

**REGIONAL SEMINAR ON "MARKETING OF FRUITS AND VEGETABLES
THROUGH COOPERATIVES"**

Held At Tokyo (Japan) - May 17 -27, 1970.

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INTERNATIONAL COOPERATIVE ALLIANCE

Regional Office & Education Centre for South-East Asia

43 Friends Colony, New Delhi-14. India

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R E P O R T

I. Introductory

A Regional Seminar on Marketing of Fruits and Vegetables through Cooperatives was held at Tokyo, Japan, from 17th to 27th May, 1970, under the joint auspices of the ICA Regional Office and Education Centre for South-East Asia and the Central Union of Agricultural Cooperatives of Japan. The Seminar which was attended by observers and resource persons was held at the Institute for the Development of Agricultural Cooperation in Asia in Tokyo. The countries represented at the Seminar were Ceylon, India, Iran, Japan, Korea, Malaysia, Pakistan, the Philippines and Thailand. Observers were from the FAO, ILO and the APO, USA and Japan. Lecturers and other resource persons were drawn from Australia, Ceylon, Philippines, Japan and a consultant from the Asian Development Bank to present papers on specialised subjects at the various sessions of the Seminar.

Mr. K. Fujimoto, Chief of the International Department of the Central Union of Agricultural Cooperatives, Japan, while welcoming the delegates and observers to the Seminar, stressed the need for continued collaboration between the ICA and the CUAC in organising joint activities from year to year. He mentioned the gradual shifting of emphasis in the seminars jointly organised by the two agencies towards more technical

subjects and added that the Commodity Conference and the Regional Seminar were the two examples signifying this trend.

Mr. M.V. Madane, Joint Director (Technical Assistance and Trade) of the ICA RO & EC, welcomed the observers on behalf of the ICA and explained the background efforts which led to the organisation of the two activities in Japan this year. He thanked the CUAC and its leadership as well as the past and present Managing Directors of the IDACA for their active collaboration in organising the joint activities in Tokyo. Mr. H. Togawa, Managing Director of the IDACA, welcomed the delegates to the Seminar and expressed the hope that the deliberations would lead to more practical results in the field. He added that IDACA was always happy to welcome the delegates from Asian countries and provide them facilities available in the Institute.

II. Present Position in the Region

The delegates attending the Seminar reviewed the present position concerning the marketing of fruits and vegetables in their respective countries and highlighted some of the problems they are facing in developing this activity. A number of delegates also mentioned the development programmes which they intend to undertake for strengthening the marketing activity in this field. The following is a brief summary of the factual position in the countries represented at the Seminar.

1. Ceylon

The organisation of fruits and vegetables marketing in Ceylon was based on the overall programme formulated by the government. The Ceylon Agricultural Producers Cooperative Societies Union, which is the apex organisation of cooperatives producing fruits and vegetables was providing transport and marketing facilities both on a wholesale and retail basis.

Sixteen per cent of the total vegetable production in Ceylon was at present marketed through cooperatives. The Federation also provides agricultural inputs and credit to the producers of fruits and vegetables.

The cooperative organisations in Ceylon are facing severe competition from the merchants who not only buy from the farmers but also ensure delivery of the produce by giving advances to the producers before the crops are harvested. There was also a lack of proper management with the cooperatives marketing fruits and vegetables and their pricing structure was not geared to competitive business. There was a lack of publicity effort and the secondary organisations expected to undertake these activities were rather weak. There was a lack of marketing and intelligence services for the cooperatives. There were also too many societies in Ceylon doing this activity and most of them were functioning as uneconomic units. The consumer cooperative societies' unions are not at present handling perishables.

It was mentioned that the Government of Ceylon had appointed a Royal Commission to enquire into the problems of the cooperative movement and suggest measures aimed at future development and it was expected that the recommendations of the Commission, when implemented, would lead to the effective reorganisation of the movement.

2. India

The horticultural industry in India, although spread all over the country, is not yet organised in most of the places. As almost all varieties of fruits and vegetables are produced, there was a big potential for developing effective production and marketing to nutritionally supplement the diet of the large population. At present only 20-25% of the fruits and vegetables were marketed by local producers whereas

almost 50% was handled by private traders. There was a great difference in the price paid to the producer and the price charged by the trader from the consumers. Due to lack of an organised institutional structure, marketing activity had not developed to the extent possible. There was a marketing cooperative at the National level as well as federations at the State level. Marketing cooperatives at the district or sub-district level provide marketing facilities. Some of the multipurpose cooperatives undertake marketing of produce for their members. A few specialised cooperatives have also been organised for marketing of fruits and vegetables such as bananas, oranges, apples, etc.

There were quite a few good examples of cooperatives handling fruits and vegetables and they were also engaged in their export. As the returns to the producers were much higher, in respect of horticultural crops and vegetables, it was possible to organise successfully cooperative activity in the country provided sufficient incentives and assistance were assured to the producer. The lack of adequate grading, processing and cold storage facilities have added many difficulties to the present marketing activity. The delegate from India felt that as horticultural production needed special facilities for grading, packaging, processing and marketing, it was necessary to have specialised types of cooperatives for this purpose. India has a number of small processing units for fruits and vegetables, and there are plans for developing large-scale plants in the country.

3. Iran

Iran was a large fruit growing country and a wide variety of fruits and vegetables are produced under the different climatic conditions prevailing in the northern and southern parts of the country. Cooperatives in Iran were multipurpose institutions undertaking various activities for

the benefit of farmers. Apart from credit, some marketing facilities are being provided by rural multipurpose cooperatives under the general guidance of the Central Organisation for Rural Cooperatives of Iran. The activities extend to storage as well as grading and packaging. Efforts are being made to develop communications and transport systems with a view to facilitate effective marketing of agricultural produce through urban centres. The export of fruits and vegetables is being undertaken by cooperatives through a number of centres established in Teheran, Isfahan, Shiraz, etc. The CORC extended credit to producers until last year but now the work has been transferred to the Agricultural Cooperative Bank of Iran. There was a yearly review by a Committee concerning the problems of cooperative business.

4. Japan

The marketing of fruits and vegetables as well as exports by cooperatives are handled under the general supervision of the National Marketing Federation of Agricultural Cooperatives of Japan (Zenhanren). The activities at the national level are coordinated by Zenhanren which also organises direct marketing through some of its distribution centres. The Prefectural Federations at the provincial level also have their marketing outlets for the benefit of the producers and the multipurpose cooperative societies.

Marketing by the cooperatives is done through two methods, one of which is through unconditional consignment and the other through conditional marketing. With a view to achieving economies of scale and increasing bargaining power, the system of planned marketing and pool accounting is followed. This enables the national and the prefectural marketing organisations to sell products at the various terminal markets and other centres in a balanced manner

ensuring the delivery of stable quantities of produce and assisting in the stabilisation of prices. The main aim of the marketing structure in Japan is to enable the small farmer to obtain advantages which normally would accrue only to large producers. This is being done by joint marketing of the produce in the most efficient manner.

There is a very effective link between the marketing and the production of these commodities at various centres in Japan. The market intelligence and market research services provided by the National and Provincial federations enable the multipurpose cooperatives to plan production of certain categories of fruits and vegetables on an organised basis. There are extensive grading and storage facilities throughout the country for these products and a few processing plants have also been established for converting the primary produce into marketable commodities. With a view to ensuring a continuous supply of fruits and vegetables throughout the year, green house production has become a very common practice in Japan and it is now possible to produce a large variety of fruits and vegetables in the winter months. The system of rotating the crops around the year has also been developed taking into consideration the supply and demand position in the markets. The rotation of the crops as well as acreage is changed from year to year according to the market situation.

The farm block system developed for ensuring efficient production has helped the cooperatives to be very consistent in ensuring smooth marketing activities on a continuing basis. The changing food habits of the people in Japan and the consumption of non-traditional types of fruits and vegetables has given a great filip to the production of fruits in the country.

5. Korea

The Republic of Korea is a big producer of apples and of a variety of fruits and vegetables. However, the proportion of marketing through cooperatives was rather low. Most of the fresh vegetables and fruits are sold in the market direct to the consumers. Agricultural cooperatives have established marketing centres in five major cities of the country where wholesale trade is undertaken in competition with the private traders. Although there were a few storage facilities they were a small percentage of the total demand in respect of storage, grading and processing. Except for the apple growing cooperatives in the central part of the country, specialised cooperatives have not been developed for handling various fruits and vegetables. Transport, packaging and standardization have also not been very much developed although efforts are being made to develop domestic and international trade through the National Agricultural Cooperative Federation.

6. Malaysia

Malaysia has a number of tropical fruits which are sold both in the domestic as well as foreign markets. The acreage under fruits and vegetables is insignificant compared to the vast areas covered by commercial crops like rubber, coconut, palm oil, etc. Most of the fruits were seasonal in nature and owing to the lack of storage facilities it was not possible to sell them round the year. Vegetable gardens were not very developed and the choice vegetables were not available in plenty. Some vegetables such as onions, garlic and tomatoes were imported on a large scale. The climate was not suitable for most of the popular varieties of fruits except in some areas in the Cameron Highlands. Popular tropical fruits such as pineapple are processed and exported to a number of countries. The cooperatives hardly play any

role in this operation except in Southern Johore where direct marketing of pineapple is undertaken by cooperatives. However, there was potential for developing fruits and vegetable marketing through cooperatives in Malaysia. There was also not much development in respect of grading, transportation, market research and intelligence. The cooperatives lack funds to undertake marketing activities of this nature. The delegate from Malaysia stated that there was a need for developing a wholesale market, such as the one organised by Zenhanren in Tokyo. There was also a lack of adequate cooperative retail outlets which could effectively market fruits and vegetables.

7. Pakistan

Pakistan had a variety of fruits and vegetables but most of the commodities are sold fresh in the markets nearest to the producing centres. Most of the fruits were seasonal and a few items are processed to meet the domestic demand. Grading is done only by retailers and marketing has not been organised very efficiently even in the private sector. The agents were directly connected with the producers and had a command over the produce even before the produce was harvested. In each district there were three to four markets which provided an outlet for selling fruits and vegetables by the farmers. Owing to the lack of proper transport and communication facilities, it was not possible to market the produce at the best possible centres. Packaging, storage and grading had not so far been organised by cooperatives. The West Pakistan Consumer Cooperative Society which is at present organising cooperative super markets plans to organise processing and marketing activities for fruits and vegetables also. Pakistan has regulated markets which restrict the freedom of private traders to market produce at their discretion and ensure fair prices to the farmers in the disposal of their agricultural produce.

8. Philippines

Philippines was a major producer of tropical fruits, 80 to 90 per cent of which were sold fresh direct in the market. There were two canning factories which produce their own raw-material, such as pineapple. A few international companies have agreements with local companies for producing tropical crops on a commercial scale. This has ensured constant supply of fresh fruits to the international companies such as Delmonte. The delegate from the Philippines mentioned that there was a great scope for developing marketing of tropical fruits through cooperatives in the country.

The present pattern of producing vegetables is mainly through home gardens, rotation with cereals and on a commercial scale. There are limited specialised facilities for quality control, packaging, storage and transport and most of the packaging is done in bamboo baskets. There is a severe competition from private merchants. Mention was made of the Greater Manila Terminal Food Market costing US\$ 27 million and which is being developed on an area of 120 hectares. It was hoped that the creation of this market would greatly assist the development of marketing of fruits and vegetables.

9. Thailand

Many varieties of fruits are produced in Thailand, most of which are tropical. The climate which is warm and humid prevents the fruit from lasting for a longer period and the handling of such fruit is therefore very difficult. The cooperatives which have created facilities for marketing of cereals have not yet ventured into the field of fruit and vegetable marketing on any significant scale. There is a reluctance to handle perishable items, since there is keen competition and so much risk. Mention was made of the establishment of the National Marketing and Purchasing

Federation in Thailand which is expected to be in a position to undertake marketing of agricultural produce including fruits and vegetables at a future date.

10. Australia

Australia was a big producer of a variety of fruits and vegetables and 90 per cent of the fruits were sold by seven cooperative organisations. Almost the entire quantity of dried fruits were sold by cooperatives, as also 98 per cent of pineapple. There were extensive facilities for processing of citrus fruits and pineapple. The prices for the commodities marketed are fixed by the National Boards created for various commodities and the producers cooperative. arranges for the packaging and delivery of the fruits to the markets. Cooperatives have stalls in city markets on an individual basis. In respect of apples and pears, although the fruits are produced by cooperatives, the export is regulated by the Boards created by the government. In respect of vegetables the cooperatives in Australia handle a very small percentage of the total volume marketed. They also have a few processing facilities for vegetables. The farmers do not get any special or concessional credit from any cooperative agency and have to obtain their financial requirements from normal banking agencies. Processing cooperatives, however, get concessional finance from the Reserve Bank of Australia.

11. Remarks by Observers

The observers from the Asian Productivity Organisation and the UN/FAO made a few opening remarks on behalf of their respective organisations and mentioned the areas in which special interest has been taken by their organisations for improving production, processing and marketing of fruits and vegetables. The representative of the APO made a special

mention of the Agricultural Division established in the APO in 1966 and added that a number of projects aimed at providing agricultural inputs to farmers are being initiated through his organisation. The representative of the FAO referred to the special interest of the FAO in developing agricultural production, processing and marketing in respect of all the commodities including fruits and vegetables and emphasized the need on the part of cooperative organisations for developing the necessary capacity and organisational structure for undertaking the production and marketing of fruits and vegetables. He added that FAO would be willing to offer technical assistance in the above fields.

III. Planned Production for Effective Marketing

At present, marketing of fruits and vegetables was based mainly on the surplus available from out of the total production by agricultural producers. The cooperative organisations, by and large, engaged in such marketing activity have so far attempted the marketing of the produce in the markets nearest to their cooperatives. The only exceptions in the Region were in respect of Japan and Australia which have a highly developed marketing and market oriented production system for fruits and vegetables. The other countries in the Region have a long way to go in reaching the required standards which are a pre-condition to effective marketing in respect of any of the agricultural commodities. This being the case, the Seminar devoted considerable attention to the question of organised production with a view to developing effective marketing.

1. Kigezi District Vegetable Growers Cooperative Union

Before the question of production was discussed two case studies were presented- one on a cooperative in the Kigezi district of Uganda and the other of a cooperative marketing

organisation in Ceylon. The experiences of the Kigezi District Vegetable Growers Cooperative Union presented at the Seminar related to the organisation of marketing of vegetables in the most effective manner. The production of non-indigenous vegetables in Kigezi district, which was started in 1914, has been growing steadily and the local inhabitants developed a taste for these varieties. A vegetable scheme initiated in 1951 provided a spring-board for initiating cooperative marketing activities through the above organisation. In 1961, the Department of Cooperative Development assisted in the formation of a cooperative for this purpose and the membership of this organisation was recorded to be growing from year to year. Later in 1965, the Kigezi Union started operating through its seven primary societies. The decentralisation was attempted mainly with a view to dividing responsibility for buying, grading, packaging and other services. The main features of the working of these organisations was that they marketed top quality vegetables and provided extension services, agricultural inputs and other facilities in order to achieve the targeted quality production. Agronomic practices were introduced which resulted in systematic crop rotation, disease control and education of farmers. Quality control was strictly enforced and detailed grading by primary societies as well as additional grading control before weighing and buying was introduced. The Union staff also checked the grades while buying the product from the primary society. The primary societies were assisted in developing their accounting and book-keeping systems. The pricing policy was aimed to adjust prices to those of competing crops in order to encourage production of the desired vegetables. The Union, in a very few cases, had to ask the primary societies to accept a lower price owing to fluctuations in market prices. In case of over supply, the

society always gave the option to the producer to sell the excess quantity to the society at a reduced rate. The government assisted this process by declaring vegetables as controlled commodities which automatically restricted all the transactions through licensed dealers. The Union has a modest publicity campaign through pamphlets, exhibits, newspapers and radio.

2. The Palugama "Link-up" Scheme

The Palugama "Link-up" Scheme in Ceylon (also known as the Udapalatha "Link-up" Scheme) consisted of providing the credit needs of the farmers both for production and subsistence purposes, the determination of the credit needs of the producers sufficiently in advance, the issuing of loans in kind, the delivery of the produce to the societies' collecting centres through a marketing agreement, and the adjustment of the sale proceeds against the credit of the societies and the members through a systematic linkage among the financing and marketing agencies. In other words, the "link up" scheme was based on a high degree of cooperation among the cooperatives as well as of the extension department of the government. The resistance provided by the private traders could be met only because of the effective coordination of these agencies. The link-up scheme was an attempt to bring together all the forces operating in the fields of production and marketing. The scheme also relied on education of the members, credit on personal security, and efficient management through a committee. The whole process of marketing was supported by an efficient system of collection and transport of vegetables to the marketing centres. The funds for the operation were provided through the People's Bank.

3. An Example from Japan

To provide a basis for discussion on the question of planned production for better marketing, the Seminar was also given an opportunity to visit the Yaizu City Agricultural Cooperative Society and study its various facilities. In addition to this, a reference document was also prepared on the working of the society with special emphasis on the needs of production planning for better marketing. The society has attempted planned production through the organisation of commoditywise groups of producers within the society and by installing important facilities for grading, cooling and storage. A very thorough commoditywise production planning programme undertaken by the society has resulted not only in production of uniform commodities but has also assisted marketing operations in fruits and vegetables. The commoditywise groups of producers, through the assistance provided by the specialised management, have been able to effect a planned distribution of various kinds of vegetables on the basis of the skills and interests developed by the members.

The delegates to the Seminar were in general agreement concerning the need for planned production for effective marketing. On the basis of the examples discussed at the Seminar, the delegates felt that no cooperative marketing activity would be meaningful unless the first consideration was given to the question of targeting a market. Unless the cooperatives aim at a particular market, investigate requirements concerning quantity, quality, standards and specifications, they would not be able to make any impact in a new market. The competitors in the field, their capacity to sell as well as their weaknesses will have to be thoroughly analysed by the cooperatives if they were to be successful in such a competitive set up. It was

emphasized that most of the markets for these commodities were buyers' markets.

The Seminar felt that the cooperatives must therefore attempt a planned production of the commodities which they want to sell in the domestic as well as the foreign markets. Planned production could be undertaken through the reorganisation of farming patterns, establishment of farm blocks, modernisation of production techniques, improvement of seeds and the supply of suitable agricultural inputs. It was felt that unless the cooperatives are in a position to supply produce of the required quantity and quality, it may be futile from a long-term point of view to attempt the marketing of products which may not continue to hold the market in the face of competition from suppliers of superior qualities.

4. Extension and Role of Government

The delegates discussed the question of planned production in the context of present capacity and resources of the cooperatives in the Region. It was felt that for a planned production of fruits and vegetables the cooperatives would need adequate credit as well as agricultural inputs from the national or secondary organisations. The question of adequacy of credit was discussed in the light of requirements of the producer for production and consumption purposes. The delegates were of the view that inadequate credit is more harmful than no credit, and production credit should therefore include credit for the day-to-day needs of the producer. Experiences from many countries were narrated concerning the practice of private traders who can make advances to producers before the harvesting season. If the cooperatives were to advance adequate funds to the farmers for all their needs, it may not be necessary for them to seek financial accommodation from the traders. The extension

services available through government departments or similar agencies should be availed of by the cooperatives and an effective coordination should be developed between the two with a view to achieving timely production of the desired commodities. The cooperatives should also coordinate their extension activities with those of the government by timely supply of seeds, fertilizers as well as adequate irrigation facilities.

IV. Facilities Required For Effective Marketing

1. Storage and Grading

The Seminar delegates discussed at considerable length the question of providing grading facilities to the producers of fruits and vegetables. A basis was provided by an example taken from the Yaizu Agricultural Cooperative Society as well as the Chiba Prefectural Economic Federation of Agricultural Cooperatives of Japan. It was felt that in order to obtain maximum economic benefits for the members, the produce marketed by them must be brought to the marketing centres in the graded form rather than in bulk. The pre-graded commodities would have a better chance of obtaining fair prices than those in bulk. Quality control and grading facilities should be made available both at the level of the primary society as well as at the secondary organisations. These facilities will certainly help in increasing the commercial value of the product.

2. Processing

The delegates were of the opinion that processing facilities by cooperatives in the Region were far from adequate and were not sufficiently modern. The example of the Leeton Cooperative Cannery Limited in Australia was presented as a case in point for discussion. It was felt that processing activity undertaken by this cannery was

successful mainly because of the close relationship developed between the producer and the processing organisation, the contractual obligation agreed to between the two parties, the fixation of a minimum price for the fruit delivered by the producer, and the willingness of the cooperative to absorb surplus production during peak seasons. The Seminar felt that with the ever-changing eating and buying habits of the people in the Region, there will be a gradual increase in the demand for processed fruit and vegetables and so the cooperatives should now take this opportunity of entering this field so as to gradually build up their capacity to meet the expected demand. It was felt that the processing activity should be undertaken on the basis of a deliberate policy to process quality goods in quantities determined by the requirements of specific markets. On the basis of a market analysis of the area in which the products are to be sold the processing activity should be undertaken after ensuring a constant supply of raw-materials and rationalising the production process. In other words, a very close relationship between the producer and the processing unit must be developed and a contractual obligation must be placed on the parties concerned.

Processing activity undertaken only with a view to disposing of the surplus will not be effective but also will not operate on an economic basis. The Seminar discussed the question of utilising the idle capacity in the processing plants and suggested that in order to avoid under-utilization, a thorough study must be made of the rotation of crops in different parts of the country and of the availability of supplies from various sources. With proper planning it should be possible to maximise the utilisation of the capacity for processing seasonal crops. Where more than one crop is harvested it may be necessary to store one of them before the more delicate and perishable commodity

is processed. In order to maintain an efficient operation on a continuing basis, the processing unit should have a strong link with the producers through an effective transport and communication system, which will ensure the formulation of a realistic time-table for the delivery of the produce to the processing centre.

The Seminar also discussed the possibility of joint ventures among cooperatives and other organisations so as to develop technical know-how and undertake production of fruits and vegetables on a commercial scale. The Seminar suggested that the ICA should assist in exploring the possibility of establishing such ventures.

3. Cooperative Distribution Centre

While discussing the facilities necessary for effective marketing operations, examples of agricultural cooperatives in Japan were examined. The delegates also had an opportunity of visiting the wholesale centre for fruits and vegetables established by Zenhanren in Saitama Prefecture near Tokyo. The special features of the marketing facilities established by cooperatives in Japan were based on the principle of a clearcut division of responsibilities at different levels. There was no overlapping in the functions and the rationalisation of distribution of commodities through the central wholesale markets in Japan was planned on the basis of a network of market intelligence throughout the country.

The marketing activities at the village level involved planned production and shipment, grading and packaging, joint marketing on the basis of pooling account system, packaging, storage and workshop facilities. At the prefectural level the organisation prepared estimates of future demand and supply within the prefecture, organised production on the basis of the estimates and regulated the

shipments. They also prescribed the standards, organised the transport system, established distribution centres within the prefecture, established cold storages and operated the central wholesale markets in the prefecture. At the national level the organisation estimated the total demand and rationalised the system of production and shipment, not only regulating the marketing of produce through the central wholesale market but also organising exports.

The Central Organisation had an extensive market research and information network on a nationwide basis. It had distribution centres in each of the large cities and operated the wholesale market mentioned above. Extensive research was undertaken to analyse the data received from various sources as well as from the prefectural federations. The success of the Japanese marketing system was mainly due to the close coordination among the various agencies and the very effective communication system developed by the agricultural cooperative movement.

The delegates felt that with a view to developing an effective marketing system in their respective countries, it was necessary to establish market intelligence facilities and to undertake extensive research. There was also an urgent need to reorganise the marketing structures in order to link the marketing centres with the producing centres for which transport and communication facilities must be effectively linked. While creating the facilities for various marketing operations, care should be taken to see that the capacities created for grading, processing and packaging should be fully utilised. The question of mechanising the grading and other operations should be dealt with taking into consideration the resources available within the movement as also the problem of surplus labour.

The delegates discussed the Zenhanren system of marketing without resorting to auctions. It was felt that this system not only eliminates middlemen, but also ensures the delivery of quality products at the appointed time to the private retailers, consumer cooperatives and other institutional groups. If proper storage and pre-packing facilities are available at such centres, it should be possible for marketing organisations to obtain higher returns for the producers. The delegates, however, cautioned that such a centre must be supported by effective market research and intelligence. The possibility of introducing cooperative products through bazaars was discussed and it was felt that this should be done only when organised marketing activity had not been developed. The bazaars could be used only to dispose of the surplus at the nearest outlets. However, in order to develop an efficient marketing function, the cooperative must aim at creating marketing facilities of its own and representing its producers at the terminal markets in each cities. The Seminar also stressed the need for developing institutional marketing by cooperatives.

The practice prevailing in certain countries in the Region of regulation of markets by governments was discussed. It was felt that in order to avoid malpractices by private traders and to encourage the open auction of the produce brought by the producers in the central market, the governments should be requested to regulate the markets for fruits and vegetables where they have not already done so. It was mentioned that regulation of markets in respect of certain commodities have helped the farmers to obtain higher returns. In the light of experience in regulated markets for other items, efforts should be made to include fruits and vegetables into the regulated market system.

Discussing the system of unconditional consignment and the pooling account system in Japan, the delegates felt that unconditional consignments was the most acceptable form of contract between the cooperative society and the producer in the prevailing circumstances. As the cooperatives were ensuring the distribution of produce by the members through centres offering the most favourable terms, the producer was not likely to lose anything through the system. The pooling account system also enabled the society to operate on a large-scale and to influence the flow of commodities in the market. Most of the cooperative organisations in the Region were also functioning on the unconditional consignment basis although in a few cases outright purchases had been effected.

The Seminar devoted considerable attention to the question of returns to the producer vis-a-vis the ultimate price paid by the consumer. It was felt that as the marketing cooperative societies were representatives of the agricultural producers, it was their responsibility to obtain the maximum prices for their members, for the produce sold by them through the society. While marketing cooperatives can attempt to eliminate the profits earned by the middlemen by linking the production centres with the consumer markets in metropolitan cities, it was doubtful whether they would be in a position to control the prices at the retailing centres. A question was raised whether the agricultural cooperatives should not take into consideration the interests of the consumers while fixing the prices for agricultural commodities marketed through them. It was felt that there were many factors beyond the reach of the agricultural cooperative organisations which operate in determining the price structure and it may not be possible for these cooperatives to pay as much attention to the interests of the consumers as that of the producer members.

V. Operational Techniques

1. Financial Aspects of Marketing

The Seminar discussed the aspects of marketing fruits and vegetables in the context of the financial implications which normally follow from such operations. Considerable time was also devoted to the question of stabilisation of prices and possible compensatory measures against price fluctuations. The discussion on general financial aspects was based on a case study from the Philippines on the working of the Atok Cooperative Marketing, Inc., which is one of the five actively operating vegetable growers cooperatives in the Mountain province of the Philippines.

The cooperative which was engaged in providing agricultural inputs as well as marketing of fruits and vegetables of the members has been getting technical as well as financial assistance from the Agricultural Credit Administration (ACA) for production and marketing under the ACA Cooperative Financing-Marketing Scheme. ACA also assists the cooperative in importing Irish potatoe seeds. The vegetables are sold by the society to local buyers, to truckers, middlemen and to some cooperatives and the Greater Manila Terminal Food Market (GMTFM).

The case study brought to the notice of the delegates the difficulties faced by the cooperatives in marketing the vegetables in view of the widespread influence of the local traders who normally advance loans before the harvesting season. There were many ways of marketing but in many cases middlemen dominate. Even where the marketing activity was organised by cooperatives on a collective basis, the scheme was not effective. The major difficulties faced were that the figures for receivables from vendors or retailers who obtained the vegetables on credit were unsatisfactory. Substantial deductions were made for

alleged spoilage. The cooperatives failed to sell substantial portions of the deliveries of the members and had also not repaid the loans received from the ACA. There was also the question of mismanagement in the organisations.

The GMTFM was organised to stabilise prices of farm produce and to introduce quantitative and qualitative improvements in food production with a view to raising the incomes of the rural population. To achieve this aim, the facilities in the market were designed to provide a convenient outlet for agricultural food products, to assure the farmers a reasonable return and prompt payment, minimise spoilage, eliminate undesirable practices and promote better quality production. The Atok Cooperative Society and the GMTFM had entered into an agreement under which specified quantities of cabbage and Irish potatoes were delivered to the terminal market. A guaranteed floor price was given to the society on behalf of the members if the actual selling price was below the agreed guarantee price. The marketing costs for goods marketed through private traders were rather high and the GMTFM attempted to eliminate the excess costs.

The delegates felt that the ACA Cooperative Financing-Marketing Scheme was peculiar to the conditions prevailing in the Philippines and might not be suitable in other countries, except with some modifications.

The group devoted considerable attention to the question of government participation in the financial structure of the cooperatives. Examples were given of the practices in different countries, such as government subsidies, loans as well as participation in the equity capital. The delegates felt that as far as possible efforts should be made to raise the capital from the members themselves. However, with a view to raising adequate funds

for various development activities, it might be necessary in certain countries for the governments to assist the cooperatives in some other form. Assistance could be through subsidies for various activities including management subsidy, loans for various development purposes, grants for construction of facilities etc. Some delegates felt that the loans should be given to the cooperatives through the normal banking channels and not through the government although exceptions may have to be made in certain countries.

As regards government's participation in the equity capital, there was a divergence of opinion and some of the delegates did not see particular advantages in such an arrangement. The Seminar, however, recommended that wherever possible, the cooperatives may invite the government to participate in the equity capital if the government is so willing under its normal development policies. Care should, however, be taken to ensure that the government share capital be gradually withdrawn and the members themselves be encouraged to increase their own contributions. Although government contributions to the equity capital might be necessary the governments should not exercise control over the normal democratic functioning of the cooperative organisations.

2. Pricing

The Seminar felt that the cooperatives should not overlook the fact that they have to function in a competitive set up and their business activities must be so formulated as to be able to function efficiently and without causing any loss to the organisation. Care should be taken to see that the member is not put to disadvantage as in such a situation the cooperatives are bound to lose the loyalty of their members. The delegates felt that with a view to

minimising the hardships of the members, the marketing cooperatives should give a greater proportion of advances to the members towards the produce to be delivered by them to the society. There should also be a short time lag between the time of delivery and its marketing and the period of reckoning for pooling purposes should be as short as possible.

3. Guaranteed Floor Price

Various practices concerning guaranteed floor prices were discussed and it was felt that when the producers follow planned production according to the cooperative marketing scheme, the cooperatives should be able to offer, with government support, a guaranteed floor price to the producer for all his produce sold by them. The price so paid should not, however, result in over-supply and production of inferior quality. Such a guarantee should always be related to the quality of the produce. In no case should such a scheme be allowed to disturb the equilibrium of supply and demand in the market.

4. Price Compensation Scheme in Japan

The question of ensuring a minimum price to the producer was also discussed in the light of the present practices in Japan under the Vegetable Price Compensation Scheme which was explained to the delegates by a representative of the Ministry of Agriculture and Forestry, Government of Japan. The scheme incorporates the establishment of concentrated vegetable producing areas and of a stabilised marketing system with a view to ensuring a steady supply of vegetables in big cities. Some selected varieties of vegetables are covered by this scheme which is applicable to five areas in different parts of the country. The scheme is based on a demand prospect prepared annually

five years in advance by the Ministry of Agriculture and Forestry, on the basis of studies and certain assumptions concerning acreage, soil conditions, quantities to be produced and on estimates that the cooperatives involved in the production of these vegetables should reach more than two-thirds of the total quantity marketed. The guidance for intensified production is provided through a Coordinator with whose assistance modernisation schemes and production plans are worked out. The Ministry of Agriculture and Forestry subsidises one-third of the costs of introducing new production techniques.

The aim of the price scheme is to alleviate the hardships faced by the producer when there is a decline in the prices of vegetables and also to prevent decrease in the planted acreage under the vegetables. The amount of compensation to be provided to the farmer is given out of a fund known as the Association of Vegetable Production and Marketing Stabilisation Fund, which was established in 1966. The scheme is applicable to onions, cabbages, Chinese cabbages, carrots, cucumbers and Welsh onions, which are produced in designated producing areas. The fund has been established under the Vegetable Production and Stabilisation Law. Twenty-five per cent of the contributions are made by the cooperative farmer members, twenty five per cent by the prefectural government and the remaining fifty per cent by the national government. The guaranteed price level is fixed on the basis of the sales price in the past years at the Central Wholesale markets in each designated consuming area, and is calculated by multiplying the unit value of the volume delivered to the market. The unit value of the price compensation is normally the equivalent of 80 per cent of the price difference between the guaranteed price and the average actual market price. The scheme does not cover the quantities which are not shipped

to the market. However, consideration is now being given to the introduction of a scheme under which some compensation will be provided for the discarded produce which may be necessary as an effective measure to restore the market price.

The delegates welcomed the introduction of this scheme and felt that such stabilising measures should be taken wherever possible by cooperative organisations to ensure a steady income to the farmer as also to assist in developing planned production of quality vegetables.

VI. Promotional Measures

1. Market Research and Intelligence

The Seminar discussed the need for organising effective market research activities and building up an efficient market intelligence service with a view to increasing efficiency. It was felt that in the absence of a support activity of this nature, marketing organisations will not be able to model their marketing practices on modern business lines. Market research was necessary to identify the potential markets, to identify the commodities to be marketed, to obtain specific information on the quantities and qualities desired by the targeted markets, and to ensure a steady supply of analytical data on the day-to-day market situations. There must be an effective combination of the market intelligence and market research services within the organisation.

However, it was felt that the cooperatives themselves may not be able to undertake market research on an extensive scale owing to the limitation of funds and personnel. The delegates felt that the government or government sponsored agencies should undertake market research which could be used by all agencies interested in

marketing of fruits and vegetables. The experience so far in the field of market research and intelligence by government agencies was far from satisfactory and it was felt that any such research to be undertaken in future should be concerned with the problems which are of direct relevance to the marketing of fruits and vegetables. Even if research is to be undertaken on fundamental problems it should have practical applicability. The priority areas should be identified before any research is undertaken by the government agencies. A commodity by commodity approach was perhaps the best approach in determining the problem areas for research, as it is otherwise difficult to identify such areas. There should be a very effective communication between research agencies and the agencies which are to make use of the research results. The organisations responsible for research should be able to advise the cooperatives and other agencies on the methodology of utilising the findings of the research studies.

The delegates also felt that in addition to the research undertaken by the government or such other agencies, the cooperative federations at the national or provincial levels should have their own research and market intelligence departments on a commodity basis. The cooperatives should consider this activity as an essential part of their normal functions and should try to set aside a certain percentage of their net profits for the purpose. The Seminar felt that at least some quantum of the profits should be allocated for research.

2. Advertising

The Seminar also discussed the utility of advertising for the various products to be marketed by cooperative societies. Although there was a general agreement that advertisement normally assists in increasing

and the discussion centred round the training and the nature of activities of the farm advisers employed by the primary societies. It was noted that most of the farm advisers had technical knowledge concerning the various aspects of production of fruits and vegetables and assisted in selection of the key products, identification of key crop producers and in the preparation of production plans. They also assisted in field operations and advised on the marketing practices on a continuing basis. The activities of the farm advisers were coordinated by the extension officer of the Government of Japan. It was explained that whereas the extension officer assisted in respect of general planning and development of agriculture, the farm advisers assisted the members of the cooperatives in evolving specific production and marketing patterns. Training facilities for farm advisers are conducted at the primary level as well as at the prefectural and national levels. This was supplemented by on-the-job training through attachment of trainees, as apprentices, to the societies which had made considerable progress in this field.

The delegates emphasized the need for evolving training programmes geared to the actual needs of the producers and suggested that a very effective coordination ought to be developed between the various agencies at different levels with a view to making use of the personnel trained to the maximum extent. The question of evolving a pool of experts to work at various levels was discussed. However, it was felt that as the farm advisers are employees of respective cooperative societies, it may not be possible for developing a cadre for this category of personnel, but the system followed will normally depend on the conditions prevailing in different countries. A point was made that highly qualified persons working at

secondary or higher levels of organisation should also be sent for field work from time to time.

4. Collaboration between Agricultural Cooperatives and Consumer Cooperatives

One of the subjects which came up repeatedly during the discussion was the question of collaboration between the agricultural producer cooperatives and the consumer cooperatives with special reference to the marketing of fruits and vegetables. Emphasis was often laid on the need for developing marketing after taking into consideration the requirements of the consumers. In other words, the marketing of produce by agricultural cooperatives ought to be based on the requirements of the market. There was general agreement that the agricultural cooperatives should produce fruits and vegetables which can be marketed to the best advantage of the producers. Simultaneously, the Seminar emphasized the need for developing a direct relationship between the producers and the consumers cooperatives for the delivery of fruits and vegetables under an agreed formula between the two organisations. The discussion on the subject towards the end of the Seminar was based on examples given from the Japanese Cooperative Movement.

It was pointed out that there are a few noticeable cases of collaboration between the agricultural producers cooperative and the consumer cooperatives. However, such collaboration was of recent origin and the total volume of trade involved through such collaboration was of a marginal nature. While the Seminar emphasized the need for developing such collaboration, it was felt that there were several difficulties in evolving an agreed formula acceptable both to the producers as well as the consumers cooperatives. The most important factor in the process

was the question of price in respect of which there is likely to be a conflict of interest between the two groups. However, it was felt that the question of prices could be resolved by negotiating the price structure on the basis of current market prices and taking into consideration the averages over a period of time. If in some cases the agricultural cooperatives have to accept a slightly lower price or the consumers cooperatives a slightly higher price, it was felt that the elimination of expenses normally incurred for the services of the brokers or wholesale agents may bring, in the ultimate analysis, greater benefits both to the producer and the consumer.

The Seminar, therefore, commended the example of collaboration between the agricultural cooperatives in Japan and a few consumers cooperatives for consideration by other movements in the Region. It was also emphasized that the organisation of wholesale distribution centres such as the one organised by Zenhanren in Tokyo would be an effective way of developing such collaboration. Through such centres the producing cooperatives would be able to deliver agreed quantities of fruits and vegetables to representatives of consumer cooperatives on a continuing basis ensuring both steady supply and quality goods at an agreed price.

The delegates were of the opinion that for an effective collaboration between the two types of organisations it was necessary to have a proper planning at both points of the marketing and purchasing operation. The consumers cooperatives should be able to purchase adequate quantities of fruits and vegetables from a producing organisation with a view to ensuring a proper planning of the required varieties and quantities at the production end, and unless the consumer organisations

themselves are properly organised and are able to determine their requirements sufficiently in advance, it will not be possible for the two organisations to develop effective collaboration.

The delegates also suggested that more information on cooperative marketing in different countries should be made available through the Information Bulletin and other publications of the ICA Regional Office and Education Centre.

17th to 27th May 1970

PROGRAMMESession No.17th May, Sunday

10.00 a.m.	1	Inauguration
1100 - 1130		Tea Break
1130 - 1300	2	Orientation on Marketing Structure of Fruits and Vegetables in Japan
Afternoon		Free

<u>18th May, Monday</u>	I	Visit to the Yaizu Agricultural Cooperative Society, Yaizu.
<u>19th May, Tuesday</u>	I	

<u>20th May, Wednesday</u>		Visit to the Cooperative Perishable Product Wholesale Centre, Tokyo
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21st May, Thursday

0930 - 1030	3	Presentation of Background papers by participants
1030 - 1045		Tea Break
1045 - 1200		Presentation of background papers (contd)
1200 - 1400		Lunch Break
1400 - 1530		Presentation of background papers (contd)
1530 - 1545		Tea Break
1545 - 1730		Presentation of a Case Study on "The Kigezi District Vegetable Growers Coop Union, Uganda"
		Chairman Mr M.V.Madane
		Introduced by Mr G.R.Spinks, Marketing Specialist FAO, Bangkok.

Cooperative Marketing of Vegetables and Fruits with special reference to the Palugama Link-up Scheme, Ceylon

Introduced by	Mr C.J.R.Pogollagama Senior Asst.Commissioner Colombo.
Discussion	

22nd May, 1970. Friday

- 0930 - 1030 4 Need for Planned Production for Effective Marketing of Fruits and Vegetables - Presentation of a Case
 Chairman Mr Shiro Futagami
 Introduced by Mr Yukio Uchida, Chief, Farm Guidance Section
 Yaizu Agrl. Coop Society
 Yaizu, Japan
- 1030 - 1045 Tea Break
- 1045 - 1200 Discussion
- 1200 - 1400 Lunch Break
- 1400 - 1500 5 Marketing Facilities for Fruits and Vegetables and the role of Cooperatives at different levels in providing facilities
 Chairman Mr G.R. Spinks, FAO, Bangkok
 Introduced by Mr Masao Nakata
 Chief, Vegetable Section
 Fruits and Vegetable Department
 Zenhanren, Tokyo.
- 1500 - 1545 Discussion
- 1545 - 1600 Tea Break
- 1600 - 1730 6 Group discussion on Session No. 4

23rd May, Saturday

- 0930 - 1030 7 Processing Facilities required for improving marketing conditions and for disposing of surpluses and the role of cooperatives at different levels in establishing the processing facilities - Presentation of a Case
 Chairman Mr Eogollagama
 Introduced by Mr B.G. Lowe
 General Manager
 Leeton Coop Cannery, Leeton,
 Australia.
- 1030 - 1045 Tea Break
- 1045 - 1200 Discussion

23rd May (contd)

- 1200 - 1300 Lunch break
- 1300 - 1400 8 Plenary on Session No.6
- 1400 - 1500 9 Operational Techniques in Fruits and Vegetable Marketing by Cooperatives - "Unconditional Consignment and Pooling Account System"

Chairman Mr S.T.Sundaram

Introduced by Mr Kazuo Kizawa
Chief, Planning Section
Zenhanren, Tokyo

&

Mr T Ishibashi
Chief, Horticulture Dept.,
Chiba Prefecture Economic
Federation of Agricultural
Cooperatives, Japan.

1500 - 1515 Tea Break

1515 - 1615 Discussion

24th May, Sunday Free

25th May, Monday

0930 - 1030 10 Operational Techniques in Fruits and Vegetable Marketing by Cooperatives - "Financial Aspects for Marketing Operations and Management"

Chairman Mr V.G.Furanik

Introduced by Dr V.U.Quintana
Director, Agri Coop & Credit
Institute, Laguna.

