc besides other essential consumer goods. At present 15 supermarkets are functioning and a market share of 3% has been secured. Processing plants for different food items are under installation and Coop is entering processing and distribution of perishables on professional basis.

There is however no significant role of cooperatives worth mentioning in this particular field of activity.

## Wholesale Prices of Some Brands (Rupees per dia)

Brand	Mango 30 oz.	pine apple 30 oz.	Squash lemon 26oz.	Jams 16 oz.	Jelly 16 oz.	Tomato ketchup 14 oz.	Vegetable Peas 30 oz.
Haque	-	42.25	-	36.50	-	29.87	24.50
Star	42.00	40.00	42.00	30.00	30.00	24.00	28.50
FPL	43.45	-	33.35	26.25	26.25	22.30	24.25
Khyber	45.00	-	31.00	24.00	25.00	21.00	25.00

REPORT ON PRODUCTION OF RAW MATERIAL FEEDSTUFF IN IRAN

by

Mr Mehdi Hendesi  
Member, Board of Directors  
Central Organisation of Rural Cooperatives  
Teheran, Iran

COMMODITY CONFERENCE ON FRUITS AND VEGETABLES AND RAW MATERIALS FOR  
FEEDING STUFF IN SOUTH-EAST ASIA, TOKYO, JAPAN, May 12 to 16, 1970

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE  
New Delhi, India.

CENTRAL UNION OF AGRICULTURAL COOPERATIVES,  
Tokyo, Japan

Report on Production of Raw Material Feedstuff in Iran

By Mr. Mehdi Hendesi  
Member, Board of Directors  
Central Organization for  
Rural Coops of Iran  
357 Pahlavi Avenue, Teheran

Since, parallel to the Land Reform Law, the rural cooperative societies have first been established in crop-producing areas which were not favorable for animal-breeding, & only within last two years, they have expanded through animal-breeding areas, the activities of the rural cooperative societies in the field of animal-breeding, & the production of raw material of feedstuff, have been limited only to the areas whose populations have been in need of this product. Besides, changing the type of the feedstuff must be preceded by training the rural population, so that when the raw material of feedstuff is provided by the cooperatives, its distribution & consumption by those engaged in animal husbandry will be practical. Of course, the rural cooperative societies provide useful assistance in various activities through the distribution of the financial aids required by farmers. They also have undertaken some activities to protect & retain the natural pastures close to cooperatives, & gradually when their members accustom their animals to the concentrated feedstuff, these activities will be improved. All these activities must be in accordance to the development of cooperatives' possibilities.

So far, the rural cooperative societies of Iran have undertaken two fundamental activities in the field of expanding animal husbandry & producing the feedstuff.

A. According to the project drawn up by the National Husbandry Organization of Iran (1964), it was determined to build one silo in every 5 village located close to the sugar factories of Arak, Abkooh (Mashad), Chenaran (Mashad), Birdjand, Bardsir (Kerman), Marvedasht, Fasa, Shahabad, &

Bistoon (Kermanshah) to make use of the sugar beet molasses to feed the animals, specially in the winter when there is a shortage of fresh provender.

This project was carried out with the collaboration of the members of the rural cooperative societies in the mentioned areas. The terms of the project are:

1. The silos should be built by the National Husbandry Organization Of Iran, & have the capacity of 500 tons of provender. In the first year, N.H.O. will provide molasses for these silos through the close plants & then hand it over to rural cooperative societies, free of charge.

2. The concerned cooperative society is responsible for maintaining the silo & distributing the molasses among those engaged in husbandry.

3. In the following years, the molasses for silos should be provided by the concerned cooperative society.

4. The rural population of the village in which the silo is decided to be built should donate a 200 square meters piece of land (50 ms. length & 4 ms. width) to their cooperative society.

The brochures concerning the building of the silos provided by the National Husbandry Organization of Iran are distributed among the rural cooperative societies.

In order to utilise the molasses of the silos, those engaged in husbandry should buy it from the cooperative society, the total expenses of transportation & offloading of the silo is the basis for determining the price.

So far, 44 silos have been built

B. Considering the fact that almost 80% of the meat & dairy products required by the country is provided by the domestic production, animal-husbandry can be regarded as the skeleton of the country's agriculture.