1030 - 1045 Tea Break

1045 - 1200 11 Group Discussion on Session No.10

1200 - 1300 Lunch Break

1300 - 1400 12 Market Intelligence and Research Services and Advertising facilities required for fruits and vegetables marketing including export, and the role of Coops at different levels

Chairman Mr E.G.Lowe

Introduced by Mr Edward Chobanian
Asian Development Bank,
Bangkok.

25th May (contd)

1400 - 1430

Discussion

1430 - 1445

Tea break

1445 - 1630

13

Plenary on Session No.11

26th May, Tuesday

0930 - 1030

14

Compensatory measures against price fluctuations by cooperatives with special reference to Japanese Experience

Chairman Mr E Chobanian

Introduced by Mr Satoshi Obara, Chief,
Vegetables & Flowers Section
Ministry of Agriculture and
Forestry, Tokyo.

1030 - 1100

Discussion

1100 - 1115

Tea break

1115 - 1215

15

Group discussion on Session No.12

1215 - 1315

Lunch break

1315 - 1400

16

Collaboration between consumers cooperatives and Agricultural Cooperatives

Chairman Mr H Wickramasinghe

Introduced by Mr Shiro Futagami
Deputy Director, ICA RO & EC
New Delhi.

1400 - 1430

Discussion

1430 - 1445

Tea Break

1445 - 1545

17

Plenary on Session 15

1545 - 1645

18

Types of Personnel needed for Fruits and Vegetables Marketing and Contents of Training Programme for the Marketing Personnel

Chairman Dr V.U. Quintana

Introduced by Mr K Tsutsumi
Farm Management and
Agrl. Policy Department,
Central Union of Agricultural
Cooperatives, Tokyo.

1645 - 1715

Discussion

27th May, Wednesday

1000 - 1200		Visit to National Marketing Federation of Agricultural Cooperatives, Tokyo.
1200 - 1400		Lunch break
1400 - 1500	19	Final Plenary Session
1500 - 1515		Tea Break
1515 - 1700		Final Plenary Session (contd)
		Closing of the Seminar

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REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH
COOPERATIVES, TOKYO, JAPAN

17th to 27th May 1970

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WORKING PAPER

Session No. 3

THE KIGEZI DISTRICT VEGETABLE GROWERS COOPERATIVE UNION

Case study on a Field Project on Marketing of Fruits and
Vegetables at Kigezi District, Uganda

by

F.A.O. Regional Office,
Bangkok

REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH COOPERATIVES "

TOKYO, JAPAN. 17th to 27th May 1970

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE
NEW DELHI
INDIA

INSTITUTE FOR THE DEVELOPMENT OF
AGRICULTURAL COOPERATION IN ASIA
TOKYO JAPAN.

THE KIGEZI DISTRICT VEGETABLE GROWERS COOPERATIVE UNION¹

FAO Regional Office
Bangkok

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The first recorded introduction of non-indigenous vegetables into the District of Kigezi was about 1914 when some "European type" vegetables were grown. Since that time the number of these vegetables has increased and farmers gradually acquired a taste for the new products in spite of strong preference for their traditional vegetables. Periodic shortages of specific types of vegetables, especially potatoes in Kampala, the capital of Uganda, stimulated interest in vegetables growing in this area, particularly during the 1940s. The attitude of the area made it suitable for a range of vegetables.

However, the first serious attempt to establish vegetables growing as an agricultural industry occurred in 1941, when the colonial administration implemented a vegetable scheme under which the members of the scheme would supply vegetables to the Kampala market. Membership was limited to the "official growers" whose vegetable fields had been inspected and approved by colonial department of Agriculture officials. All members' produce was purchased regardless of transport difficulties and marketing outlets. This practice resulted in considerable quantities being left at the buying centres. Therefore the Department of Agriculture which was responsible for the Scheme was forced to pay the trading deficits in the initial years. In order to cover a wider number of growers, than those on the 'official list' produce could be purchased from non-members if increased supplies were needed. However, the 'unofficial' producers had to grow at their own risk unlike the members who had a guaranteed market.

1. This cooperative union is located in the Kigezi District of Uganda; one of the East African countries. Uganda is a landlocked country being surrounded by the Congo (Kinshasa) Ruanda, Tanzania, Kenya and the Sudan. The following brief outline of the development of the Kigezi District Vegetable Cooperative Union is based on a report by F. Scherer, The Development of Smallholder Vegetable Production in Kigezi, Uganda. The study was undertaken by Mr Scherer for the African Studies Centre of the Ifo-Institute for Economic Research, Munich, West Germany. In 1965, the author was employed by the FAO as Marketing Adviser to the vegetable growers' organisation and remained with the Union after its formation in that year until 1968.

The district of Kigezi is located in the south-west corner of Uganda. In 1968, the population of the district was estimated at 534,000 which gave a population density of about 109 per square km (281 per square mile). Before independence, Uganda was a British possession although colonial policy in the country was primarily one of upsetting the existing indigenous administration as little as possible. All land was owned and cultivated by Africans as there were no foreign-owned estates or plantations.

Certain problems had gradually emerged under the vegetable scheme one of the main ones being that many growers had insufficient land to allow regular planting as well as the fragmented and scattered holdings. In addition, farmers were inclined to produce a narrow range of commodities which was usually determined by the individual farmers' tastes. Therefore, there tended to be little orientation to what the market wanted. At the same time, produce faced particularly strong competition from supplies of vegetables from Kenya and the Congo. One of the main market advantages of produce from these two sources was their regularity of supply so that wholesalers in Kampala could have considerable confidence in receiving their requests. In fact, regularity of supply was considered more important than quality at this stage of market development.

In order to avoid irregularities of supply of vegetables from Kigezi, selective production plans were introduced as an essential part of the Vegetable Scheme. A member of the Scheme was obliged to follow these instructions and if he failed to do this, he could be removed from the 'official growers list'. This disciplinary action could also be used against growers who sold to other buyers. Difficulties were also experienced in educating farmers to incorporate vegetable production into their agricultural rotation patterns for subsistence and other cash crops.

In order to control the supply of vegetables to market demands in Kampala, the agricultural authorities distributed the seed. However, initially some difficulties were experienced in that farmers wanted to multiply their own seeds by allowing plants to flower. This practice quickly resulted in serious declines in quality.

The marketing of the actual products in Kampala was handled by a private business firm but it was claimed by the management of this company that considerable losses were incurred on their vegetable operation. Transport difficulties were faced because the highly perishable commodities had to travel a distance of about 427 km (265 miles) to Kampala. At the same time, some doubts were expressed about the methods of marketing employed by this private company and in 1960 the company retired from the marketing of fresh vegetables.

Establishment of the Cooperative

It must be pointed out that the original vegetable growers in the Kigezi district seemed to represent a certain group of farmers. They were open minded and responsive to the adoption of modern production and organisational procedures. Even in 1953, endeavours were made to form a cooperative but most growers were not prepared to support the scheme at this particular period.

In 1961, after the withdrawal of the private marketing organisation in Kampala, the Department of Cooperative Development assisted in the formation of a cooperative.

Membership increased from 306 in 1961 to 1431 in 1965. In many ways, the new cooperative followed the production and marketing lines utilised by the former vegetable scheme. Seed was purchased in bulk, made up into small packages and distributed by the cooperative. No profits were planned on this business operation and the price to producers was sufficient to cover costs. At the same time, through the seed distribution, the cooperative attempted to control production to market requirement; the method employed by the former vegetable scheme. As could be expected, this restrictive practice created a market for seed among farmers so that outside suppliers such as the private trade were quick to deliver other seed to those farmers who sought it.

The cooperative scheme, again building on the basis provided by the former vegetable scheme, gave close attention to the production aspects. Extension services, planting programmes, rotation patterns etc. were continued and expanded.

Buying arrangements

Members delivered their produce to specific buying centres. Commodities were purchased for cash and vegetables which could not be placed on the transport for movement to Kampala were left behind. However, private traders would usually pass the buying points before the cooperative's transport arrived and purchase the better quality produce and/or those varieties of vegetables which were in short supply in Kampala and other markets. Therefore there was a tendency for a limited range of vegetables to be marketed from the cooperatives. The cooperative did not own the transport but preferred to contract. By this means, low cost transport was available as vehicle owners were anxious to locate a return load to Kampala.

Kigezi District Vegetables Growers Cooperative Union Ltd

By 1962 organisational patterns had begun to emerge and it was suggested that the cooperative be split into several small societies. However, difficulties with election procedures and opposition of members stopped this development. In 1965, however, the district cooperative officer and the newly appointed FAO vegetable marketing adviser succeeded in dividing the cooperative into seven primary vegetable societies and incorporated the Kigezi District Vegetable Growers Cooperative Union Ltd which started operations in August 1965.

The reasons for the decentralisation were:

- a. As the vegetable growing area seemed to be too large for a central administration, the responsibilities were localised into smaller units in regard to extension services, seed distribution connected with the regulation of production, purchase, grading and packing of the products;
- b. The buying of vegetables was shifted over from the manager of the cooperative to the primary societies. They bought directly from their members which reduced the time spent by the growers awaiting for the manager and the lorry;
- c. as grading, weighing and packing were the responsibilities of the primary societies, the buying procedure of the union from the primary societies could be conducted in a relatively short time;

- d. the setting up of a double quality control : farmer - primary society and primary society - union.
- e. by the territorial delimitation into areas, the individual has been given an understandable concept of how the cooperative is organised and he can influence the running of his society by electing the person he knows and thinks suitable as a committee member. The possibility of accusing strange members from other areas of making mistakes can be ruled out;
- f. it was easier to explain and teach members the cooperative idea and the cooperative set-up through their own small society;
- g. influences from outside could be better eliminated;
- h. discovery and location of mistakes, difficulties and irregularities could be isolated easier, For example, a particular primary society whose members caused overproduction of a certain commodity had to take the consequences in the form of buying restrictions imposed by the Union. Whereas, the progressive societies diversifying the vegetable production had not to share its profits with the others;
- i. development of sound competition among the societies and the possibilities of comparing expenses, progress and profits.

Organisation of the Vegetable Growers Cooperative

In order to ensure some measure of control which is essential in the marketing of a highly perishable commodity such as fresh vegetables, close coordination and cooperation were maintained with means of improving their production. Great emphasis was placed upon the need for effective agricultural extension services. The number, training and methods employed by extension workers were examined. As a result, considerable changes in training and methods occurred within the area producing vegetables. At the same time, extension in cooperative procedures was provided as part of the extension programme but greater emphasis was always given to efficient agricultural production and marketing methods. Experimental work, particularly in the testing of suitable varieties of vegetables for the district, was undertaken. Constant examination of the seed distribution system was a routine function in order to locate ways of improving its effectiveness.

Agronomic practices were allocated the high priority they must have. Cultural methods were evaluated; crops rotation patterns were examined; pest and disease control means were improved. The education of farmers to the correct use of chemical fertilizers was a top priority measure to improve production efficiency.

Because of the importance of marketing, marketing extension methods were expanded to include the correct stage of maturity for harvesting to ensure that produce arrived in the distant market in good quality. The concept of market freshness was instilled upon members. Cleanliness of commodities destined for the fresh market and its relationship to quality was a major aim of the Union's marketing policy. Training to improve quality and presentation was practised. Grading was reintroduced after the failure of an attempt in 1956 with committee members being trained in grading methods for fresh vegetables. In fact, the entire programme was carefully orientated to the preparation of the produce for the market.

Within the marketing system of the Kigezi cooperative scheme, three quality checks were established. These were:

- a. detailed grading at the grading tables of the primary societies by the committee members in charge;
- b. additional control of the graded products before weighing and buying, and
- c. control of the vegetables by the union staff during weighing and purchase of the product from the primary society.

Until 1965, vegetables were graded into first and second grades and subsequently bought at graduated prices. But the consignments tended to become mixed during transport so that value at the market was lowered. This system was changed into distinguishing good and bad quality. The primary society took the "good" and farmers consumed the "bad". It was decided that the Kigezi vegetables must acquire a favourable reputation for quality so all second-quality produce was eliminated from the market. Also all was purchased for one price so that purchasing operations were quicker.

The Primary Cooperative Societies

These were organised along traditional lines although considerable emphasis was placed upon the principle of 'self-help'. The Union initially granted the primary societies a single loan to purchase vegetables but this was repaid within one year. The decentralisation was used to the maximum in evaluating and comparing the individual balance sheets from the seven societies. For example, in 1965, one society distributed a bonus but subsequently, all societies renounced the granting of dividends and decided to use profits for improvements to their stores and to accumulate capital for future developmental purposes.

Within three years, the quality of primary society book-keeping had attained a remarkably high standard. Misuse of funds has been limited to one case but this money was refunded by committee members.

The Cooperative Union

Representatives of the primary societies elect nine members of the union at the annual general meeting. Two sub-committees of three members were formed and were responsible for transport and packing and for price policy. The aim of these two sub-committees was to ensure quicker decisions on marketing arrangements and to reduce expenses.

Pricing Policy

The average distance from vegetable plot to store of the primary society was about 8 km. At the store, the produce must pass through three stages: grading, weighing and purchase (receipt and cash).

The guiding principle to determine produce-price has been an attempt to adjust prices to those of competing crops in order to encourage production. The union's price policy was based upon the average price in the market, fixed costs of the union and losses and wastage during handling, transport and marketing. Price fluctuations at the marketing end were borne by the Union and only in extreme cases did the Union adjust the fixed price to the primary societies. If the producer price was to be varied, the primary societies must be informed eight days in advance.

Buying restrictions had to be imposed in some cases because the seasonal nature of vegetable production is conducive to overproduction. The manager of the union was supplied with weekly estimates of the quantities of each type of vegetable that the market in Kampala can take. The manager in turn then uses these data for the calculation of the purchasing quota of each primary society according to the membership and characteristics of the particular production area. The production quota is submitted to the primary society on the previous market day in order to give notice about market trends early enough for members to adjust their deliveries. If oversupply was expected the committee of the primary society had two ways of solving this problem:

1. to buy from each member only a certain amount of the vegetable in question, or
2. to buy the whole graded production of the oversupplied vegetable but at a lower producer rate so that the expected amount of money paid by the union for the restricted quota would cover the purchase of all deliveries by farmers.

Excess vegetables remaining at society stores were usually sold to special trader-delivering areas which had arisen because of transport difficulties. Some were delivered free of charge to needy members of the community such as the aged poor. The programme also encouraged the home consumption of vegetables.

Sales Organisation

In 1968, the union sent four vehicle loads of vegetables to Kampala each week. There was a wholesale depot in the capital as well as a retail shop. Some smaller shops were maintained in other important rural towns. In order to assist the Union overcome competition from the private trade, vegetables were declared a controlled produce by the Government. Under this, each trader dealing with vegetables must be licensed.

The main type of sale made by the Union was contract (50-60 per cent), wholesale 20-30 per cent and retail 10 - 20 per cent.

Factors affecting the market for Kigezi vegetables

The principal factors were production, competition, consumers and advertising.

- a. Production : Production was linked with past production practices, climatic and soil conditions, availability of essential services (extension) and farm inputs (fertilizers etc).
- b. Competition : This was provided by local private traders and produce coming from other districts of Uganda and other countries; Kenya in particular. Difficulties did occur when supplies from Kigezi coincided with those from Kenya and the Luganda region of Uganda.
- c. Consumers : The main problem has been the tendency for many consumers to cling to traditional vegetables.
- d. Advertising : The Union has embarked upon a modest publicity campaign using pamphlets, exhibitions, posters, newspapers, radio etc. The costs of such programmes were always carefully weighed but the financial status of the Union excluded any large-scale programme.

Future Marketing Prospects

One of the main problems facing the Kigezi District Vegetable Growers' Cooperative Union is its future in the production and marketing of vegetables. At the time of the report, end of 1968, the main market for this programme was contracting to institutions. However, the number of horticultural farmers is increasing in areas closer to the principal market outlets and recent marketing difficulties in the main cash crops of the country, coffee and cotton, could intensify the competition as farmers shift towards vegetable production. Kigezi cannot compete with the cheap bulky or heavy mass produce such as cabbage, lettuce etc from many other districts, because of distance. The greater altitude within the Kigezi district offers advantages for the production of certain vegetables such as celery, cauliflower, pea, potato, carrot etc. The market increase which has occurred in Kampala for

fresh vegetables over the last three years is not expected to continue at the same high rate in the future. Emphasis for maintaining and expanding the fresh vegetables market will develop about potato and to a less extent, onion and seasonal adjustment to supply out-of-season products. Such a programme will entail production planning and a high degree of discipline among members. However, overriding all these considerations will be the emphasis on quality. Some thought has been given to the role of processing in the future of the Kigezi scheme, mainly dehydration.

The concensus of opinion is that the Kigezi District Vegetable Growers' Cooperative Union has been successful although it has reached a level of development when re-examination of its future is essential. Its success within the District is shown by the diversification of agriculture, an awareness among farmers that production should be market oriented (this feeling still needs further development) and a viable cooperative venture. The programme has also revealed that political and religious differences within the district can be overcome to the advantage of all members by economic considerations.

Conclusions

This particular cooperative venture is of special significance in that it has reached a level of efficiency seldom achieved by cooperatives in the developing countries. The reasons for this success raise a number of pertinent questions for the future of any cooperative and although it is not proposed to examine these at length in this summary paper, they are worthy of discussion at this seminar. The progress and history of the Kigezi programme leads to a number of hypotheses about the reasons of its success.

1. The programme was superimposed upon a venture which was already operating; namely the Vegetable Scheme and its 'official list' of growers. In this way, much of the organisational problems had been fully or partly solved.

2. Because of the 'official list' growers who tended to be the more progressive became accustomed to discipline within an organisational structure.

3. Many of the developmental difficulties had already been solved before the Union was formed as well as a considerable amount of data on technical agricultural and marketing problems had been solved.

4. The Union enlisted specialist support through technical assistance programmes.

5. The main emphasis of the programme has been upon production and marketing. These have been used in a practical way to demonstrate that cooperatives can be organised and function successfully.

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CO-OPERATIVE MARKETING OF VEGETABLES & FRUITS
IN CEYLON
WITH SPECIAL REFERENCE TO THE PALUGAMA LINK-UP SCHEME

by

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EARLY HISTORY

Prior to World War II Co-operative activity in Ceylon was chiefly confined to Credit Societies so much so that this period is conveniently described as the era of Co-operative Credit Societies, as opposed to Co-operative Consumers' Societies of the War years, the Agricultural Production and Sales Societies of the post-war period and the Multi-purpose Co-operative Societies in and after 1957. There were however a few Societies of a more complex nature prior to 1939. The foremost among them were the Estate Co-operative Stores Societies which were the precursors of the Consumer Societies of the war years and the Marketing Societies in the Northern Province for the marketing of tobacco which was then an export crop.

The need for the more complex functions of marketing in addition to credit was recognised but it was felt that the people were not sufficiently advanced in their Co-operative knowledge and business practices to make such organisations work successfully. The Registrar of Co-operative Societies whose function it was to help the development of Co-operative Societies makes the following observations in the Administration Report in 1933:-

"Marketing (of agricultural produce) is an operation which sounds delightfully easy. You have only to arrange for all your producers to collect their produce at a certain place and time and then by virtue of the improved bargaining power which you get from handling a large stock and reduced cost of transport, proceed to sell at an increased price. Actually however, it is extremely difficult as very little experience soon shows - Firstly the collection breaks down. One of your producers is cut off by an impassable stream; many others have gone for a wedding and will bring their stuff tomorrow. When your

lorry arrives, many more have been beguiled by a little hard cash and promise of more into selling to the local trader; others are tied to the village boutique-keeper who has advanced money. If they do not give him their produce, he will put them in Court and sell their lands. But they never told you a word of all this when they promised to bring their produce. Usually there is such a break-down at this stage that the whole scheme collapses. But if you surmount all this there are plenty more. Your individual members must have cash and cannot wait for it. You can only afford to pay a conservation fraction of the anticipated final price but to do even this, you need a large sum of money which you haven't got and cannot borrow because no one will lend on the security of produce which has not been collected to a Society which will very likely collapse. If you have got that far you have next got to get it sold without illicit commissions, work out transport costs and other expenses and the balance to be distributed to producers scattered all over the country. Throughout the whole transaction you will be dogged by the mistrust of the original producer who has parted with his produce on a partial payment and strongly suspect that distant people whom he does not know have cheated him or will shortly do so. Needless to say that this mistrust and suspicion is actively fostered by the agency which formerly bought these goods and have no desire to be ousted by your organisation. On a Co-operative basis all this has to be done by an association formed by the producers themselves viz. the cultivators pitted against traders, to beat them at their own game and to oust them from a market which they already hold."

The above paragraph written over 35 years ago typifies the problems relating to the marketing of vegetables then. You will perhaps agree that the problems remain much the same today.

In the years that followed several attempts were made in the direction of marketing. The earliest of them was the Co-operative Central Vegetable Market in Colombo registered in 1935 which had to close down for want of support from the producers induced in partly the Society's inability to deal with them except on a commission basis and contributing in its turn to a lack of interest in the Market on the part of the buyers who will not waste time among half-filled stalls - Consequently

the Market intended for Co-operative Marketing was handed over to the Government Marketing Department.

Another organisation was the Ceylon Fruit and Minor Produce Co-operative Society which also failed in about 1936 because of costly overheads. It failed to secure the allegiance of growers in Nuwara Eliya who continued to patronise the private commission agents who sometimes purchased outright and also granted advances on a lien on crops. The traders got the quantity produce and the Co-operative was used as the dumping ground of low grade quality.

These early failures were perhaps practical lessons to the next generation of Cooperators among whom was the necessary leadership and the knowledge of Co-operative principles to speed them off to fresh efforts.

The earliest among the successful marketing organisations was the Minneriya Co-operative Marketing Society in the field of grain marketing and the Palugama Vegetable Marketing Society now known as the Udapalatha Co-operative Agricultural Production and Sale Society both of which came into existence in 1939. It is to this latter organisation that I would focus your attention. The Co-operators of Palugama most assuredly rank as the Pioneers of Co-operative Vegetable Marketing in Ceylon. This achievement is all the more praiseworthy when one considers the fact that it was a spontaneous growth born of the economic needs felt by the producers themselves as opposed to the Agricultural Producers Societies of the later period, which sprang up as a result of Government policy.

Palugama is the name of the village and means "Deserted Village" as indeed it was till some early colonial administrator seeing the poor economic condition of the village gave them encouragement and advice to grow exotic vegetables such as Cabbage, Carrot, Beet, vegetables which had a ready market in the distant towns particularly Colombo and Kandy. The experiment proved a success owing to the favourable conditions which were ideal for vegetable production. Vegetables grew in great profusion and a new agricultural pursuit dawned on the village. But as the saying goes "more honey" brought in "more flies" in the form of traders, money lenders, collectors of vegetables. The result was a pernicious system of credit where the rates of interest, hidden and direct, rose to unbelievable heights as much as 300% per annum. Thus the economic condition of the village was barely above subsistence level under the yoke of

the village money-lender, boutique keeper, the land grabbing rich relation, the collector, and private commission agents controlling the wholesale markets.

In this environment the first step in the development of Co-operation was the formation of a chain of credit societies in 1934 to help the farmers with their financial needs mainly production loans. By 1939 there were 18 such societies with Unlimited Liability serving an area of over 40 square miles. These credit societies helped the producers to loosen their bondage to the money lenders and thus to become to some extent free agents in the marketing of their produce for which purpose they had yet to depend on the village collector and the private commission agent. Thus the organisation of the Marketing Society was but a logical step towards obtaining further benefits in the field of marketing. For the performance of marketing functions, small units were clearly uneconomical and so the entirety of the village covered by the separate credit societies was selected as the area of operation of the Marketing Society which was registered in 1939. The members also established a Co-operative Stores Society for the procurement of consumer goods.

HANDLING - UDAPALATHA C.A.P & S. SOCIETY

To form a Marketing Society at the producers' end was one thing; to secure a foothold in the terminal wholesale markets in Colombo was quite another, in the teeth of opposition from the private Commission Agents who had been in that business for several generations. A small space about 30 square feet was obtained for them by Government after much effort. In 1939 their Society sold vegetables to the value of Rs.5200/- but by the end of the year it had incurred a considerable loss and had almost been throttled out of existence by the files and propaganda of hostile vested interests. On one occasion even the lorry drivers were bought over by the enemy and delivered the vegetables to the enemy instead of to the Society's Stall. The Registrar of Co-operative Societies commenting further states:

"An intensive drive is now being conducted to canvass the active loyalty of members and a scheme of reorganisation based on a measure of State support has been proposed to Government. It is becoming increasingly clear that without reasonable State support the organisation of Co-operative Marketing in rural Ceylon stands but better chance of success under present conditions."

The War years showed out the importance of this Co-operative organisation in Colombo as an effective rival organisation to check the abuses of private Wholesale Dealers who were prone to jack up prices on the slightest pretext. It is of course, well known that Co-operative Consumer Societies were set up to combat the problem of equitable food distribution in Ceylon during the War years. Similarly even in the field of agricultural marketing this single Society was able to prove its worth as an instrument to check the inordinate rise in prices of vegetables. In these circumstances the Government gave them necessary assistance by way of transport vehicles which were vital for the regularity of supplies but this was no solution to their problem of adequate space.

The marketing difficulties experienced by this Society and of similar producers' societies could not however be solved without a suitable market in the City and to meet this situation a Co-operative Central Market located near the business Centre was suggested as a solution. Any Co-operative Society wanting to do wholesale or retail marketing in vegetables, fruits or grain could hire its own stall and commence its business in this market.

CO-OPERATIVE CENTRAL MARKET

The Co-operative Central Market as this was called became a reality in 1951 and was placed under the control of the Commissioner of Co-operative Development and the first among the many Co-operative Societies that came to occupy this Market was the Udapalatha C.A.P. & S. Society as a Wholesaler and Retailer in Vegetables. There were also other vegetable marketing Societies that came in as vegetable wholesalers. In all 23 Societies came to occupy the Co-operative Central Market.

This method of constituting a wholesale market had its own defects. It meant that each separate Society had to maintain a separate staff of employees and to make its own transport arrangements. Furthermore it created a situation where one Society appeared to compete with its neighbour for the patronage of the retail trader or consumer. Several societies found it quite uneconomical to run the separate stalls in the Central Market and abandoned the scheme. Even the Udapalatha C.A.P. & S. Society found it difficult to cope with situation as supplies were inadequate to run a wholesale market successfully. It was not entirely to overcome this situation that certain reorganisation measures were adopted at the producers' end - measures which constitute the 'Link-up Scheme'.

Marketing is, as you know, not a problem that can be tackled in isolation. It is but the final stage resulting from production and if a Co-operative Marketing Scheme is to be successful, the farmer must be helped with the complete range of services he needs in at least the same way the private wholesalers and traders. In this regard the private traders had built up a system of credit and supplies during the last 80 years ever since the Wholesale Markets became an established institution in Ceylon. The Udapalatha Society had always been appreciative of this fact but a complete range of services was not easy to organise as there were the Co-operative Credit Societies issuing credit, the Stores Societies selling the consumer goods for cash, while the Udapalatha C.A.P. & S. Society serviced the members in regard to agricultural requisites such as seed and fertilizer. All these institutions were separate and constitutionally independent of each other and it was therefore necessary to bring about a closely co-ordinated working arrangement to obtain the best results.

UDAPALATHA LINK-UP SCHEME

This working arrangement which was called the "Link-up" Scheme consisted in the following measures:-

- (1) A member's seasonal credit needs, both for production and subsistence were to be carefully assessed by each of the 18 credit societies.
- (2) The total of the requirements of all members constituted the capital required by the Society. It was thereafter easy to decide what part of this sum was to be borrowed from the Co-operative Bank.
- (3) The Co-operative Bank was to finance up to this extent by arrangement.
- (4) Once the loan was approved by the Bank the Society was in a position to finance the producers, in instalments which the Committee decided, having due regard to his needs. This financial assistance was not issued to the member direct as cash but channelled to the village Stores Society if it was for procurement of food, or to the Udapalatha C.A.P. & S. Society if it was for the supply of seed or fertilizer.
- (5) When the reaping season commenced the producers had to bring all their vegetables to the Society's Collecting Centre in terms of the Marketing Agreement.

- (7) After sale was effected the Udupalatha Society had to remit each Society's share of proceeds with the necessary Invoices to the Bank A/c of the respective Societies.
- (8) Each Credit Society would thereupon credit each member's share of proceeds to his personal account. When the members loan account was settled the proceeds thereafter would represent his savings for the season.

As you will see a high degree of co-operation among the Co-operatives was necessary to implement this scheme and this was made possible through the Departments Extension Staff and the large number of Committee members and Office-bearers of Societies, who worked very intensively to bring it to a successful pass. The obstacles in the way of success were tremendous. Many had to counter the powerful influence of the private traders who had built up a very wide and flexible system of credit and marketing.

The beneficial results of the Scheme were readily seen by the increase of loans granted through the credit societies, the larger volume of business of the Consumers' Societies and finally by the increase in the quantity of vegetables handled and the sales effected through the Marketing Societies. The following statistics illustrate the effectiveness of the 'Link-up' Scheme over the first 10 years:-

Year	Quantity in Cwt.	Marketing Turnover. Rs.	Turnover in Consumers' Society	Loans in Credit Societies
1950	10,421	234,367	443,181	117,989
1952	8,869	263,000	777,000	143,000
1954	17,800	426,000	876,000	240,000
1956	25,000	587,000	1,252,000	293,000
1958	30,700	883,000	1,251,000	308,000
1960	56,000	1,185,870	1,316,000	332,797

The following observations made by three successive Commissioners of Co-operative Development, all of them very eminent authorities on Co-operation are of interest. Mr.S.C. Fernando the first of them says in his Administration report:

" The activities of this particular C.A.P & S. Society have received international recognition: (all the FAO/ILO paid it a visit in March) and as the home of the world famous 'Link-up' Scheme it is attracting foreign Co-operators and even students of Sociology."

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A few credit societies in 1934 helped to raise the people from abject poverty and to loosen a little the financial grip of the trader. These Co-operatives next established a Vegetable Sale Society in 1939. After bitter battles with the private trader who was beating down the price of their Luscious 'English' vegetables into a pulp (.05 Cents for a big cabbage was usual and .10 Cents for 100 beans) they gradually began to raise their heads above the level of their vegetables and convert their rude shanties into well shaped dwelling houses of stone. Hundreds of these are solid monuments due to a mighty Co-operative effort in which the late Rt.Hon. D.S.Senanayake, then Minister and Mr. G. de Soyza, then Registrar both joined hands more than once at least to ensure fair play in a grossly uneven struggle.

As a Vegetable Society its main functions were transport and sale and there was no direct link with Credit Society activity. The Government Food Production Drive brought it into the main scheme of C.A.P & S. Organisation and it became one such as any other. But its main roots are very deep and the area could boast of a Co-operative Store even before the Hbg Drive of 1942. The keen interest of co-operation suggested to them the working of all 3 types in combination and the famous 'Link-up' was born with 5 Stores and 18 Credit Societies operating in its area.

Last year the Udapalatha Society handled 18,958 Cwt. of Vegetables, an increase of 1,708 Cwt. over the previous year. Its main outlets are the New Market and the Co-operative Central Market. Udapalatha has been noted for great local leadership and special mention must be made of its two Presidents and the Assistant Commissioner who launched the 'Link-up' Scheme."

Mr.S.B.Yatawara, who succeeded Mr.S.C. Fernando in 1955 as Commissioner of Co-operative Development says of this Society:

"Any account of this Society without reference to the other Societies with which it works in co-ordination would be incomplete. The cultivators obtain all the credit needs from the village credit Societies, of which they are members and supply their produce to this Society for sale. This Society sells the produce, pays their debts to the Credit Society and grants them credit at the

local Co-operative Store from which they can purchase goods. In addition to selling for the members their produce the Society also arranged to supply them with good seed, insecticide and manure. Mr. J. F. Nuttall who spent four months in Ceylon, referring to the Co-operative system at Palugama in this book "Co-operation in Ceylon" says:

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"this Marketing Society by Link-up has centralised finance in the Store and made all transactions between the various sections a matter of book-keeping only. This in effect creates credit. It has ensured the recovery of loans by the Credit Society from produce marketed and it has resulted in a closely integrated attack on the trader on all fronts - produce marketing, Credit and Supply. The members have a realistic price for produce and the whole area is more prosperous."

During the year 1955 it had sold 21,905 Cwt of vegetables at a value of Rs.413,000/-.

Not long after this report was written, this area and in fact the entirety of Ceylon had a radical change in the Co-operative structure, for in 1957 we saw the ushering in of the Multi-purpose Societies movement. This resulted in the conversion of the Udapalatha C.A.P. & S Society and the seven Stores Societies which were participants in the Scheme, into Multi-purpose Societies, each capable of attending to all the 3 functions of Credit, Supply and Marketing independent of each other. The Credit Societies became superfluous in this context. The impact of this change is reflected in the report of our next Commissioner, Mr. P. E. Weeraman, who says in his Administration Report of 1960 as follows:-

"The link up scheme obtaining in Palugama is an integration of 18 Credit Societies of unlimited liability, one Agricultural Production and Sales Society and seven Multi-purpose Societies (formerly Stores Societies). The membership in the C.A.P. & S. Society decreased by 251 to 562 while that in Credit Societies increased by 31 to 813 and that in Multi Purpose Societies by 1213 to 2073. The total of cash credit loans granted by the 18 Credit Societies under the Scheme was Rs.332,800/- as against Rs.454,000/- last year. The total of loans recovered was Rs.327,300/-. The reason for the reduction in the cash borrowings of the year under review is that many loans were given by the Multi-purpose Societies in the form of manure, seed, implements, insecticides, sprayers etc."

Thus with the growth of the Multi-purpose Societies, which were competent to handle all the three services of Marketing, Credit and Supply, the need for separate Credit Societies which were not convertible into Multi-purpose Societies (by nature of their small size) ceased to exist and therefore the triangular 'Link-up' so dear to the Co-operators of the earlier period of single-purpose Societies gradually gave way to a two-way Link-up between the Udapalatha C.A.P. & S. Society functioning as the marketing organisation and the 10 Multi-purpose Societies functioning as the Credit and Supply organisations. The Credit Societies continued to linger but they ceased to be active suppliers of credit.

The Lin-up Scheme was essentially an intelligent approach to the complex problems of production and marketing in the context of Multi-purpose Societies performing separate functions. Its success was the result of several factors. The first of these was Co-operative education which was considered essential for the efficient working of a Co-operative Society. Principles of controlled credit on personal security, democratic control and efficient management by the Committees were ingrained into co-operation before a Society was registered. To see to all this there were well-trained extension personnel by way of Co-operative Inspectors and Honorary (education) Supervisors. In recent years this aspect of Co-operative education has not received the same degree of attention. It was therefore not surprising that the system weakened considerably with the coming of the Multi-purpose Societies where the office bearers and Committee members were not adequately trained to carry out their responsibilities. The granting of loans for agricultural production under the Co-operative Agricultural Production & Sales Societies Scheme sponsored by the Government in and after 1948, undermined to some degree the high standards of repayments that were maintained by truly Co-operative organisations and in consequence the credit issued through both Credit and Multi-purpose Societies was not so closely supervised. The result was that in a large number of cases. Default was much larger than before.

This situation tended to drive the producer back to the hands of the money-lender even private traders. A survey was made in 1965 by Mr.L.E.Pickett , an I.L.O. Wxpert who says:-

"Many producers were still suffering at the hands of the private money-lenders even after 20 years of

Co-operative activity in the area. One of the reasons for this appeared to be that so many producers depend on the local, rather small, Credit Society for his production loans. Several of these small societies visited during the survey seemed to be both from the point of view of management standards and of financial viability to be unsuitable as financing agents for cultivation loans. On the other hand the large and well organised Udapalatha C.A.P. & S. Society had given and was continuing to give assistance in credit for cultivation needs which have considerably alliviated the burden for many producer members. Moreover the record of repayment at Udapalatha was excellent whereas in the smaller Credit and Multi-purpose Societies the record of repayment was poor, while of course has been a contributory factor to the discontinuance of credit facilities to their members

The impression gained was that many Co-operatives were not solving the problem of financing their members requirements to any great extent except at the Udapalatha C.A.P. & S. Society where the Scheme worked well. The reasons for this situation appeared to be

- (i) Credit issued was not given on a selective basis nor was it supervised.
- (ii) the Small Societies with strained finances were unable to stand non-repayments and so the good producers had to suffer for the sins of the bad.
- (iii) The standard of management in the small societies was not good enough to handle the organisation and supervision of cultivation loans."

The People's Bank which has taken the place of the old Co-operative Bank has come in to fill this gap. A Branch of this Bank has been established in Welimada which is the chief vegetable producing area. Thus the People's Bank is very close to the producers who is in a position to go to the Bank direct for a production loan if the Co-operative organisation is weak and unable to help him. It is the Bank's policy not to lend to a Co-operator direct if the local Co-operative can perform this function but it will lend to the producers direct (on good security) if he is not so served. The Udapalatha C.A.P. & S. Society is now closely associated with the People's Bank for the purpose of production loans. This Society has now a Banking

Department which is known as a Rural Bank where thrift and credit activities are attended to under the guidance of the Preple's Bank.

On the side of marketing the king pin of the Co-operative Marketing Scheme is yet the Udalalatha C.A.P. & S. Society which carries on the old system of collection and transport not only on its own behalf but also on behalf of all the other 18 smaller M.P.C.S. / Credit Societies of the area. Thus the old 'Link-up' scheme of the early fifties do not exist in its original form but rather on a modified basis depending on the changing circumstances.

Transport, as you know, is a vital link for efficient marketing of vegetables and fruits. In our Co-operative system this is done by the vehicles owned by the producers' societies themselves but as most of these Societies do not own lorries, the Ceylon Agricultural Producers' Union, to which I shall come presently, performs this function through a fleet of lorries which it owns. Quite often, this entire pool of lorries is insufficient to cope with the transport problems, especially during periods of glut and to cope with these situations, the lorries belonging to other Co-operative organisations mainly the Co-operative Multi-purpose Unions are brought into the transport scheme. The Multi-purpose Unions which supply consumer goods as wholesalers to the primary societies come down empty to Colombo and take a full load on the upward journey. Therefore, it is of mutual benefit to the Producers' Societies and the Multi-purpose Unions to make use of the downward journey to transport vegetables. Similarly the lorries of the Ceylon Agricultural Producers' Union located in Colombo, can be of service to the Multi-purpose Unions in the vegetable producing areas in the transport of consumer goods from Colombo. This co-ordinated system of transport is in operation and has helped to effect great economies in this direction. In fact the Ceylon Agricultural Producers' Union earns more income from the transport of consumer goods to the Co-operative organisations than on its transport of vegetables down to Colombo.

THE CEYLON AGRICULTURAL PRODUCERS CO-OPERATIVE SOCIETIES UNION LTD

Having said so much about the Udalalatha C.A.P. & S. Society and the 'Link-up' Scheme, I would come back to the point regarding the Co-operative Wholesale Market or the Co-operative Central Market, which had failed to function

effectively. With the growth of more societies interestee in vegetable production and marketing it became increasingly clear that a Union of primary Societies was the solution to the common marketing problems of these primary organisations. Such a Union was formed in 1961, with the Udapalatha C.A.P. & S.Society taking the lead even though it meant that Udapalatha Society would have had to close down its wholesale business in Colombo as a separate unit. The membership of this Union has come mainly from the 4 districts where Societies have their marketing problems. There are now in all nearly 270 Societies within its membership representing about 20000 producers cultivating annually a total acreage of approximately 15,000 acres under vegetables including potatoes.

The services of the Producers' Union are mainly:

- (1) the supply of fertilizer, seed and other agricultural requisites to the primary societies.
- (2) the collection and transport of vegetables from societies to the Co-operative Central Market in Colombo and its branches.
- (3) The sale of such produce.
- (4) The sale of other agricultural produce such as arecanut, coffee, pepper etc. consigned to the Union.

Its present structure is composed of:

- | | | |
|------------------------------------|---|-----------------------------|
| (1) Head Office | } | At Colombo |
| (2) Chief Wholesale Market | | |
| (3) Seed and Fertilizer Department | | |
| (4) Empties Supply Department | | |
| (5) Transport Department | | |
| | | Co-operative Central Market |

(6) Branch Depots at:-

- (a) Bandarawela
- (b) Nuwara Eliya
- (c) Kandy
- (d) Uva Paranagama
- (e)

(7) Outstation Wholesale Depots at:

- (a) Kiralaponne
- (b) Kurunegala
- (c) Kandy

(8) Three Retail Depots in Colombo and one at Kandy.

It is administered by a Board of Management consisting of members elected at its Annual General Meeting. 3 Board members are nominated by the Commissioner of Co-operative Development to make a total of 12 Board Members. Since 1962 the annual quantity of vegetables handled has gone up from about 3,800 tons to approximately 6100 tons in 1969 which represents about 25% of the wholesale trade in the City of Colombo. As the ratio of the entire quantity produced by the members in about 16,000 acres, the quantity sold in the Co-operative Market is about 16% of the total output of about 48,000 tons per annum. This position indicates that members sell the larger portion of their vegetables in markets other than the Co-operative Market. Investigations reveal that these sales take place at the local village fairs and to the lorry traders for spot cash in preference to sale on a consignment basis. But a good portion yet goes to the private wholesale traders by-passing the Co-operative Society and the Union. By this process some producers feel that they can get the best of both worlds. In any event it is too optimistic to hope that the private trader who has been in this business for a number of generations can be beaten at his own game so easily by co-operators who are comparatively newcomers into this field. It is an undoubted fact that the private traders' methods in regard to both supplies and sales are more flexible than those of a Co-operative institution and therefore he is often at an advantage over the Co-operatives which on their side can claim to give correct weighments, lower commissions and cheaper credit. The traders also keep close social contact with producers and village weddings and funerals are occasions on which traders would give lavish gifts and financial assistance.

In these circumstances the wresting of this trade from private traders will be an up-hill task and Co-operatives and those associated with Co-operative Development must turn their attention to counter these forces through well organised extension and educational programmes, general meetings of societies, field days and propaganda meetings, demonstrations in packing and grading, group meetings of producers and setting up of organising Committees for convenient areas are all useful measures to whip up the loyalty and enthusiasm of producers and keep them within the Co-operative fold. To do all this specially trained extension workers who have a flair for public relations and who understand the psychology of the people are indispensable. Together with them must go the

equipment necessary for them to work with. I am sure Japan can provide us with much valuable advice in this direction.

MARKETING PROBLEMS

(a) Personnel

I would now come to a few marketing problems we have had to face in our country. The first of these is in regard to management personnel at all levels from the primary society right up to the apex organisation. Vegetable trade is not a very attractive business, much less attractive to the employee than sitting behind a sales counter in a Co-operative Stores. Consequently the men with initiative and drive do not seek this employment and so the Co-operative organisations dealing in vegetables have to make do with people of lesser calibre. Such men fail to command the confidence of the producers who are only too prone to suspect that they are being cheated even though such suspicion may be entirely groundless. This fact is all the more obvious when one happens to discover a good Manager who makes himself almost indispensable by the excellence of his performance. This is true of not only Managers but also of other employees such as lorry drivers and cleaners who come in contact with the producers daily.

(b) Princing

Complaints of bad pricing are very frequent among producers, who as I said earlier, have a liaison with the private wholesalers. They would compare the prices realised from the Co-operative Union with those from the private traders and cite bills to support their contention. The Co-operative Union is alive to this criticism and makes use of market information to see that the best prices are obtained but this alone does not satisfy the producers to bring about a greater degree of confidence. The Producers' Union had once accommodated a permanent representative of the producers (a nominee of the Udapalatha C.A.P. & S. Society which is the largest single supplier) to watch over the transactions between the Manager and the retail traders, and to compare these prices with private market prices. In the end he was also suspected and withdrawn. To get at the truth of this controversy about prices two separate and independent investigations were carried out by officers of the Co-operative Department. One Co-operative Society had come to the firm conviction that private traders paid better

and had in fact entered into an agreement with one of them to supply its entire daily collections on a consignment basis. This Society was thereupon induced to alter this condition to 50% to the private trader and to send the other 50% of equal quality to the Producers' Union which they quite faithfully did under the supervision of the Departmental officer. At the end of the season, the realisations were reviewed and it was found that for 44,000 lbs. of vegetables supplied to the private market the Society had received Rs.10,602/= while for 44,696 lbs. sent to the Co-operative Market the Society had received Rs.11,616/= an excess of 10% over the private market prices. The second investigation carried out in the Central Province revealed even better results. For 48,000 lbs. sold to a number of private traders (not the same trader referred to earlier) the Society had received Rs.9800/= approximately while for 44,640 lbs. supplied to the Co-operative Market the realisation was Rs.11,106/=, an excess of about 25%. But the strangest part of this survey was that in both Societies all the members had occasion to complain about the prices in the Co-operative Market. The reason was all too obvious after a systematic study of prices. The producers picked out the few bad days in the month when the Producers' Union's prices were lower forgetting the fact that on the majority of occasions they had got equal or better prices which more than off-set the shortfall. When the position was explained to the producers they were quite convinced and revoked their contract with the private trade. This sort of survey should be part of regular extension work.

As I said earlier the private traders' methods are flexible so flexible in fact that he can manipulate prices to suit his purpose. One of the ways in which this is done is to give an underweight and enhance the price per unit. To quote an example he will record 100 lbs. of beans as 80 lbs. and give a price of .60 Cts. per lb. instead of the market price of .50 Cents per lb. Thus he would pay only Rs.48/= (less commission) instead of Rs.50/= thus benefitting himself by Rs.2/= while at the same time he would convince the producer who is never sure of his weight that the private trader had paid him better than the Co-operative Market. Sometimes, the producer himself colludes with the private trader to get a recording of a high price to make a claim from the Co-operative of 'underpayment.'

The traders would also try to capture the produce of Co-operative producers at the very beginning of the season by

giving them an unrealistically high price when the market is depressed. They will continue to do this for a few days incurring loss, to put the producers out of touch with the Co-operative Market. When this is done they would proceed to exploit the producers. To give an example, there was a Society that sent tomatoes to the Co-operative Market. They fetched prices ranging from .20 Cts. to .30 Cts per lb. The private traders undercut the Union by paying .22 Cents upwards when the supply to the Co-operative Market was stopped. I personally went to the village a few days later to be told that the private traders were paying better prices. The price on that day was .22 Cents per lb. and the producers were very reluctant to break away from them. With my persuasion they ultimately relented and promised to send it to the Co-operative Market, if I was prepared to guarantee a price of .24 Cts. It was not within my power to promise such a price as the Producers' Union was dealing on a consignment basis, but I gave this undertaking purely to bring those people back to the Co-operative fold. When the tomatoes arrived in the Market the following day I allowed the prices to take their own course and called for the sales records at the end of the day. I was going to make the necessary price adjustment if the produce had been sold for less than .24 Cts. But to my surprise the produce had fetched the very handsome price of .35 Cts. per lb. The producers were of course delighted and thanked me profusely, but I had nothing to do with the price. They came back to the Co-operative Market. The point I would like to make is that producers in their misguided efforts to have the best of both worlds quite often have the worst of both.

The next case I would cite is that certain producers try to use the Co-operative Union not as so much as a selling agency but as a lever to get better prices from the private traders. This practice is fairly wide-spread. A certain group of producers who had sold vegetables to the private traders found that they were being heavily exploited, and wanted the Producers' Union to make collections. On the first few days the quantities collected were fair but thereafter the supplies to the Union dwindled rapidly and consequently Producers' Union's lorries were not sent. Thereupon the producers came in all haste to Colombo once again to persuade the Union to send the lorries - They said:

"it is true we are not supplying you with vegetables, but we get good prices if your lorry is around".

54 had to tell them that if you have a good watch-dog you have to feed the animal. Otherwise it will not watch for long. This brings me to a very important point. The very existence of the Producers' Union as an effective marketing organisation, brings great economic benefits to both members as well as non-members because it mitigates the exploitation by the private traders. In fact this position is accepted by the producers. I am myself fully convinced of this and would estimate the surplus accruing to the producers on this account would amount to at least .05 Cents per lb, over a total quantity of about 80 million lbs. of vegetables sold during the last 7 years; this extra financial benefit to producers would be over Rs.3 million at a very conservative estimate. But the Producers Union itself is running at a loss, the main reason being the low commission of 5% charged for its services. It would seem that a minimum of 10% is necessary to secure financial stability. My plea with the members has always been that the commission should be increased to 10% but the General Meeting will not hear to this.

There are many interesting experiences which I would like to recount but this would make this paper unnecessarily long.

PLANNED PRODUCTION

The need for planned production of vegetables and fruits is all too obvious even in the most advanced countries. The average housewife, as a consumer, hopes for the ideal condition where all her requirements of fruit and vegetables, can be had in the proportions she wants at fairly stable prices all round the year in the same way that she can buy bread or soap, the supply of which can be controlled the year round. But what she finds is an entirely different set-up. Cabbages of excellent quality may be cheap this week but a few days later she may have to pay much more for cabbages of inferior quality. It does not afford her any consolation to know that this variation is due mainly to climatic conditions. On the other hand the producers' experience is even more frustrating. When cabbages and beans are in their prime condition the prices are quite low but when the off-season sets in he gets high prices for low quality. This is a universal feature in regard to vegetable marketing and I do not think any amount of planned production is going to solve this problem to the entire satisfaction of the consumer and the producer. But we can try to lessen the severity of these fluctuations.

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not in respect of all vegetables but in respect of those which are considered critical. In Ceylon we have 76 varieties of vegetables most of which are not produced on a commercial scale. The important varieties are about 20 in number, which again is quite a lot. Cabbage, Beans, Leeks, Carrots, Beet, Brinjals, Capsicum, Lufa, Pumpkins, Gourds, Tomatoes, Cucumber, Ladies Fingers, Spinich, Potatoes, Yams and leafy vegetables form this important group. These vegetables grow in 3 different regions- Cabbage, Leeks, Carrots and Potatoes will grow in the up country while beans, capsicum, tomatoes will grow in mid-country. The Lufas, Gourds, Cucumber, brinjals will grow in the low country regions. Ceylon's most popular vegetable which is the Pumpkin is a product of new clearings. Unfortunately in all those regions the seasons of planting and harvesting are the same more or less. The result therefore is that vegetables are in plentiful supply from November to January when marketing problems become very acute and again from May to July. During the rest of the year, there is a general shortage of vegetables. Attempts are therefore, being made to grow vegetables in new areas where the main seasons are different to make up the shortfall, during the scarce months. Attempts are also being made to grow vegetables during the dry season where water resources are available by way of streams or rivers. It is yet too early to measure the success of these experiments. A few have been quite successful while an equal number have failed.

In determining what to grow within the limitations imposed by climatic conditions and the elevation, the cultivators use their own good judgment depending on prices realised but how far this is good is another matter. To quote an example the cultivators of Udapalatha area grew more beans and less cabbages in 1968. The result was a poor price for beans and a high price for cabbage. So much so they lost on their bean crops. In the light of this experience they grew more cabbage and less beans in 1969. The result was that these cabbages stumped in price while beans fetched good prices. As 99% of the vegetable growers are small producers any extension work in this aspect of production is extremely difficult. Planning also includes the systematic cultivation of a certain acreage each season so as to meet the general demand for vegetables by the consumers. In this respect the Co-operative Sector in Ceylon can claim to have achieved reasonable success.

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Under the Agriculture & Food Ministry's Annual Plan for food production, an important role has been assigned to the Co-operative organisations engaged in the production of vegetables. Each Society having a reasonable number of vegetable producers is instructed to prepare a programme of cultivation giving the following particulars:-

- (a) Membership participating
- (b) Extents to be cultivated
- (c) Requirements of each member in respect of seed, fertilizer, agro-chemicals, planting material and cash loan requirements.

The total financial requirements are assessed on the above basis and the Society is advised to apply for the necessary funds to the Bank.

The District Plan for Co-operatives can thereafter be prepared. There are 4 prominent Districts and in all about 170 societies. Societies are thereafter advised and assisted to implement their programme. The Ceylon Agricultural Producers' Union would be intimated about each Society's requirements of seed, fertilizer and agro-chemicals and it would be the duty of the Union to see that these are sent in time. Cash is paid to the Union in respect of these items from the Society's own funds or from the Bank Loan.

On receipt of these each Society will issue to its members the necessary material on credit and also advance funds for items such as labour. Members would be expected to repay their total debt to the Society from the proceeds of their crops.

At the end of each season an assessment is made of the achievements as compared with the targets. The following is the summary of targets and achievements for Co-operative Societies in respect of vegetable production for the Maha Season 1968/69:

District	No. of Societies	TARGET		ACHIEVEMENTS	
		Acreage	Loans Required Rs.	Acreage	Loans Issued. Rs.
KANDY ..	9	545	92,000	377	32,100
MATALE ..	12	110	24,000	261	11,000
KURUNEGALA	4	35	15,000	36	15,000
RATNAPURA	8	110	28,800	218	42,675
NUWARA ELIYA	30	1520	366,500	1480	329,859
KALUTARA ..				22	5,000
BADULLA ..	88	4643	100,000	5976	860,000
	154	6963	526,300	8370	1,295,634

It will be seen that by and large the achievements are in excess of the targets. This is due to a variety of circumstances, such as climatic conditions and the proper performances at the time of cultivation.

The contribution of the Ceylon Agricultural Producers Union by way of services in 1969 is as follows:-

Seed Supplied Lbs.	Value Rs.	Acreage served	Fertili- zer Cwt.	Value Rs.
-----	-----	-----	-----	-----
54,062	394,986	6,954	11,349	228,750

This programme of Co-operative production and marketing is one that has to be implemented with a well trained staff of Cooperative and Agricultural Officers specially selected and trained for this work in the field and I am afraid we are somewhat deficient in this respect compared with countries like Japan which has a well defined scheme of extension activity according to a report I have read on this subject.

I would now end this paper. The Marketing of Vegetables and Fruits is the most difficult of all marketing problems. It is in my view more difficult than handling meat or fish which can be handled under refrigeration. Vegetables do not respond to cold storage well in our country quite apart from the cost. To develop vegetable marketing in the Co-operative way is still more difficult and the co-operator, be he just a producer, a Society official, an extension worker or Government official, must comprehend the problems involved in this form of marketing if he is to succeed in achieving something useful. Otherwise the exercise can be very frustrating, when it should be looked upon as a challenge to be faced with resourcefulness, confidence and courage.

Joint ICA-CUAC Seminar

May 17-27, 1970

Reference Papers on

Outline of Yaizu-city Agricultural Cooperative Society

and

Need for Production Planning for Better Marketing

Submitted by

Mr. Yukio Uchida

Chief Farm Guidance Section

Yaizu-city Agricultural

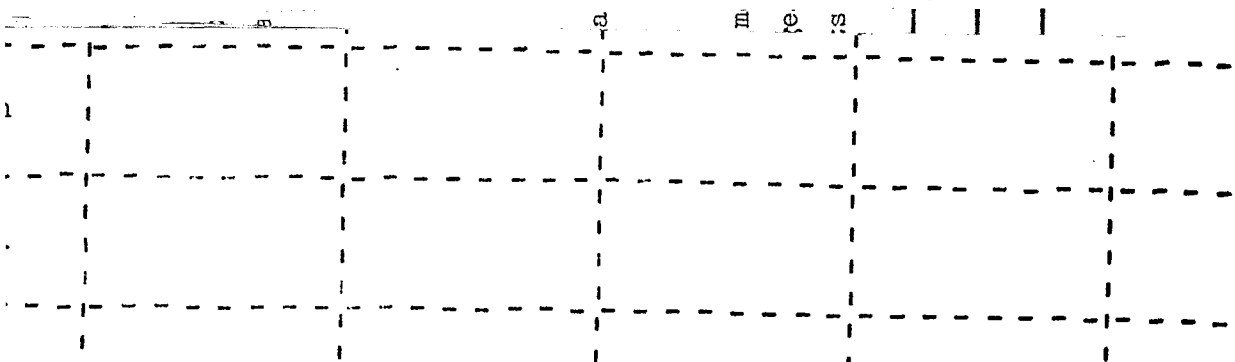
Cooperative Society

Held at

The Institute for the Development of

Agricultural Cooperation in Asia

9-24-6 Funabashi Setagaya-ku Tokyo



I. OUTLINE OF YAIZU-CITY AGRICULTURAL COOPERATIVE SOCIETY

(The figures are as of March 31, 1970)

1. Basic Statistics

- (1) Members 5,607
 3,170 --- regular members
 2,437 --- associate members
- (2) Office-holders and workers
- Officials 24
 18 --- directors
 6 --- auditors
- Workers 197
 92 --- male
 105 --- female
- (3) Capital 131,805 thousand yen
- (4) Fixed asset (tangible)
- 616,208 thousand yen
 215,882 thousand yen --- depreciation
 400,326 thousand yen --- net worths
- (5) Position of credit business
- 4,976,802 thousand yen --- savings
 2,973,196 thousand yen --- deposit
 2,451,694 thousand yen --- loan
 6,484,850 thousand yen --- insurance policies

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(6) Marketing Records of Main Commodities

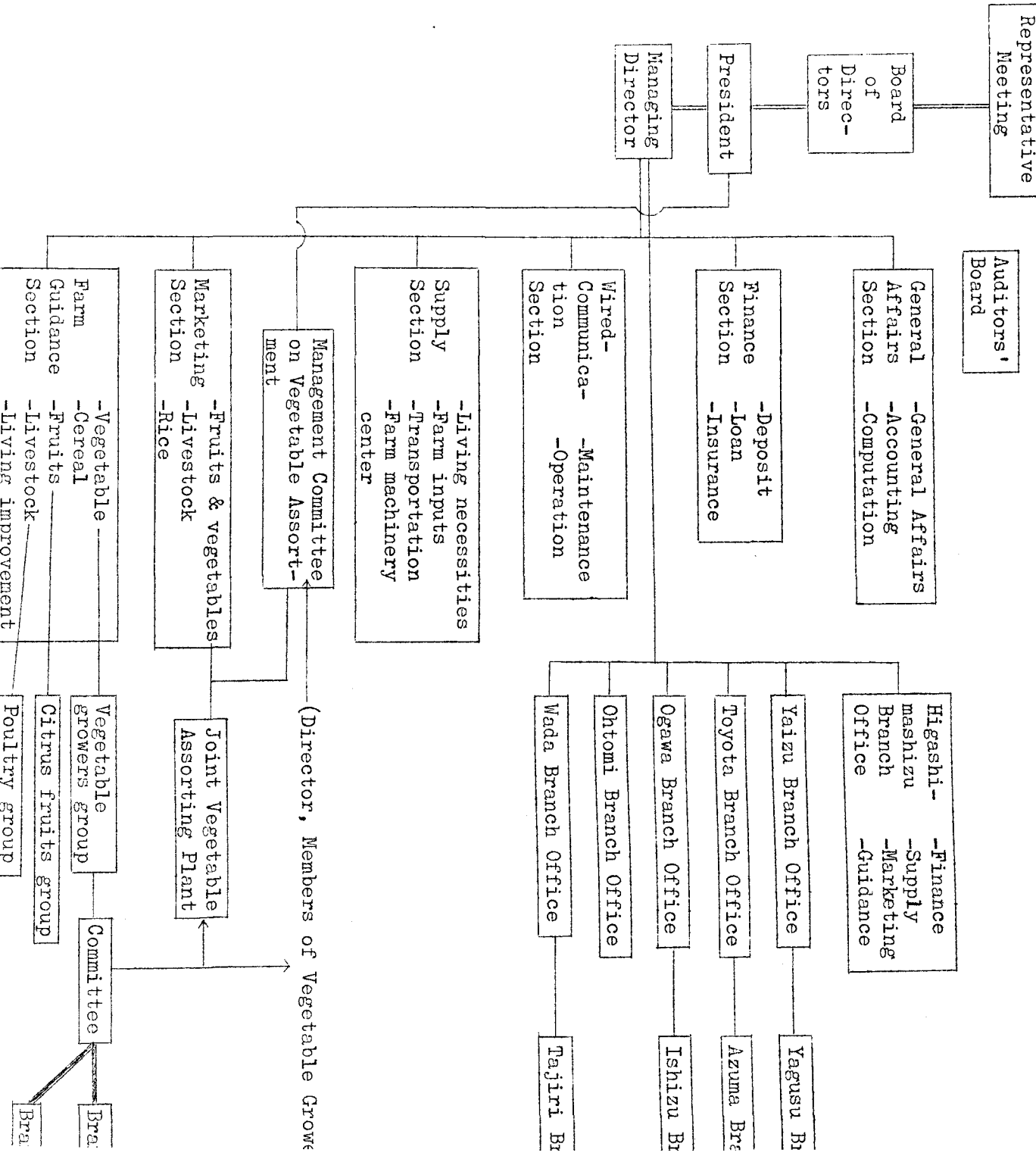
(Unit: 1,000 yen)

Item	1963	1969
Rice	234,343	373,286
Barley	765	-
Vegetable	82,845	371,235
Strawberry	60,763	70,958
Fruits	157,434	225,750
Egg	122,988	141,331
Livestock	44,903	83,432
Others	627	5,085
Total	704,668	1,271,077

(7) Records of Supply Business in Major Commodities

(Unit: 1,000 yen)

Item	1963	1969
Fertilizer	73,522	84,155
Feedstuff	178,284	205,763
Farm Chemical	32,588	67,519
Farm Machines	16,519	77,378
Horticultural	24,285	82,555
Fuel Requisites		33,280
Provisions	42,547	9,167
Home Furniture, Daily Commodities	2,548	92,555
Total	370,293	652,372



REPORT OF THE

REGIONAL SEMINAR ON "MARKETING OF FRUITS AND VEGETABLES
THROUGH COOPERATIVES"

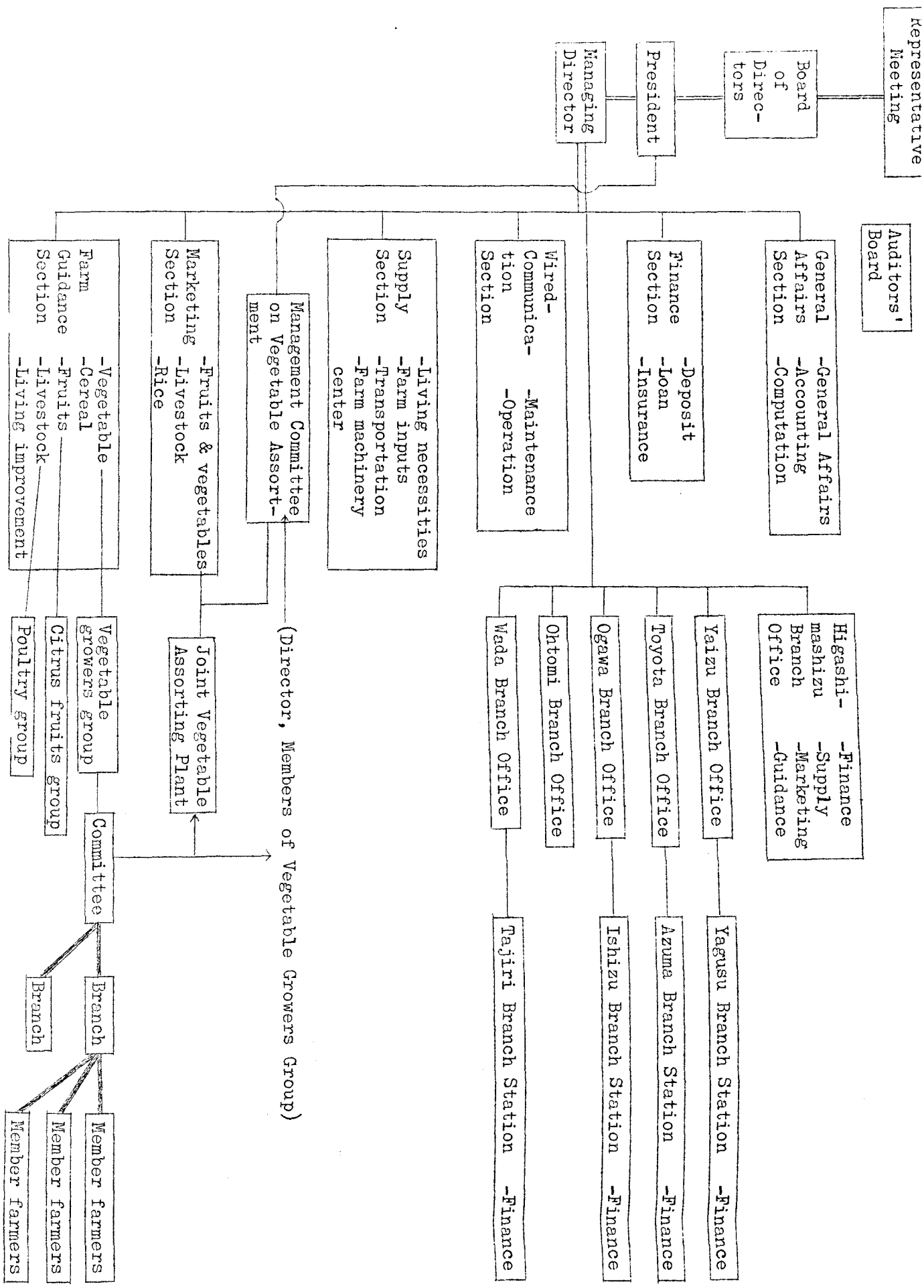
HELD AT TOKYO (JAPAN) - MAY 17-27, 1970

Course Leader: Mr. Shiro Futagami
Deputy Director (Education)
ICA Regional Office and Education
Centre for South-East Asia,
43, Friends' Colony, New Delhi-14.

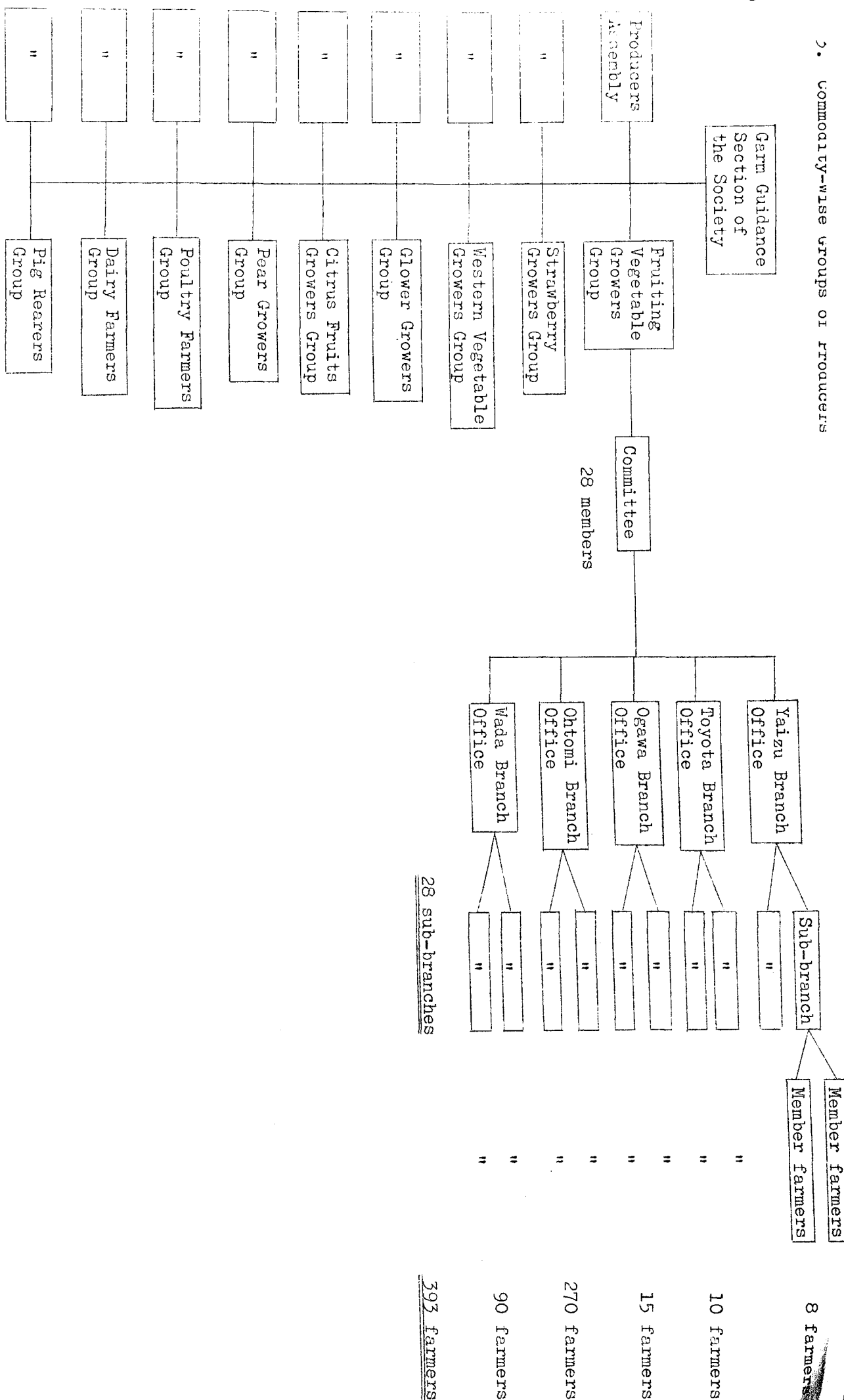
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INTERNATIONAL COOPERATIVE ALLIANCE
Regional Office & Education Centre
for South-East Asia,
43 Friends Colony, New Delhi-14. India

CENTRAL UNION OF AGRICULTURAL
COOPERATIVES,
8-3, Ohtemachi, 1-chome,
Chiyoda-ku, Tokyo (Japan)



2. Commodity-wise groups of Producers



4. Main Facilities

Joint Vegetable Assorting Plant --- tomato, pear

Joint Orange Assorting Plant --- orange

Milk Collection & Cooling Plant --- fresh milk

Egg Collection & Assorting Plant --- egg

Cool Storehouse --- rice preservation

Central Warehouse --- farm inputs & living necessity supply
station

Meat Center --- meat & egg retail store

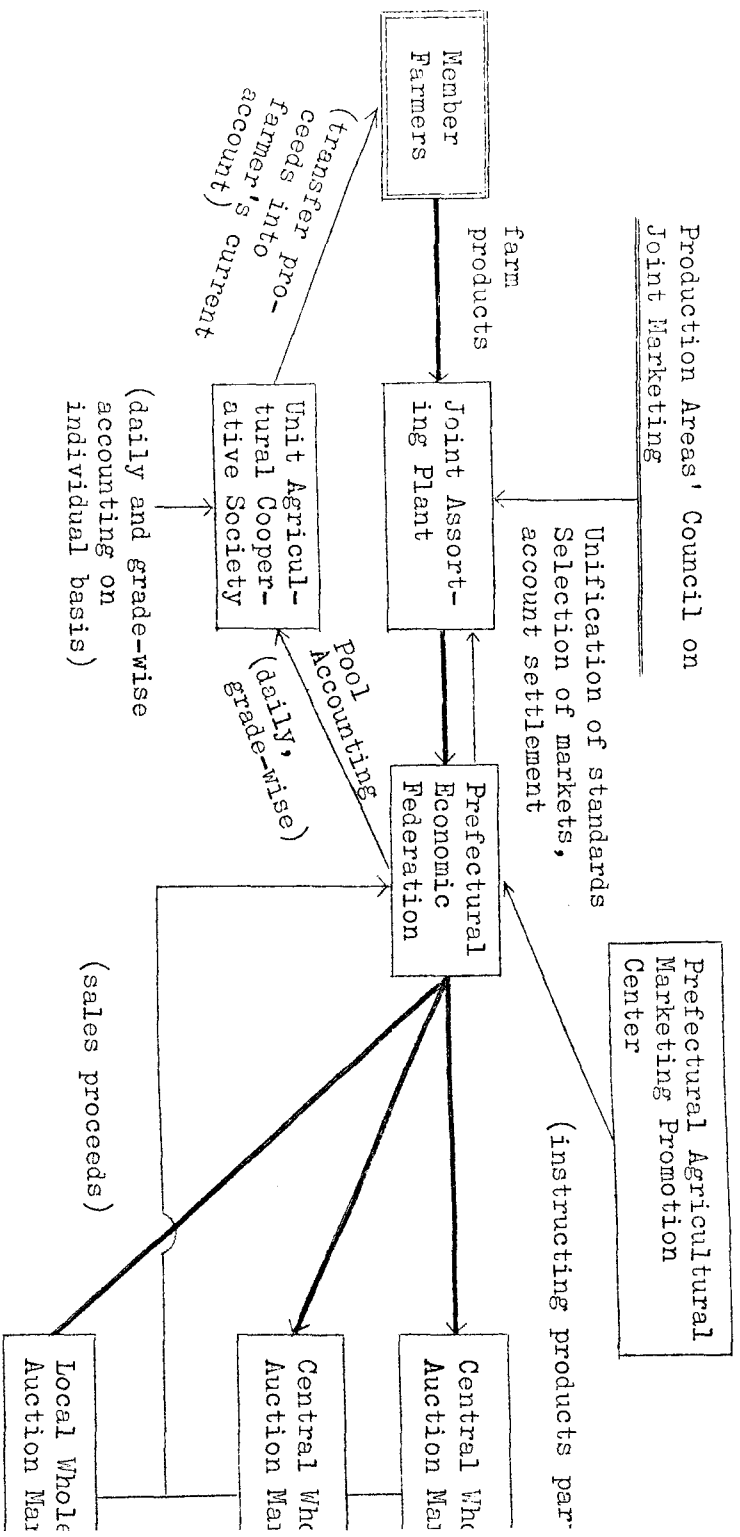
Cooking Class --- cooking instruction and training

Farm Machinery Center --- after-service & repair

Computation Center --- calculating sales proceeds etc. by
electronic computer

II. Need for Production Planning for Better Marketing

5. Cooperative Marketing Channel for Fruits & Vegetables



6. Business Records of Joint Vegetable Assorting Plant

(1) Classified by Quantity

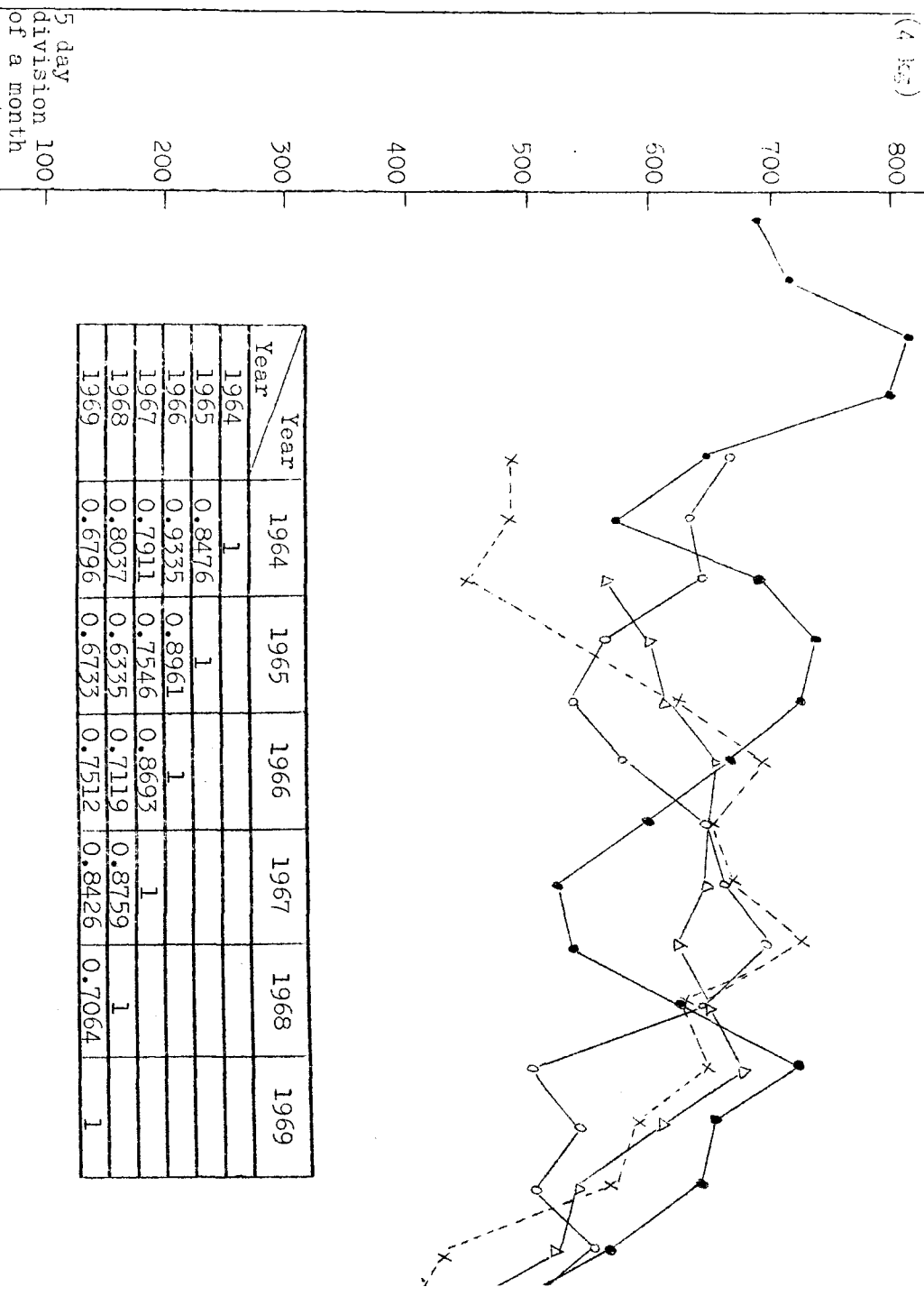
Year Class	1966	1967	1968	1969	1970 (Plan)
	days	days	days	day	day
below 500c/s	5	6	8	1	0
1,000	2	1	4	6	5
5,000	33	27	20	21	20
10,000	25	30	38	32	40
15,000	15	10	10	17	20
20,000	1	6	5	4	5
Total	81	80	85	81	90

(2) Classified by Month

Year Month	1966	1967	1968	1969	1970 (Plan)
February			392c/s	2,488	40,000
March	18,264c/s	39,183c/s	82,310	91,383	118,000
April	180,711	218,511	254,879	208,133	225,000
May	237,794	231,400	204,879	233,996	224,000
June	33,141	19,797	5,208	19,608	500
Total	469,910	508,891	547,637	555,608	607,500
Total kg	1,879,640kg	2,035,564kg	2,190,548kg	2,222,432kg	2,430,000
Poliether Bags	182,074kg	252,231kg	293,994kg	348,879kg	350,000
Total	2,061,714	2,287,795	2,484,542	2,571,311	2,780,000
Cucumber	134,910	98,374	61,682	25,913	50,000

Per Box
(4 kg)

Annual and 5-Day Co-efficient of Tomato



Year	1964	1965	1966	1967	1968	1969
1	0.8476	1	1	1	1	1
2	0.9335	0.8961	1	1	1	1
3	0.7911	0.7546	0.8693	1	1	1
4	0.8037	0.6335	0.7119	0.8759	1	1
5	0.6796	0.6733	0.7512	0.8426	0.7064	1

5 day
division 100
of a month

Month	February						March						April								
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6			
1964	-	-	-	-	-	-	-	-	-	-	497	645	729	641	523	506	497	476	519	517	
1965	-	-	-	-	-	-	508	526	513	500	572	595	570	569	537	513	476	409	376	338	
1966	-	-	-	-	484	482	455	-	621	691	643	661	724	618	638	569	540	404	371	352	
1967	-	-	-	-	-	-	-	-	558	597	611	651	642	618	639	672	583	515	494	398	93
1968	-	-	-	-	-	-	667	631	642	564	535	575	640	656	692	637	496	518	481	529	424
1969	689	715	813	798	647	574	691	735	718	662	594	523	532	619	713	630	615	541	441	395	

* 51% shipped by the end of April in the case of 1967 61% in 1968 55.2%

Year	Item	Plan for Fiscal 1970					Target for 1972					Target for 1975				
		No. of farms	Planted area, livestock population	Unit yield	Total output	Marketing ratio	Value of cooperative marketing output	No. of farms	Planted area, livestock population	Total output	(Value of cooperative marketing) Value of output	No. of farms	Planted area, livestock population	Total output	(Value of cooperative marketing) Value of output	
1970	Rice	3,156	1,373.0 ha	450kg-4,300kg	6,123.5 t	45%	372,003 826,673	3,097	1,338 ha	6,021 t	813,840	3,016	1,275 ha	5,737 t	775,445	
	Toronto	395	42.2	8,000	3,382	95	380,475 422,750	402	46.85	3,748	468,500	389	51.35	4,108	513,500	
	Cucumber	60	5.2	8,000	416	95	20,000 33,280	104	6.7	536	42,880	123	9.5	760	60,800	
	Forced strawberry	51	4.58	1,400	63.64	95	22,369 23,546	67	7.23	101	31,070	86	10.02	140	51,800	
	Semi-forced strawberry	205	16.5	1,400	231.0	95	59,251 62,370	177	15.0	210	57,400	129	10.35	140	37,800	
	Lettuce	115	12.0	1,300	156	90	11,370 14,040	89	10.0	130	11,700	85	12.0	156	14,040	
	Melon	9	40 Vinyl house	120	4,800	95	12,000	10	45 Vinyl house	5,400c/s	13,500	10	45 Vinyl house	5,400c/s	13,500	
	Peppercorn							10	0.7	35 t	7,350	30	20ha	100 t	21,000	
	Flowers trianas	19	1.55	45,000	771,000	95	4,626 7,710	29	2.0	90,000	9,000	43	3.0	135,000	13,500	
	Pot flowers	10	3,300m ²	-	39,000 pots	95	1,400 7,800	13	3,500m ²	45,000 pots	9,000	13	3,500m ²	45,000 pots	9,000	
	Citrus fruits	596	109.7ha	3,000	3,291t	95	162,905 181,005	577	112.52 ha	3,375 t	185,625	543	117.18	3,515t	193,325	
	Pears	162	27	2,400	648	90	16,200 32,400	137	24.7	592	29,600	110	20.5	492	24,600	
	Tea	1,318	89.03	400-500	322.0	100	0 209,690	1,261	106.8	373.8	242,970	1,180	117.4	410.9	267,085	
	Fig	20	2.0	2,000	40	95	3,600 4,000	30	3	60	6,000	40	8.0	80	8,000	
	Laying hen	199	190,800	14kg	2,671t	95	227,035 454,070	181	198,000	2,772t	471,240	154	217,300	3,042	517,140	
Dairy cattle	25	115	5,000	575t	100	28,750 28,750	27	143 heads	715t	35,750	29	180 heads	900	45,000		
Pig	33	1,270	-	2,678 heads	100	40,170 66,950	33	1,300	2,860 heads	71,500	33	1,350	2,970 heads	74,250		
Boar	44	109	-	1,630	90	6,846 22,820	34	120	1,800	27,000	30	130	2,080	31,200		
Meat cattle	30	40	-	40	100	6,400 8,000	20	30	30	6,000	15	25	25	5,000		
Total						1,363,400 3,417,854				2,539,925				2,675,985		

9. Standardization of Operational Scale among Unit Holdings

(1) Fixing Management Pattern

Pattern		No. of Farms in 1970	No. of Farms in 1975
Specialized Management	Rice	0	0
	Orange	30	15
	Egg	16	20
	Vegetable	0	30
Combined Management	Rice + Vegetable	393	320
	Rice + Fruits	300	250
	Rice + Livestock	250	200
	Rice + Tea	100	80
	Rice + Strawberry	350	300
	Others	1,731	1,801
Total		3,170	3,016

(2) Indices for Optimum Operational Scale of Vegetable Farms

	1970	1975
Target Agricultural Income	1,200,000 yen	2,000,000 yen
Gross Revenue	1,850,000	3,700,000
Operation Cost	650,000	1,700,000
Per Capita Living Cost	180,000	250,000
Gross Revenue from Tomato/10 a	1,000,000	1,040,000
Production Cost/10 a	410,000	550,000
Income/10 a	590,000	490,000
Tomato House Area	(1,245,000yen) 15 a	(1,470,000yen) 30 a
Paddy Area	80 a	60 a
Family Labour	2	2
Family Members	6	6
Annual Labour Input	250 days	200 days
Tomato Marketing/10 a	February 1,000kg March 2,600 April 3,000 May 2,000 Total 8,000kg	February 2,000kg March 3,000 April 3,000 Total 8,000kg
Unit Selling Price	1 kg 125 yen	1 kg 130 yen
Tomato Housing Site	20 a	40 a
Liquid Capital Annually Required	500,000 yen	1,200,000 yen

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10. Division of Function & Specialization in Agricultural Production and Marketing

 11. Rationalization and Adjustment in Agricultural Production
 - Standardization in production techniques ... variety, seeding period
 - Controlling planting acreage ... procurement of seeds

 12. Cost Reduction
 - Facility investment, Functional division in production
 - Green housing structure ... financial measure
 - Mechanization of cultivation work ... automated air conditioning and ventilation
 - Fertilization and pest and insect prevention
 - Automated watering facility

 13. Quality Improvement and Higher Average Price
 - Level up of cultivation techniques
 - Functional division in cultivation ... joint nursery of seeding

14. Rationalization of Marketing & Distribution Channel-System

- Markets ... Bidding system of transaction
- Direct Sales ... Transaction with retail markets

- Using toll express-way > commission
- Playground method

- Consolidation of large-scale joint assorting plant
- Scale enlargement of packing unit

- Business structure of the Cooperative Society
- Toward prompter account settlement

15. Other Points

Marketing Facilities for Fruits and Vegetables
and the Role of Cooperatives at different levels
in providing facilities

Submitted by Mr. Masao Nakata
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Zenhanren

Facilities Managed by Cooperatives at Different Levels and its Relevant Major Marketing Produces

Coops.	Facilities for Joint Market- ing (Including packing)		Storage (Inc.Cold storage)		Processing		Marketing
	Vegetables	Fruits	Vegetables	Fruits	Vegetables	Fruits	
Village Coop.	Cucumber	Orange	Onion	Orange	Tomato	Orange	Wholesale market (Ibaragi & Shiga Prefectures)
	Tomatoes	Apple	Irish Potatoes	Apple	Green Pea	Peach	
	Onion	Pear		Chestnut	Coltsfoot	Grapes	
	(Hokkaido Island, Hyogo Pref.)	Peach		Banboo Sprout	Pear, etc.		
	Irish Potatoes (Hokkaido Island, Miyagi Pref.)				(Nearly 40 coops own such facilities)		
Prefectural Federation	Green Pepper Mushroom etc.	Orange Apple	Onion (Hyogo & Yamaguchi Prefectures)	Orange Apple Chestnut	Items are similar to that of village coops (5 Economic federations 5 Specialized federa- tions own such facili- ties.)		
National Marketing Federation					Items are same. (One processing plant is established by National Marketing Federation on joint stock basis)		Distribution Deptat. Wholesale Agent.