CORC is specially interested in the animal husbandry since it produces the required meat for the country. The rural cooperative societies, in collaboration with the National Husbandry Organization planned & performed a pilot project in 1966. The objective of this project was to assist the animal-breeding members of the cooperatives.

According to this project, cooperative folds & provender stores have been built in animal breeding areas of Tabriz, Sanandadj, Kermanshah, Behbahan, Gorgan, Kerman, Djiroft, shahre Kord, Kohkilouye, & Mashad in order to aid the activities of breeding & fattening the animals. Also, two markets for the sale of animals have been established in Mashad & Tabriz. These markets have been utilized.

According to the mentioned pilot project, the cost do installation & running the breeding station for the first 3 years will be undergone by the National Husbandry Organization of Iran.

The rural cooperative societies will undertake the affairs of the breeding station after being trained.

1. Total number of the sheep retained in one period of fattening: 581
2. Total increase in the weight of the sheep during the period  
of fattening: 9005 Kg.
3. Average revenue earned for one sheep during one period  
of fattening: 600 Rls.

The private, non-cooperative, sector has undertaken activities in the field of exporting feedstuff like fresh & dry provender, molasses, mullet, barley & oat to the neighbouring countries of South East of Iran.

BEARING FRUIT TO EUROPE<sup>§</sup>

By

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COMMODITY CONFERENCE ON FRUITS & VEGETABLES AND RAW MATERIALS FOR  
FEEDINGSTUFFS IN SOUTH-EAST ASIA, TOKYO (JAPAN) : 12th-16th May, 1970

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE -  
Regional Office & Education Centre  
for South-East Asia, P.O. Box 3021,  
43, Friends' Colony, New Delhi-14, India

CENTRAL UNION OF AGRICULTURAL COOPS.  
Nohkyo Building, 8-3, Ohtemachi,  
1-chome, Chiyoda-ku, Tokyo,  
Japan.



INTERNATIONAL COOPERATIVE ALLIANCE  
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A/29th April, 1970

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For many less-developed countries, the fresh fruit export business presents a tantalizing dilemma. On the one hand, developing fruit exports would seem to be a rational way to exploit their resources of sunshine and earth. Moreover, there would seem to be a market in the industrialized countries, where consumption of fruit is rising along with personal income.

On the other hand, exporting fresh fruit involves formidable horticultural, logistical and commercial problems that do not lend themselves to cheap or quick solutions.

The question is, are the potential rewards - often remote - worth the investment and effort necessary to reap them? Obviously, there cannot be a general answer; any country seeking an answer will have to analyse its own particular set of circumstances and their relationship to the realities of the market.

One conclusion seems inescapable: If developing countries want to go after a meaningful share of this business, they must make the decision at the highest levels, and gear themselves for a national effort. No one grower or exporter, nor even groups of growers and exporters, can cope with all the supply and marketing problems that must be solved.

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Countries seeking information "input" for formulating a decision about their place in the produce export business can find a mass of it in a new Centre study, The Fresh Fruit and Vegetable Market in Seven European Countries. Volume I<sup>§</sup> includes a survey of the market for 12 fruits, mainly of the "Mediterranean-type", in France, the Federal Republic of Germany, Belgium-Luxembourg, the Netherlands, the United Kingdom and Sweden.

This article is based on the new study and focuses on the eight fruits that seem to have the most promising market prospects: oranges, table grapes, lemons, clementines, grapefruit, mandarins, peaches and melons. (Note that the study does not deal with processed fruits, whose problems and prospects can be quite different. These will be the subject of a separate study).

### Problems

The seven countries in 1966/67 consumed almost 5 million metric tons of the eight fruits, and about three-quarters of this consumption was covered by imports. In value terms, 1967 imports of these fruits totalled nearly US \$ 630 million. The United Kingdom, Belgium-Luxembourg, the Netherlands and Sweden are almost entirely dependent on imports of these fruits. Imports account for about 78% of their consumption in the Federal Republic of Germany (the biggest market) and for about 55% of their consumption in France.

Despite the heavy reliance on imports, new suppliers will not find this an easy market to conquer. Most of this imported fruit comes from within Europe itself, from Italy and Spain in particular. European suppliers enjoy the important, often crucial, advantage of proximity and, especially within European Economic Community, tariff, price and sometimes quota protection.