Ways and Means for Better Marketing & Role of Cooperatives at Different Levels

Village Level

Fundamental Requirement

- (1) Planned production & shipment

Prefectural Level

- (1) Estimation on future demand and supply within its prefecture. Production on the estimate. Control and adjustment of shipment.

National Level

- (1) Establishment of estimate on demands. Control and adjustment of production and shipment.
- (2) Marketing of produces through the central wholesale markets. Export of produces.
- (3) Direct sale to large purchaser.
- (4) Market research and market information.

Practice to be taken

- (1) Standardized grading and packing
- (2) Joint marketing and application of pooling account system.
- (3) Operation of grading, packing plant, storage and work-shop.

- (1) Making of standard and propagation thereof.
- (2) Wise pooling of trucks for Marketing.
- (3) Establishment of distribution depot within prefecture
- (4) Operation of central wholesale markets in prefecture.
- (5) Operation of storages.

- (1) Establishment of the adjusting committee by the kind of marketing commodities.
- (2) Making of nation wide standard.
- (3) Establishment of distribution depot. in large cities. Exploitation of new customers
- (4) Exploitation of new market in overseas and establishment of countermeasures.
- (5) Improvement of market research works and its information activities.
- (6) Centralization of market interferences despatched by different prefectural federation.
- (7) Study on marketing method by using cold atmosphere storage and cold chain method.

Commodity	A	B	Sub- total	Principal commodity assorted														Vege- table
				Fruits													Other oranges	
				A man- darin orange	A summer orange	An apple	A pear	A peach	Grapes	A persimmon	A chest- nuts	A Japanese apricot	A plum	An apricot	Japanese medlar			
				orange	orange	orange	orange	orange	orange	orange	orange	orange	orange	orange	orange	orange		
A mandarin orange	934	849	85	151	55	-	3	2	-	-	17	1	2	-	-	2	3	
A summer orange	268	114	154	151	55	-	-	-	-	-	-	-	-	-	-	1	1	
An apple	1,141	1,075	66	1	-	-	25	27	1	9	2	1	-	-	1	-	-	
A pear	373	314	59	1	-	32	25	7	3	12	4	1	-	-	-	-	3	
A peach	341	171	170	1	-	115	37	7	7	3	4	1	-	-	-	-	4	
Grapes	116	54	62	-	-	10	1	40	7	3	3	-	-	-	-	-	8	
A persimmon	312	229	83	36	2	13	13	15	1	1	3	1	1	-	-	-	2	
A chestnut	69	61	8	-	-	-	1	-	-	-	3	1	1	1	-	-	3	
A Japanese apricot	37	26	11	2	3	1	1	1	-	-	1	1	3	1	-	-	1	
A plum	16	10	6	-	-	-	-	3	-	-	-	-	3	1	-	-	-	
An apricot	4	3	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
A Japanese medlar	2	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other oranges	53	18	35	20	15	-	-	-	1	-	2	2	2	-	-	-	-	
Other fruits				2	-	6	-	2	1	-	2	2	2	-	-	-	-	
Total		2,925																
Vegetables	885	770	115	5	5	37	22	24	7	10	3	1	-	-	-	1		
Total		3,695																

A: Total number of plants used for the referred commodity

B: Number of plants used exclusively for the referred commodity

C: = A-B number of plants used not exclusively for the referred commodity

WORKING PAPER

SESSION No. 7

23rd May 1970

PROCESSING FACILITIES REQUIRED FOR IMPROVING MARKETING CONDITIONS AND FOR
DISPOSING OF SURPLUSES AND THE ROLE OF COOPERATIVES AT DIFFERENT LEVELS
IN ESTABLISHING THE PROCESSING FACILITIES

by

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REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH COOPERATIVE
TOKYO, JAPAN, 17th to 27th MAY 1970

Organised jointly by

INTERNATIONAL COOPERATIVE ALLIANCE
NEW DELHI
INDIA

INSTITUTE FOR THE DEVELOPMENT OF
AGRICULTURAL COOPERATION IN ASIA
TOKYO, JAPAN

INTERNATIONAL CO-OPERATIVE ALLIANCE
REGIONAL OFFICE AND EDUCATION CENTRE FOR SOUTH EAST ASIA

SEMINAR, TOKYO, 17TH TO 27TH, MAY 1970

"MARKETING OF FRUITS AND VEGETABLES THROUGH CO-OPERATIVES"

PAPER PRESENTED BY MR. B. G. LOWE, GENERAL MANAGER

LEETON CO-OPERATIVE CANNERY LIMITED, LEETON, N.S.W., AUSTRALIA

"PROCESSING FACILITIES REQUIRED FOR IMPROVING MAR-
KETING CONDITIONS AND FOR DISPOSING OF SURPLUSES
AND THE ROLE OF CO-OPERATIVES AT DIFFERENT LEVELS
IN ESTABLISHING THE PROCESSING FACILITIES"

CASE STUDY: LEETON CO-OPERATIVE CANNERY LIMITED, LEETON,
N.S.W., AUSTRALIA

000 10.

I N T R O D U C T I O N

Before commencing a detailed study of the Co-operative, I feel that it would be of assistance to give you a general picture of the Co-operative and its operations.

The Cannery was established on July 1, 1935 and in its first year of production processed 6,439 tons of fruit and vegetables. In 1967 a total production of 32,809 tons was reached.

The Cannery covers an area of eighteen acres of land and has expended \$6,000,000 on buildings, land and equipment. We have a permanent work force of 200 which increases to 950 during the season, that is, from December to the end of March. It may be of interest to note that during the first year of operation 780 persons were employed.

Our products hold a leading place on the Australian market and are prominent on many export markets. We export to over fifty countries throughout the world and our total sales exceed \$10,000,000 per annum.

The Cannery is situated 400 miles south west of Sydney and 300 miles north of Melbourne in an area known as the Murrumbidgee Irrigation Area, (M.I.A.) The M.I.A. is a State irrigation scheme which commenced operations in 1912. It has an area of 450,000 acres, subdivided into 2,195 farms of which approximately 1,000 are for horticultural purposes. The average size of these horticultural farms is 50 acres and the owners are the supplier shareholders of the Co-operative.

SECTION I

STRUCTURE OF THE CO-OPERATIVE

The Leeton Co-operative Cannery Limited was registered under the Co-operative Act of New South Wales by three producer Co-operatives in operation on the M.I.A. These Co-operatives were suppliers of goods, machinery and farm supplies and operated fruit packing sheds. They were also responsible for the marketing of members' produce.

The need for growers to own their own processing plant arose from dissatisfaction in the ability of the Co-operatives to reach satisfactory agreements with processors.

OBJECTS OF CO-OPERATIVE

To purchase, process and market produce grown by shareholders under contract to the Cannery.

CONTRACT

The first requirement of the Co-operative Cannery was for intending shareholders to sign a contract to cover shareholding, supply of produce and many other details which I will enlarge upon. This contract formed the basis on which the Co-operative was to arrange finance to purchase the existing State Cannery and to obtain sufficient working capital.

As you can see, this was a very important document and despite the fact that it has been subjected to legal challenge, it is still in operation today. It is regarded by our Bankers as being essential and, in fact, no fruit is accepted from a grower until he signs this contract. The following are the main points in the contract :

(a) SHARE CAPITAL

On registration of the Co-operative Cannery, the three Societies involved in the formation of the Co-operative took up a shareholding of a fixed amount. Actually the amount was a levy which had been collected from their suppliers to assist in the establishment of a Cannery.

The contract provided for a shareholder to pay a share capital levy of 5 percent of the gross value of produce delivered. This levy is still in force and is used for repayment of amounts borrowed for the purchase of plant and machinery.

Under the rules of the Cannery a maximum shareholding is fixed at \$10,000. When a shareholder ceases to be a supplier, the Co-operative repurchases his shareholding on a long term basis.

DURATION OF CONTRACT: The original contract provided for termination only when all moneys borrowed had been repaid. As there was some doubt about the legality of this contract, it was validated by Act of Parliament. Current contracts are for a term of five years with automatic renewal unless one years notice of termination is given by either party.

(b) SUPPLY OF PRODUCE

The contract binds shareholders to deliver all their production of certain fruits to the Cannery unless arrangements are made for release of certain quantities.

The contract contains a quality specification with which growers' fruits must comply. In special circumstances such as damage by natural causes, the specification may be varied to assist growers. In such cases, the price is adjusted to prevent undue losses to

the Cannery.

This clause, covering supply of produce, is of particular importance as it ensures a continuity of supply to the processing facility and, in fact, is one which our Bankers insist remains in any renewal of contracts.

On the Cannery's part, it undertakes to purchase all the shareholders' fruit except in circumstances beyond its control or when it is impossible to find markets for the produce. In the latter case, notice must be given to shareholders prior to harvest and the total tonnage required by the Cannery is apportioned to all shareholders on an equitable basis.

(c) PRICE

The contract also required the Cannery to pay the growers a minimum price for their fruit as set by the Fruit Industry Sugar Concession Committee. This Committee is a statutory body comprising a Government nominated Chairman, a representative of the Australian sugar industry, two growers and two Canner representatives who meet annually prior to harvest and fix fruit prices, considered to be fair and reasonable to all parties. Points considered are market prospects, crop size and costs of production etc.

ADMINISTRATION

The operation of the Society is vested in a Board of Directors comprising seven grower shareholders. The Board appoints its own Chairman each year. There are no Executive Directors and the day to day operations are the responsibility of the General Manager. Directors are elected by shareholders who are entitled to vote on the following basis. One vote per shareholder who delivers twenty tons or less per annum, two votes for those whose deliveries are in excess of twenty tons per annum. This ensures that the control of the Co-operative is in the hands of active growers.

FINANCE

The 5 percent share levy paid by shareholders is insufficient for the day to day financing of the Co-operative. Whilst the Cannery has been profitable, for the most part, during its existence, the profits have been small and have been used mainly for the purchase and replacement of plant and equipment. We are therefore dependent on outside sources of finance.

The Reserve Bank of Australia Rural Credits Section provides

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finance for Co-operatives such as ours to cover some of the processing costs of each years crop. This finance allows us to pay growers before we have marketed the finished goods and it is loaned at concessional rates of interest, at present 2% below standard rates. The Rural Bank of New South Wales, a State Bank, provides the remainder of our finance at a concession of 1% below normal rates.

DISTRIBUTION OF PROFITS

It is prudent to set aside as much as possible as reserves to be retained for use in the operations of the Co-operative. After providing for reserves, the first call on profits should be dividends on share capital. In our case, a maximum of 8% is fixed by law.

The profits can be retained in the business and the grower's equity increased by the allotment of fully paid shares.

OPERATIONS OF CO-OPERATIVE

A Co-operative registered under the Co-operation Act of New South Wales has certain functions and obligations to shareholders which differ in some respects from those of a Public Company registered under the Companies Act of New South Wales. There are also some concessions on Bank Interest not available to Public Companies.

There are certain concessions on Federal Income Tax, provided the Co-operative comes within the definition of Co-operatives contained in the Federal Income Tax Act.

These definitions are as follows :

- (a) That ninety percent of produce purchased is purchased from shareholders.
- (b) That shareholders supplying produce hold at least ninety percent of shares issued.

In all other respects, a Co-operative such as ours must operate as efficiently as the private and public companies with which it must compete.

GROWERS' POSITION PRIOR TO CO'OPERATIVE

It is of interest to know the agricultural and economic position of growers prior to the establishment of the Co-operative Cannery. When the M.I.A. was first established, growers who acquired horticultural farms were advised by the authorities on the type of trees they should plant. The basis of this advice was related to soil types and available markets.

The Government established a Cannery on the M.I.A. to take care of the canning type fruits that growers were advised to plant. There were also Canneries located in Sydney which were interested in buying fruit from the M.I.A. However, growers were not offered contracts by any of the Canneries and had to take the risk that there would be an outlet for their fruit when it matured. Producer Co-operatives were commenced in three districts to assist growers in marketing their products and to negotiate with Canneries for the disposal of their canning fruits.

By the late 1920's and early 1930's as more farms came into production, growers found that, when they had a good season, Canneries were unwilling to increase their production. This often meant that growers were notified when they were delivering fruit that no fruit was required for two or three days as the Cannery had reached capacity. As ripe fruit will not keep, growers suffered severe losses. They were faced with economic ruin as their farms were planted with fruit trees and therefore could not be changed over quickly to production of other crops. It was for this reason that they decided to form their own Co-operative for processing and marketing.

An approach was made to the State Government to take over the existing Cannery at Leeton and it was agreed that serious negotiations would be continued provided the Producer Co-operatives demonstrated sufficient grower interest. The whole basis of the final negotiations was that a large majority of growers signed the contract mentioned earlier in this paper.

I cannot emphasise too strongly the necessity of having a similar contract as a basis for the establishment of any Co-operative processing facility. It is essential to ensure the availability of raw materials on a long term basis.

On the production of signed contracts, the Cannery was acquired on reasonable terms.

FACTORS GOVERNING ESTABLISHMENT OF PROCESSING FACILITYTYPE OF PROCESSING FACILITY

The factors to be considered in deciding the type of processing facility are :-

- (a) Crop to be processed
- (b) Available markets for end products -
 - (i) Pre-packaged fresh
 - (ii) Canned
 - (iii) Bottled
 - (iv) Dehydrated
 - (v) Frozen

A combination of types of production may be more practicable and economical. For example, if the crop were oranges, then a packing plant to supply the fresh fruit market together with a juice processing plant could be the correct combination.

SIZE OF PROCESSING FACILITY

The size of the processing facility will be governed by the volume of product to be handled and the time over which the crop matures. However, the size of plant can also be affected by a decision as to whether a one shift, two shift or three shift operation is necessary or desirable. Such a decision could only be made by taking into consideration local conditions.

Other factors affecting the size of the plant are the type of equipment to be installed. Without going into detail of equipment available, I will nominate two aspects which should be considered :

- (i) Modern automatic labour saving machinery.
- (ii) Modern machinery utilising a large labour force.

Again, any decision can be determined only by local needs and conditions.

LOCALITY OF PROCESSING FACILITY

This was not a consideration in this Case Study as the Cannery was already established at Leeton. Locality is, however, probably the most important decision to make as it could affect the economic operations of the facility for all time. Generally, the decision will be between two places, i.e. adjacent to the growing areas or adjacent to the main markets and shipping ports. However, to arrive at this decision it would be necessary to carry out a detailed investigation into many factors. I will discuss the more obvious ones but each problem will no doubt have some local influences which will need to be taken into account.

(a) Government Policies: Many Governments offer assistance to establish industries in rural centres. Growers' Co-operatives would usually qualify for such assistance. There may be other types of Government assistance that would assist in the establishment of processing Co-operatives.

(b) Transport: The availability of transport and the cost of transport are very important aspects to be studied. It is in this area that the economics of a project are often affected. Costs of transporting the finished product to a market as against costs of transporting the product to be processed to an area adjacent to a market are very important factors. The cost of transporting materials such as containers and ancillary materials to the processing plant are also important.

(c) Labour: The processing of agricultural products is largely seasonal and requires large numbers of people for a short time. The Case Study processor has a permanent work force of 200 but this increases to 500 from mid December to mid February when a work force of 1,000 is required until the end of March. It is therefore essential that adequate labour of a seasonal type is available at the site chosen for the processing facility.

We find that we have less trouble in finding labour where we are located than the Canneries in the cities. This is no doubt due to the large numbers of itinerant workers attracted to fruit growing areas at harvest time when plenty of work is available. Again, this situation is a purely local one and has to be assessed accordingly.

(d) Ancillary Materials and Services: The availability of ancillary materials such as packaging material, cans, bottles, cartons, labels, fuel for boilers, coal, oil or gas, machinery spares and general stores must also receive detailed consideration. The proximity of services such as electric power, adequate water supply, rail or motor transport are all important matters affecting the ultimate siting of a processing plant.

SUPPLY OF RAW MATERIALS

It is obvious that to have commenced an investigation into the possibility of establishing a Co-operative processing facility, there are some crops or products available to warrant such an investigation. However, as the plant is to be erected for a specific purpose, every effort must be made to ensure an adequate and continuous supply of the basic materials. I notice in the Memorandum and the tentative program forwarded to me the phrase : 'processing facilities required for improving marketing conditions and for disposing of surpluses.' I will deal with marketing in a separate section.

The words, 'disposing of surpluses' may be interpreted in different ways. Perhaps I have accepted a meaning different from that which the writer intended when I say, quite emphatically, that no processing facility will operate efficiently or economically if one of its prime objectives is to process surpluses.

Having said this, let us look at ways that surpluses may be handled. If the crop to be processed can be marketed fresh as well as processed, then we should look at planned surpluses. By this I mean quantities above those which can be expected to be marketed at satisfactory prices. A good example of this would be oranges, apples, pears, apricots etc.

However, the processor must contract with the grower for a definite quantity and not just for the amount left over after the grower has marketed the maximum quantity at the best price. If a grower elects to grow more than his market requirements and his contract with the Co-operative, then the grower must stand the loss, not the Co-operative. It is often easier for a Co-operative processing facility to go bankrupt by over production than by under production.

In an earlier section I stressed the need for a long term contract with the grower. I feel that this cannot be over emphasised as any processing facility must run efficiently and economically to survive. Remember the quantity that can be processed is governed both by the size of the plant and the size of the market at a payable price.

MARKETING

The setting up of a processing plant and the production of the finished goods are very often the easiest part of the subject under discussion. The real problem begins when the goods are to be marketed.

It would be almost certain that the goods produced would be some kind of foodstuffs and, if this is so, they would immediately enter a very competitive market, if not in your own country, then certainly on world markets, if the goods were exported.

There are many avenues of Market Research available, all of them costly, which can indicate the potential of a market and the price levels on those markets. It will no doubt be wise to use some of this professional know how. No doubt you will all feel you have a good knowledge of your own home market, but let me say this, 'Often the nearer home the bigger the mistake.'

As an example, my own Co-operative, in its early years decided that it was uneconomic to set up its own sales force and elected to sell through brokers or agents.

After some years it was obvious that either the brokers were making more money than the Cannery or that they were not expending the energy necessary to sell the output of the plant. We then established a sales force of our own and immediately increased our sales.

At present we handle our own selling on the Australian market and appoint agents in those countries to which we export. Our policy on export markets is to appoint an agent of local nationality and to visit agencies on a regular basis.

You will no doubt be governed by marketing conditions in your own country but it must be remembered that the success of your processing Co-operative will be dependent on its ability to market its product at satisfactory and profitable prices.

SECTION IV

MANAGERIAL ARRANGEMENTS

The Case Study has a Board of Directors of seven growers who are elected by shareholders. The Board is responsible for appointing its own Chairman each year. Under the Rules of our Society, the Board is required to meet at least once each month.

Let us look at the functions of the Board of Directors of a Co-operative such as the one under discussion. The Board should :-

- (a) Decide what the Co-operative's business is or what it should be.
- (b) Give official approval through its Rules of the objectives which the Co-operative sets for itself.
- (c) Be responsible for its capital raising and expenditure policies.
- (d) Critically examine the profit result of its operations.
- (e) Appoint the Chief Executives and determine their salaries and conditions of employment.
- (f) Evaluate the performance of its Management.

The Board of Directors should NOT take part in the day to day operations of the Co-operative. Its duty is to review and appraise the carrying out of its policy and objectives.

Membership of the Board needs careful selection. It requires members who are loyal and dedicated and who have the ability and

experience to question and assess the performance of the Management.

Now let us look at the position of the Manager's role in a processing Co-operative. The axiom that 'a business is only as good as its Management' applies very definitely to Co-operatives. In this modern age, the General Manager needs to know about such things as computers, electronic aids, budgetary control on the administration side as well as modern techniques of management controls used in manufacturing industries.

He must have some knowledge of up to date processing methods and machinery available for the particular processes in which the Co-operative is engaged. The Manager must also have knowledge of modern marketing methods and selling techniques. It would, of course, be impossible in a business of any size for one man to carry out all of these functions. He must therefore have the very important ability to be able to delegate authority and to see that the policies he sets are carried out.

He must work closely with the Board through its Chairman and be concerned at all times with his relationship with the Directors and the members of the Co-operative.

SECTION V

ECONOMIC IMPACT OF PROCESSING FACILITIES ON PRODUCERS

In the Case Study under discussion the growers, by establishing their own processing facility through a Co-operative, have achieved a great degree of stability in their overall operations by eliminating many of the problems discussed in Section II.

ECONOMIC STABILITY

(a) Outlet for Produce: In accordance with their contract as mentioned in Section I, growers are assured of an outlet for their produce grown under contract, except in exceptional circumstances.

(b) Equal Share of Processing Capacity: Prior to the formation of the Co-operative Cannery, growers often did not know until they delivered their fruit to the processor whether it was going to be accepted or not. This often meant that the grower whose fruit ripened first had all his crop accepted whilst the unfortunate grower with a later maturing crop had very little accepted.

Under the terms of their present contract, if the total crop is greater than the requirements of the Co-operative Cannery, then

each grower is given an equitable allocation prior to harvest. However, it is the policy of the Cannery to make every effort to ensure that the total crop is accepted, processed and marketed.

(c) Price Stability: I mentioned in Section I that, in our case, the prices of canning fruits are fixed by a statutory body. However, the fixing of a price under this method does have the effect of causing non-cooperative processors to limit their production from time to time.

The shareholder of a Co-operative has the double safeguard of price and acceptance of his crop. Should the price prove unprofitable to the Co-operative Cannery then it is possible that the shareholder would be levied to cover the losses. However, this has not been necessary.

(d) Forward Planning: A grower of canning fruits needs to follow a practice of long term planning to maintain a steady level of income.

The main crops in our district are peaches and apricots . These trees normally have an economic producing life of twenty years after taking five years to reach production. By having a long term contract with the Co-operatives, growers have the confidence to plan their production the five to ten years ahead that are necessary.

(e) Produce Not Under Contract: This heading refers mainly to citrus fruits such as oranges, lemons and grapefruit which are grown basically to supply the fresh fruit market.

The effect of having a processing facility to receive a percentage of their crop has been of great assistance to them. Growers are able to restrict their fresh fruit marketing to first quality fruit only, thus lifting their average price received from this open market selling.

A contract is issued yearly to growers for fruit for processing on a tonnage basis. Prices for this fruit are fixed by the same statutory body mentioned in Section I.

The fruit accepted for processing into juice products is of good quality but externally blemished and therefore unacceptable for fresh fruit marketing. When crops are large, processors are encouraged to process larger quantities to enable the fresh market to remain stable.

GENERAL

In setting out the impact of the processing facilities on processors, I do not want to confuse economic stability with economic satisfaction. The final arbiter as to what price the growers receive for their produce is the ability of the market to pay.

We export approximately 50 percent of our fruit products to over 50 countries throughout the world. Although we feel we obtain the best prices possible, this is not necessarily enough to pay the growers a price they consider essential to cover costs of production.

SECTION VI

ROLES OF PRIMARY AND SECONDARY CO-OPERATIVES

Primary Co-operatives can play both important and differing roles in relationship to processing Co-operatives.

In the Case Study under discussion, primary Co-operatives were instrumental in the formation of the processing Co-operative. However, once commenced, the processing Co-operative was responsible to its shareholders with whom it had signed contracts. The primary Co-operatives were shareholders of the processor Co-operative and through their elected Directors had some part in its operations. However, the important point is that the processor Co-operative was an independent Co-operative.

Two of the original primary Co-operatives located in districts about 40 miles from the Cannery today, act as receiving agents for the Cannery. In these cases, growers would also be shareholders of the primary producers through whom they would purchase many of their farm supplies such as fertilisers, sprays etc.

There are other examples in Australia where the primary Co-operatives are suppliers to the processing Co-operative, having purchased the produce direct from their own shareholders. In these cases, the primary Co-operatives supply the capital and the Directors to operate the processing Co-operative.

We have also seen processing facilities established within the organisation of a primary Co-operative whose primary objective was the marketing of its' shareholders' produce. In this particular case, there were various products marketed but only one involved in processing. It was inevitable that a conflict of interests of shareholders eventually forced the establishment of a separate and independent processing facility. It is important for the successful operation of a Co-operative, particularly processing which requires a large amount of capital, that the interests of shareholders are similar.

S U M M A R Y

In this paper, I have shown how the Case Study, Leeton Co-operative Cannery Limited, has grown from a humble beginning in 1935 to become a large Cannery and an important part of Australia's canning industry.

At the same time, its grower shareholders have progressed from an unsound future and a shaky economic situation to one of stability and confidence.

As well as being the processor of its shareholders' produce, the Co-operative has a voice in all industry matters that affect its own and its growers' operations. It has representation on the Fruit Industry Sugar Concession Committee which fixes the price for fresh fruit for canning; it is represented on the Australian Canned Fruits Board, a statutory body which fixes prices and conditions of sale on export markets and it is an active member of the Australian Cannery Association. This is a voluntary Association of Cannerymen who attend to all industry problems and set the prices and conditions of sale for the Australian market.

I have presented this paper on the lines suggested in the Annotated Agenda forwarded to me. In doing so, I have discussed briefly those points which I considered were important in deciding on the establishment of a processing facility.

No doubt there are also many other matters which would come under consideration. I am hoping that what I have said will provoke discussion among delegates, who will undoubtedly have many problems they will wish to discuss. I trust that I will be of some assistance in answering your questions.

Joint ICA CUAC Seminar
May 17-27, 1970

Operational Techniques in Fruits and Vegetables
Marketing by Cooperatives: "Unconditional
Consignment and Pooling Account System" with
Special Reference to Japan

Submitted a jointly by
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Cooperative Marketing of Fruits and Vegetables and its Significance

1. Significance

The aim of joint marketing is to obtain better prices for small prices for small producers by having every advantage that a large producer has by means of collecting produces from many member farmers and sell it jointly in order to get commanding position and voices in the marketing of their produces through their cooperative. Merit and advantage of joint marketing are, (1) In the practice of joint marketing, standardization by joint grading which advances their marketing eventually becomes necessary, (2) Large volume of marketing produces by joint collection makes it possible to adjust and control the amount of shipment to different auction markets, eventually stabilization of prices among different markets becomes possible. In this way, the producers will obtain more advantages and more voices in the marketing of their produces, (3) Joint marketing will reduce the cost of packing, delivery and others.

In the practice the three rules so called "Joint marketing under unconditional consignment", "All-out utilization of systematic cooperatives" and "Planned marketing with pooling account" are applied within cooperative marketing. With these rules, the joint marketing in this country is being promoted.

The three rules will be explained here.

(a) Marketing through cooperatives

The practice of marketing through cooperatives can be classified into two categories, one is unconditional consignment and the other conditional marketing. The former means that producing former entrusts his produce for marketing into the hand of his cooperative with no instruction whatsoever with regard to the selling price, purchaser, time of sale and market to sell. He merely receives his proceeds from the marketed price of his produce. The later is opposit, the producer merely market his produce through his cooperative, and the cooperative acts according to his instruction.

The authority of fixing selling price, time of sale, etc. is entirely in the hand of producer. Unconditional consignment method, since the producer entrusts nearly everything to his cooperative, it will not work if there is not feeling of mutual trust, particularly of the producers toward his cooperative.

The significance of unconditional consignment marketing is to make a small producing farmer able to obtain every advantage that a large producer has by collecting small amount of produce as many as possible from many farmers and market jointly their product along with their plan under the supervision of his cooperative. In the case of conditional marketing, since the cooperative can not act by its own will, the advantages of unconditional consignment can not be obtained, no matter how large volume of product is collected. Unconditional consignment marketing, therefore, has for more advantages than the other.

(b) All out utilization of cooperatives within cooperative movement

In the movement of cooperation, members have to sell all of his produces unconditionally through his cooperative, after leaving some for his home consumption. The cooperative (village cooperative) entrusts all of the entrusted produces by the members to its apex cooperative (prefectural economic federation), after leaving only necessary portion for the marketing in the village. Prefectural economic federation again entrusts the sales of all of the entrusted produces by the village cooperatives in the prefecture to the National Marketing Federation (apex federation at national level), leaving only necessary portion for the marketing to local wholesale markets and merchants in the prefecture. National federation sells entrusted produces through central wholesale markets and directly to large consumers (e.g. agricultural products processing plant). In this way, marketing activities of cooperatives are all centralized in the national level with some flexibility allowing necessary portion for direct marketing at the respective levels from the standpoint of economy and efficiency. In this practice of marketing activities at different levels, we are in the belief, the cooperative ought to act within its own capacity, that

is to say, village cooperative cater to village markets and village merchants, prefectural federation local markets, medium size consumers (agricultural products processing plant) in the prefecture and national federation central wholesale markets, large consumers and processing plants.

Although the stabilization of prices is possible to a large extent with the method of marketing mentioned here, it is regretted, this method is not yet fully practiced in all kinds of crops due to some personal reason of producer, nature of crops or habit in the village, etc.. To disseminate this practice of unconditional consignment from the bottom of producer up to the national level more widely is a current issue of the cooperative movement.

(c) Planned marketing, pooled accounting

The actual aim of joint marketing is to bring better price to producer. For this purpose, all the expenses involved in marketing have to be reduced to the minimum, besides more return to producer.

In order to achieve this purpose, the cooperative, with market research on the volume of demands by seasons, markets and purchasers beforehand, has to establish their plan for shipment, not oversupply same product to same market in one time or in same season. Optimum supply to each market and purchaser will avoid price fluctuation and price difference among markets.

Although the planned marketing is practiced under unconditional consignment method, the market prices of same commodity of same quality is not same throughout the country and also the delivery cost. As mentioned before, the producer does not designate where his produce be sold. If the cooperative pay the actual net proceeds after deducting delivery expenses, the net farmer would receive differ by market,— A farmer might receive more than B farmer. The difference in actual net proceeds, particularly in the case of same quality, will arise unfatisfactory feeling against his cooperative among those not

received equal amount. Here the method of pooling account becomes very necessary. The calculation of net proceeds under pooling account is: suppose the product of A farmer is sold at 100 yen and delivery cost 10 yen and B farmer's of same grade 120 yen with delivery cost of 20 yen, the net they receive would be $\frac{(100-10) + (120-20)}{2} = 95$ yen, and both of A and B farmer will receive 95 yen each.

Though it is desirable to have the pooling account system on every item throughout the country, many of the agricultural items are not yet standardized nationally. How to set the standard is the main problem, especially vegetable due to difference of technique of farming and the season to harvest by district. To apply pooling account method merely by the difference in quality is very hard for vegetables.

Pooling account, however, is necessary for joint marketing practice, therefore, it ought to be applied according to marketing conditions of the commodity. Those items not appropriate or practicable to have countrywide pooling account measure ought to have prefecture wide pooling account and those not practical county or village-wide pooling account. Period of pooling calculation should be fixed practicably and reasonably, say the year round, one month, ten days, one week or one day.

2. An Example of Cooperative Marketing (case study)

— joint marketing practice of tomatoes in Chiba Prefecture —

Chiba Prefecture is located south-east side of Tokyo Prefecture, and the climate is very mild, and, because of that, tomatoes, parsley, cabbage, cucumber, radish, etc. are produced.

Because of the location, very close to Tokyo City and Tokyo-Yokohama area, they enjoy every convenience and the patronage of the people living in these areas.

Market share of vegetables of the prefecture in Tokyo markets in 1967

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is 21.7% in volume and 17.6% in value, holding the first rank ever since 1964. Under the state of affairs, the prefectural economic federation is trying hard to develop more marketing of vegetables, adopting joint marketing system in the policy of business.

How the system is working will be explained here by presenting tomato as an example.

(a) Standardization

Tomatoes in Chiba Prefecture are raised in green house, tunnel-shaped plastic paper house and in ordinary farmland. Due to the technical innovation of horticulture, tomatoes are supplied the year round, but the main season is from March to July. The method of joint marketing covers entire prefecture systematically and pooling account is applied on one day basis throughout the prefecture.

In order to promote the sales by this systematic joint marketing method, the producers, the village cooperatives and their apex federation (Chiba Prefectural Economic Federation) felt the necessity of having some standards for their tomatoes. Grading of tomatoes in Chiba Prefecture is done with their standard throughout the prefecture.

In order maintain their standard and make the farmer observe the criterion, the group of producing farmers has their own inspector from its members (autonomous inspection of their own). Those inspectors receive training and guidance from the expert of their cooperative. In this way, differences of technics among individual farmers and in standard among hamlets are eliminated. The Prefecture, at the county level, has also inspectors who are provided by the village cooperatives and Prefectural Economic Federation.

They work for homogeneity of grading among counties in the prefecture and at the same time, extend guidance and education to autonomous inspectors of the farmers' groups and experts of the village cooperative mentioned already. Integration of these people is remarkable. In this

way, the tomatoes in the prefecture are systematically standardized.

Tomatoes in the prefecture are graded by the criterion into A, B, C, D, ranks by its quality and six classes by the size. Green house tomatoes are packed in cardboard box which contains 4 kg and the tomatoes of tunnel shaped plastic paper house and of ordinary farmland in cardboard box that contains 8 kg. for marketing. Classification by size are namely LL (not more than 14 tomatoes in a box of 4 kg), L (15-18 tomatoes), M(24), S(28), SS(32-35) and SSS(40-50) for marketing. All of the tomatoes for marketing are ranked by the autonomous inspector impartially by the criterion.

(b) Marketing technics

Nearly 80% of the standardized tomatoes in the Prefecture is marketed through the wholesale markets in Tokyo City and Tokyo-Yokohama areas, and nearly 70% of it is shipped to the same wholesale broker (wholesale broker is an agent to receive shipment from producer or village cooperative (shipper) and put up the shipment on auction on behalf of shipper) linked to the village cooperative, kind of fixed business integration between the two. In other words, the shipped (village cooperative) delivers shipment always to the same broker, not this or that broker. The cooperative makes shipment according to the program established beforehand. It is planned shipment. The remaining 30% is sold more flexibly to any market, considering the condition of market, volume of shipment from other producing prefectures etc., through wholesale brokers of that market.

Shipment for marketing virtually starts with collection of tomatoes by the farmers. The day before shipment, the producer delivers his tomatoes to his cooperative by 2 PM., graded there according to the standard described before, then loaded on the truck for marketing. The village cooperative informs the number of shipment to the branch office of Prefectural Economic Federation by 3 PM. The branch office informs the liaison office of the federation in Tokyo by 3:30 pm the number of shipment. The liaison office, upon the receipt of information, discuss

whether the volume of shipment is optimum for the market with the National Marketing Federation and the wholesale broker of the market. If the market outlook for the next day, on which auction in the market takes place, is not favorable, the liaison office directs the branch office to ship a part of the shipment to other markets.

Delivery to wholesale broker as per delivery instruction of the liaison office is made from 7 pm to the early morning of the following day.

Auction of the market starts around 7 AM, and the report of sales is made immediately to the liaison office by the wholesale broker.

The liaison office, upon the receipt of reports from brokers of different markets, makes the aggregate of sales and calculate per price for each grade by pooling account method. This price is reported to the branch office of federation by 3:30 p.m..

In this way, the tomatoes of Chiba Prefecture are marketed with stabilized price for the producers. It is expected that the technics applied now will develop the marketing of tomatoes further.

(c) Settlement of Accounts, Remittance of Proceeds

Calculation of marketed price by grades is made by the liaison office as mentioned before. The proceeds thus calculated is credited in the respective shippers' accounts with the prefectural credit federation within 4 days through the Central Cooperative Bank for Agriculture and Forestry.

WORKING PAPER

Session No. 10

THE ATOK FARMERS COOPERATIVE MARKETING ASSOCIATION INC. : A CASE STUDY
OF THE FINANCIAL ASPECTS OF MARKETING OPERATIONS AND MANAGEMENT

by

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Laguna.

REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH
COOPERATIVES ", TOKYO. JAPAN. 17th to 27th May 1970

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INSTITUTE FOR THE DEVELOPMENT OF
AGRICULTURAL COOPERATION IN ASIA
TOKYO, JAPAN

DR. VICENTE U. QUINTANA^{b/}

In view of the fact that in the Philippines there is no active fruit growers cooperative, I arbitrarily limited my discussion to the marketing of vegetables through cooperatives using the Atok Farmers Cooperative Marketing Association, Inc. as the subject.

The Vegetable Industry

In the 1968 Annual Report of the Bureau of Agricultural Economics, the estimated national annual production of vegetables was 250,900 metric tons and the estimated rate of annual increase was 2.5 percent.^{1/} However, the estimated increase in commercial production, particularly in the Mountain Province, is at the rate of 9.3 percent per annum. During the same year, the Philippines imported more than 3,000 metric tons of vegetables. At the rate its population is growing, the country will continue for a few more years to import this group of commodities.

The National Economic Council of the Philippines reported that during the calendar year 1966 and 1967, available food supply versus established nutritional requirements showed that the sufficiency level of fruits and vegetables is 52.6 percent.^{2/} By definition, sufficiency level is the ratio of requirement to available supply, including imports. In the

^{a/} Paper prepared for the Regional Seminar on the Marketing of Fruits and Vegetables held in Tokyo, Japan, May 17-27, 1970 under the auspices of the ICA Regional Office and Education Centre for South-East Asia.

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^{1/} 1968 Annual Report, Bureau of Agricultural Economics, Department of Agriculture and Natural Resources, Diliman, Quezon City.

^{2/} The Statistical Reporter Vol. XIII No. 4. The Food Situation in the Philippines, Oct.-Dec., 1969 FY 1967-68. B.G. Bantigui and Juan o. Sumagui.

same publication, it was indicated that the food allowance for vegetables was 76.6 kilograms per capita per year. Food allowance means the quantity of vegetables a person should consume in one year in order to stay healthy. For 1968, the supply requirement of 2,748,638 metric tons of vegetables a year was obtained by multiplying the food allowance of 76.6 kilograms by the size of our population.

Unfortunately, the above supply requirement is misleading since Filipinos do not eat as much as they should. In case of vegetables, only 9.13 percent of the total intake requirement is consumed due to the limited available supply. By and large, Filipinos only eat to stay alive, not necessarily to be healthy.

In view of the shortage, the government has encouraged vegetable growers to expand production. Technical as well as financial assistance in the form of production as well as commodity loan on vegetables are intended to growers. Furthermore, the Government imports in behalf of the cooperatives and their members, essential agricultural inputs such as seeds and fertilizers. These measures are designed to save and earn dollars which are necessary for our economic development programs.

The Atok Farmers Cooperative Marketing, Inc. -

The Atok Farmers Cooperative Marketing, Inc. (FaCoMa) is one of the five actively operating vegetable growers cooperatives in the Mountain Provinces. Atok is a municipality which is 300 kilometers from Manila, the business capital of the Philippines. It has an elevation of 7,000 feet with a climate suited for truck farming. Most of the inhabitants are natives of the place, few are Chinese farmer-merchants.

The Cooperative was organized on March 3, 1955, with an initial membership of 330. The total paid-up capital amounted to ₱16,582, which was a little more than 16 percent of the ₱100,000 authorized capital. ^{3/} As of June 30, 1969, it had a total asset of ₱445,871 but a total net worth of only ₱40,872.00. In 1969, the total volume of business from its different operations was ₱155,452.58. The Cooperative purchases and distributes

^{3/} Annual Reports, Atok Farmers Cooperative Marketing Association, Inc. - obtained from Atok FaCoMa.

agricultural inputs and markets the vegetables of the farmer-members.

The Cooperative has been getting technical as well as financial assistance from the Agricultural Credit Administration for production and marketing. It has also been assisted by ACA in the importation of Irish potato seeds. The farmer-members sell their vegetables to local buyers, truckers, middlemen, the cooperative, and the Greater Manila Terminal Food Market.

The Marketing Structure

In general, the marketing situation that has prevailed for many years has not been favorable to the vegetable growers. Usually, a local contractor grants a production loan to the producers on the condition that at harvest time the vegetables will be delivered to the creditor. Very often the wholesalers of vegetables in Manila and the suburbs or Baguio actually provide the money which the local contractor lends to the farmers. In this practice, the vegetable grower has a sure market outlet during harvest, but does not have the freedom or privilege to look for alternative buyers who can pay a price higher than that offered by the local contractor. The local contractor, because of the loan and the commitment to sell to him, determines the price and other terms of purchase including the costs to be deducted from the sale proceeds. One very common term of purchase is that the farmer will deliver all his products but will be paid for only 90 percent of it. The remaining 10 percent is said to be used to defray the handling costs through the marketing channels.

The local contractor may have his own trucking facilities with which to transport the vegetables to the terminal markets, but more frequently he sells the vegetables to a trucker who transports the product to a wholesaler in the terminal market or to a dealer near the city limits to avoid city taxes. The dealer purchasing the product at the city limits generally then delivers it to the terminal market and sells it to wholesale-distributors who in turn sell the product to retailers who come from various public markets in Manila and the suburbs. This system necessitates profit to many middlemen or handlers.

In another marketing practice, the middlemen acts as a consignee of the vegetable growers. He goes to the farm to offer his services to sell the produce at a price which is allegedly the current market price in Baguio or in Manila. Usually, the price is 10 percent lower than the actual current price. the consignee who gets a commission of 7 percent or more goes back to the farm a week after getting the product to pay the farmers the amount after deducting the commission fee and handling costs from the sale proceeds minus the 10 percent. More often the middleman issues personal checks to

the farmers with the stipulation that the checks not be cashed within a given time for clearance purposes. In effect, payment is delayed for about two weeks. At times, the farmers cash these checks in the Baguio market at a discount. The effective farm price is thus further reduced.

Methods of Marketing used by the Atok FaCoMa

Although the Atok farmers produce almost all temperate vegetables, it is estimated that about 95 percent are cabbage and Irish potatoes. For this reason, cabbage and potatoes are the vegetables discussed in this Case Study.

The Cooperative has at one time or another used one, two, or three methods of marketing the vegetables of the farmer-members, such as marketing directly to middlemen, marketing to or through the Cooperative, and marketing to the Greater Manila Terminal Food Market through the Cooperative. These systems differ in pricing, financing, and methods of payment.

Marketing to middlemen. This method is the most disadvantageous to the farmer-members in terms of economic return. Here the middlemen, money supplier, wholesaler or his agent provides production loan without any interest and collateral requirements. The only proof of indebtedness is an IOU note. In return, the moneylenders, usually Chinese middlemen, buy or market the produce of the farmer-member-borrowers. More often than not the farmer-member does not even know the actual price of his product because the moneylender automatically deducts the handling costs including transportation expenses and shrinkage allowance of 4 kilos per 100-110 kilos of vegetables. This practice does not allow the vegetable producers to be liberated from continuous exploitation. The dispenser of credit, being assured of adequate marketable quantity and with the power behind money, enjoys the benefits of a monopsony. In effect the farmer-member who receives low prices for his product and the consumer who pays higher prices for the same suffer very much from this marketing situation.

Cooperative marketing by pooling. Although this is a more cooperative way of marketing, some of the cooperative members do not participate in the pooling. Some of them market their products through the Cooperative without pooling nor grading. Those farmers who participate in the pools have their products sorted and graded.

In this scheme, pooling is done on a weekly basis. In implementing the program, the farmer-members and the Cooperative were provided with

the following mechanics:

1. Based on average local prices, farmer-members will be given an advance or down payment of not more than sixty percent (60%) of the value of their deliveries. The vegetables will be shipped to Manila where a branch manager and salesgirl who operate a whole-sale outlet will undertake to sell them. Sale by the branch may be in cash or on a credit basis payable within fifteen days. Cash trading, however, shall be preferred.
2. Liquidation of the balance due the farmer-members shall be by pool. Each pool shall be liquidated within the third week after receipt of the vegetables by the Cooperative. Irrespective of whether or not all the sales proceeds of the pool due for liquidation are collected, the same shall be paid to the farmer-members. If, for failure to collect credit sales within the prescribed period of 15 days, the Cooperative shall have insufficient funds for liquidation purposes, it may avail itself of the operating capital loan fund which shall be refunded upon receipt of the sales proceeds. The liquidation price shall be the average of the actual selling prices during the week for each kind and class of vegetables included in the pool due for liquidation. Each farmer will be paid the balance after deducting all authorized expenses, which are transportation and handling expenses, 5 percent fee for the Cooperative to cover administrative costs, and reasonable deductions for payment of unpaid subscriptions or for revolving capital or both. The 5 percent Cooperative fee does not include 1 percent commission for gross sale and a ₱100 monthly allowance each for the branch manager and the salesgirl.

An evaluation of the scheme revealed a number of deficiencies. Firstly, the figures for receivables from vendors or retailers who got the vegetables on credit are staggering. Secondly, the alleged spoilage which does not have any proof is quite substantial. Thirdly, the Cooperative has been unable to liquidate a sizeable portion of the deliveries of members. And fourthly, the Cooperative has defaulted its first amortization to the Agricultural Credit Administration.

The main reason for the failure is mismanagement due to alleged incompetence and dishonesty. In view of the fact that the manager and the salesgirl were not bonded, there was no deterrent to committing frauds in the business. In addition, they did not have any training and experience in managing a cooperative business enterprise. Furthermore, there was no effective coordination between the home office in the highland and the wholesale

The Atok Farmers Cooperative
Marketing Association, Inc. ... - 6 -

outlet in Manila in terms of the flow of vegetables from the province to the city. In spite of the market glut in the wholesale outlet there were times when the home office continued to ship vegetables.

Marketing through the Cooperative to the GMTFM. The Greater Manila Terminal Food Market was organized primarily to (1) stabilize prices of farm produce; and (2) induce quantitative and qualitative improvements in food production, thereby raising the incomes and standards of living of the rural population. These twin objectives can be realized by (a) providing a ready, convenient outlet for agricultural food products; (b) assuring farm food producers of reasonable prices and prompt payment for their produce; (c) minimizing spoilage of perishable farm commodities; (d) eliminating undesirable distribution practices, and (e) promoting the production of better quality food commodities and an organized efficient food marketing system. It has an area of 120 hectares. When the project is completed, it will easily be the biggest and the most sophisticated food terminal market in the whole of Asia.

Among others, the vegetable cooperative being studied is one of the few institutions that are dealing directly with the GMTFM. In addition to the technical and financial assistance in the form of loans to farmers, the GMTFM assists cooperative in the development of an effective marketing system. An example of this is the marketing agreement between the Atok Cooperative and the GMTFM. Under the marketing agreement,^{4/} the Cooperative agreed to appoint the GMTFM as its marketing agent to deliver the cabbage and Irish potatoes, immediately after the harvest of every crop season. The GMTFM with its facilities shall sell the commodities at the best possible price.

^{4/} Memorandum of Agreement Between the Atok FaCoMa and the Greater Manila Terminal Food Market - obtained from Atok FaCoMa.

The Cooperative shall receive in behalf of the members concerned a guaranteed floor price in case the actual selling price is below the guaranteed price. The agreed guaranteed price for cabbage and Irish potatoes is as follows:

Cabbage

<u>Grade</u>	<u>Price/kilogram</u>
I	₱0.36
II	0.30
Off grade	0.25 minimum

Irish Potatoes

<u>Grade</u>	<u>Price/kilogram</u>
I-XL	₱0.45
I-L	0.45
I-M	0.38
I-S	0.29
II-XL	0.40
II-L	0.40
II-M	0.36
II-S	0.20

Upon delivery to the Cooperative, the vegetables of the farmer-member are sorted, graded and packed, and duly inspected and passed by the GMTFM field representative. The GMTFM then shall extend to the farmer-member through his Cooperative a commodity loan which is 80 percent of the total value of produce based on the guaranteed floor price.

Under the agreement, too, the GMTFM gets 6 percent of the gross sale as commission from the Cooperative. The commission covers loss from shrinkage, spoilage and piferage. In addition, the terminal collects 5 centavos per kilogram for transportation, one centavo per kilogram for sorting and grading, fifty centavos per basket for packing, and one percent per month interest on the commodity loan which is 80 percent of the total value of the vegetables based on the guaranteed price.

In the event of a necessity to liquidate the farmer-members' commodity loan obtained thru the Cooperative from the GMTFM, the Cooperative named the GMTFM its attorney-in-fact to sell and liquidate the farm produce deposited with it to receive the payment, and to apply the same or so much of it in payment of all commodity loans received by the farmer-member concerned, plus fees, dues and other incidental expenses. To illustrate the scheme the following liquidation statement is presented.

Liquidation Statement (Irish Potatoes)

<u>Grade/Size</u>	<u>Crate</u>	<u>Net Wt.</u>	<u>Ave. U.P.</u>	<u>Graded</u>	<u>Cff Grade</u>	<u>Total</u>
I-XL	57	1,362	₱0.6387	₱ 869.92		
I-L	127	3,007.5	.6481	1,949.14		
I-M	62	1,432.5	.628	898.34		
I-S	4	99	.5694	55.98		₱3,773.38
Off grade	<u>5</u>	118	.50		59.00	<u>59.00</u>
				₱3,773.38		₱3,832.38

Less: Commodity Loan

80 percent	₱2,050.47		
20 percent	512.62	₱2,563.69	₱2,563.69

Sales commission (6%)		226.40	3.54	229.94
Cooperative commission (1%)		37.73	.59	38.32
Transportation (6,081 klg. x .05)		348.10	6.95	355.05
Grading fee (6,081 x .01)		59.62	1.19	60.81
Crating fee (255 x 50)		125.00	2.50	127.50

Interest (Aug. 25 to Sept. 19
 on 80% of commodity loan
 at 12%)

		23.92		23.92
Total Deduction		₱3,383.86	14.23	₱3,398.63
Net Due		₱ 389.52	₱44.23	₱ 433.75

In this example, three features of the scheme should be pointed out. Firstly, due to grading or sorting, the better quality vegetables are given price premium. There is a difference of ₱0.13 per kilo between the prices of the I-XL and offgrade. Secondly, the commodity loan has made it possible for the farmer to take advantage of a better price. And, thirdly, the growers received prices higher than the guaranteed prices, or ₱433.75 per 1,000 kilograms more than the total value of the vegetables based on the guaranteed price.

Some of the problems encountered in the implementation of the marketing agreement are reflected in the reply of the General Manager of the GMTFM to the inquiry of the manager of the Cooperative, to wit:

.....please be informed that we have liquidated all cabbage shipments received, including those mentioned in your aforestated letter

.....the sales proceeds were barely enough to repay the 100% commodity advances granted previously to the farmers concerned, we could not even recover the corresponding expenses incurred for transportation, crating, etc. and had to absorb these as losses.

we tried our best to pay the offgrade or unclassified cabbage received but the poor prices at which the cabbage were sold plus the high rate of spoilage made this impossible

Marketing Costs

In this paper the term "marketing costs" is used loosely for the simple reason of my inability to separate the real expenses from the profit. According to Thomsen, ^{5/}marketing costs should be used only to include actual expenses of marketing agencies, including both fixed and variable costs. In this study commission is included as a part of marketing costs. It is a known fact that a part of commission is profit, but as to how much of it is profit is difficult to tell. At any rate, based on the Cooperative records and data gathered from personal interviews of farmers and middlemen including wholesalers and retailers of vegetables of the members of the Atok Farmers Cooperative Marketing Association, Inc. a comparative marketing costs analysis of the FaCoMa was made.

^{5/} THOMSEN, Frederick Lundy, Agricultural Marketing, 1st Edition
New York, McGraw-Hill, 1951.

ation cost via the Kennon Road is higher than that thru the other way. In the area studied the truckers usually took the Naguilian Road, thus lowering costs despite the distance.

The containers used by the middlemen or farmers for packing the vegetables are of three types. Large, loose-woven bamboo baskets that cost about ₱1.00 to ₱1.20 each are generally used for products like cabbage. When full, these baskets weigh approximately 100 kilos. Smaller crates of the same general construction are used for lettuce and celery. These crates cost about ₱0.80 to ₱1.00 each and hold approximately 30 to 35 kilos. Beans and other small vegetables are usually packed in tightly woven-basket. They are one-way, one-use containers that are cut apart or destroyed by the wholesalers and retailers.

Vegetables are packed in bamboo baskets in an upright position. Baskets in upright position have substantial vertical strength. But in loading them for shipment to Manila they are laid on their sides with other containers placed on top of them. The bamboo containers have practically no strength when placed sidewise. Thus, loading them in this position results in a tremendous amount of damage to the vegetables in all but the top layer of containers. The weight and rough roads crush the outer portion of vegetables, the sharp edges of the bamboo strips cut and bruise all leaves they come in contact with. The net result is losses that often run to as much as a third of the shipment, especially for leafy vegetables.

Another problem with these containers is that they are too large to be handled easily and efficiently. Two men are required to lift to the truck a large container holding about 100 kilos. As a result of the weight factor and the difficulty of handling them, the containers are frequently dropped in the loading or unloading process. This results in more damage to the vegetables.

Due to the partial ban on trucks and buses in the Manila area, cargo trucks from Baguio usually unload cargoes at the terminals. Then, another set of trucks allowed to operate in Manila to deliver the goods to the wholesale and retail outlets in the city.

The transportation rate for delivering vegetables to the Manila area is ₱5.00 for three baskets and ₱0.50 per basket of the excess quantity. The total marketing cash costs in the marketing of cabbage by middlemen is ₱108.54 including spoilage. The costs are higher when losses due to faulty handling and loading are considered.

Marketing costs (Cooperative). During the year under study, the vegetable Cooperative marketed a part of the products of the farmer-members.

It had a wholesale market outlet in Manila with a manager hired jointly by several cooperatives. However, due to management and operational problems in the wholesale outlet the joint venture was discontinued.

TABLE 2. - Marketing cost per 1,000 kilograms by cooperative

I T E M S	C O S T S
Transportation (₱0.05 per kilogram)	₱50.00
Service fee (5 percent of gross sale)	16.00
Container (₱1.10 cost per basket)	12.10
Spoilage, shrinkage (4 kilos per basket)	14.32
Transportation from terminal to retail outlets (₱5.00 for the first three baskets and ₱0.50 per basket for the excess)	9.00
T O T A L	₱101.42

By and large, the marketing costs of 1,000 kilograms of cabbage through the Cooperative is lower than the marketing costs through middlemen. For marketing the produce of the members, the cooperative deducts from the proceed of the sale five percent of the gross sale. In the past, the Cooperative collected one percent marketing fee in addition to the five percent service fee. For these fees the Cooperative looks for the highest possible price of the vegetables. Based on the farm price the marketing costs are already 38 percent of the total value of the vegetables. The estimated costs include only the expense incurred between the farmer and the wholesaler. It was difficult to gather the costs between the wholesaler and the retailer. Judging from the margins, the retail marketing costs could be substantial, especially with more perishable commodities like leafy vegetables. If we consider that 50 percent of the margin between the wholesaler and retailers

is costs, then we can have an additional cost, ₱50 per 1,000 kilograms. Therefore, the total marketing costs will be ₱151.00 per 1,000 kilograms. Percentagewise, the total marketing cost is one-third of the total value of 1,000 kilograms of vegetables. Considering that the total margin is ₱370 per 1,000 kilograms, then we can conclude that the profit of ₱219 per 1,000 kilograms is to be shared among the middlemen involved in the marketing of the product.

Marketing cost per 1,000 kilograms (GMTFM). The marketing cost of vegetables bought by the Greater Manila Terminal Food Market is ₱100.48 per 1,000 kilograms. As in the other methods, the highest item of expense is transportation, which is ₱50.00 per 1,000 kilograms or ₱0.05 per kilogram. The GMTFM also collects a grading fee of ₱0.01 per kilogram, crating fee of ₱0.50 per crate or basket, and a sales commission of 6 percent of the gross sale. For the Cooperative, a commission of 1 percent is collected from the sale proceed. In addition, interest on the commodity loan at the rate of 1 percent per month goes to the GMTFM. In effect, this is a storage fee.

TABLE 3. - Marketing costs of cabbage per 1,000 kilograms using the GMTFM wholesale outlet

ITEMS	COST
Transportation (₱0.05 per kilogram)	₱50.00
Grading fee (₱0.01 per kilogram)	10.00
Packaging fee (₱0.50 per basket - 11 baskets)	5.50
Sales commission to GMTFM (6 percent of gross sale)	19.80
Commission to Cooperative (1 percent of gross sale)	3.30
Interest on commodity loan (1 percent per month for ₱288)	2.88
Transportation from terminal to Manila outlets ₱5.00 for first three crates and ₱0.50 per crate for excess.	9.00
TOTAL	₱100.48

It is to be noted that grading and packaging are new services which are added to items of cost. Grading undoubtedly improves the marketing system. Aside from the fact that it facilitates buying and selling, it provides incentives for farmers to produce better quality product because of the price differentials. Growers will only transport high quality product to a distant market for high economic returns from it. Offgrades are usually sold at the local market because it may not be economically profitable to ship them to a distant market. The packaging fee collected by the GMTFM which is not found in the other methods is an additional expense. Lack of proper packaging or crating in the general marketing structure is a problem. This problem is aggravated by faulty loading. Improving crating may save some of the vegetables that now go to waste. It is a necessary function and it must be encouraged in the marketing of vegetables.

Prices and Margins

TABLE 4. - Average farm to retail price per kilo of Irish potatoes, 1969

	GMTFM	COOP	MIDDLEMEN
		<u>Pesos</u>	
Farm	0.45	0.47	0.35
Wholesale	0.64	0.65	0.55
Retail	0.80	0.81	0.75

Farm, wholesale and retail prices of Irish potatoes. The farm prices in this paper are not the actual amount received by the vegetable growers. Handling costs including transportation, crating and spoilage are usually deducted from the farm prices. Commissions are also deducted for the services rendered by jobbers and brokers. In this Cooperative, the farmers received higher average prices when the Cooperative marketed the Irish potatoes of the members. On the average the farm price paid by the GMTFM was lower by ₱0.02 per kilo than the Cooperative's farm price but higher by ₱0.12 per kilo than the farm price received from the middlemen who bought directly from individual farmers (Table 4).

The wholesale prices used here are the prices paid by the retailers. This does not imply that in the marketing channel there is only one whole-

saler. As a matter of fact there are several of them which may include a local contractor, merchant trucker and real wholesaler. The prices indicated in Table 4 are the highest wholesale prices in the various schemes. It was not possible to get the wholesale prices at the various levels. It was even more difficult to get the markup. The average wholesale price of Irish potatoes bought from individual farmers was the lowest, followed by the wholesale price to the GMTFM.

It was not difficult to determine the retail prices because the number of retailers buying from other retailers was insignificant. In other words, there was an insignificant number of middlemen between the last wholesaler and the retailers. The average retail price paid by the consumers was lowest for vegetables handled by middlemen. In all cases, the main reason was the fact that vegetables bought by middlemen from individual farmers were not sorted, classified or graded. On the other hand, vegetables marketed through the GMTFM and by the cooperative were carefully sorted or graded. Some of the offgrades were not shipped to distant market outlets.

Marketing margins of Irish potatoes. The total absolute marketing margin is the difference between the farm price and retail price. The percentage marketing margin is computed by dividing the difference between the selling and buying prices by the selling price. The absolute as well as the percentage marketing margins between the farm price and wholesale price were highest when the products were channeled to the middlemen and the GMTFM. When marketing was done by the Cooperative the marketing margin was the lowest, which was ₱0.18 per kilogram (Table 5). The reason for these very high margins is primarily the existence of many middlemen in the marketing channels.

The high margins indicate inefficiency. The margin of profit of these middlemen may not be very substantial considering the fact that several people will share the amount after deducting expenses including spoilage. By and large, the absolute and the percentage margins between the wholesaler and the retailer were lower than the margins between the farmer and the wholesaler. The logical explanation for this phenomenon is the presence of more middlemen prior to the last wholesaler than after the last wholesaler.

TABLE 5. - Average farm to retail marketing margins per kilo of Irish Potatoes, 1969

	GMTFM		COOP		MIDDLEMEN	
	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Farm to wholesale	₱0.19	29	₱0.18	28	₱0.20	36
Wholesale to retail	0.16	20	0.15	19	0.20	27
Total	₱0.35		₱0.33		₱0.40	

The farmers had a larger share when they marketed their potatoes to the GMTFM and through the Cooperative (Table 6). It was best for them to market through the Cooperative by pooling. They received on the average ₱0.58 for every peso paid by the consumers. When middlemen bought their potatoes they got only ₱0.46 of the ₱1.00, which is ₱0.12 lower than the share they received through the Cooperative. The share of the wholesaler handling potatoes sold by middlemen was ₱0.27 of the consumers ₱1.00, which was ₱0.50 higher than the share for wholesaler of potatoes marketed through the cooperative. In general, the retailers' share were smaller than those of the wholesalers'. The possible explanation for this is the fact that Irish potatoes are not highly perishable and so spoilage is not very high.

TABLE 6. - Distribution of peso paid by consumers for Irish potatoes, 1969

	GMTFM	COOP	MIDDLEMEN
Farmers	₱0.56	₱0.58	₱0.46
Wholesalers	0.24	0.22	0.27
Retailers	0.20	0.20	0.27
Total	₱1.00	₱1.00	₱1.00

Farm, wholesale and retail prices of cabbage. As in potato, the average farm price of cabbage of ₱0.26 per kilogram was the lowest in the third marketing scheme (Table 7). In the case of the GMTFM the average farm price regardless of grades was ₱0.33 per kilogram. The figures indicate that the farmers produced more or less equal quantities of grades I and II of cabbage. The GMTFM guaranteed floor price is ₱0.36 per kilo for Grade I cabbage and ₱0.30 for Grade II. The wholesale prices in the three schemes were more or less equal. However, in the retail prices, the lowest was ₱0.64, the price paid by consumers for cabbage bought by middlemen from individual farmer-members. The main reason for this is the low quality of the cabbage.

TABLE 7. - Average farm to retail prices per kilo of cabbage, 1969

	GMTFM	COOP	MIDDLEMEN
	<u>Pesos</u>		
Farm	₱0.33	₱0.32	₱0.26
Wholesale	0.49	0.49	0.48
Retail	0.69	0.68	0.64

TABLE 8. - Average farm to retail marketing margins per kilo of cabbage, 1969

	GMTFM		COOP		MIDDLEMEN	
	Absolute	Percentage	Absolute	Percentage	Absolute	Percentage
Farm to wholesaler	₱0.16	32	₱0.19	39	₱0.22	46
Wholesaler to retailer	0.20	30	0.19	28	0.16	25
Total	₱0.36	X	0.37	X	0.38	X

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The farm to wholesale absolute as well as percentage margins were highest in the vegetables of farmers marketed by middlemen, or ₱0.22 per kilogram and 46 percent, respectively (Table 8). On the other hand, the whole-sale to retail margins were highest in the GMTFM scheme and lowest in the middlemen scheme. Parenthetically, the highest total absolute margin of ₱0.38 per kilogram was for cabbage bought from growers individually; this was followed by absolute margin under the cooperative marketing.

In the GMTFM marketing scheme, the farmers received ₱0.48 for every ₱1.00 paid by the consumers (Table 9). In the middlemen scheme, the farmers received only ₱0.40 of the ₱1.00 paid by the consumers. Table 9 indicates that the group of wholesalers handling cabbage from individual farmers received more than one-third of the peso paid by the consumers. Of all retailers, the group who bought cabbage from the GMTFM received the biggest share.

TABLE 9. - Distribution of peso paid by consumers for cabbage, 1969

	GMTFM	COOP	MIDDLEMEN
Farmers	₱0.48	₱0.47	₱0.40
Wholesalers	0.23	0.26	0.34
Retailers	0.29	0.27	0.26
Total	₱1.00	₱1.00	₱1.00

Financial Arrangements

The Atok Cooperative met its capital requirements by means of equity and debt financing. Members attempted to strengthen the financial structure of their Cooperative by adopting the following capital formation schemes:

1. When a farmer joins a cooperative, he is required to pay an entrance fee of varying amounts and one or more shares or stocks. At times when capital for production and marketing is badly needed, the cooperative retains from the sale proceeds an amount equal to at least the value of two unpaid subscriptions.
2. The cooperative instituted the Revolving Capital Fund for varying periods at 8 percent interest per annum. It collected ₱0.01 per kilogram of vegetables sold to or through the cooperative. The Fund is primarily intended to finance the marketing operations.
3. A very limited number and amount of capital loans from the members were obtained at times when other sources of capital were not available except from members.

The cooperative has used the following methods of obtaining capital from non-members:

1. The Agricultural Credit Administration financed the marketing operations of the Atok FaCoMa by granting it a ₱52,800 operating capital loan that would be gradually replaced by membership capital within a period of not more than five years. Capital contributions of the members came from two sources: (1) their patronage allocations and (2) deductions from their sales proceeds. Their contributions were applied to payment of shares of stock and revolving capital of the Cooperative.

ACA established at the Philippine National Bank Branch in Baguio City a loan fund account exclusively for vegetable financing. The fund is under the joint responsibility of the ACA Branch Credit Manager and the Branch Cashier in Baguio City. Out of the funds allocated, an "Operating Capital Loan" was extended to the Atok FaCoMa, in the form of credit line to be used only for the following purposes: (1) to make advances against commodity deliveries by Cooperative members, based on current prices in Baguio City, and (2) to cover initial marketing and operational expenses, including the procurement of essential farm supply items needed by the members.

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Loans released under this scheme are amortized for a period not exceeding five (5) years. Payment of the yearly amortization is in accordance with a schedule jointly agreed upon by the Cooperative Manager and the ACA Branch Credit Manager. The interest on the loan is eight percent (8%) per annum.

2. The Greater Manila Terminal Food Market has also extended financial assistance to the members of the cooperative in the form of production as well as commodity loans/advances. Upon delivery of the produce, the GMTFM extends to the farmer-member, thru his cooperative, a commodity loan/advance of 80 percent of the value of vegetable based on the guaranteed floor price for each grade. The remaining 20 percent plus an excess amount due to prices higher than the guaranteed floor prices is given to the farmer-member after deducting transportation costs, grading and crating fees, commissions, and other costs.
3. The local contractor, trucker or middlemen provide the vegetable growers with production loan usually without interest with the promise from the growers that they will deliver all the marketable surplus to the farmer. The grower has a sure market for his product usually at prices lower than the current ones. In this case, the moneylender provides credit facilities both for production and marketing. In this arrangement, the dispenser of credit acts as a monopsony.

Recommendations

Of the methods of marketing presently used by the Atok Farmers Cooperative Marketing Association, Inc. marketing by the Cooperative and the Greater Manila Terminal Food Market are highly recommended with basic modifications in mechanics.

The pooling method of marketing with a cooperative branch in Manila as a wholesale outlet should be given top priority in the development of marketing cooperatives. In order to improve the scheme, the following measures are necessary:

1. Since vegetables are relatively perishable it is very important for the wholesale outlet to have cold storage or rent cold storage space so that when there is a market glut, the management will be able to delay the disposal of the vegetables.

2. The Agricultural Credit Administration should provide adequate guidance and supervision of the wholesale operations in Manila to avoid the occurrence of unexplained losses or spoilage.
3. The manager and other accountable employees should be adequately and properly bonded to protect the cooperative and its members from misuse of funds.
4. The policy of limiting credit sales to buyers in the wholesale outlet should be strictly observed to avoid substantial collectibles which may later become bad debts because the debtors can no longer be located. If possible, sales should be on a cash and carry basis.
5. To be able to attain an economic volume of business, it is advisable to invite other vegetable cooperatives in the provinces to use the facilities in the wholesale outlet. If there are already several cooperatives in the business of marketing vegetables, then the next step is to organize a federation which will manage the wholesale outlet in Manila.
6. The ACA or other lending institutions should make available more short-term as well as long-term credit to the cooperative and its members to meet its minimum requirements for efficient functioning.

The marketing scheme introduced by the Greater Manila Terminal Food Market needs the following improvements:

1. The GMTFM field representatives should be competent in the grading of the produce. In the past, the grades certified by the fieldmen more often than not were downgraded in the GMTFM Central Office which resulted in the dissatisfaction of the members. It produced a credibility gap between the farmers and the fieldmen.
2. To be able to give the commodity loan/advance upon the delivery of the produce, the GMTFM must set up a Revolving Fund primarily for this purpose. It has been observed that commodity loans/advances were given one week after the delivery of the produce. This practice leads farmers to think that they have been cheated.

3. Regardless of the behavior of the supply and demand of vegetables, the GMTFM should buy from the members through their cooperative at the guaranteed floor price for each grade even if there is a market glut. This, in effect, will really provide the incentive for the farmers to produce more vegetables.

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MARKET INTELLIGENCE AND RESEARCH
AND
ADVERTISING FACILITIES REQUIRED FOR FRUITS VEGETABLES
MARKETING
INCLUDING EXPORT, AND THE
ROLE OF COOPERATIVES AT DIFFERENT LEVELS

WORKING PAPER AND LECTURE

25th MAY 1970

BY

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TEMPORARILY ON ASSIGNMENT AS
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TO THAILAND WITH THE
ASIAN DEVELOPMENT BANK OF MANILA

In order to establish the objectives of the problem in this paper, I will present a hypothetical case. It is imperative to focus on real problems in order to plan, to research, to implement, or to manifest the results of the recommendations from the research into promotional activities. The case study is a composite of cooperative marketing problems probed in Taiwan, South Korea, Thailand, Japan, India, Ceylon and Pakistan. No nation is void of the issues presented here.

This case illustrates the various problems to be solved by nations and cooperatives. The methodology presented in this case may be used in various forms depending on the circumstances of the marketing situation. This methodology can be used for:

1. a developing nation's cooperative that has a large share of a fruit market in another nation, and finds itself losing its large share to other producer nations.
2. a developing nation's cooperative that once had 25-30% of a fruit market in another nation and finds it has complete loss of the market.
3. a developing nation's cooperative that would like to introduce their fruit for the first time to another nation.

After I have briefly presented this case, I will state in the facts of the case the methodology in which the problems have been traditionally approached, then we will attempt to attack the situation under a modern business marketing management orientation.

The fruit growing nation is called TAKAPAN and the fruit is called Wasser. The market happened to be a developed nation called PANDIA.

Wasser fruit is highly perishable and spoils within 14 days after ripe. Therefore, it is important to pick fruit at the right moment so that product can be shipped across the seas to PANDIA.

INSERT

Wasser is mainly produced by small farmers, who take their produce to a local cooperative where it is cleaned. Wasser is graded by government inspectors into 4 grades. Only the top two grades are exported. The cooperative packs the export fruit in large weighed baskets. It is transported to the Cooperative owned and operated warehouse at the dock facilities of three harbours in TAKAPAN. There it is grade again by a PANDIA Ministry of Agriculture technician. The product is then assigned to 12-15 exporters who take title when product is delivered onto a refrigerated ship. When the ship reaches PANDIA, the product is unloaded by the shipping company and placed in a warehouse owned by the importers association where title is transferred after inspection by the importers association for damage due to mishandling by the shipping company. Of course, Wasser is insured through the shipping process. The importers transfer approved Wasser fruit to large wholesalers, who then transfer Wasser fruit to retailers.

Mr. Soo has been marketing Director of the Wasser Fruit Cooperative (WFC) for the past five years. In this period sales have increased 10% in volume. TAKAPAN'S share of the market for Wasser fruit in PANDIA has decreased from 97% to 59%. Sales of Wasser fruit have increased by 11% in these five years to other nations in the Far East.

The Minister of Trade called Mr. Soo and lectured that the nation needs foreign exchange. "Although Wasser fruit has increased a total of 10% for the past five years, this did not

meet the standard of growth in the economy of 5% per year for TAKAPAN. Moreover, the total foreign exchange earned with the increase of 10% only brought in a 8½% foreign exchange gain."

Mr. Soo said that Wasser Fruit Cooperative was the most successful cooperative in the Far East.

The Minister replied "may be, that is so, but farmers claim the cooperative is not striving for increased production and increased sales." The Minister of Trade suggested something be done quickly about this situation, or the Ministry would persuade the President of the Wasser Fruit Cooperative (WFC) to find a new Marketing Director.

After the conversation with the Minister of Trade, Mr. Soo called together his Agricultural Marketing Economist, the Cooperative Economist, his Marketing Research Manager and his researchers. He asked them to prepare recommendations to expand the market and solve to The Wasser Cooperative's problems in marketing Wasser in PANDIA.

The agricultural Marketing Economist was trained in England and Australia, and later trained in a joint Takapan Western Institute. His report stated that "Wasser is a fruit that was available all year round. Wasser deteriorates within two weeks and even faster if it is picked ripe at harvest. A Wasser plant takes 24-30 months to bear its first fruit and the plant has a profitable productive life of eight years. Wasser is cleaned by water spray and carefully graded in local cooperative stations by government officials. Only the top two grades are packed for export, and the remaining two grades are consumed by the ever expanding domestic population. The cooperatives have ripening, refrigerated storage areas in TAKAPAN at three shipping dock areas." He reported the history of Wasser in terms of production, how many hectares were planted specific areas planted, yields of different areas, who produces Wasser, hectares each grower produced, time of gestation of the fruit, varieties of Wasser production of each variety, varieties

for export; the size of each plant and the number of fruit from each plant. He stated, "PANDIA was the biggest market", and what the yearly amount of Wasser shipped to PANDIA effects of disease and weather on export; he stated Wasser occupied first place as an export earner of all farm products and third place in all export items; and dollar figures as to exports for the last three years; and the last year dollar sales decreased "due to serious competition in PANDIA's market." He stated that he was on a special Committee to look into "boosting production, improving Wasser producer's share of export profits and "establish smoother marketing of Wasser to PANDIA. He and his committee recommend the following:

1. Supply of Wasser seedlings;
2. Expansion of Wasser plantation;
3. Readjustment of seasonal production of Wasser in order to achieve a more uniform distribution of product to PANDIA;
4. Weather protection support;
5. Increase Wasser fruit yields through soil conservation, fertilizer allocation and application, and pest and disease control;
6. Demonstration farms and experimentation and research;
7. Credit facilities and Wasser production supervisory groups;
8. Strict control of prices and margins aimed at promoting the welfare of producers;
9. Carefully planned production and exports through allocation to exporters and the assistance of the Wasser Fruit Cooperative.

Wasser Fruit Cooperative Economist was trained in economics at a prestige United States university for his higher degree.

He drew up Supply and Demand Schedules, obviously based on historical data. Then he made estimations on historical data to projected future markets in FANDIA. He stated "competition on the international Wasser market is likely to be very keen in the future." He advocated the following suggestions:

1. Raise the per unit area yield,
2. Improve packing and transportation,
3. Strengthening the Wasser Fruit Marketing Cooperative,

Mr. Sato, the Marketing Research Manager, trained in the excellent agricultural schools of various foreign countries, reported on the marketing channel of Wasser fruit. His analysis included farm gate prices and carried through both middlemen and the cooperatives to the various stages to the shipping point.

All these reports were analyzed by Mr. Soo. But, he could not find out any answers to the cooperatives problems and the Minister of Trades request. He further questioned leading TOPAKAN university economists and agricultural economists and their research on suggestions to help the Farmers, and the Foreign Exchange request of the Minister of Trade with respect to Wasser. None of these discussions or reports helped Mr. Soo to solve his problem.

Mr. Soo discussed this problem with his brother who is an industrialist. His brother told him that Dr. Armstrong of the International Marketing Institute was in town, and why doesn't Mr. Soo invite him on a two week consulatation fee basis to analyze Mr. Soo's problems and possible alternative solutions to find out procedures to solve those problems.

Dr. Armstrong said he would be happy to spend 14 days in order to propose a methodology to solve the problems.

For the first three days, Dr. Armstrong talked with the President of Wasser Fruit Cooperative and Mr. Soo (Marketing

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Manager). He then interviewed the key personnel in the cooperative, farmers, collecting agents, local transportation companies, inspecting centers, local cooperative officials, exporters, government officials, and shipping companies. He flew to PANDIA, talked to importers, wholesaler and retailers. He reviewed the promotion and advertising of importers, competitors producing Wasser fruit and other substituted fruits. He returned to TAKAPAN and read all published data provided by the economists, agricultural economists and all other recommendations by University professors.

He then produced the following document which is the International Marketing Institute's methodology to solve marketing problems and export planning (Produced in Appendix I.)

Dr. Armstrong suggested that Mr. Soo thoroughly read this document so that he could discuss its meaning and the advantages of this kind of approach.

He stated categorically that Wasser Fruit Cooperative and the government of TAKAPAN knew little about the consumer in PANDIA; nor anything about potential of the PANDIA market; or about the process of how the product moved through the channel in PANDIA; nor did Wasser Fruit cooperative understand the competition and what promotional activities the competition was using to gain a greater share of the market from TAKAPAN; nor did Wasser understand what promotional activities they should pursue. Dr. Armstrong stated only a modern business marketing research approach could give Mr. Soo, Wasser Fruit Marketing Cooperative, and the Government of TAKAPAN ANSWERS to action to expand its share of the market, and to earn more foreign exchange.

Dr. Armstrong strongly recommended the Marketing Director, Marketing Research Manager, Agricultural Economist, Economist and number of leading Ministry officials attend a eight week training session a handling the results of the extensive research advocated in the plan (Appendix I) into Real Marketing Decisions.

Dr. Armstrong stated the budget for the actual research might range from \$15,000 -\$25,000. He added that based on total sales of \$85,000.000, he thought an outside private agency could provide the consumer data that was needed in PANDIA, and the remaining data could be gathered and processed by the Wasser Fruit Marketing Cooperative staff with the assistance of the Takapan government.

Once Appendix I type of research has been done, more specific research might be considered. But this could be done by trained marketing management who carefully thought out their problems and who could then write more specific marketing research specifications. But Appendix I, the IMI approach, should be the Minimum approach for a nation of TAKAPAN size and its dependence on Wasser Exports. This last statement includes the Wasser Fruit Marketing Cooperative.

The International Marketing Institute Methodology

Areas of Inquiry in Export Marketing Research and Planning

We may now review the facts that must be looked into in a standard marketing research survey. We will do this from the point of view of home-based and overseas-based analysts working cooperatively on a study.

The first point to make is that no survey can ever be 100% complete. Surveys will vary in thoroughness depending on several factors, including:

- a. the nature of the product and the characteristics of the markets it serves, and the availability of data about those markets;
- b. the time and resources available for the work; and
- c. the ability, training and experience of the analysts.

In final analysis, the latter factor is most important. A good analyst, while fully aware of routine research methods, is one who is able to invent or adapt his methodology to suit each specific task. To be a good analyst, one must have a flexible, creative and analytical mind.

The second most important prerequisite for a good research job is thorough knowledge of the product under study and of the capability of the industry that produces the product. Thus, prior to, and in conjunction with the extensive desk research to be carried on by the home-based research staff (as discussed in a previous section), it is necessary that the home-based staff learn everything it can about the industry and the product under study on a first hand

basis. This information will be indispensable to the overseas-based staff when they are asked to carry out the field research end of the study.

Thus, commodity export capability records, including individual company and cooperative profile cards, should be kept up to date at all times. It should be a key function of the International Trade Information Center to maintain these records as compiled by marketing researchers so that when ever the overseas research and promotion staff require such information (which is daily) they can obtain it without delay.

STAGE ONE: Background analysis - The client, the product, the industry, and the problem.

A. Identification of the Client. (In this case our marketing cooperative)

1. Name and address
2. Locations of headquarters, branches, warehouse, processing plants, ect.; domestic and overseas.
3. Ownership structure + organization chart, including inter-corporate relationships.
4. Employee structure.
5. Capital structure.
6. Total annual sales in currency value during 5 years.
7. Total export sales " " " " "

B. Product Analysis: The Client Case - Description of the product group, and product lines within the group, for which a marketing plan is to be made.

1. Physical specifications (of the particular commodity for export)
 - a. Unit capacity - by
 - sizes, materials, shapes, styles, models, design, quality levels, etc.
 - b. Special export standards applicable to

product's finish, materials, weight, accessories, dimensions, purity, uniformity, etc.

2. Performance specifications of product.

- a. Functions performed by product.
- b. Major uses for the product.
(component or ingredient in other products or as an end-product, itself)
- c. Comparison of product with other (competitive) products having same general utility -and special benefits derived from client's product.
- d. Special requirements for use, maintenance, or servicing.

3. Psychological specifications of product.

- a. Major selling appeals; sensory values and benefits for the user; practicality, economy, necessity, quality, ole fashioned, modern, etc.
- b. Type of customer attracted by products' image and appeals:
 - mass consumption goods buyers
 - specialty goods buyers
 - impulse goods buyers
 - other appeal-types of buyers.
- c. Special market segments for the product:
 - types of persons (age, sex, occupation, education level, ethnic background, etc.);
 - types of institutional markets for product;
 - types of industrial market for the product.

4. Cooperative image as a producer of product for:

- importance, reliability, quality, delivery, economy, etc.

5. Cooperative history as exporter of the product.

- a. Total annual unit and value sales for the product by product lines - for 5 years.
- b. Comparative profitability (gross margins) of commodity lines

- at FOB average, and
- in domestic market.

- c. Export sales (units and FOB values) for each commodity line - by - markets of destination, and total for all export markets.
- d. Comparative profitability of each product line for each major export market.

6. The client's technical situation and condition:

- a. Raw materials situation.
- b. Machinery, equipment and physical plant situation.
- c. Operating capital situation.
- d. Man-power situation.
- e. Quality control situation.
- f. Export trade channels and facilities situation.

C. Product Analysis: The Industry-Wide Case.

1. Identification of other producers of the product group. For each:

- a. Names and addresses.
- b. Location of branches, factories, etc.; at home and overseas.
- c. Ownership structure.
- d. Capital structure.
- e. Employee structure.
- f. Total sales (units - value) of the product during 5 years.
- g. Total export sales (unit + FOB value) of the product during 5 years.

2. Industry-wide annual production - 5 years.

(see section II above)

3. Industry-wide annual exports of the product - 5 years.

(see section II above)

- a. Client's share of total annual production - 5 years
- b. Client's share of total annual exports - 5 years.

4. Outlook for industry as a whole as compared with other major actual or potential producing countries.
 - Materials and equipment situation.
 - Technical know-how situation.
 - Manpower situation.
 - Financial situation.
 - Distribution facilities situation.
 5. "Country image" as a producer of the product (logical, natural, surprising, abnormal, etc.)
 - compared with other major actual or potential producing countries.
 6. Status of, and targets for, the product in ROKG 5-year Plans.
- D. Definition of the cooperative Marketing Problem(s) to be resolved by the Export Marketing Plan which is to result from this study.
1. Statement of each problem in two forms:
 - a. As a problem - e.g. "cooperative does not know how his product is marketed."
 - b. As an objective - e.g. "to identify specifically in which national and sub-national market the cooperative's product is marketable, and to define what strategies are required to achieve market penetration where a potential exists."
 2. If physical production, materials supply, technical know-how, financial support, etc., type problems must be resolved prior to tackling the marketing problems, these should be identified and a decision made as to whether marketing planning should proceed prior to their being resolved.

STAGE TWO: Development of a Target Market Strategy.