Moreover, the European fruit market, taken as a whole, is not very dynamic. Fruit consumption is growing by something like 1.6% a year - only slightly more rapid than the growth of the population itself.

### Bright spots

But there are bright spots within this rather grey over all picture. Consumption of certain fruits - grapefruit and lemons in particular - is growing far faster than the average, and European production cannot meet the demand. Even for fruits grown in large quantities on the European continent, such as clementines, grapes and peaches, developing countries have a chance to build up their share of the market if they can deliver when the local crops or the products of traditional suppliers are not available. Modern transport techniques, including use of air freight and refrigerated containers, should help overcome the perishability and transport cost problem.

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<sup>§</sup>Vol.1 US\$10.00, Vol.2: The Fresh Vegetable Market US\$5.00.

Published in English, French and Spanish. Available from the International Trade Centre UNCTAD/GATT, Palais des Nations, 1211 Geneva 10, Switzerland. On written request the Centre will supply copies free of charge to official bodies and to traders in the developing countries who apply on their business letterhead.

Moreover, per capita consumption is very uneven from country to country and also varies widely between fruits. This emerges clearly from the charts on this and the preceding pages, and from the charts for the individual fruits. For example, the United Kingdom's per capita fruit consumption - overall and for most of the individual fruits - is far below the average for the seven countries. The U.K., the Netherlands and Sweden are well behind the other countries in their per capita consumption of lemons.

Such disparities suggest that promotional campaigns, especially campaigns that are sponsored multinationally, might well help to boost consumption in market segments that display low or below-average levels. The same conclusion can be drawn from the relatively advanced per capita imports and consumption of particular products in particular countries, such as clementines in France and grapefruit and melons in the United Kingdom. If per capita imports and consumption of these fruits can reach such high levels in one country, they should be able to in others as well.

Developing-country exporters should benefit from consumption increases, although their share in the market is extremely variable by product and by country. Exporters from developing countries are fairly well introduced in the grapefruit markets, in which they account for 60 to 75% of the total imports of the various countries surveyed. They also have a substantial share in the orange markets; but for the other fruits their penetration is, with some exceptions, only between zero and 20%.

At least as important as any promotional campaigns would be actions by developing countries to improve their offerings, in terms of both quantity and - no less important - quality. Indeed, there is strong evidence that for developing countries the key to selling more fruit to Europe lies at least as much in the supply side as it does in demand.

#### How to Succeed

The successful efforts of a few developing countries, notably Israel and Morocco, are often cited as examples that others should follow.

#### Quality critical

It would be hard to over-stress the importance of quality. Poor quality is one of the most frequent complaints levelled at fruits from some countries. The term "quality" is a sweeping one. It embraces the basic characteristics of the fruit itself, such as its taste, colour, texture and keeping-time. It covers uniformity of grading. It also involves the kind of packing used for shipment, for on this depends the condition in which the fruit arrives. And the "quality" factor even extends to the way the fruit is packaged for presentation to the consumer, for more and more consumers tend to buy "with their eyes".

In general, housewives seem to be increasingly willing to pay more for good quality, even in countries like Belgium and the Netherlands, where frugality has perhaps been practiced more diligently than in some other countries. For example, it was common not long ago for importers to remove small oranges from shipments to Scandinavia, in order to sell them on the Dutch and Belgian markets. Scandinavian consumers wanted the larger sizes, while Dutch and Belgian housewives sought the smaller, cheaper grades. Today, a large proportion of Dutch housewives want only large, high quality fruit, even if they have to pay a bit more for it.

The success of high-priced U.S. grapefruit in several European countries is another example of this upgrading in consumer taste and inclination to spend. It has captured a major share of some markets despite its higher price. In France, for example, the average CIF import price for U.S. grapefruit in 1967 was 1.15 francs per kilo, compared with 0.90 francs for Israeli grapefruit, 1.05 for South African and 0.88 for Moroccan. Although Israel is the biggest French supplier, the United States sells more grapefruit in France than South Africa and the other suppliers.