- A. Industry-wide exports of the product to each foreign market - 5 year-record (units and values)
- B. Foreign markets for the same product exported by major

competitor countries (e.g. Japan, Hongkong, Taiwan, etc.)

1. Bank all importing countries by valued of imported product from each of the competing supplier countries for as many years as possible up to five.
 2. Compute comparative value of each country's exports to each of 10 major importing countries (estimated unit prices times number of units).
- C. List top five importing countries of the product.
1. Compute industry-wide share of imports by each country
 2. " Client share " " " " " "
- D. Selection of specific country market for detailed analysis and market planning.
1. State reasons and criteria for selection of the particular target market.
- E. The Target Market Situation.
1. Consumption of the product during 5 year history.
 - a. Annual production - units + value.
 - b. " imports - " + " °
 - c. " exports - " + "

(Analyse exports + re-exports, if important)

- Compute $a + b - c =$ consumption except inventory:
(e.g. "apparent consumption")
 2. Project consumption trends for total and per capita.
 - a. Straight line or moving averages.
 3. Project relevant market indicators. For example:
 - a. Personal consumption expenditures for all type of fruits, or products that compete with fruits.
 - b. candy consumption data.
 - c. Other.
 4. Competitive situation/share of market patterns.
 - a. Major brands produced in the target market and their major competitive features.
 - b. Major imported brands and their competitive features.

5. Price situation.

- a. Retail prices of particular commodity in the country.
- b. Average price of imports (divide value of imports by quantity of imports),

6. Quality control requirements.

- a. Quality standards applicable to the product.
- b. Inspection procedures for export products.

7. Product and package design requirements.

- a. Special requirements in product (moisture, temperature content, size, etc.)
- b. Product specifications for consumer acceptance (color, style, fashion, etc.)
- c. Package requirements - standard shapes, sizes, quantity, label requirements, language, warnings, ingredients.

8. Availability of major marketing, trade, and promotion organizations and services:

- a. Exporting country representatives.
- b. Chamber of Commerce
- c. Banks.
- d. Trade promotion organizations.
- e. Government agencies related to imports (National Marketing Boards)
- f. Trade associations for the product (Cooperative Selling Organization)
- g. Exhibit and display centers.
- h. Shipping and transport companies.
- i. Private Commercial Marketing Research Agencies.

9. Import regulations and controls.

- a. Tariff, customs duties on imports.
- b. Inspection, quality or other standards required for import-food and drug regulations, warnings on labels, etc.
- c. Other forms of controls on imports such as quotas, anti-dumping regulations, etc.

10. Economic and financial situation.

- a. Rate of foreign exchange-availability, and trend in rate.
- b. Financing regulations-L/C, and other forms of payment.

11. Geographical situation.

- a. Climatic conditions affecting product use in the country.
- b. Size and topography of country affecting use and distribution of product.
- c. Major rail & highway lines for distribution.
- d. Major cities by size.
- e. Major port(s) of entry-airports-free export zones for trans-shipment in nearby countries.
- f. Adjacent countries for future market expansion.

F. Segmental Target Markets by Customer Types.

1. Types of customers: End users - demographic & socio-economic characteristics of ultimate buyers and users of the product.

- a. Locations-major cities & population centers for sales, distribution & consumption-regions and major market areas-one or several?
- b. Characteristics related to consumption, such as age, sex, occupation, income, nationality or other groups-relative size and importance in the population etc.
- c. Per capita income-buying power-distribution of income related to product purchase.

2. Types of customers for the product: Industrial and institutional buyers and users.

- a. Types of industries & manufacturers using the product.
- b. Special markets-list and describe if applicable to product.

- Utilities, transportation & Communications.
- Military, government procurement.
- Institutional-schools, hospitals, restourants.

3. Types of customers for the product: Distributors.

- a. Importers
- b. Wholesalers
- c. Retailers
- d. Chain stores
- e. etc.

STAGE THREE: Development of Transportation Plan, Distribution Cost Analysis, and Pricing Strategy.

A. Distribution Channels from Factory to Buyers. (If more than one channel, show proportional distribution)

1. In exporting country

- a. Own company.
- b. Trading company/export agent.
- c. Shipping company.
- d. Other (be specific).

2. In target market.

- a. Importer/Trading company.
- b. Shipping company.
- c. Agent or representative.
- d. Branch office.
- e. Wholesaler-retailer.
- f. Retailer direct.
- g. etc.

B. Packing Requirements.

- 1. Protection of goods from damage, pilfering, etc.
- 2. Identification on shipping cartons.
- 3. Special packing requirements for handling.
- 4. Number of product units per measured ton or (40 cu.ft.

C. Domestic Handling in Exporting Market, Documentation and Financing.

1. Warehousing Refrigerated inventory for export.
2. Preparation of shipping documents.
3. Financial arrangements-types of payment.
4. Inspection of goods for shipment.
5. Types of insurance coverage.

D. International Shipping.

1. Form of transport-air/surface-special types of transport.
2. Port of embarkation & debarkation - reasons for selection
 - a. Shipping distance.
 - b. Shipping times.
 - c. Trans-shipments.
3. Shipping lines between these ports.
4. Facilities for loading, unloading and storage at ports.

E. Base Price FOB Factory - Cost Analysis.

1. Cost of raw materials per unit.
2. Cost of labor per unit.
3. Cost of overhead per unit.
4. Cost of sales per unit.
5. Cost of advertising & promotion per unit.
6. Profit per unit
7. Other cost per unit (Specify).

F. CIF Price Port of Debarkation.

1. Cost of export packing, documentation, financing, inspection, overhead, warehousing, office expenses, etc. per unit.
2. Shipping costs per unit.
3. Insurance cost per unit.
4. Port costs per unit.
5. Other costs per unit (Specify).

G. Comparison of Costs in E and F, above, with Costs of Imports from Other Countries.

H. Calculation of a Pricing Structure that will be competitive with the prices of the product as imported from other countries.

(This price will not include mark-up to cover cost of sales promotion in the target market.)

STAGE FOUR: Development of Sales Promotion Strategy and Sales/Distribution System.

A. Selection of Sales Channel(s).

1. Definition of types of intermediate buyers to be approached.
 - a. Local exporters-trading companies.
 - b. Foreign importers for specific types of products.
 - c. Distributors or agents for specific types of products.
 - d. Manufacturers or Processors for specific types of products.
 - e. Wholesale or retail buyers.
2. Sources for names of buyers in overseas markets.
 - a. Directories of importers, agents, etc.
 - b. Local trade promotion organizations.
 - c. Local embassies and consulates.
 - d. Banks, airlines, shipping firms.
 - e. Sources in the overseas market.
 - Trade promotion organizations.
 - Banks, shipping companies, etc.
 - Chamber of Commerce.
 - Trade Associations.
 - Other sources.

B. Methods for Contacting Foreign Buyers.

1. Direct mail to prospective buyers.
 - a. Types of letters to different types of buyers.
 - b. Physical handling of mail-out.
 - c. Plan for follow-up of non-repliers (series of promotion letters).
 - d. Plan for follow-up of repliers.
 - Those interested.
 - Those not interested.

- e. Maintenance of records-procedures.
2. Use of trade fairs, exhibits and display centers.
 - a. display centers and exhibits.
 - b. Trade Fairs.
 - c. Plans for displays or exhibits.
 - Products.
 - Space utilization & design of display.
 - Records of inquiries and visitors-buyers names, addresses, and type of interest.
 - Materials for handout to visitors.
3. Personal travel and visits overseas.
 - a. Preliminary planning of trip.
 - Preparation, schedule, itinerary and travel arrangements-purposes for trip.
 - Persons and organizations to contact by personal call.
 - Materials to show to prospective buyers and agents.
 - b. Setting up appointments to see buyers.
 - Having a base for contact-address & telephone.
 - Secretarial, translation or interpretation services needed.
 - c. Follow-up plan on return to home office.
4. Evaluating prospects.
 - a. Credit investigation.
 - Through banks.
 - Through credit information agencies.
 - b. Selection of agent (Criteria for selection)
 - Territorial coverage.
 - Qualifications for sales and promotion.
 - Other arrangements.
5. Cost of Expense items in "B".

C. Requirements for Informing Buyers about the Product.

- 1. Catalogue sheets or brochures.
 - a. Describing product-values, benefits, specifications
 - b. Describing company-reputation, present customers, production, financing, physical facilities, inspection procedures, capitalization etc.
- 2. Price list CIF port of debarkation.
- 3. Delivery and financing terms.
- 4. Sales arrangements with agents, representatives, importers etc.
 - a. Territorial coverage.
 - b. exclusivity.
 - c. Promotion and advertising arrangements.
- 5. Cost of expense items in "C"

D. Requirements for Attracting Buyers.

- 1. Advertising.
 - a. Media to be used-trade publications, international bulletins, mass broadcast and/or print media, etc.
 - b. Main copy themes or appeals to create image and reputation for brand, company, or product.
- 2. Special promotional devices.
 - a. Design of displays, cartons.
 - b. Posters, banners, tags on merchandise.
 - c. Gift premiums.
 - d. Samples.
 - e. Other merchandising devices-calendars, ask trays etc.
- 3. Packaging.
 - a. Special labeling-brand names, directions for use, language, color, design.
 - b. Inserts, promotion leaflets.
 - c. Special container designs.
- 4. Corporate and brand symbols, logos, etc.

5. Cost of expense items in "D".

E. Service Organizations for Advertising.

1. International agencies in exporting market.
2. Agencies in the importing country market.
3. Cost of advertising agency services.

F. Final Estimate of Sales Prices required to Market the Product Profitably. (See Stag Three, item H : Those costs/ prices + research costs + costs in B5,C5,D5 and E3, above + a reasonable profit margin, will determine the final pricing policy.)

Gentlemen:

Agricultural Marketing Economists do not understand Marketing; nor do they understand consumers or customers; nor do they attempt to understand other segments of the Marketing Mix, which includes Advertising. THAT IS NOT SHOCKING. IT IS THE TRUTH, since their training generally ends at the terminal market or at the most, the wholesaler. In a review of the economic literature through colleagues in Thailand, Taiwan, Japan, South Korea, India, Pakistan and Ceylon, less than 1% even mention marketing in a modern business sense. 99% or more still take in Agricultural Marketing terminology with a few model formulations to bring the research seemingly up to date. They view the problem either from an academic exercise, or a governmental a cooperative or from a farmer's viewpoint which are all legitimate. That is only half the story.

But never - - - never from the consumer or the buying viewpoint. We, Agricultural Marketing Economists tend to conclude our analysis at the terminal market or the wholesaler.

Economists (I place myself in that category as well) are no better. Both Agricultural Economists and Economists still view the problem as a static Supply and Demand situation - - - and that is where it stands. Professor Herman Southworth told us in 1957, "Agricultural Marketing Economists ought to review the business sector and ought to use consumer orientation." Few of us have. Peter Drucker, economist, author, and international expert on marketing has stated "we should view our problems in the firm, in the nation, or any other business enterprise from the Buyer's end and then and only then will viable alternative solutions come to light."

In the industrial sector, and the consumer goods sector the argument of marketing over the productive sector is over. A firm must know where their product is sold before management decides to build a new \$30,000,000 plant. It's easier to lose

up to \$20,000 on a marketing survey then trying to explain to stockholders why a \$30,000,000 plant was either obsolete, or too large, or even too small, or that there is not a market for the produced product.

In the food business, we have finally reached a modern marketing mix approach to the problems of marketing foods. But the Agricultural Economic journals still have not. The developing countries economists and agricultural economists view their export marketing problems in static Supply and Demand schedules or regression analysis at best.

Major Cooperatives and major Export Development Corporations in successful exporting countries continue to make drastic errors in marketing fresh fruits and vegetables. They think they are secure once they have found a broker or buyer who may take the product at the harbour of the exporting country. The usual result has been loss of a significant share of the market to another country, or a total loss of the market to competition, or inability to approach marketing for the first time on a potentially profitable product.

The basis for the shrinkage of their share of the market by these so-called successful countries is several fold:

- 1) Cooperatives are unable to identify their own marketing problems and were not able to set cooperative objectives in marketing their fruits:
- 2) Unqualified marketing management to make decisions that are vital to success of the marketing of the fruit commodity:
- 3) Lack of Marketing Research which would pinpoint consumer preferences, habits, attitudes, marketing channels, and the media or advertising strategy based on the marketing research to regain their historical market, and in fact expand their markets:
- 4) Lack of knowledge on where to go to obtain this kind of knowledge:
- 5) Lack of competent professionally trained marketing research personnel.

Very often developing countries through their cooperative will subsidize exports in order to solve the problems

of lagging exports, instead of tackling the situation head-on. This is eventually laid on the domestic consumer in heavy taxes and is usually absorbed by farmers and the low income earners of the developing countries, thus, causing unnecessary hardships on disposable incomes which could purchase other goods and services.

In Takapan 10-15 exporters sell to at least 250 importers of the larger developed country. Often the cooperatives inherit these situations from historical practice or possibly legislation pushed through by the private sector. But more often it is the fault of the cooperative: It is easier to trade this way, less work, very few problems, much less effort or risk. They often hold the product for the exporter at the dock; they even refrigerate or place the product in protected storage, frequently, they even purchase ships, and ship the product for the paper exporter. The exporter does not know his market. He justs paper transfers Wasser to the importer in the larger developed country. The market share diminishes each year even though their alles have a gradual growth; that is until competition comes in. Price quotations are eventually set for farmers by exporters and importers - - - at least in the beginning. Then, farmers with their rising expectations want their incomes expanded, ask their cooperative to expand their quotas. The cooperative contacts the exporter and asks them to expand their quotas with the importers of the developed country and eventually negotiations take place. Importers have never explored their market and it is in their interest not to expand their prices and firm control of their existing market. SO NOTHING GETS DONE. Then, the farmers bring pressure on the government either through cooperatives or through direct political action very often through the press. Eventually, the government gets involved.

If cooperatives have sad marketing experiences, governments are worse. IT IS NOT THEIR BUSINESS TO MARKET PRODUCTS.

They are the slowest to react; they are not qualified in business negotiations; finally, they view the problem in terms of RESTRICTIONS not EXPANSION. Another words, they see the problem negatively, not positively.

Let me repeat - - - government negotiations between two countries do not usually expand the market. They are protectionist and restrictive.

Where is the solution? Solutions can be insituted with an aggressive cooperative or a Development Corporation. Traditional industrialists and traditional cooperatives who were production oriented have died in the last few years either by more dynamic marketing oriented cooperatives, or by private businessment. THE COOPERATIVE MUST OPERATE AS A CORPORATION, AND THE OBJECTIVES ARE THE SAME. Without this assumption the cooperative should get out of business since all it adds is an additional expense in the form of a middleman, or as another link in the marketing channel. The cooperative must be the push - - - the dynamic innovator - - - the cooperative must lead his industry not lag behind the pricate sector. The cooperative must introduce new ideas in marketing Wasser Fruit; he must have all the answers BEFORE they are asked. Anyone can build plants, produce products, even grow Wasser; but are those plans or plants based on how much product that plant or cooperative can sell today and tomorrow? Are these products what consumers want? At the place the consumers want it? At the time the consumer want it? Have the cooperative promotional strategy been geared to consumer present wants and needs, and, of course, future wants and needs?

Wasser is transfered from the cooperative to the exporter who makes a profit by meerly assuming some of the risks by finding an importer or several importers. The cooperative's function ends. Sooner or later the exporters gets the farmers and the cooperatives and/or the government to pay for advertising in the larger country. No one checks how the

advertising funds are being used; often they go into the pockets of the importers and that ends the effectiveness of those advertising funds. You can see the farmers, the cooperatives are at the mercy of the larger country.

If advertising exists it is most uncreative and only states "How good Wasser fruit is, because it comes from TAKAPAN".

Who cares? Does the consumer care where that product fruit comes from. NO. She is concerned with providing a healthy product that has multipurposes for her children. She is concerned with how easily she can purchase it; how long it keeps in her refrigerator or her storage area; how easily and convenient she can serve it; and compared with other fruit, is the cost fairly competitive for this convenience; how attractive the product appears in its package or raw form; and what attractive forms can she prepare the product. All of these thoughts go through her mind and more. Remember, the Purchaser is Mrs. Consumer, not other members of the family. But the end user is not only Mrs. Consumer, but more importantly, her children or her husband. Thus, you see Mrs. Consumer does not care about Wasser coming from Takapan, she cares about pleasing her family's needs and desires.

But the cooperatives does not know this - - - nor does the exporter, nor does the importer, and often the wholesaler does not know; and believe it or not the retailer is just as deficient in this knowledge.

This is how marketing research can help the cooperatives solve all the above problems. The objectives of research should;

- 1) Find out consumer habits, attitudes with Wasser and the effect of competition from other countries;
- 2) Evaluates other competing types of fruit;
- 3) Find the bottlenecks in the marketing channel in order to replace and remove those bottlenecks in the marketing of Wasser;
- 4) Select the proper promotional activities through all types of media from the analysis of consumer habits, attitudes etc.
- 5) Expand demand, so farmers can expand production and gain more income;
- 6) Earn valuable

foreign exchange for its government.

Recently, a book published about the Japanese government's role in business, said "MITI always maintained that no one has ever measured the market. That, supply and demand situations for a growing economy never balance and are certainly not static."

I'll take that one step further, even MITI has not measured their market both at home or abroad. With good marketing research by MITI or private sector personnel, Japan could pass all the developed nations before all the projections. THIS GOES FOR COOPERATIVES AS WELL.

* * * * *

Joint ICA/CVAC Seminar
May 17-27, 1970

The Vegetable Price Compensation Scheme
in Japan

Presented by
Mr. Satoshi Ohara

held at

The Institute for the Development of Agricultural
Cooperation in Asia (IDACA)

9-24-6 Funabashi-cho, Setagaya-ku, Tokyo, Japan

The Vegetable Price Compensation Scheme in Japan

1. Vegetable Production & Marketing in Japan

The land of Japan extends to a long distance from north to south. The climate is relatively mild. Favored by these conditions, a large variety of vegetables are produced in this country and fresh vegetables are abundantly on the market throughout all the seasons of the year.

Vegetables are daily necessities and the demand for them is growing in parallel with the rising incomes (Table 1). Production of vegetables is also increasing in accordance with the growing demand. The increases in production have been largely due to increases in the yield per unit area. The overall planted acreage has shown a small increase or a tendency to level-off in recent years (Tables 2 and 3).

Fresh vegetables are daily shipped from the producing areas to wholesale markets by agricultural co-operatives, voluntary groups of producers, collecting brokers and individual producers. Through the wholesale markets, many kinds of vegetables are distributed to retail shops and finally to consumers (Fig. 1). In Japan, the central wholesale markets, which handle about 42% of total volume of marketed vegetables, play a central role in the price formation. The price fluctuations are larger in vegetables than in other types of agricultural products. The following are among the factors causing price fluctuations of vegetables (Fig. 2, Table 4):

- (1) Production of vegetables is influenced by the seasons as well as by the weather conditions, and the yield varies greatly due to abnormal weather and climate.
- (2) The planted acreage tends to increase or decrease as a result of the price fluctuations in the previous year. Furthermore, the instability in yield and price has resulted in unstable supply of vegetables.
- (3) Vegetables are, in general, highly perishable and difficult to be stored.
- (4) The demand for vegetables is not elastic.

2. Administration on Vegetables

For stabilizing the prices of vegetables, it is essential to stabilize their production and shipment in accordance with demand.

For this reason, the Government is taking the following measures under the Vegetable Production and Marketing Stabilization Law:

(1) Designation of Concentrated Producing Areas

The Government is encouraging to establish the concentrated vegetable producing areas where the production and marketing of vegetables are conducted in a more stable and better-organized manner to meet the demand in the big cities (Table 5).

- (i) The following are selected by the Government as designated vegetables because of their high levels of current consumption and expected demand increases in the future:

Cabbages, cucumbers, Japanese radishes ("daikon") onions, tomatoes, egg-plants, carrots, Welsh onions ("negi"), Chinese cabbages, lettuces and green peppers.

- (ii) The designated consuming areas specified by the Government are the following urban areas where the population is concentrated:

Area	Coverage	Population (in 1968)
Keihin Area	Tokyo, Kawasaki, Yokohama	14,248,000
Chukyo Area	Nagoya	2,018,000
Keihanshin Area	Kyoto, Osaka, Amagasaki, Kobe, Himeji	6,639,000
Kitakyushu Area	Kitakyushu, Fukuoka	1,915,000
Sapporo Area	Sapporo, Otaru	1,109,000

- (iii) The Ministry of Agriculture and Forestry publishes every two years the demand prospect of 5 years hence for the designated vegetables in the designated consuming areas.
- (iv) The concentrated producing areas to supply vegetables to the designated consuming areas are designated by the Government for each designated vegetable and for each period of marketing. The following are the requirements to be applied at the time of designation:

- a. The planted acreage should be expected to reach higher than a certain level.

In the case of an area to supply vegetables to Keihin Area, the level is 50 ha for cabbages, "daikon", onions, carrots, "negi", Chinese cabbages and lettuces, 25 ha for spring cucumbers, winter cucumbers, winter tomatoes and spring egg-plants, and 30 ha for summer and autumn cucumbers, summer and autumn tomatoes and summer and autumn egg-plants.

- b. The amount to be shipped to the designated consuming area should be expected to reach more than one half of the total shipment of the designated vegetables from that area.
- c. The co-operative marketing should be expected to reach more than two thirds of the total marketing.

(v) A co-ordinator is placed in each designated producing area to give intensive guidance to the producers.

(vi) The producing area designated by the Government is to establish a plan for modernizing production and marketing of vegetables within three years after the designation.

The Ministry of Agriculture and Forestry subsidizes one third of the costs of introducing production equipments for joint use and collection and shipment facilities to promote co-operative marketing according to this plan.

(2) Promotion of Well-planned Production & Marketing

In order to organize better-planned production and marketing in accordance with the prospected demand, conferences for each designated vegetable are held in each designated consuming area before planting and before marketing. Participants of the conference are wholesale receivers, representatives of producers organizations and national and local government officials. At the conference, the informations and views are exchanged and a necessary adjustment is made for production and marketing plans.

The Ministry of Agriculture and Forestry makes a daily survey of amounts of vegetables delivered and their prices at the central wholesale markets in 11 principal cities, and the

results of the survey is distributed throughout the country within the day by means of teletype, telex, and other.

(3) Price Compensation for Vegetables

The prices of vegetables are daily determined by the auction at the market. The Government makes no intervention in the formation of the prices of vegetables. However, when the average market prices of specified vegetables decline lower than a certain level for the whole period of marketing, some compensation are made to the producers under an established scheme. The Government supports and finances this compensation scheme.

3. Outline of Vegetable Price Compensation Scheme

(1) Aim of Price Compensation Scheme

The aim of the vegetable price compensation scheme is, when there is a marked decline in the price of principal vegetables, to alleviate bad influences upon the producers and to prevent a decrease in the planted acreage in the following year.

For this purpose, the Association of Vegetable Production and Marketing Stabilization Fund was established in 1966. The Association grants a compensation for the producer through its members when the market price of a vegetable declines below the specified level. At present the price compensation scheme covers the following six items of vegetables: onions, cabbages, Chinese cabbages, carrots, cucumbers, and "negi".

(2) Organization of the Association of Vegetable Production and Marketing Stabilization Fund

The Association of Vegetable Production and Marketing Stabilization Fund is an organization established voluntarily by the shippers of vegetables under the Vegetable Production and Marketing Stabilization Law.

The members of the Association are organizations, such as federations of agricultural co-operative unions, etc., which supply designated vegetables to the designated consuming area. The participation and withdrawal into and from the Association are free (Fig. 3).

(3) Operations of the Association of Vegetable Production and Marketing Stabilization Fund

(i) Raising of the Fund

The fund for grants of price compensations to producers is raised by the members, the Prefectures and the State. The allotments for the members and the Prefectures are 25% respectively and that for the State is 50% of the total fund.

(ii) Granting of Price Compensations

The compensations are granted to the producers through the members to which the producers entrusted the sales of their products, when the average sales prices of the specified vegetable decline below the guaranteed price level on the central wholesale markets in the designated consuming areas.

The guaranteed price level is fixed to three fourths of the weighted mean of the sales prices in the past years on the central wholesale markets of each designated consuming area.

The amount of a grant for price compensation to the producers is calculated by multiplying the unit value by the volume delivered to the market. (If the actually delivered volume exceeds the contracted volume to be compensated, the unit value is to be multiplied by the contracted volume.)

The unit value of the price compensation is decided to be equivalent to 80% of price differential between the guaranteed price and the average actual market price. (If the average sales price is lower than the minimum price level, the compensation does not cover this part. In other words, the unit value of price compensation covers only the differential down to the minimum price.)

The each member that receives a grant for compensation to the producers from the Association should promptly make compensation payment to the producers, who entrusted the sales of their products to it, on the basis of the entrusted volume (Fig. 4, Tables 6 & 7).

(iii) Compensation for Discarding at Farm Level

The current scheme of compensation does not cover those amounts which are not shipped to the market and those parts of prices which are lower than the minimum price level. In view of these defects, a new attempt is going

to be made. A certain amount of compensation (20% of the average market price in the past) is to be introduced on an experimental basis for discarding at farm level when such discarding is forced to be jointly made by producers' groups as a necessary and effective measure to restore the market price.

This measure, however, is not effective if a considerable amount of vegetables is shipped to the market by the groups other than members of the Association. For this reason, compensation for discarding is to be confined for the time being to summer and autumn cabbages, the shipment of which is best-organized by the members of the Association (Fig. 4).

Appendices

- Table 1 International Comparison of Per Capita Annual Consumption of Vegetables
- Table 2 Planted Acreage of Principal Vegetables
- Table 3 Production of Principal Vegetables
- Table 4 Trend of Wholesale Prices
- Table 5 Share of Designated Producing Areas to the Total Deliveries of Vegetables into Designated Consuming Areas (in 1967)
- Table 6 Division of Account for Price Compensation
- Table 7 The Amount of Price Compensations paid to Producers
-
- Fig. 1 Marketing Channels of Vegetables in Japan
- Fig. 2 Annual Fluctuations of Consumer Price Index
- Fig. 3 Organization of the Vegetable Price Compensation Scheme
- Fig. 4 Details of Vegetable Price Compensation Scheme

Table 1 International Comparison of Per Capita Annual Consumption of Vegetables

(in kg)

Crop Year	Canada	United States	Denmark	France	West Germany	Italy	Netherlands	Norway	Sweden	Switzerland	United Kingdom	Japan
60/61	74.7	98.7	68.1	146.1	50.4	139.5	69.0		29.2	70.3	60.9	106.5
61/62	73.9	98.0	64.9	139.4	50.0	141.3	71.2	38.1	30.5	79.0	57.4	100.0
62/63	81.7	96.5	66.2	136.8	48.0	135.1	69.5	35.7	30.2	76.4	56.6	110.1
63/64	69.4	98.0	68.0	136.8	53.4	141.5	73.7	38.5	31.5	79.3	60.5	119.4
64/65	73.4	97.2	63.3	132.1	51.1	149.1	70.6	34.4	34.2	77.8	61.4	111.3
65/66	79.7	97.8	54.4		50.8	151.2	63.3	36.5	35.5	77.1	59.7	116.5
66/67					56.5	155.7		38.7			61.5	122.5
												121.7

(Source) : OECD "Food Consumption Statistics 1954 - 1966", but the figures for Japan is based on "Food Balance Sheet".

Note : Above figures do not include tubers (potatoes, and sweet potatoes) and fruit-like vegetables (water melons, strawberries, melons, etc).

Table 2 Planted Acreage of Principal Vegetables

(Unit : in ha, Index : %)

Types of Vegetables	1965		1966		1967		1968		1969	
	Planted acreage	Index	Planted acreage	Index	Planted acreage	Index	Planted acreage	Index	Planted acreage	Index
Cabbages	43,000	100	44,500	103	44,300	103	45,900	107	45,300	105
Cucumbers	34,500	100	35,700	103	34,600	100	33,000	97	31,700	92
"Daikon"	98,400	100	97,200	99	91,200	93	90,700	92	86,500	88
Onions	33,600	100	34,600	103	32,500	97	32,700	97	33,200	99
Tomatoes	18,900	100	19,500	103	20,100	106	20,500	108	19,500	103
Chinese cabbages	49,600	100	50,700	102	49,000	99	50,600	102	49,500	100
Carrots	23,900	100	24,400	102	24,700	103	25,400	106	24,500	103
Green onions	29,500	100	29,400	100	28,800	98	29,000	98	28,000	95
Egg-plants	30,000	100	29,800	99	28,900	96	27,700	92	26,800	89
Spinaches	24,000	100	24,700	103	24,100	100	23,800	99	23,700	99
Lettuces	2,670	100	3,320	124	4,460	167	5,510	206	6,920	259
Green peppers	2,740	100	3,480	127	3,540	129	3,590	131	3,840	140
Total of (24 items)	600,660	100	607,670	101	589,860	98	585,970	98	571,690	95

Source: Crops Statistics, Ministry of Agriculture and Forestry.

Table 3 Production of Principal Vegetables

(Unit: tons, Index: %)

Types of Vegetables	1965		1966		1967		1968		1969	
	Crop	In- dex	Crop	In- dex	Crop	In- dex	Crop	In- dex	Crop	In- dex
Cabbages	1,157,000	100	1,291,000	112	1,321,100	114	1,501,000	130	1,474,000	127
Cucumbers	773,000	100	879,200	114	963,800	125	982,800	127	953,300	123
"Daikon"	3,085,000	100	3,037,000	98	2,889,000	94	3,095,000	100	2,951,000	96
Onions	859,600	100	1,032,000	120	938,000	109	1,029,000	120	1,105,000	129
Tomatoes	531,500	100	628,400	118	768,600	145	849,500	160	782,100	147
Chinese cabbages	1,541,000	100	1,607,000	104	1,621,000	105	1,867,000	121	1,867,000	121
Carrots	400,400	100	421,300	105	441,100	110	503,700	126	481,100	120
Green onions	568,300	100	593,300	104	603,200	106	638,500	112	618,200	109
Egg-plants	623,300	100	666,800	107	714,900	115	715,300	115	680,400	109
Spinaches	322,000	100	341,200	106	340,200	106	364,600	113	361,900	112
Lettuces	48,100	100	65,100	135	86,900	181	112,700	234	138,300	288
Green peppers	52,600	100	76,800	146	81,600	155	95,600	182	103,400	197
Total of (24 items)	9,961,800	100	10,639,100	107	10,769,400	108	11,754,700	118	11,515,700	114

Source: "Crops Statistics", Ministry of Agriculture & Forestry.

Table 4 Trend of Wholesale Prices (Tokyo Central Wholesale Market)

(Unit : yen/kg)

Type Year	Cabbages	Cucumbers	"Daikon"	Onions	Tomatoes	Chinese cabbages	Carrots	Green onions	Egg-plants	Lettuces	Green peppers	Average of all kinds of vegetables
1960	15	39	9	16	37	8	29	19	27	34	34	22
1961	21	54	12	29	45	15	22	36	35	47	46	29
1962	21	56	13	31	53	11	29	38	39	44	49	32
1963	18	62	13	41	56	10	21	32	43	49	53	34
1964	19	62	13	20	57	14	32	32	52	71	74	34
1965	24	76	16	38	75	14	46	47	66	61	98	43
1966	21	76	16	26	62	13	31	42	64	72	83	42
1967	30	81	22	53	72	18	39	55	58	81	95	51
1968	19	83	18	42	78	15	34	48	83	76	108	49
1969	26	97	20	21	92	11	45	45	103	91	146	55

(Source) : Annual Reports of Tokyo Central Wholesale Market.

Table 5 Share of Designated Producing Areas to the Total Deliveries of Vegetables into Designated Consuming Areas (in 1967)

Type	No. of areas of production	Sapporo	Keihin	Chukyo	Keihanshin	Kitakyushu	Total
		%	%	%	%	%	%
Cabbages	54	53	45	52	60	39	50
Tomatoes	77	77	44	51	45	45	46
Cucumbers	115	59	44	38	38	50	43
Chinese cabbages	65	76	57	81	72	67	63
Onions	50	60	89	89	96	95	90
"Daikon"	33	77	11	81	40	12	25
Carrots	51	37	78	62	53	58	68
Green onions	15	28	41	60	42	24	42
Egg-plants	22	41	29	23	16	21	24
Lettuces	29	74	65	64	69	48	65
Total	511	51	50	64	58	51	53

Table 6 Division of Account for Price Compensation

6-1

Type of Vegetable	Division of Account		Marketing Periods	Years to be Covered	Unit Amount of Fund Raising (yen per kg)	Guaranteed Price Level (yen per kg)	Minimum Price Level (yen per kg)
	Destination						
Spring cabbages	Keihin Area		Apr. 1 - May 10	Apr. 1, 1969 - May 10, 1971	8.55	27.50	16.81
Early summer cabbages	- ditto -		May 1 - June 30	May 1, 1970 - June 30, 1972	3.72	14.50	9.85
Summer and autumn cabbages	- ditto -		July 21 - Oct. 31	July 21, 1970 - Oct. 31, 1972	5.14	19.00	12.57
- ditto -	Keihanshin Area		- ditto -	- ditto -	6.37	24.00	16.04
- ditto -	Kitakyushu Area		Aug. 1 - Oct. 31	Aug. 1, 1970 - Oct. 31, 1972	7.30	27.50	18.38
Winter cabbages	Keihin Area		Nov. 1 - Dec. 31	Nov. 1, 1969 - Dec. 31, 1971	5.30	18.00	11.37
- ditto -	Chukyo Area		- ditto -	- ditto -	5.01	19.00	12.74
- ditto -	Keihanshin Area		- ditto -	- ditto -	4.82	20.50	14.48
- ditto -	Sapporo Area		Jan. 1 - Mar. 31	Jan. 1, 1970 - Mar. 31, 1972	7.88	23.00	13.15
- ditto -	Keihin Area		- ditto -	- ditto -	10.30	22.50	9.62
- ditto -	Chukyo Area		- ditto -	- ditto -	10.49	18.50	5.39
- ditto -	Keihanshin Area		- ditto -	- ditto -	10.30	19.50	6.63
- ditto -	Kitakyushu Area		- ditto -	Jan. 1, 1971 - Mar. 31, 1973	4.77	18.00	12.04
Summer and autumn cucumbers	Keihin Area		Jul. 1 - Sept. 30	Jul. 1, 1970 - Sept. 30, 1972	11.75	44.00	29.31

Division of Account		Destination	Marketing Periods	Years to be Covered	Unit Amount of Fund Raising (yen per kg)	Guaranteed Price Level (yen per kg)	Minimum Price Level (yen per kg)
Type of Vegetable	Marketing Periods						
Onions (delivered without cold storage)		Sapporo Area, Keihin Area, Chukyo Area, Keihanshin Area, and Kitakyushu Area	Apr. 1 - Apr. 30	Apr. 1, 1970 - Apr. 30, 1972	11.84	45.00	30.20
- ditto -		- ditto -	May 1 - Jun. 30	May 1, 1970 - Jun. 30, 1972	5.01	18.50	12.24
- ditto -		- ditto -	Jul. 1 - Oct. 31	Jul. 1, 1970 - Oct. 31, 1972	5.71	22.00	14.86
- ditto -		- ditto -	Nov. 1 - Mar. 31 next year	Nov. 1, 1970 - Mar. 31, 1973	12.11	45.50	30.36
Onions (delivered after cold storage)		- ditto -	- ditto -	- ditto -	10.02	37.50	24.98
Winter carrots		Keihin Area	Nov. 1 - Mar. 31 next year	Nov. 1, 1969 - Mar. 31, 1972	5.17	26.00	19.54
- ditto -		Keihanshin Area	- ditto -	- ditto -	4.10	31.50	26.38
Autumn and winter green onion		Keihin Area	Oct. 1 - Dec. 31	Oct. 1, 1970 - Dec. 31, 1972	10.03	38.00	25.46
- ditto -		- ditto -	Jan. 1 - Mar. 31	Jan. 1, 1971 - Mar. 31, 1973	9.04	34.50	23.20
Autumn and winter Chinese cabbage		- ditto -	Oct. 1 - Dec. 31	Oct. 1, 1966 - Dec. 31, 1970	3.22	10.00	5.40
- ditto -		Chukyo Area	- ditto -	Oct. 1, 1967 - Dec. 31, 1971	3.36	13.50	8.70
- ditto -		Keihanshin Area	- ditto -	- ditto -	4.76	16.00	9.20

Division of Account		Marketing Periods	Years to be Covered	Unit Amount of Fund Raising (yen per kg)	Guaranteed Price Level (yen per kg)	Minimum Price Level (yen per kg)
Type of Vegetable	Destination					
Autumn and winter Chinese cabbage	Kitakyushu Area	Oct. 1 - Dec. 31	Oct. 1, 1967 - Dec. 31, 1971	3.92	11.50	5.90
- ditto -	Sapporo Area	Jan. 1 - Mar. 31	Jan. 1, 1970 - Mar. 31, 1972	7.38	20.00	10.77
- ditto -	Keihin Area	- ditto -	Jan. 1, 1967 - Mar. 31, 1971	6.52	12.00	2.69
- ditto -	Chukyo Area	- ditto -	Jan. 1, 1968 - Mar. 31, 1972	7.98	13.00	1.60
- ditto -	Keihanshin Area	- ditto -	- ditto -	8.24	15.00	3.23
- ditto -	Kitakyushu Area	- ditto -	- ditto -	7.16	11.00	0.77

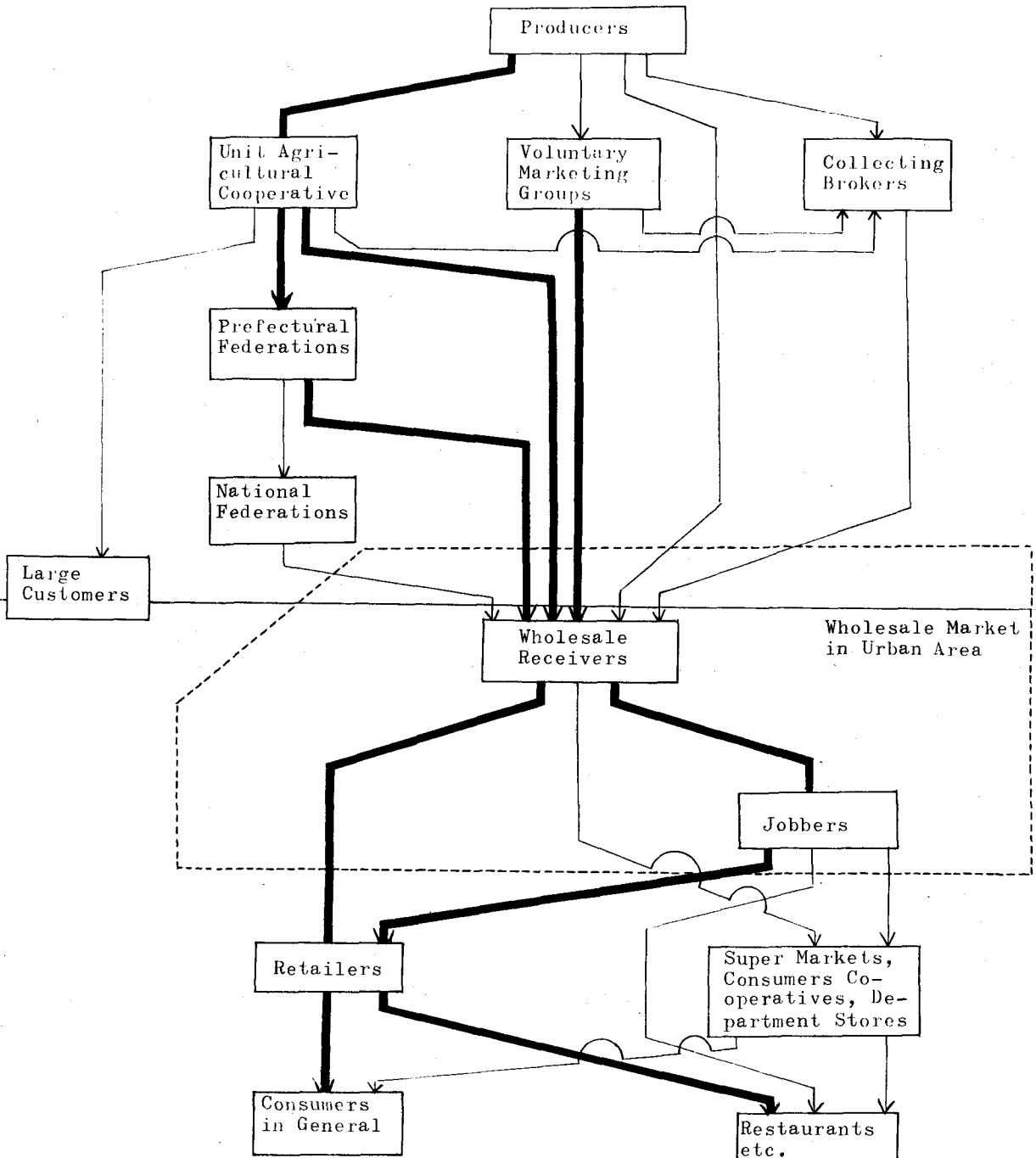
Table 7 The Amount of Price Compensations paid to Producers

(in thousands of yen)

Types of Vegetables	1968	1969	Total
1. Cabbages	269,957	16,143	286,100
2. Onions	200,672	159,435	360,107
3. Chinese cabbages	42,236	44,740	86,976
Total	512,865	220,318	733,183

Note : No compensation was granted in 1966 and 1967.

Fig. 1 Marketing Channels of Vegetables in Japan



Note : The bold line shows a major channel of marketing.

		1965 / 1960		1969 / 1965	
		Total	Vege- tables	Total	Vege- tables
Rate of rise		35.1	98.8	21.6	9.5
Rate of contri- bution to rise		100.0	8.0	100.0	1.5

— Total
 — Vegetables

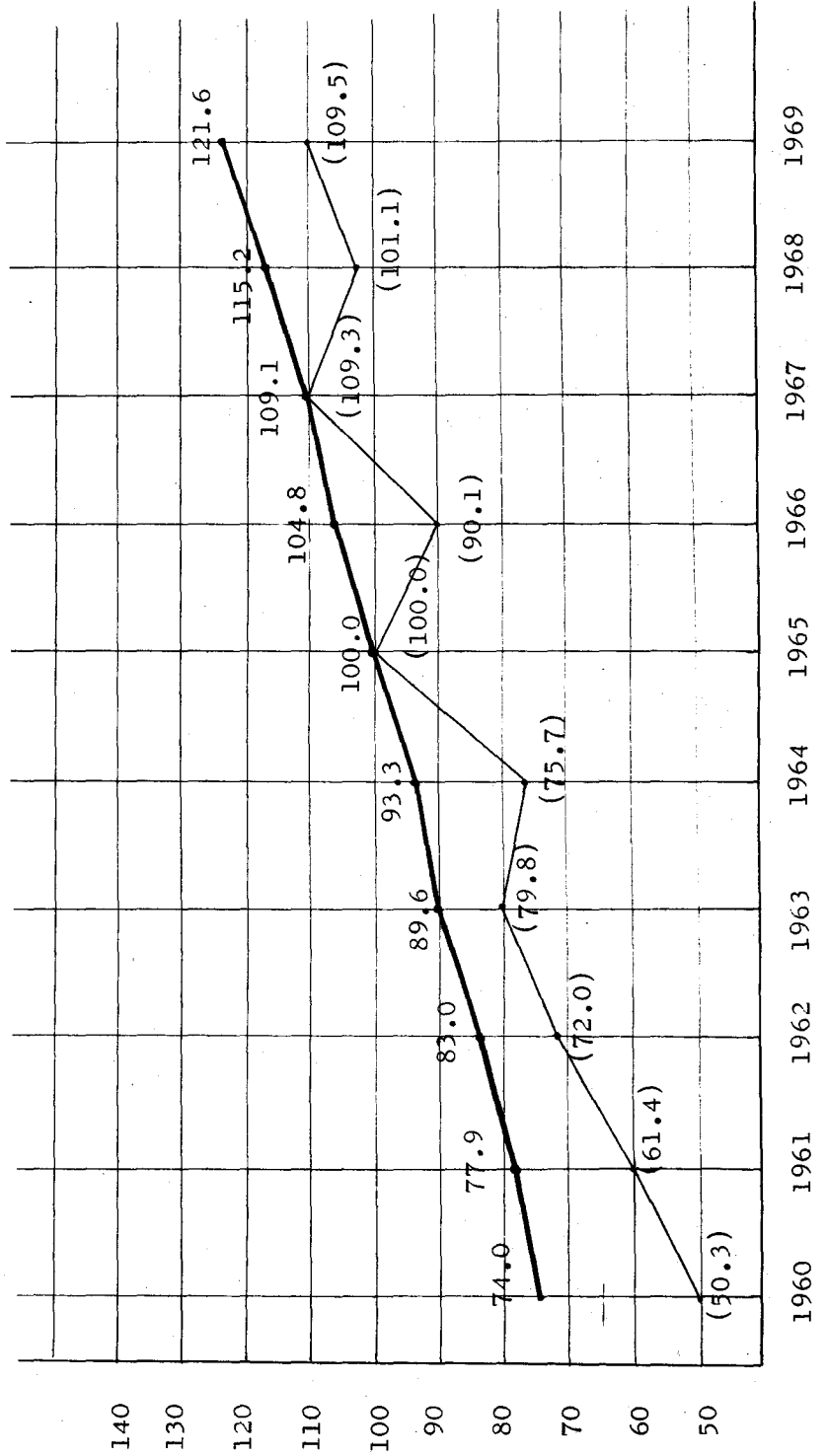
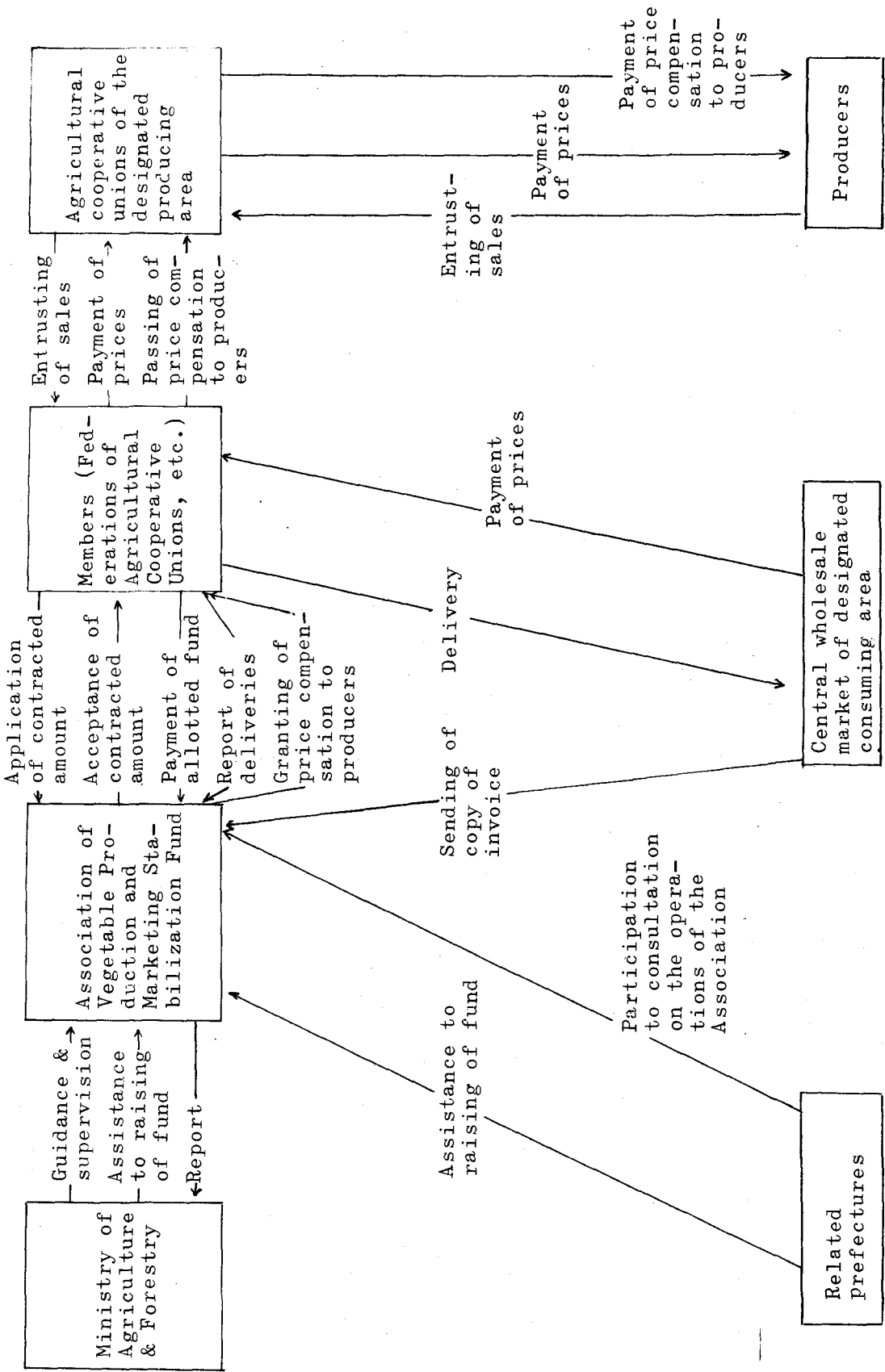


Fig. 3 Organization of the Vegetable Price Compensation Scheme



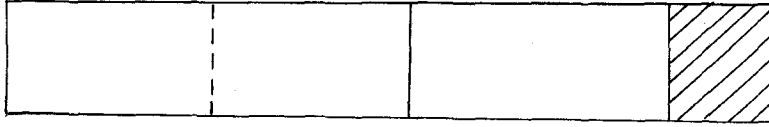
1. Vegetables for Which Price Compensation is Made :
Cabbages, onions, carrots, Chinese cabbages, cucumbers and "Negi".
2. Percentages of Share of Fund Raising:
State 50%, Prefectures and members 25% respectively.

(A) Average market price in the past (A)

(B) Guaranteed price level $((A) \times 3/4)$

(C) Minimum price level $((A) \times 1/2)$

(D) Compensation for discarding at farm level $((A) \times 2/10)$



(i) Ordinary Case :

amount of price compensation to producers
= volume of deliveries to the market x
(guaranteed level - market price) x 0.8

(ii) Special Case (when discarded at farm level):

amount of compensation to producers = volume
discarded at farm level x $((A) \times 2/10)$
(Confined to cases where certain requirements
are met).

WORKING PAPER

Session No. 16

COLLABORATION BETWEEN CONSUMERS COOPERATIVES AND AGRICULTURAL
COOPERATIVES

by

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REGIONAL SEMINAR ON MARKETING OF FRUITS AND VEGETABLES THROUGH COOPERATIVES

TOKYO JAPAN 17th to 27th MAY 1970

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NEW DELHI INDIACENTRAL UNION OF AGRICULTURAL COOPERATIVES
TOKYO JAPAN

COLLABORATION BETWEEN CONSUMER COOPERATIVES AND AGRICULTURAL COOPERATIVES

Shiro Futagami
Deputy Director
International Cooperative Alliance
New Delhi

Introduction

The need and importance of collaboration between consumer cooperatives and producer cooperatives have been discussed for quite some time and some attempts have also been made by several consumers cooperatives in Japan. I have no much achievement has been made so far.

However, the changes of socio-economic conditions and technical improvements in various fields in the recent years have necessitated the direct linkage between consumer and producer organisations.

Under such circumstances consumer cooperatives, agricultural and fishery cooperatives have given considerable thoughts to the development of direct collaboration between consumer and producers cooperatives and various achievements have been made though it is still in the initial trial stage. There are many problems yet to be solved for further systematic expansion of such mutual collaboration.

I am going to introduce some examples to show how and what attempts are being made in Japan with a view to develop the collaboration between consumers and producers cooperatives.

2. Present status of consumers and agricultural cooperatives in Japan

	Consumer coop societies			Agr. Coop Societies
	Community consumer societies	Employees consumer societies	Total	Multi-purpose societies
No. of societies	871	709	1,580	7,074
Membership (1000) (per society)	5,467 (10,595)	3846 (5845)	9,313 (7933)	7,061 (1014)
Share capital (million)			9,170	130,212
Supply (000000)	53,021	75,156	128,177	854,469
No. of societies surveyed (per society)	(336) (158)	(633) (119)	(969) (141)	(123) (123)
i. Foods			52,773	112,501
ii. Clothing			17,002	15,314
iii. Durable consumer goods			11,681	14,371
iv. Land and buildings			9,600	
v. L.P.Gas			-	12,239
vi. Others			37,121	41,377
vii. Farm requisites			-	633,113
Savings received				3,481,884
Loans advanced (000,000)				1,694,350
marketing (000,000) (fruits and vegetables)				1,903,337 (205,537)

3. Patterns of Operation

Since the direct transaction between consumers' and producers' cooperatives in Japan is still in initial stage and much depends upon the initiative of individual societies, the patterns adopted vary from society to society. However, it may largely be classified as follows:

- a. A consumers' cooperative society and a group of producers.
- b. A consumers' cooperative society and an agricultural cooperative society.
- c. A consumers cooperative society and several agricultural cooperative societies or their federations.
- d. A group of consumers cooperatives and an agricultural cooperative society or federations.

4. Examples of practical collaboration

A. Fukushima Consumers Cooperative Society

i. Outline of the Society

The society was established in 1932 with 50 members. The first store was opened in 1955 and the membership at that time was 1,143. The society had established four self-service stores by 1969 and membership increased up to 9,000. The amount of their share capital in 1969 was more than 40 million yen and its turnover in 1969 was 800 million yen.

ii. Direct supply of agricultural produce from agricultural cooperatives to the societies:

A. Grapes:

1. New Channel

Motozawa in Yamagata prefecture is one of the high quality grape growing areas. There are 253 grape growers who are holding 100 hectares of grape orchard. Motozawa agricultural cooperative society is serving to its 600 members including grape growers in this area.

Motozawa agricultural cooperative society made the first shipment of grapes to Fukushima consumers cooperative society in August 1968 and the volume of transaction between the two societies has considerably increased. Shipment of grapes by Motozawa agricultural cooperative is made in packages of one kg. each which makes handling easy for the consumer cooperative society.

Nada-Kobe Consumers Cooperative Society

a. Outline of the society

	Membership	share capital (Y 000)	Total amount of supply (Y 000,000)
1957-58	25,651	66,790	990
1962-63	53,291	331,590	4,530
1967-68	125,500	2,715,000	18,600
No. of employees		3,700	
No. of branch offices		26	
No. of stores		18 (most of the stores are super markets)	
Area covered		8 cities (20% of the total households in eight cities are members)	

b. Commodities purchased from producers cooperatives

Item	Supplier	Year of starting transaction	Value of purchase for 1969-70 (Y 000)	Note
Rice	Hyogo Pref. Economic Fed. of Agrl Coops	April 1951	534,049	
Noodle	"	July 1951	14,288	
Potato	Hiroshima Pref. Econ. Fed. of Agrl Coops	May 1954	25,000	
Scallions, Yam, Radish	Tottori Pref. Economic Fed. of Agrl Coops	Sept. 1968	2,000	Stopped in Sept 1969. Yam supplied by agrl. coops was the best quality even at Osaka central wholesale market. Brokers of the market informed Economic Federation that they will not accept their consignments if they continue to supply yam to consumers cooperative.

Onions, Melon	Hyogo Pref. Econ. Fed. of Agrl.Coops	1955	8,000	
Onion, potato, lettuce, apple oranges	Nishinomiya Fruit and Veg. Assorting Centre of Zenhanren	1963	42,000	Zenhanren packages with small bags
Potato	Hokuren (Hokkaido Pref.Econ.Fed)	Oct. 1967	6,000	
Lettuce, cabbage etc.	Nagano Prf. Econ. Federation	July 1969	8,000	Price is much cheaper than market price
Pickled plums	Wakayama Pref.Fed. of Fruits Growers Coops	Oct. 1968	3,000	Price is 10% less than market price
Grapes	Tojo-cho primary coop.	Aug 1968	2,800	All grapes procured by this society are supplied to the Nada Kobe Society
Apple (Kokko)	Hiraga Primary Agrl Coop	Oct 1968	2,500	
Pear	Tottori city Ag.Coop	Sept. 1969	2,500	
Mandarine Orange	Mikkabi Agrl.Coop	March 1970	14,500	
Beef	Zenhanren Osaka Branch	April 1961	577,900	Shipped from four prefectural economic federations.
Broiler chicken	"	April 1961	150,685	Shipped from Okayama Pref.Economic Fed.
	Hyogo Pref.Econo. Fed of Agrl Coops	March 1960	28,832	
Beans	Hokuren	April 1967	33,881	
Canned asparagas	"	June 1967	13,800	
Canned orange canned peach	Zenhanren Osaka Branch		15,539	
Fish meal	Hyogo Eco. Fed.	Nov. 1960	5,739	60% of retail price
Egg	"	1953	463,600	
	Zenhanren Kobe branch	1960	531,200	
Total			2,485,813	

C. Toyota Consumers Cooperative Society

1. Outline of the Society

The society was established in 1949 with the employees of Toyota Automobile manufacturing Company of which the number of employees is more than 30,000. The membership of the society has been extended to the employees of Toyota Transport Co, Toyota Concrete Co, Toyota Automobile Sales Co and some residents in the same area.

At the end of March 1968, the total membership of the society was 38,160 and the employees of the society was 1,500. The society has 18 branch offices and stores with total office and sales area of 20,000 sq. meters. The total turnover was about 6,800 million yen (about US \$ 19 millions)

One of the special features of the society is that the society was undertaking supply of meals to the factory workers. The society provides about 70,000 meals per day on an average. Out of 1500 employees of the society 600 are employed in this activity.

2. Need for Collaboration with Agricultural Cooperatives

It was quite a problem for this society to procure the raw materials for such a large quantity of meals. If the society buys the materials at the Nagoya Central wholesale market, the wholesale price will be very much raised. Therefore the society approached Toyota Agricultural Cooperative Society with a view to getting supply of agricultural produce at established prices. Toyota city municipal office also supported the linkage between the two societies and extended some subsidy to those farmers who grow crops on a planned basis to meet the requirements of the Toyota Consumers Society. During 1967-68 the Toyota Consumers Cooperative Society purchased agricultural products from Toyota agricultural cooperative society as follows:

Vegetables	¥ 15 million (13% increase against the previous year)
Meat	¥ 12 million (6% increase)
Egg	¥ 34.7 " (4% increase)
Noodles	¥ 13.8 million (41% increase)
Others	¥ 20 million "

This amount is about one sixth of the total amount of marketing of Toyota agricultural cooperative society. However, the Toyota agricultural cooperative society meets only 15% of vegetables required and 70% of eggs required by the Toyota Consumers Cooperative Society.

There is much scope for both the societies to increase the volume of transactions in the future.

D. ODATE Consumers' Cooperative Society

1. Supplier Farmers in Tarigoe Village in Akita Prefecture
2. Year of starting supply July 1969.
3. Method Contract farming. The society discusses with the group of farmers in the village before plantation and decides varieties, grades, quantities and seeds.
4. Commodities:

	Quantity	Purchase price	Consumer price of society	Retail price in market
Radish	18,000 pieces	¥ 13.50 /piece	¥ 15	¥ 20
Carrot	6,360 kg	30 / kg	50	70
Sweet carn	3,922 pieces	10 / piece	12	15
Welsh onion	2,820 bundles	10 / bundle	15	20
Beans	300 kg	75 / kg	90	120
garlic	4,475 pieces	15 / piece	18	23
Pumpkin	1,600 kg	30 / kg	50	80
Potato	2,000 kg	15 / kg	20	30

5. Problems

1. Quantity

As compared to the total volume of marketing of agricultural cooperatives, the quantity supplied to consumers cooperatives are still marginal. The volume of supply is yet to be increased in order to increase effectiveness of direct transactions.

2. Varieties:

Consumers cooperatives require variety of vegetables and other commodities throughout the year. To meet such requirements collaboration with many agricultural cooperatives in wider area or with their federations is needed.

3. Delivery schedule:

The delivery programme is to be carefully worked out especially in case of perishable items.

4. Pricing:

This is the most important and difficult problem. Various methods are now being tried by various cooperatives to solve this.

5. Packaging

The cost involved in packaging is closely related to the quantity of supply to the consumers' cooperatives.

6. Organisation:

The role of the federation in both parties - supplier and buyer - are yet to be improved.

7. Interference by the brokers:

Measures to be found in order to protect the suppliers from the disturbing interference of brokers of the wholesale markets.

Joint ICA-CUAC Seminar
May 17-27, 1970

Types of Personnel needed for Fruits and
Vegetable Marketing and Contents of Training
Programme for Marketing Personnel

Submitted by Mr. Yuzo Nomura
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Held at

The Institute for the Development of
Agricultural Cooperation in Asia
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THE REQUIRED TYPES OF PERSONS ENGAGED IN FRUIT
AND VEGETABLE MARKETING BUSINESS AND THE
CURRICULUM FOR TRAINING OF SUCH PERSONS

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1. The Required Types of Persons engaged in Fruit and Vegetable Marketing Business

The main distribution channels of fruits and vegetables in Japan can be illustrated in the following diagram:

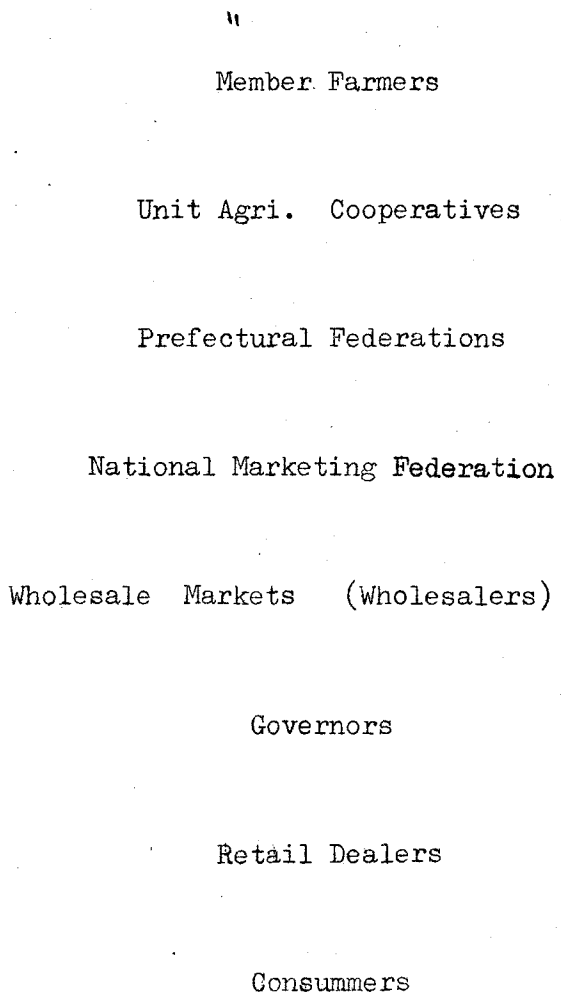


Diagram: Distribution Channels of Fruits and Vegetables

Wholesale markets are the places where the tradings between producers and consumers are carried on. Those who act as intermediaries for promoting the tradings in fruits and vegetables are known as "wholesalers". In the case of the agricultural cooperatives, therefore, persons who take charge of the business practices relating to the trades in fruits and vegetables are usually defined to mean the persons who "carry on the entire business ranging from the business to receive the fruits and vegetables from the member farmers through the business to convey them to the wholesalers at wholesale markets. Those who take charge of the trades in fruits and vegetables are, as shown clearly in the above diagram, the three types of cooperatives: unit agricultural co-operatives, prefectural federations of agricultural cooperatives and the National Federation of Agricultural Cooperatives.

Remark:

In the country like Holland, wholesale markets are managed generally by the producers' organizations. As the wholesale companies in Japan might be regarded as the operators of the markets under the management of the producers' organizations in Holland, Japan's wholesale companies in charge of the dealing in fruits and vegetables could also be included in the so-called persons in charge of the fruit and vegetable marketing business.

In the case of the agricultural cooperatives in Japan, those who take the charge of the fruit and vegetable marketing business are the aforesaid three level agricultural cooperatives, but the roles played by them vary, respectively.

The existing agricultural cooperatives in Japan have generally dealt in rice, wheat or barley in the main. They have possessed the striking feature in that they were, so to speak, the specialized agricultural cooperatives for

dealing in rice, wheat or barley. The reason for this could be found partly in that when the agricultural cooperatives deal in rice, wheat or barley, they could secure their financial stability, because, as rice, wheat or barley are kept under the Government direct control (while the livestock products, etc., are completely kept under free trade), the increased production of rice, wheat or barley has direct bearing on the increased farm income of the cooperatives' member farmers. As a result, cooperatives' business activities have been confined mainly to the increased production of rice, wheat or barley. In recent years, however, as great changes have been brought in the economic situations in Japan, farmers or farming enterprises and agricultural cooperatives are not permitted to depend merely upon rice, wheat or barley. Accordingly, in order to meet the changing situations, the systems for dealing in fruits, vegetables and livestock products have come to be improved and strengthened. In view of this, the agricultural cooperatives, some ten years ago, embarked on strengthening the trading system by promoting the campaign for forming the cooperative farming complex, etc. The main purport of this campaign is to bring all the activities from production to marketing under one management of the agricultural cooperatives. Thus the distributing and marketing activities have come to the front as an important integral part of the agricultural policy. In order to drive this campaign to the fullest extent, the persons well qualified therefor have become still more essential.

In the following captions, let us deal with the duties and roles to be performed by the persons in charge of the fruit and vegetable marketing business which are carried on by the agricultural cooperatives on the respective levels. In addition, we will refer to the leading knowledge and tech-

niques required to be acquired by them.

- (i) Persons in charge of the fruit and vegetable marketing business of unit agricultural cooperatives.

At present, the construction of unit agricultural cooperatives varies according to the kinds of the transacted farm crop items. Namely, in case of the unit cooperatives dealing in a number of crops, the sections taking charge of the business common to the respective crops (such as guidance section, purchasing section, marketing section, etc.) are set up, while in case of the unit cooperatives dealing mainly in the special products shipped from the respective producing centres, the sections taking charge of the business peculiar to each of the special products (e.g., fruit section, vegetable section, livestock section, rice-wheat-barley section, etc.) are set up generally so as to display the integrated functions from production to marketing of the respective special products. In such cases, due consideration is given so as to arrange the qualified persons suitable well for providing the integrated guidance in activities from production to marketing of the respective special products. In this case, the persons known as "cooperative farm advisors" are assigned to the post as leaders. Duties and roles played by them, and the knowledge and techniques needed to be acquired by them will be dealt with below, in turn.

Duties and Roles of Cooperative Farm Advisors

- o Selection of the key crops adapted well for the geographical setting in the respective areas;
- o Formation of key-crop producers' organizations;
- o Guidance in the production of key-crops, (preparation of unified cultural calendar, field guidance, etc.)

- o Establishment of the standards for the purpose of raising the commodity values;
- o Establishment of the inspection system;
- o Selection of markets to which the crops are shipped;
- o Establishment of a collecting and shipping system.

Knowledge and Techniques

- o Fruit and vegetable marketing theory;
- o Techniques for the production of key crops;
- o Knowledge of commodities relating to key crops and their production materials, and practical knowledge required for trading in key crops;
- o Practical knowledge of the related laws and regulations, taxation system, agricultural credits, etc.;
- o Knowledge of guiding principles and business practices for farm management (production cost survey, book-keeping, agricultural corporation, techniques for care-taking of available facilities, etc.);
- o Cultural and care-taking techniques for key crops;
- o Operation of the machinery and facilities;
- o Survey and analysis of the markets and mapping out of business plans;
- o Operation of farmers' organizations.

Business Practices

- o Establishment of the cropping plans;
- o Joint-purchase of necessary farm supplies;
- o Supply of seeds, production materials, etc.;
- o Holding of field study meetings, and itinerant guidance;
- o Preparation of written consignment contracts for shipping and marketing of

crops;

- o Study and examination of the markets for which the crops are destined;
- o Holding of preliminary meetings for the shipment of crops;
- o Holding of preliminary meetings for the joint-assortment of fruits and vegetables;
- o Holding of meetings for review on the past shipment achievements.

(ii) Persons in charge of the fruit and vegetable marketing business of prefectural federations of agricultural cooperatives.

Among the persons in charge of the fruit and vegetable marketing business of prefectural federations of agricultural cooperatives are included various groups: the persons attached to the prefectural federation's branch offices set up in countries or cities; the persons who are stationed at the markets established in the main consuming centres; and the persons who are attached to the head office of each prefectural federation of agricultural cooperatives.

The duties and roles to be played by them and the knowledge and techniques to be acquired by them will be described below.

Duties and Roles

- o Unification of the prefecture level standards and brand names of the crops to be shipped to markets;
- o Selection and designation of the main markets to which the crops are shipped;
- o Coordination of the collection and distribution of the crops;
- o Business practices for the collection and shipment of crops;

- o Application of a pool accounting system;
- o Organization and management of conferences.

Knowledge and Techniques

- o Fruit and vegetable marketing theory;
- o Changing trends of the production and distribution of fruits and vegetables;
- o Knowledge of fruits and vegetables as commodities;
- o Knowledge of the transportation and conveyance of fruits and vegetables;
- o Knowledge of the related laws and regulations taxation system, and agricultural credits;
- o Survey and analysis of the markets, and preparation of business plans;
- o Business practices for the transaction;
- o Techniques for book-keeping and accounting.

(iii) Persons in charge of the fruits and vegetable marketing business of the National Federation of Agricultural Cooperatives.

The persons attached to the National Federation must regulate the shipment of fruits and vegetables from the nation-wide viewpoint, and they ought to make efforts to secure the expansion of outlets for fruits and vegetables with a view to increasing their consumption in the future.

Duties and Roles

- o Investigation of the credit standings of the main customers;
- o Designation of specific receiving agencies;
- o Survey of demand-supply situations, and the offer of the market information to prefectural federations and the like;
- o Nation-wide coordination of the shipment;

- o Unification of the national level standards and brand names;
- o Exploitation of new markets and expansion of export trade;
- o Publicity of fruit and vegetable consumption.

Knowledge and Techniques

- o Theory of trades in agricultural and livestock products;
- o Trends of Japan's economic movements;
- o Mathematical statistics;
- o Accounting;
- o Knowledge of commodities;
- o Knowledge of transportation and conveyance;
- o Knowledge of exportation and importation;
- o Survey and analysis of the markets and the preparation of business plans;
- o Business practices for trading;
- o Steering of conferences.

2. Types of Training Projects now in Practice in Japan.

Trainings now in practice in Japan can be divided roughly into types as follows:

Type 1. Trainings practised under the system of a training course (or a short course). Under this system, lectures are given by lecturers to a goodly number of participants (generally 40 to 50 participants to a maximum) in a lecture hall. Following the regular lectures, question-and-answer services or mutual discussions are practised.

Type 2. Practical business training system. Under this system, one or more trainees stay for a relatively long time in some other developed areas in the

country in order to learn the business practices from their own experience. This system makes a special feature of training in that it enables the trainee to acquire the business practices from their own experience, while Type 1 training system has for its object to learn The Theory rather than business practices.

In the following captions, let us introduce the training projects now practised under the auspices of the agricultural cooperatives on the respective levels.

(1) Self-trainings practised at unit cooperatives

For the purpose of training the persons in charge of the fruit and vegetable marketing business of the respective unit cooperatives, the trainees are usually sent out to stay for a long time at some other developed areas in the country so that they may enable them to take the training in business practices; or the trainees are sent on the short study-trips to acquire the knowledge available for their business practices. In other cases, almost all the persons take self-trainings in business practices from their own experience while working at their unit cooperative offices. However, in case of some large-scaled unit cooperatives having a fairly great deal of farm advisors engaged in the fruit and vegetable marketing business, training courses are sometimes held by inviting the lecturers. In such case, however, it is usual that the participants in the training courses are the growers of key crops.

(2) Training practices sponsored by prefectural unions or federations of agricultural cooperatives.

Training courses are held at least two or three times a year under

the auspices of each prefectural union or federation. In such cases, the participants are composed of unit cooperatives' farm advisors, etc. (i.e., the persons in charge of the production and marketing of fruits and vegetables). The duration of a training course lasts mostly for one week or less, and in the majority are three-day courses.

Among the training courses are included various ones which are taken up according to the study projects; e.g., fruit course, vegetable course, fruit-tree course, house-cultured-cucumber course, Shiitake mushroom course, citrus fruit course, etc.

Among the subject-matters of curriculum are included various items: fundamental studies of soil and fertilizers, cultural methods of key crops, consumption trends viewed from the fruit and vegetable marketing business, business practices for fruit and vegetable marketing, the formation of the main producing centres, or the promotion of expansion of cooperative farming complex from the standpoint of agricultural cooperatives.

In some prefectures, training courses are divided into two types: primer course for beginners; and specialized course for seniors. Many a specialized federation of agricultural cooperatives hold the training courses or short courses mainly for the training in the production of citrus fruits at relatively brief intervals.

(3) Training practices sponsored by the Central Union or the National Federation of Agricultural Cooperatives.

Training courses held under the auspices of the Central Union or the National Federation are divided into three types as described below.

Type 1. Training course held for the benefit of the persons attached to the

prefectural unions or federations by calling them in a lecture hall.

Type 2. Training course held under the auspices of a branch office of the National Federation for the benefit of the persons attached to the prefectural federations within the areas under the charge of the branch office.

Type 3. Training course held under the auspices of the Central Union or the National Federation for the benefit of the persons attached to such unit cooperatives as model cooperative farming complex or the selected unit cooperatives.

Training courses are held sometimes under the auspices of a single agency, or under the auspices of the National Fruit and Vegetable Countermeasure Coordination Office (composed of national level agencies), or sometimes held under the joint-auspices between the Central Union or the National Federation and the Regional Agricultural Administration Bureau of the Ministry of Agriculture and Forestry.

Appendix: Model Training Courses and Their Curriculum.

Two model cases are shown below as the typical training courses:

(1) Training course held for the benefit of the farm advisors in the designated vegetable producing centres under the joint-auspices between the Kanto Agricultural Administration Bureau of the Ministry of Agriculture and Forestry and the Tokyo Branch Office of the National Marketing Federation of Agricultural Cooperatives;

(2) The training course held for the benefit of the farm advisors attached to the cooperative farming complex under the auspices of the National Fruit and Vegetable Countermeasure Coordination Office established by the Central Union

and the National Federation of Agricultural Cooperatives.

Model 1. The Training Course held in Fiscal 1969 for the Farm Advisors in the Designated Vegetable Producing Centres.

1. Purpose:

This training course is held basing upon the synopsis of implementation of the project for development of the designated vegetable producing centres. The training course has for its object to give the training in the production and marketing of vegetables to the farm advisors in the designated vegetable producing centres, thus promoting the qualifications of the farm advisors in the designated vegetable producing centres and strengthening their guidance activities in the producing centres.

2. Participants eligible for the training course:

The persons eligible for participation in this project are confined to those who are the farm advisors in the designated vegetable producing centres in the prefectures under the charge of the Kanto and Tohoku Agricultural Administration Bureaus as well as in Hokkaido Province, and those who are recommended by the governors of the aforesaid prefectures and Hokkaido Province.

3. Duration of training course:

The training course lasts for six days from October 27 to November 1, 1969.

4. Training place:

The Agricultural Cooperative Education Centre in Kanagawa Prefecture.

5. Study-items:

Refer to the Schedule as shown in Accompanying Table 1.

6. Lodging and fees:

Lodging: All the participants are to lodge together in the Education Centre during the period of six days.

Fees: Per-capita fees of ¥9,000 are charged, including lodging and boarding fees, study materials fees, field trip expenses and sundry expenses.

7. Personal effects:

(i) Note-taking goods, washbowl, health insurance card, etc.

(ii) Card which identifies himself to be a farm advisor in the designated vegetable producing centre.

Accompanying Table 1

Schedule for the Training Course in Fiscal 1969 held for the Benefit of the Farm Advisors in the Designated Vegetable Producing Centres.

Monday, October 27

11:00 - 12:00 Registration.

12:00 - 13:00 Lunch.

13:00 - 14:00 Opening Session

14:20 - 16:30 Lecture on the promotion of over-all agricultural administration policy and on the promotion of the measures for vegetable production.

Question and Answer services.

17:45 - 18:15 Dinner.

18:00 - Social Meeting.

Tuesday, October 28

8:30 - 10:00 Lecture on the horticulture in Kanagawa Prefecture.

- 10:15 - 17:00 Group discussions on the technical problems how to grow vegetables in the vegetable producing centres and their solution, according to crop items and growing types. Under moderators (4): vegetable experts at the Experiment Station.
- 12:00 - 13:00 Lunch.
- 17:45 - 18:15 Dinner
- 18:30 - 20:00 Exchanges of information on vegetable production in the respective producing centres.

Wednesday, October 29.

- 8:30 - 10:30 Lecture on the "Law for Agricultural Promotion Area" and on the "City Planning Law". Question and answer services.
- 10:40 - 12:10 Lecture on the joint-shipment of vegetables and the vegetable price formation.
- 12:00 - 13:00 Lunch.
- 13:00 - 17:00 Discussions on the furtherance of a joint marketing system, and the points at issue. Under the moderator, 3 or 4 reports are made.
- 17:45 - 18:15 Dinner.
- 18:00 - 20:30 Movies,

Thursday, October 30

- 8:30 - 17:00 Field discussions at Fujisawa and Miura in Kanagawa Prefecture.
- 12:00 - 13:00 Lunch.
- 17:45 - 18:15 Dinner.

Friday, October 31

- 8:30 - 10:30 Lecture on the joint-shipment of vegetables and the use of an electronic computer.
- 10:40 - 12:00 Discussions on the above.
- 12:00 - 13:00 Lunch.
- 13:00 - 15:00 Lecture on the formula for vegetable price stabilization and the problems related to vegetable marketing.
- 15:10 - 17:00 Report on the Collection and Delivery Centre in the 11th month since its auguration.
- 17:45 - 18:15 Dinner.

Not later
than 21:00 Presentation of reply to the questionnaire relating to the
participants' views on this training course.

Saturday, November 1

- 8:30 - 11:30 Discussions on the right orientation in the farm advisors'
activities in the designated vegetable producing centers.
Reporters: 3 or 4 persons.
- 11:40 - 12:20 Closing Session.
- 12:20 - 13:00 Lunch.
- 13:00 Adjournment.

Model 2. The Fruit and Vegetable Training Course held for the Farm Advisors
in the Cooperative Farming Complex.

1. Purpose:

This training course has for its object to secure the improvements
in the expert knowledge and ability of the farm advisors in the cooperative
farming complex, with a view to expediting the steady development of the co-
operative farming complex basing upon the underlying principles for driving
the agricultural basic conception.

2. Participants:

The persons eligible for the participation in this training course
are, as a rule, confined to the farm advisors (persons of unit cooperatives,
the Central Union or the National Federation) in the prefectural model co-
operative farming complex which have been established by the respective
prefectural headquarters for driving the agricultural basic conception, as
well as to such applicants for farm advisors (persons of the Central Union

or the National Federation) who are recommended by the respective prefectural headquarters. Besides the above, the persons (attached to the Central Union or the National Federation) who are recommended by the prefectural driving headquarters may also be permitted to participate in this training project.

3. Duration of training course:

This training course lasts for six days from October 20 to 25, 1969.

4. Training place:

The Agricultural Technical Centre of the National Purchasing Federation of Agricultural Cooperatives at Hiratsuka City in Kanagawa Prefecture.

5. Study items:

Refer to the Schedule as shown in Accompanying Table 2.

6. Fees:

Per-capita fees of ¥8,000 are charged, including lodging and boarding fees, study materials fees, etc.

7. Number of participants:

40 persons or less. Application is accepted in order of arrival, but as soon as it has reached 40, the application will be closed.

8. Application for participation:

(i) Send the application to the Central Union of Agricultural Cooperatives on filling up the Application Card and the Table for showing the outline of the cooperative farming complex to which the applicant is attached.

(ii) Send the application not later than October 15, 1969.

9. Other matters:

(i) Participants must pay extra for the lodging before or after the train-

ing period;

- (ii) Participants must arrange by themselves to get the return trip tickets;
- (iii) Participants are requested to bring the available data covering the activities of the cooperative farming complex or in the prefecture which may serve as reference data at the time of mutual discussions;
- (iv) Participants are asked to bring their health insurance cards, slippers, washbowls, note-taking goods, etc.

Accompanying Table 2.

Schedule for Specialized Training Course for Farm Advisors attached to the Cooperative Farming Complex.

Monday, October 20

- 9:30 - 10:30 Registration; Opening Session.
- 10:30 - 12:00 Lecture on the agricultural basic conception and the cooperative farming complex.
By the Director of the Farming Administration Division of the Central Union.
- 12:00 - 13:00 Lunch.
- 13:00 - 14:00 Photographing in remembrance; and looking into the Agricultural Technical Centre.
- 14:00 - 15:30 Lecture on the present situations and the problems of fruit and vegetable growing complex. By the officer of the Farming Administration Division of the Central Union.
- 15:30 - 17:00 Introduction of each participant himself and brief report on his cooperative farming complex.
- 17:00 - Social meeting.

Tuesday, October 21

- 9:00 - 12:00 Lecture on the formation of producers' organizations. By the Chief of the Marketing Adjustment Research Office of the National Institute of Agricultural Sciences, Ministry of Agriculture and Forestry.
- 12:00 - 13:00 Lunch.
- 13:00 - 16:00 Reports on the formation and operation of producers' organizations, by crop items:
- (i) The Agricultural Cooperative, Sosha City, Okayama Prefecture;
 - (ii) The Nampo Agricultural Cooperative, Matsuzaka City, Mie Prefecture.
- 16:00 - 17:00 Mutual discussions under a moderator.

Wednesday, October 22

- 9:00 - 12:00 Lecture on the matters to be taken into consideration for the establishment and operation of fruit and vegetable assorting facilities. By the Technical Research Officer, the Farm Machinery Division, the National Marketing Federation of Agricultural Cooperations.
- 12:00 - 13:00 Lunch.
- 13:00 - 16:00 Reports on the operation of the key facilities for cooperative farming complex:
- (i) The Agricultural Cooperatives, Yaizu City, Shizuoka Prefecture.
 - (ii) Yanai Horticultural Business Office of the Yamaguchi

Prefectural Economic Federation.

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16:00 - 17:00 Mutual discussions under the moderator.

Thursday, October 23

9:00 - 12:00 Lecture on the measures for reduction in production cost. By the Professor at Shizuoka University.

12:00 - 13:00 Lunch.

13:00 - 15:30 Lecture on recent trends of horticultural techniques. By the Director of the Horticultural Experiment Station, Ministry of Agriculture and Forestry.

15:30 - 17:00 Visiting to the Horticultural Experiment Station.

Friday, October 24

9:00 - 12:00 Lecture on the actual status of fruit and vegetable marketing and the points at issue. By the Research Worker of the National Agricultural Research Institute.

12:00 - 13:00 Lunch.

13:00 - 14:30 Lecture on the current status of fruit and vegetable marketing activities and the points at issue. By the Deputy-Director of the Fruit and Vegetable Division, the National Marketing Federation of Agricultural Cooperatives.

14:30 - 17:30 Mutual discussions. Moderator: The National Fruit and Vegetable Counter-measure Coordination Office.

Saturday, October 25

9:00 - 10:30 Report on the recent trends of demand for fruits and vegetables viewed from the standpoints of super market stores, By The Maru-ichi Food Company, Ltd., Tokyo.

- 10:30 - 12:00 Report on the trends of food processing business. By Japan Canned-Food Association.
- 12:00 - 12:30 Closing Session
- 12:00 - 13:00 Lunch; Adjournment.

3. Due Considerations to be given to the Training Project.

(1) Training course (or short course)

For the purpose of attaining the full success in the project of a training course, it is important to show clearly its object. Along the line of the established object, suitable participants must be picked up and the curriculum must be compiled carefully. In case where its object is to provide general knowhow of the fruit and vegetable marketing business to the newly-appointed persons, they can be trained in a fruit and vegetable course, but such general course is not suited well for the training of a fairly much experienced persons.

In case where the training course has for its object to provide a higher level of specialized knowledge, the persons eligible for the participation in the training course will become decreased. It is preferable to raise the level of curriculum according to the ability of trainees so as to offer a general course to beginners and a specialized course to a fairly much experienced persons (it is advised that the curriculum level should be raised for instance, from a fruit and vegetable course to a vegetable course, or from a fruit-tree course to a fruit and vegetable course and to a citrus fruit course, and then to an apple course).