Obviously, there is no one-for-one relationship between consumption and price; the fruit's size, quality and other characteristics are also important factors in consumer choice ("quality", of course, is not always an absolute; certain characteristics may be preferred in one country but not in another). With personal incomes rising throughout Europe, this quality discrimination is becoming increasingly significant in all of the countries studied, and for all of the fruits. For developing countries seeking to penetrate this market or to expand their share of it, this trend poses both problems and opportunities. It raises the standards exporters must aim at to get attractive prices. But it also means that if high quality is attained, it can help offset the higher prices developing countries often must charge to cover their relatively high transport costs.

#### Logistics

Rationalization of transport is another vital area. Proper palletization and refrigerated transport are essential, and exporting countries should keep close watch on developments in containerization, so that they are ready to exploit them when they can. Air freight is worth investigation. Kenya, for example, has already spurred great interest in Europe with its fresh-fruit air shipments. Airlines will often carry trial shipments free of charge to promote their own business.

Besides paying scrupulous attention to the quality standards of each market country, exporters must make more regular, continuous offers, even if this involves a financial sacrifice at the start. And they must set themselves up to reply rapidly to importers' requests, by telex if possible.

Proper timing of offers can mean life or death in the produce business. In ways, the trade is much like a military operation, where speed of decision and rapidity of execution are the decisive factors for success. On another level, exporters should try to hit the market at the times when their competitors can not satisfy demand, and when prices are highest. In France, for example, 97% of annual clementine imports arrive on the market during just three months - November, December and January. Such lumping of present supplies offer new exporters a chance if they can bring their fruit to the market at other periods. Climatic conditions are a controlling factor, but development of fruit varieties with different maturing times offers some flexibility.

Obviously, a large part of the supply problem goes all the way back to the first links of the long chain from grower to consumer. Crop type and timing is only one factor. Output is often low, and production zones scattered. Besides the obvious steps of increasing production, available tonnages should be gathered into one central collecting area to facilitate shipment.

Product promotion is another subject that needs more attention. Apparently much could be done through collective campaigns financed by several producing countries and the trade to boost consumption of fruits whose market potential seems to be still unexploited, such as melons. But all the promotion in the world will not help sales if supply is inadequate, or quality low.

Table NO.1 Demand & Supply for Feedstuff

UNIT: 1,000 Ton.

YEAR			1960	1965	1968	1970	
			TDN	TDN	TDN	TDN	
DEMAND			10,548	14,775	17,251	20,581	
SUPPLY CONCENTRATED	Roughage	Quality	1,495	2,846	3,620	4,443	
		Low Quality	3,382	3,069	2,562	2,776	
		FOB-Total	4,877	5,915	6,182	7,189	
	Concentrated feed.	Domestic	3,773	3,908	4,030	4,271	
		Imported	1,898	4,932	7,039	9,121	
		Sub-Total	5,671	8,840	11,069	13,397	
	Total			10,548	14,775	17,251	20,581
	SUPPLY RATIO (%)	Roughage/Total Supply		46.2	40.4	35.8	34.2
		Concentrated/Total Supply		53.8	59.2	64.2	65.4
		Imported/Total Supply		18.2	33.4	40.8	44.3
Imported/Concentrated		32.5	55.2	63.6	68.4		

Table: NO.2 Commercial and Self supply of Concentrated feed

YEAR	ITEM	Total	By Route of Supply		By FORM of Feed	
			Self-Supply	Commercial	Non-compound	Compound
1960		7,9440 (100)%	3,120 (39)%	4,820 (61)%	5,058 (64)%	2,882 (36)%
1965		12,056 (100)	2,241 (15)	10,265 (85)	3,906 (32)	8,150 (68)
1969		16,711 (100)	1,709 (10)	15,002 (90)	3,611 (22)	13,100 (78)
		17,917	2,811	11,529	3,413	14,300

Table No. 3 Production of Compound Mixed Feed

UNIT: 1,000 Ton

ANIMAL \ YEAR	Quantity			Constitution Ratio (%)			Increase Ratio
	1960	1965	1968	1960	1965	1968	1968/1960
Poultry	2,320	5,314	6,992	80.5	65.2	61.6	301
Pig	208	1,773	2,433	7.2	21.4	21.4	1,170
Dairy Cattle	309	803	1,301	10.2	9.2	11.5	421
Beef Cattle	5	79	448	0.1	0.2	3.2	896
Other	45	182	183	1.5	2.2	1.6	407
Total	2,882	8,151	11,358	100.0	100.0	100.0	394

Table No. 4 Quantity used for Compound Mixed Feed by Materials

UNIT: 1,000 Ton. Ratio: %

Materials	Corn (Maize)	Milo (Sorghum)	Other grains	Cereal By-product	Alfalfa (Lucern)	Soybean Meal	Other Vegetable Oil Cake	Fish Meal	Other Materials	Total
Quantity	1,371		141	570		157	176	171	299	2,885
Ratio (%)	47.5		4.9	19.8		5.4	6.1	5.2	10.4	100.0
Quantity	2,869	1,544	291	1,308		623	378	415	1,759	8,187
Ratio (%)	35.0	18.9	3.6	16.0		7.6	4.6	5.0	9.2	100.0
Quantity	4,234	2,275	206	1,234	324	937	537	557	1,047	11,403
Ratio (%)	37.6	20.0	1.8	10.8	2.8	8.2	4.7	4.9	9.2	100.0

Table No. 5 Imported Quantity of Feed Raw Materials

ITEM	YEAR	Quantity (UNIT: 1,000 Ton)			Value (UNIT: ¥1,000)
		1960	1965	1968	1968
Cereal By-Product	Wheat Bran	219	394	261	16,550
	Rice Bran	7	5	2	85
	Others	17	30	130	7,427
	Total	243	429	393	24,062
Cereals Grains	Corn (Malze)	1,465	2,995	4,128	242,221
	Milo (Sorghum)	57	1,622	2,277	131,188
	Wheat	481	912	1,101	83,224
	Barley	-	370	634	43,773
	Others	20	68	92	5,567
	Total	2,023	5,967	8,231	505,973
Vegetable Oil Seeds	Soybean Meal	13	53	16	1,703
	Others		99	158	11,752
	Total	13	152	174	13,455
Mineral Meal & Oil Cakes	Fish Meal	18	84	138	18,486
	Others	3	112	141	18,227
	Total	21	196	279	36,713
	Others	30	381	571	28,241
Grand Total		2,330	7,125	9,648	608,493



Country : : : South : : Other : Total  
 Year: Canada : Argentina: Peru : Africa : Australia: countries : quantity  
 of import

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*Table No. 4*

Quantity of Main Imported Animal Feeding Stuffs by Country

Item	Year	Country	Canada	Argentina	Peru	South Africa	Australia	Other countries	Total quantity of import
Maize	1965			3,777 (0.1)		16,197 (0.5)		42,241 (1.5)	2,994,756 (100.0)
	1966			27,336 (0.9)				134,062 (4.3)	3,101,431 (100.0)
	1967			48,922 (1.5)		653,636 (19.8)		298,126 (9.0)	3,305,267 (100.0)
	1968					211,881 (6.5)		14,050 (0.4)	1,172,651 (35.2)
Grain sorghum	1965			74,685 (4.6)					1,621,769 (100.0)
	1966			183,084 (7.6)			13,510 (0.5)	14,465 (0.6)	2,415,306 (100.0)
	1967			112,671 (4.4)		113,768 (4.5)	18,813 (0.7)	109,637 (4.3)	2,541,181 (100.0)
	1968			29,730 (1.1)		35,734 (1.4)		17,938 (0.7)	943,923 (37.1)
Wheat	1965		263,477 (28.9)				361,912 (39.7)	480 (0.0)	912,418 (100.0)
	1966		200,643 (21.3)				366,560 (38.8)		943,194 (100.0)
	1967		255,586 (20.7)				507,263 (41.1)	1,092 (0.1)	1,233,209 (100.0)
	1968		113,266 (9.2)				648,827 (52.6)		1,100,915 (89.3)
Barley	1965		156,888 (42.7)				9,383 (2.6)	28 (0.0)	369,960 (100.0)
	1966		123,127 (28.3)				89,076 (20.4)		435,533 (100.0)
	1967		350,620 (61.2)				111,425 (19.4)		573,069 (100.0)
Rye	1965		47,962 (86.0)	3,441 (6.2)			1,626 (2.9)		55,749 (100.0)
	1966		60,493 (99.8)	6 (0.0)				101 (0.2)	60,600 (100.0)
	1967		77,900 (99.9)						78,005 (100.0)
	1968		46,838						46,838

Source: Livestock Bureau, Ministry of Agriculture and Forestry shows Purchase Amount by ZEMKOREN

Table No. 6

(Unit : M/T %)

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Item	Country Year	Thailand	Philippines	Cambodia	P.R. of China	U.S.S.R.	U.S.A.
Oat	1965						
	1966						1,559 (11.8)
	1967						394 (2.0)
	1968						218
Wheat bran	1965		42,836 (10.9)		818 (0.2)		58,056 (14.7)
	1966		56,409 (16.0)				72,434 (20.6)
	1967		85,145 (39.6)				19,424 (8.3)
	1968		60,030		12,396		79,501
Pollard (Rice bran)	1965		380 (7.0)				
	1966		385 (12.3)				533 (17.2)
	1967		240 (37.4)				
Soyabean oil-cake and meal	1965				-40 (0.1)	4,714 (8.9)	47,840 (90.6)
	1966					11 (0.4)	2,503 (95.9)
	1967						
Fish scrap and meal	1965				2,922 (3.5)	8,486 (10.2)	421 (0.5)
	1966		52 (0.0)		1,670 (1.6)	8,062 (7.6)	212 (0.2)
	1967				495 (0.5)		
Total	1965						
	1966	596,480 (9.2)	43,216 (0.7)	17,977 (0.3)	226,898 (3.5)	13,200 (0.2)	4,241,297 (65.2)
	1967	814,283 (11.0)	56,846 (0.8)	25,110 (0.3)	149,026 (2.0)	8,073 (0.1)	4,834,093 (65.0)
	1968	541,932 (6.7)	83,385 (1.0)	14,562 (0.2)	58,220 (0.7)		4,474,766 (55.5)
	1968	687,000	66,420	7,105	61,630	13,227	4,540,000

(Unit : M/T,%)

Country :	Canada :	Argentina :	Peru :	South Africa :	Australia :	Other countries :	Total quantity of import
Oat	1965 : 505 (4.2)	:	:	:	11,609 (95.8)	:	12,114 (100.0)
	1966 :	225,460 (57.3)	:	:	11,647 (88.2)	:	13,206 (100.0)
	1967 : 1,595 (8.2)	91,828 (26.1)	:	:	17,543 (39.9)	:	19,532 (100.0)
	1968 : 1,035 (4.2)	4,085 (16.2)	:	:	26,767 (95.8)	:	28,545 (100.0)
Wheat bran	1965 : 40,122 (10.2)	33,904 (16.2)	:	14,035 (3.6)	51 (0.0)	12,250 (3.1)	393,628 (100.0)
	1966 : 62,392 (17.3)	4,639 (85.8)	:	29,260 (8.3)	:	39,140 (11.2)	351,463 (100.0)
	1967 : 16,999 (8.1)	1,226 (40.6)	:	24,061 (11.5)	:	34,296 (16.3)	209,829 (100.0)
	1968 : 37,573 (10.2)	400 (62.4)	:	48,297 (11.5)	:	56,421 (16.3)	266,788 (100.0)
Pollard (Rice bran)	1965 :	:	:	:	:	388 (7.2)	5,407 (100.0)
	1966 :	:	:	:	:	935 (29.9)	3,119 (100.0)
	1967 :	:	:	:	:	:	640 (100.0)
	1968 :	:	:	:	:	1,117 (11.7)	11,927 (100.0)
Soya bean oil-cake and meal	1965 : 211 (0.4)	:	:	:	:	:	52,805 (100.0)
	1966 :	:	:	:	:	96 (3.7)	2,610 (100.0)
	1967 :	:	:	:	:	:	2,495 (16.047)
	1968 :	:	32,839 (39.3)	25,640 (30.7)	:	13,318 (15.8)	83,626 (100.0)
Fish scrap and meal	1966 :	:	67,870 (64.3)	25,596 (24.2)	:	2,158 (2.1)	105,620 (100.0)
	1967 :	98 (0.1)	53,757 (50.8)	39,932 (37.7)	:	11,590 (10.9)	105,872 (100.0)
	1968 :	509,165 (7.8)	312,002 (4.8)	32,839 (0.5)	55,872 (0.9)	384,581 (5.9)	68,705 (1.0)
Total	1965 :	446,655 (6.0)	303,520 (4.1)	67,870 (0.9)	54,856 (0.9)	480,793 (6.5)	190,957 (2.6)
	1966 :	646,964 (8.0)	195,995 (2.4)	53,757 (0.6)	831,397 (10.3)	655,044 (8.1)	454,741 (5.6)
	1967 :	361,537 (4.2)	96,121 (1.1)	96,499 (1.0)	1,221,096 (14.1)	864,166 (10.2)	365,898 (4.2)
	1968 :	1,035 (4.2)	4,085 (1.1)	48,297 (1.0)	26,767 (14.1)	26,767 (10.2)	28,545 (100.0)

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Table No. 6

Quantity of Main Imported Animal Feeding Stuffs by Country

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(Unit: Metric Tons)

Item	Year	Country					
		Thailand	Philippines	Cambodia	P.R. of China	U.S.S.R.	U.S.A.
Maize	1965	549,058 (18.3)		17,997 (0.6)	223,118 (7.5)		2,142,368 (71.5)
	1966	781,248 (25.2)		25,116 (0.8)	147,356 (4.8)		1,986,319 (64.0)
	1967	509,634 (15.4)		14,562 (0.4)	57,725 (1.8)		1,722,622 (52.1)
	Z	220,663 (18.8)			16,641 (1.4)		709,416 (60.5)
	1968	652,369		9,125	48,584		2,553,226
Grain Sorghum	1965	47,422 (2.9)					1,499,662 (92.5)
	1966	33,035 (1.4)					2,171,212 (89.9)
	1967	32,298 (1.3)					2,153,994 (84.8)
	Z						860,521 (91.2)
	1968	21,631					1,077,212
Wheat	1965						286,549 (31.4)
	1966						375,991 (39.9)
	1967						469,268 (38.1)
	1968						322,511
Barley	1965						203,661 (54.7)
	1966						223,330 (51.3)
	1967						111,024 (19.4)
	1968						
Rye	1965						2,720 (4.9)
	1966						-
	1967						105 (0.1)
	1968						2,237

(1) Source : Livestock Bureau, Ministry of Agriculture and Forestry

(2) Z Shows Purchase Amount by ZENKOPEN

Table: No. 7 Feedstuff Handled by Agricultural Coop Channel  
by Each Stage from Farmer to National Federation

UNIT: 100 million yen.

YEAR STAGE	Value handled.			Utilization Ratio (%)
	1960	1965	1968	1968
FARMER	1237 (30.2)	3,474 (42.4)	4,469 (40.2)	48.5
UNIT COOP	447 (15.2)	1,484 (24.2)	2,166 (25.0)	84.2
Prefectural Federation	383 (19.0)	1,232 (26.2)	1,826 (29.2)	88.0
National Federation (ZENKOKEN)	341 (26.2)	1,119 (36.2)	1,607 (34.5)	

( ) : indicates the percentage of business volume of feedstuffs out of total purchasing business volumes.

Table: No. 8 Compound Mixed Feed handled by Agricultural  
Coop Channel by Each Stage

UNIT: 1,000 tons

YEAR STAGE	Quantity				Utilization Ratio (%)
	1965	1966	1967	1968	1968
FARMER	8,150	9,898	10,323	11,366	44.2
UNIT COOP	3,342	4,268	4,542	5,085	82.2
Prefectural Federation	2,801	3,489	3,738	4,260	99.2
National Federation (JINKYUEN)	2,747	3,481	3,687	4,248	

Table No. 9 ZENKOREN'S Handling Share of Compound  
Mixed Feed in 1968.

		Ratio: %
Cattle	Dairy Cattle	44.0
	Beef Cattle	17.2
	Sub-Total	51.2
Poultry	Chick	28.2
	Broiler	25.2
	Layer	32.3
	Sub-Total	70.2
	Pig	47.4
	Others	12.6
	Total	37.6
	Mixed Feed.	29.3
	Grand Total	37.4