Persons eligible for the participation in the training course must

be selected carefully so as to pick up the participants having almost the same ability. It must be strictly avoided to train collectively the persons different in ability. (Take care not to train the first-year elementary school boys and the graduate students inclusive).

Attention must also be paid so that the curriculum may be compiled by combining these items: purely theoretical items; items derived from the practical experience in some other developed areas; up-to-date topics or any good ideas; mutual discussions among the participants; etc.

Study items must be combined carefully by giving due consideration to the participants' experience. In case of the training of beginners, the curriculum should be composed chiefly of lectures on the fundamental theory or on the business practices, while in case of the training of a fairly much experienced persons, it is preferable to give priority to the high level specialized theory or business practices, as well as to the mutual discussions among the participants.

Besides, depending upon the circumstances, visitings are desired to be arranged. Such arrangements will also contribute much to the training project.

(2) Long-term training project (Studying in other developed areas in the country).

In case of a long-term training project, a trainee is sent out to some agricultural cooperatives and the like in other developed areas within the country, but it is almost next to impossible for the agricultural cooperative in charge of the training of the person under care to train him from morning till night, because the cooperative is pressed with its own daily

business. As a result, one who sends out a trainee is required beforehand to make arrangements so as to make the trainee fully aware of the object for which he is sent out, and to make him map out a plan for his study project and to give any required advices on his plan. Moreover, during his study period, he is encouraged to keep a diary of his study project and to present his study reports to his cooperative at one or two week intervals.

Background Paper
CEYLON

MARKETING OF VEGETABLES AND FRUITS THROUGH COOPERATIVES IN CEYLON

by

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Deputy Commissioner for Coop Development
Colombo.

REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH
COOPERATIVES", TOKYO. JAPAN. 17th to 27th MAY 1970

Jointly organised by:

INTERNATIONAL COOPERATIVE ALLIANCE
NEW DELHI.
INDIA.

INSTITUTE FOR THE DEVELOPMENT OF
AGRICULTURAL COOPERATION IN ASIA
TOKYO. JAPAN.

COUNTRY STATEMENT - CEYLONPresented by H. WickramasingheMarketing of Vegetables and Fruits through Co-operatives in Ceylon

Supply of services and inputs through co-operatives for vegetable production, and marketing of the produce through co-operatives is given an important place in the Ceylon Government's Five-Year Agricultural Development Programme. Programmes of seasonal cultivation are prepared by the primary societies (Multi-Purpose Co-operative Societies) in the chief vegetable-growing areas wherein estimates of requirements of fertilizer, credit and other inputs and the probable acreages with such inputs would serve to cultivate are prepared and incorporated in the Agricultural Development Proposals. The cultivation seasons during an year are 'Maha' - October to March and 'Yala' - April to September. By and large the estimates posited in the Agricultural Development Plan for the supply of inputs and services through co-operatives for vegetable production, have been realised.

Financial assistance for cultivation by way of loan facilities are obtained by co-operative societies from the People's Bank. Of the Island's total imports of vegetable seed about 40 per cent is distributed to producers through co-operative societies. The co-operative societies also channel fertilizers and agro-chemicals to producers.

The primary level co-operative societies involved in the marketing of vegetables and fruits are 270. The membership in these societies consists of about 25,000 vegetable cultivators. It is estimated that a total acreage of approximately 15,000 is cultivated by this membership in the 270 societies. Almost all these societies are affiliated to the Ceylon Agricultural Producers Co-operative Societies Union Limited (established in 1961) which provides the following services.

- 1) The supply of fertilizer, seed and other agricultural requisites to the primary societies.
- 2) The collection and transport of vegetables from societies to the Co-operative Central Market in Colombo and its branches.
- 3) The sale of such produce.

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- 4) The sale of other agricultural produce such as arecanut, coffee, pepper etc., consigned to the Union.

This Union operates four wholesale markets, two in the City of Colombo and two in the Provincial Towns of Kurunegala and Kandy. It also operates four retail selling points in Colombo and two in the Kandy and Matale Districts. It has also resorted to sale of consumer packs weighing between three to four pounds. The Ceylon Agricultural Producers' Co-operative Societies Union Limited is administered by a Board of Management consisting of members elected from the primary societies at the Annual General Meeting. Three Board Members, however, are nominated by the Commissioner of Co-operative Development to make a total of 12. A summary of the structure of the Union is as follows:

- (1) Head Office)
- (2) Chief Wholesale Market)
- (3) Seed and Fertilizer Department) At Colombo
- (4) Empties Supply Department) Co-operative Central
- (5) Transport Department) Market
- (6) Branch Depots at:-

 - a) Bandarawela
 - b) Nuwara Eliya
 - c) Kandy
 - d) Uva Paranagama

- (7) Outstation Wholesale Depots at:-

 - a) Kirillapone
 - b) Kurunegala
 - c) Kandy

- (8) Three Retail Depots in Colombo and one at Kandy.

Apart from the above Union, co-operative marketing of vegetables and fruits is engaged in by a large primary society in the chief vegetable producing area of Ceylon, namely, the Udapalatha Co-operative Agricultural Production and Sales Society, which was a pioneer society in the field of co-operative marketing of vegetables and fruits. This society markets its members' produce in a stall which it operates in the Colombo Municipal Market, commonly known as "New Market", through the Producers' Union, a stall in the Amparai District and sales by van and lorry in the Polonnaruwa and Trincomalee Districts. There being hardly any involvement at the secondary level in marketing of vegetables and fruits, the marketing activities of; a) The Ceylon Agricultural

Producers' Societies Union, and b) The Udapalatha Co-operative Agricultural Production and Sales Society, have to be reckoned with in any assessment of co-operative marketing of fruits and vegetables in Ceylon. Taking into consideration statistics of produce marketed through these two organisations, it is seen that in the last few years there has been a steady increase in the quantum of vegetables and fruits marketed through these two co-operative organisations. The total poundage of vegetables marketed through these two organisations are as follows:-

1966	-	9,755,747
1967	-	10,810,767
1968	-	11,139,387
1969	-	10,032,570 (Figures not complete)

However, one cannot be too complacent on this score when one considers the fact that the total marketing potential in the areas of operation of the societies in the membership of the Producers' Union is between 40,000 to 55,000 tons of vegetables per annum. It is estimated that only about 16 per cent of the total production of this membership is marketed through co-operative channels. While about ten per cent of the vegetables produced is needed for local consumption, about 65 per cent to 70 per cent of the total production in the chief vegetable-growing areas is marketed through commission agents who purchase on a consignment basis and to lorry traders doing a shuttle service between principal producer areas and consumer areas - (these traders purchasing for cash outright). The commission agents are centred mainly in Colombo and Kandy while the lorry traders have direct communications between other important towns. The quantity of fruits marketed by the co-operative organisations - (the Producers' Union and the Udapalatha Co-operative Agricultural Production and Sales Society), is estimated to be between 25 - 30 tons. The chief varieties are plantains (bananas), pineapple, papaw and pears. A much larger proportion of the fruits produced however, is bought by the Ceylon Marketing Department at its canning factory in Colombo for the preparation of jams, jellies, juices, cordials, creams and tinned fruits, for local consumption as well as for export. A number of private industrialists too have begun processing of fruits for export.

The marketing of vegetables and fruits through co-operatives has presented several problem-areas which have been consistently under study both by the co-operative organisations involved, by the Co-operative Department and the Ministry of Agriculture and Food. These are briefly referred to below:-

a) Management

It is well known that management in co-operatives at primary levels has been an important problem-area. In fact this is a problem even at the apex level, i.e. at the level of the Producers' Union itself. It is generally felt that since the vegetable trade has so far yielded comparatively lower profits than those accumulated in other trades, it does not attract men of better calibre and management ability. The damage done to the popularity of co-operative marketing by one fraudulent transaction of, say, a Collection Centre Manager being made public, is incalculable. In fact it is to strengthen management that the Commissioner of Co-operative Development has released three officers of his Inspectorate at present to the Head Office of the Producers' Union for accounting and secretarial duties.

b) Pricing

A related problem is that of weaknesses in pricing. Loyalty of members in regard to co-operative marketing of vegetables and fruits, as indeed that in other commodity or activity, today has to be built around solid economic benefits in the way of better prices and other advantages than those offered by the private trader. Although pilot studies have shown that pricing by co-operative organisations has over a period been more favourable than that of the private trader, even isolated instances of a lower price being paid by a co-operative as compared with that paid by a private trader would receive much publicity among the producer-membership itself and be taken advantage of by the private traders to paint a gloomy image of co-operative pricing. It is in this context that well-planned and adequate extension work and publicity becomes the most essential instrument in expanding co-operative marketing of fruits and vegetables.

c) Extension and Publicity

In Ceylon today the district level administrative personnel have been involved in the expansion and improvement of cultivation of paddy and other field crops. The Government Agent who is the chief administrative authority in a district co-ordinates the Development Programme. It is strongly felt that the same attention must now be paid in regard to vegetable and fruit production, and this has been decided upon in principle by the Ministry of Agriculture and Food. Today extension and publicity work in connection with vegetable and fruit production and marketing has

to be carried out by a small number of Co-operative Inspectors (termed Vegetable Liaison Officers) and Instructors of the Department of Agriculture. More vigorous and effective extension and publicity services have been planned for by the Ministry of Agriculture and Food and these are to be implemented shortly.

d) Role of the Secondary Organisations

The secondary organisations namely, the Multi-Purpose Co-operative Society Unions, have so far not played any significant role in the marketing of vegetables and fruits. Two reasons have been adduced for this.

- 1) That they are generally satisfied with engaging in the traditional trade in transportation and distribution of rationed goods - (rice, flour and sugar) and consumer goods.
- 2) The local collection of vegetables is not always a profitable business and that they generally will not undertake this because of its attendant risks.

Although several attempts have been made to encourage and induce the secondary organisations to participate in vegetable and fruit marketing, not much success has been achieved in this regard. It is hoped that a few secondary unions will very soon take up this activity.

e) Problems of the Ceylon Agricultural Producers Co-operative Societies Union Limited

As stated above problems of management have affected the above Union too. The union today is allowed to charge a commission of five per cent on vegetables marketed by it. The primary societies in turn charge a commission of between three to five per cent so that the producer ultimately has to pay a commission of between eight to ten per cent. The private traders' commission is ten per cent. Transport rates as between the Producers' Union and the private trade are approximately the same. On the other hand the Producers' Union supplies packs to producers charging 20 cents and 25 cents for a gunny and crate. As for the private wholesaler, producers' own packs are used. When these packs are returned a charge of five cents and ten cents per gunny and crate respectively is made as transport charges. The commission agent pays this to the lorry owner and recovers this from the producer on the sales proceeds of the produce. The overheads of the

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Producers' Union remaining static and comparatively bigger in relation to those of the commission agents and other vegetable traders, the vital ingredient of financial stability becomes the quantum of vegetables supplied by primary societies to the Union. In recent months the Producers' Union has been running at a loss. It is allowed to charge a commission, as stated before, of five per cent. The financial situation can be improved by;

- a) increasing the turnover of vegetables and fruits marketed;
- b) closing down uneconomic outlets and collection centres; and
- c) increasing the commission - this has not met with the approval of the general body.

A programme of cutting down expenditure and closing down uneconomic points, i.e. sales outlets and collection centres which have been consistently running at a loss, has already been embarked upon by the Board of the Union. The Government has stepped in to assist the Union financially with low interest loan of Rs. 3 million. This loan has been made use of so far for purchasing vehicles and improving buildings of the Union. The Ministry of Agriculture and Food has appointed a Vegetables and Fruits Marketing Advisory Committee consisting of representatives of the Producers' Union, vegetable producers, the Departments of Co-operative Development, Agriculture and Marketing to co-ordinate programmes of vegetable marketing and to assist in resolving relevant problems. This Committee has served a very useful purpose up to now.

f) Improvements necessary in regard to Grading and Standardisation

Today grading rarely takes place at the producers end. However, grading does take place in regard to one or two varieties of vegetables at the wholesale floor of the Producers' Union before such vegetables are sold by the Union. Great improvements can be made in this regard.

g) Lack of Surveys and Research on Marketing

Very little research or statistical investigation has been carried up to now in the spheres of marketing of fruits and vegetables and production thereof. If informed decisions are to be arrived at in regard to improvement of co-operative marketing on fruits and vegetables, it is vitally necessary to conduct studies in regard to production and income patterns, methods of marketing, marketing margins, marketing intelligence, grading,

packaging and standardisation, and other relevant subjects. Some work in this regard has already been done in the Department of Marketing. The Ministry of Agriculture and Food envisages the setting up very soon of an Agro-Economics and Marketing Unit in the Development Division of the Ministry. It is expected that studies made by this Union will prove to be of great benefit to practical implementation of programmes of expansion of co-operative marketing of fruits and vegetables and for arriving at decisions based on accurate statistical data and analysis.

Thus by and large it can be stated that the co-operative sector has come to stay in Ceylon in the sphere of marketing of fruits and vegetables and steady improvements have been recorded in this direction. The problem areas within this sphere have been identified and are under study, and one can be confident that further expansion and improvements in this field would take place in the near future.

May, 1970.

ICA REGIONAL SEMINAR ON "MARKETING OF FRUITS
AND VEGETABLES THROUGH COOPERATIVES", TOKYO

Japan. 17th to 27th May 1970

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THE PROBLEMS OF MARKETING AND PROCESSING
OF FRUITS IN HIMACHAL PRADESH

by

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THE PROBLEMS OF MARKETING & PROCESSING OF FRUITS
IN HIMACHAL PRADESH

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Situated on the North Western borders of India, Himachal Pradesh is a leading state in fruit production in the country. The area of the State is 25 thousand sq.miles and population about 3 million. The terrain is rugged and hilly; The altitude ranges from 400 metres to 4,000 metres above sea level. The State is gifted with variety of agroclimatic conditions suiting culture of various kinds of fruits. The fruits grown in the State include apple, cherry, pear, walnut, chesnut, pomegranate, peach, plum, apricot, persimmon, guava, grapes, litchi, locat chilgoza etc. It is however apple which occupies predominantly important place among the fruits grown in the State. It is therefore proposed to deal with apple only in this paper.

As already stated the terrain of the region is mountaineous and cultivation is done on the slopes of the hills. The average holding per family comes to about one hectare which includes pasture lands also. Out of total area of 56.34 lac hectares, the area under cultivation is 5.94 lac hectares. About 92 per cent of the population depends upon agriculture for living. Because of geographical conditions excepting valleys it is not possible to develop means of irrigation or undertake mechanization of farming. Most of the farming operations are done through manual labour. The cost of cultivation is comparatively much higher as compared to plains. The cultivation of conventional food crops is therefore un-remunerative. The farmers are rapidly taking to horticulture which has made phenominal progress during the last two decades. The area under apples' was about 1,000 hectares in the year 1951 which had gone upto 85,000 hectares in the year 1969. About 10,000 acres of new area is added to horticulture every year. The annual production of fruits is estimated to be 81,000 tonnes. The State exports fruits worth Rs. 5 crores to other parts of the country every year. It is estimated that

these exports will go upto Rs.20 crores by the year 1974. The villages in the state are small consisting of few hamlets. The markets are situated at distant places and the farmers are ignorant of the latest position of price of agriculture produce obtaining the market. The terminal markets of fruits are scattered all over India. The fruit trade is controlled by traders and commission agents. There are numerous malpractices rampant in the trade. The wholesalers generally dispose off the goods in their own name showing fake buyers. These sales are made at lower prices. Bargain with intending buyers is struck under cloth cover. The ignorant growers are duped by the clever traders and commission agents. It has been estimated that there is a price spread of Rs. 10 / - to Rs. 20 / - per crate (17 Kgs.) between the primary and terminal markets after making allowance for the freight charges etc. An apple growers marketing society is being organized this year to provide organizational support to Apple Marketing and help in minimizing the malpractices.

As stated earlier the apple production will multiply four times by the year 1974. The production of this fruit has been continuously rising in other regions like Jammu and Kashmir as well. It is highly unlikely that the rise in demand will also commensurate with the increasing production. In order that the prices are not allowed to fall below the remunerative level it is essential that inter-alia three measures are taken immediately viz: (i) Establishment of network of cold storages in the Principal markets all over India, (ii) setting up of fruit processing industries on a large scale, and (iii) Export of apples to the foreign markets.

C O L D S T O R A G E S

Steps are afoot for establishment of cold storages in the principal markets of the country. The Himachal Pradesh Government is negotiating with the Delhi Administration the Maharashtra State Government to acquire land in Delhi and Bombay respectively for the purpose. Land for setting up cold stores will also be acquired in Madras, Calcutta and Bangalore etc.

P R O C E S S I N G

About 10 per cent of total fruit produce is ordinarily of low quality and remains unmarketed. In case of adverse weather conditions the percentage of low quality apple is as high as 50 per cent. Himachal Pradesh is very keen to set up the fruits processing industries at a large scale in

the Pradesh. At present there are two fruit processing units both in the Public Sector in the Pradesh - One unit is at Simla and the other at Dhaula Kuan in District Sirmur.

*"At the Fruit Canning Unit, Naubahar, Simla-2, from production of 400 Kg. during 1950-60, the production was raised to 56,691 Kg. during 1968-69 with sales to the tune of Rs.1,02,758 and at the Fruit Canning Unit, Dhaulakuan, District Sirmur H.P., from production of 6004 Kg. during 1962-63 the production was raised to 18,250 Kg. during 1968-69 with sales to the tune of Rs.22,000/-.

Products Standardized

1. Apricot and Peach Nector
2. Creamed Apple (Apple Puree).
3. Canned Hill Corn (Sweet Corn).
4. Ginger Appetiser.
5. Rhododendron Squash.
6. Read to Serve "Sarson-ka-Saag" canned.

Amongst products standardized "Sarson-ka-Saag" needs special mention, as this product was very much appreciated in the foreign markets especially in U.K. by Indians and also by others who have fancy for Indian dishes. The Himachal Pradesh Govt. have already entered into an agreement with M/s. Thames Ganges Trading Co. London on 13th August, 1968 for export of "Sarson-ka-Saag" to U.K. The first consignment valued at Rs. 15,000/- has already been shipped to London and the buyer have placed an order for supply of additional 50,000 canes before March, 1970. Besides this item Apple juice, Ginger appetiser, Rhododendron Squash, Apricot Nector, Peach Nector Peach halves in syrup, Mixed Fruit Sauce, various types of Jams are some of our products which are in great demand in India. Some of the fruit products like canned Peaches Apricot halves, Hill Lemon Juice, Lich Squash and Ginger Jam have withstood rigorous quality tests in U.K. and have been appreciated by the world renowned authorities on the subject.

With the progress made during the past few years in the field of fruits preservation and the demand for the products having increased tremendously at home and abroad, the Himachal Pradesh Government readily agreed to step up the production capacity of the existing units of Simla/Dhaulakuan Rajgarh/Bagthan and Chamba into large scale processing factories and also to establish small scale units in Kulu/Kinnaur/Bilaspur during 1970-71. Besides giving employment to the people the Canning units will go a long way in building up the economy of the Pradesh".

Cooperators in Himachal Pradesh are very keen to start fruit processing units in Cooperative Sector in the Pradesh. We shall be grateful if the Japanese Cooperative Movement could collaborate with the Himachal Pradesh Cooperatives in this venture.

EXPORT TO FOREIGN MARKETS.

Last year about 1,000 crates of apples (each case contains 17 Kgs. apples) were exported to U.K. through the State Trading Corporation as an experimental measure. This year the demand has increased to 10,000 crates. But unless the exports are substantial they are unlikely to make any impact on the internal markets. Himachal is very keen to explore the foreign markets. We shall be glad to export apples to South East Asian Countries on Cooperative to Cooperative basis. One of the bottle-necks in this regard is that of proper shipping facilities. We hope that Japan which are leaders in shipping in the world shall come to our rescue in this behalf.

The problems of Apple Marketing in other apple growing regions of the country are identical with Himachal Pradesh.

* "Establishment of Fruits and Vegetable Processing Factories in Cooperative Sector" - Satwant Singh.

BACKGROUND PAPER

India

A NOTE ON THE DEVELOPMENT OF PRODUCTION OF POTATOES IN INDIA
AND ITS PROBLEMS OF MARKETING THROUGH COOPERATIVES

by

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A NOTE ON THE
DEVELOPMENT OF PRODUCTION OF POTATOES IN INDIA AND ITS
PROBLEMS OF MARKETING THROUGH CO-OPERATIVES

FOR THE
SEMINAR TO BE HELD AT TOKYO FROM MAY

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17th TO MAY 27th, 1970

Introduction:

Potato is one of the most important tuber crops and can be grown right from the sea shore to the snow line. It is primarily a winter crop but a wide range of varieties are available which are grown during summer months in the hills winter and spring months in Northern India and during rainy season in some other States like Mysore, Maharashtra. The production and the development of potato was taken up on an organised basis towards the end of the Third Plan although the researches in potato breeding and its agronomic requirements were undertaken much earlier at the Central Potato Research Institute, Simla, which was established in 1929. However, it is only during the recent years that new improved varieties have become available which have made it possible to expand the area under potatoes and also raise the yield potential. Hitherto the yield level of potatoes was stagnant around 3 tonnes per acre which was primarily due to the fact that healthy seed stocks of improved varieties were not available in sufficient quantities. In case of potato the virus diseases result in degeneration of stocks quickly and the yield level is restricted very much and no amount of fertilisers application can raise the yield level.

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Till now it was possible to produce good seed stocks in the high hills only. In the recent years, a technique for the production of healthy seed stocks in the plains has been developed and it has thus become possible to multiply the stocks quickly because the multiplication rate in the plains is 10 times as compared to 5 times in the hills.

REVIEW OF THE PROGRESS ALREADY MADE:

By end of Third Plan the area under potato was estimated at 10 lakh acres with a production of nearly 30 lakh tonnes. Under the Crash Programme started in 1964-65, the State Governments were assisted in setting up of foundation seed farms for potatoes and also for construction of cold storage by providing 100 per cent central assistance. The major potato-producing States took up the advantage of these programmes and the potato cultivation has developed at a much faster pace during the last two annual plans and towards the end of the Third Plan.

2. In view of the fact that potato is a good source of carbohydrates, it has been given the status of a food crop for development in the Fourth Plan. The area under potato during 1968-69 is expected to be 18 lakh acres. It was proposed to bring 22 lakh acres under potatoes by the end of 1970-71. The additional area brought under potatoes with the implementation of Crash Programme Scheme in 1965 and 1966 was reported

of seed stocks further through the registered growers has also been organized to some extent by Himachal Pradesh, Punjab, Uttar Pradesh, and Orissa but the certification programme has not made much headway as yet. The National Seeds Corporation had taken up production and certification of seed potatoes for a couple of years but during 1967 they abandoned this programme because their hands were full with the seed production programme of high yielding varieties of food grains.

PROJECTIONS FOR THE FOURTH FIVE YEAR PLAN:

The yield potential of the new varieties like Kufri Sindhuri is about 12 tonnes per acre and the seed produced under seed plot technique leads to early harvest of crops. With the increasing irrigation potential specially under minor irrigation projects and the emphasis placed on multiple cropping, the area under potatoes is likely to increase to 28 lakh acres in the country by 1973-74, from an anticipated area of 18 lakh acres under potatoes during 1968-69. On the basis of these expectations, the production programme during the Fourth Plan has been worked out as under:-

Year.	Area (in lakh acres)		Production (in lakh tonnes)
	Total	Under high-yield- ing varieties.	
1.	2.	3.	4.
1969-70	20	6	104
1970-71	22	7	116
1971-72	24	8	128
1972-73	26	9	140
1973-74	28	10	152

The tentative break-up of area for respective States is given in Table I.

APPROACH TO THE FOURTH PLAN:

The yield potential of new potato varieties is very high and a yield of 10 to 15 tonnes is possible within a period of 90 to 120 days. With the use of seed raised under seed plot technique in the plains, an early harvest of crop is possible during the month of December, specially in North India. After harvest of early potatoes, a wheat crop, by using short duration Mexican varieties like Sona-lika, S-308 and Sharbati Snora, can be successfully raised. The role of potato, therefore, as a source of carbohydrate food, has been recognized and the potato and other tuber crops have been given the status of food crops. The increase in area under potatoes is, therefore, anticipated by introducing potato crop under the multiple cropping programme specially in those areas where tube-well and well irrigation will be introduced.

2. The increase in area and production over the base year is expected to be nearly 55 % and 90 % respectively. As against the general growth rate of 5 %, the increase in area and production of potatoes seems to be very high but these are based on recent trends in potato development, which have been witnessed with the availability of new varieties and larger quantities of seed stocks at cheaper rates multiplied in the plains. For achieving the targets at the end

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of the Fourth Plan, it would be essential to maintain a systematic year to year progress.

3. The seed production programme in potatoes shall have to be organized with meticulous care so that virus free seed is made available for cultivation over large areas.

4. Suitable measures shall have to be taken to develop cold storage capacity specially for the storage of seed potatoes under optimum conditions so that the seed tubers are in the right physiological condition at the time of planting.

5. To organize such a big production programme for seed potatoes and table potatoes, the technical staff shall have to be suitably augmented. The growing of potato is an highly specialized job and that of seed potato is more so. Therefore, the training programmes for technical staff at all levels and also for farmers shall have to be suitably arranged.

6. There is a great potential and need to increase the area under rainy season crop in States like Mysore. The main problem in these areas is of late blight occurrence. The Central Potato Research Institute has developed some late blight resistant varieties, sizable stocks of which shall have to be built up for growing as a rainy season crop in the hills as well as in States like Mysore, Maharashtra. The availability of table potato during the period of September, October when the crops in these areas will be harvested,

would be a great incentive to the growers because during that period fresh potatoes are not available elsewhere. Moreover, the cost of cultivation will be low because the crop will be raised under rain-fed conditions.

STRATEGY FOR ACHIEVING FOURTH FIVE YEAR PLAN TARGETS:

One single factor in increasing the productivity in case of potatoes is the availability of healthy seed, free from virus and other tuber borne diseases. For an area of 28 lakh acres, the requirement of seed will be about 20 lakh tonnes. At present, the availability of good stocks is limited to nearly 1 to 2 lakh tonnes. Therefore, large scale production of certified seed potatoes, shall have to be organized through various stages.

2. Hitherto, high hills were considered to be the best seed areas but there is a limited scope for increasing the area in the hills. Fortunately, suitable seed areas in the plains have been located where winter is quite severe and, as such, aphid vectors which cause spread of virus diseases are practically absent during the growing period of the crop. In those areas in the plains where the winter is short, it is not possible to raise good seed crops. Therefore, some of the States like Assam, West Bengal, Mysore, Maharashtra, Gujarat etc. shall have to depend on seed stocks from outside sources. Even in other States, the requirement

of seed will be so enormous that the State Organizations will not be able to produce certified seed in sufficient quantities to meet their requirements in full.

Therefore, there shall always be large scale inter-State movement of seed.

3. The production, certification, marketing and storage of seed potatoes will thus require special consideration not only from the State Governments but it is felt that a Subsidiary Wing of the National Seeds Corporation may be established to take up certification programmes on potatoes.

4. The setting up of foundation seed farms of 100 to 500 acres in the plains is, therefore, recommended. An Organization for the development of the crop and production of seed potatoes shall also have to be established in each State where this has not already been there. Where such Organizations have already been established, these shall have to be strengthened in relation to the area programmes.

5. Out of an area of 28 lakh acres which is likely to come under potato, it is desired to bring 10 lakh acres under newly evolved improved high yielding varieties. The yield potential of this area shall have to be raised to an average of 8 tonnes per acre by ensuring the supply of certified seed potatoes and inputs like fertilizers, plant protection chemicals and equipment. The National Seeds Corporation should be able to meet at least 50 % of the seed requirement of

that area by undertaking a production programme

ultimately for nearly 4 lakh tonnes of seed potatoes.

6. The degeneration rate for new varieties i.e. Kufri Sindhuri and Kufri Chandramukhi is comparatively low and the seed stocks can be maintained for 3 to 4 generations. As such, it is anticipated that there will be a natural spread of seed stocks of these varieties over larger areas which will lead to increased production to the remaining areas which have been placed on an average of 4 tonnes per acre.

7. An area of 2,000 acres will be required for the production of foundation seed stocks by using 40,000 maunds, of breeder/nucleus stocks available from C.P.R.I. These foundation seed farms should be set up by the Department of Agriculture in respective States in relation to the magnitude of the programme that is anticipated in the ultimate phase of development.

The foundation seed will be available for 20,000 acres for growing with the registered growers. By another multiplication, the registered seed will be available for 2 lakh acres. It is assumed that out of this, 50 % of the seed will be of the desired health standards and purity standards for another multiplication to cover 10 lakh acres with certified seed of high yielding varieties. The State Governments shall have to work their production programmes accordingly and prepare technical staff and cold storage requirement

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during the Fourth Plan period. The supply of inputs like fertilisers, plant protection chemicals and equipment shall have to be assured for areas specially under high yielding varieties.

8. The point of significant importance in new potato varieties like Kufri Sindhuri is that their fertilizer requirement is not very high but the comparative increase in yield is attained by use of healthy seed stocks.

9. On an average, the fertiliser requirements are placed at :

Nitrogen	50 Kg per acre
K_2O	40 Kg per acre
P_2O_5	40 Kg per acre.

SEED CERTIFICATION:

Field Inspection Surveys to check the standards of purity and freedom from virus diseases will be required for certified seed production. In the hills, one Inspector may be able to inspect 500 to 1000 acres whereas in the plains 1000 to 2000 acres. The State Governments have to decide whether they will like to set up their own seed certification Agency or they will entrust the seed certification work to the National Seeds Corporation. The staff requirement of the State Government shall, therefore, have to be worked in relation to the seed production programme that they envisage during the respective years of the Fourth Plan.

FOUNDATION SEED FARMS:

In the States of Bihar, West Bengal, and Assam,

there is an immediate need to establish or earmark areas in compact blocks covering 100 to 500 acres for the production of foundation seed stock. Adequate technical staff and contingency shall have to be provided for such foundation farms. However, in view of the substantial return that will accrue from the sale of seed potatoes, the net provision in the plan may be quite meagre.

COLD STORAGES:

The State Governments undertaking seed certification have to create adequate cold storage facilities to take care of the seed stocks specially upto foundation level. In the recent years, cold storage capacity has been developing fast and at present the total cold storage capacity in the country is placed at 9.5 lakh tonnes. Out of this nearly 50 per cent is utilized for storage of seed potatoes. The cold storage capacity shall have to be gradually augmented for taking care of atleast 15 to 20 per cent of the total production. From the seed storage point of view, the cold storage capacity should be developed to a minimum of 20 lakh tonnes by 1973-74. Most of the cold storages area in the private sector and some cold storages have also been established in the cooperative sector. Under the Centrally Sponsored Schemes, the State Governments have also been assisted for setting up of cold storages in the public sector to take care of the foundation, certified seed stock. 100 per cent central assistance

is provided under these schemes with 25 % as grant and 75 % as loan. These schemes are proposed to be continued as Centrally Sponsored schemes during the Fourth Plan. The State Governments should work out their requirements for cold storage capacity and indicate the possible extension in cold storage capacity in private, cooperative and public sector. Such States where cold storage capacity has not been developed to the desired extent i.e. Maharashtra, Gujarat, Mysore, Assam, Orissa, etc., a special emphasis shall have to be laid on the development of adequate cold storage capacity for seed as well as table potatoes. In the public sector, an additional storage capacity for one lakh tonnes of seed potatoes should be developed and funds provided under the Centrally Sponsored Scheme.

SEASONS OF HARVESTING AND MARKETING:

Potatoes are normally grown as a winter crop in the plains and as a summer crop in the hills, except in south India, where the winter crop of the hills is also of considerable importance. Performance of planting and harvesting however vary from State to State. The harvesting of the crop in the plains usually starts in December and continues till March. The produce starts coming into the market at the same time and often continues till about June. From April onwards however, the supply in the plains is comparatively low. The supplies of the hill potatoes starts from July-August and continues till the beginning of December, being at their maximum from middle of

September to the middle of November. The period of lowest supply is therefore from June to August and again from November to about middle of December.

ASSEMBLING:

The potatoes are assembled by the following agencies.

- (1) Producers;
- (2) Village merchants;
- (3) Itinerant merchants;
- (4) Fertiliser dealers;
- (5) Wholesaler merchants or commissioned agents;
- (6) Producers' Co-operative Societies.

The opportunity for the growers to market the produce varies in different tracts according to the financial position of the producers and transport facility. Very often they are bound by the financial advances from the village merchants, commissioned agents or fertiliser dealers. In such cases they have no option but to sell the produce to their creditors on the farm itself or in the local assembling markets. In some areas, as in Upper Lssam districts, they may sell the crop long before it is ready for harvesting. Thus, the work of assembling the produce by the cultivators themselves is very much limited. Further, the complicated market practices, lack of transport facility are some of the inhibitive factors for selling of the produce by the grower himself in the organised

markets. Thus the assembling and the marketing is done by and large by the village merchants, itinerant merchants fertiliser dealers, wholesale merchants and commissioned agents. The sale of produce through cooperative societies has not yet made sufficient impact inspite of all the programme and planning of Government. The only society undertaking sale on a large scale is the Nilgiri Co-operative Society in Tamilnadu, the Gardemers' Production, Supply and sale Society, Belgaon and Potato Growers' Association Ltd., Ahamadabad. In Himachal Pradesh, the Co-operative Marketing of seed potato has made sizable progress recently. In order to ensure better price to the primary producers, it is very necessary that the cooperatives should be organized at the producers level to supply them inputs at reasonable prices and to give production credit and also to market the produce at the best possible rates. The cooperatives can establish link direct with the wholesale market and thereby the costs on a number of middle men operating in the chain, can be minimised to a considerable extent. This will ensure not only remunerative prices to the growers, but also will ensure minimum prices to the consumers.

The cost of production per acre of potato are as follows:-

Seeds - 5 quintals @ Rs.100/-	Rs. 500/-
Fertilisers:	
Nitrogenous 50 Kg.	Rs. 125/-
K ₂ O 40 Kg.	Rs. 40/-
P ₂ O ₅ 40 Kg.	Rs. 100/-
Pesticides ...	Rs. 60/-
Irrigation cost(Lift Irrigation)	Rs. 125/-
Labour charges ...	Rs. 300/-
Land rent ...	Rs. 25/-
	<hr/>
Total ...	<u>Rs.1,275/-</u>

The average yield is estimated at 150 maunds or 56 quintals per acre. At a price of Rs.15/- per maund, in the harvesting season, the gross value of the yield per acre works out at Rs.2,250/-. If the cooperatives are organized, for keeping the seeds in the cold storages then the cost of production will be reduced considerably on seeds and also on labour charges. By keeping good and certified seeds in the cold storages the cooperatives may spend on the average Rs.4/- per quintal on transport , Rs.4/- on spoilage and shortage and Rs.27/- per quintal as cold storage rent. Taking into account, the purchase of potato at the rate of Rs.40/- per quintal during the harvesting season, the total cost of seeds including all the above charges will amount to Rs.75/- per quintal. If the seeds at this rate, are supplied to the growers, then there is a saving of Rs.125/- towards the cost of seeds per acre. Similarly, in the labour charge, there will be a substantial reduction

of charge, if the mechanised cultivation is undertaken for potato cultivation, through the Co-operative Producers societies. It is already pointed out earlier that a drive has been undertaken to improve the quality of potato for which the Seed Foundation Farms have been set up through Government assistance in different parts of the country. The Co-operatives will be able to distribute certified seeds, free from virous diseases. If the cooperatives are set up in different parts of the country, then a Federation can be established by which the marketing channel can be rationalised and the link can be established direct with the exporting markets and the consumers in terminal markets.

ROLE OF COOPERATIVE IN PROVIDING FACILITIES:

The activities of the cooperative societies in wholesale distribution of potatoes have not yet come up more than 5 % to 6 % of the total distribution in the country as a whole. All attempts were made to organise a number of societies during the 3rd plan period. They were also given assistance for setting up of Cold Storages for preservation of potatoes. It is only in Tamilnadu, Maharashtra, Uttar Pradesh and Himachal Pradesh, sizable quantities of potatoes are handled by cooperative marketing societies. The Nilgiri Cooperative Marketing Society was started in 1935. Many potato Marketing Co-operative Societies have been organized for procurement and distribution of seeds,

manures and agricultural machineries in addition to the sale of potatoes. If there is need for advance planning, the primary objective should be to develop marketing systems and to induce growers to produce more. These can only be done by organisation of Cooperative Marketing Societies in these intensive areas providing financial facilities not only for production purposes but also to develop marketing by providing cold storage and transport facilities to the consuming points. The objective should also be to ensure highest return to the producer, at the same time ensuring lowest price to the consumers in view of the limited purchasing power of bulk of the consumers. The Co-operative Marketing Societies will be the suitable agency to achieve this object by eliminating a number of middlemen in the chain of distribution system. When planning for the production of potatoes is made in any area, there should be a clear picture of the marketing possibilities of the particular varieties and time of availability of produce. These consideration are particularly important in the respect of exports.

Market intelligence for purpose of collecting data for planning is very essential for marketing of any agricultural produce. This can be best organised through Cooperative Marketing Societies for potatoes.

PROBLEMS OF COOPERATIVE MARKETING IN POTATOES:

Although Co-operative Marketing in potatoes in the country dates back from 1935, the cooperative

Marketing has not progressed to the desired extent on account of the following problems, inspite of the impetus given by the Government during the 3rd Plan period.

(1) On account of the small holdings of the potato cultivators, the growers have not been able to get the economic advantages of a largescale production. The marketing programme has therefore to be linked up with cooperative farming societies.

(2) Collecting centres may be set up from sub-yards of Regulated Markets. Grading facilities may be made available to them at those centres.

(3) Fast and wherever necessary, refrigerated and priority rail transport should be made available. Specially built wagons should be provided and these should be attached to passenger trains considering the loss and wastage in the present rail transport.

(4) There is no fixed standards in the grading of potatoes in the normal markets by private dealers. Every dealer is guided by the own judgment. Cooperative marketing societies can introduce this grading and standardisation both for seed purposes as well as for table potatoes. The all-India Grading Specifications for table potatoes have also been drawn up under the Agricultural Produce Grading and Marketing Act, 1937. Cooperatives have not yet adopted the grading to a large extent. In case of certified seeds

also the cooperatives have great opportunity in registering the seed growers. This can guarantee the seed free from diseases. Except in few places this has also not much developed in other parts of the country. Grading of potatoes should be organised in Agricultural Marketing. As far as possible, inter-State movement to the terminal markets should be on the basis of agricultural marketing grades. It will help the cooperatives to develop their marketing to the benefit of primary producers.

(5) It has been indicated earlier that there is a large programme for setting up of cold storages for preservation of potatoes. In the recent past the cost of construction has gone up very high. The average cost of construction of cold storages having capacity of 20,000 maunds has been estimated at 7 to 8 lakhs of rupees. The major portion of this amount has been obtained by way of loan either from Government or from Commercial Banks. On the basis of present rate of storage rent, the marketing societies are not able to work out the cold storages profitably and repay the block costs out of their business profit. The time has come to conduct research on cheaper materials for the construction of cold storage so that the costs can be reduced considerably and the societies can be able to pay up the block costs out of their normal business profit.

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(6) Apart from the cold storages the processing industries has to be developed for the better marketability of potatoes. For this the scheme for de-hydration of potatoes has to be taken up by the cooperatives.

(7) In the management of cold stores, the trained operators and the trained managers are absolutely necessary. For this an intensive training programme has to be undertaken. The training may be arranged both at the regional and national levels.

(8) The packaging is very important aspect in the marketability of the crop both from point of view of distant markets and also time for demand. The existing arrangement is not adequate. Therefore, standardisation of packages will be highly beneficial. The Indian Institute of Packages and Indian Standard Institution can help a good deal in this respect to the cooperative marketing societies. Packings should be 25 Kg. to 50 Kg. in weight and the packages of heavier have to be discontinued to reduce wastage and loss.

(9) The cooperative marketing society has also faced problems in the collection of produce and dissemination of market news due to the undeveloped condition of the feeder roads for the marketing facilities. Therefore feeder roads have to be developed in the producing areas for quick transport. So there is a great need for development of feeder roads.

(10) Owing to the high rate of vehicle taxes development of road transport has not made as much progress as it should. The existing restrictions in the Inter-State movement of vehicles have also an impediment in the quick transport of perishable commodities. It is therefore necessary that a thorough study on the subject should be made and steps should be taken to eliminate the above bottleneck in case of transport.

(11) The freight charges for fruits and vegetables including potatoes have increased from quarter parcel rate to half parcel rate. This has adversely affected the economics in transport of potatoes. It is therefore necessary to restore the quarter parcel rate.

(12) There should be improvement in handling of potato packets in the railway. On account of defective handling, there is a large percentage of spoilage in potato in transport. The railway authority should therefore educate the labourers for proper handling of the packets.

(13) In order to safeguard the interest of the ~~interest-of-the~~ producers organized in the Co-operative Marketing Societies and for better marketing possibilities, the cooperative marketing societies should be federated into national federation. This national federation can look after the planned production

and organise marketing including storage and other allied subjects.

(14) The cooperative societies should also take into account the qualitative aspects of potatoes in their grades. Hence suitable varieties should be evolved for specific purposes. There should be research and study of the consumers preference for specific variety. The possibility for export of potatoes in processed form may be investigated. Simultaneously, the possibility of industrial use of potatoes in preparation of flour and preparation of alcohol etc. should also be investigated.

(15) The financing of cooperative marketing societies has presented a serious bottleneck in the marketing operation. It has been permissible for the Commercial Banks to give advance to the growers on the pledge of stock in the cold storage of the marketing societies. The commercial banks are not very much liberal in financing such loans. The marketing societies have also to maintain the margin before such loans can be obtained from the commercial banks. Such margin, the societies cannot have in the beginning out of their own collection of share capital. The initial share capital contributed by the members and also by Government together with loans from Government are spent on the block costs of cold store plants. Very little money is left to serve as marketing for working capital loan. Therefore, the margin money to avail the

financial assistance from the commercial banks may be provided by the Government to the marketing societies as per their requirement.

(16) The insurance charges in the cold storages, both for machineries as well as for stock, works out very high. The private parties running cold storages normally avoid such amount of costs. Naturally the cooperatives are placed at a disadvantageous position in marketing the produce after payment of all charges. In order to ensure better price to the producers and the minimum price to the consumers, the insurance charges should be studied and kept down.

The Seminar may discuss the various problems faced by the Potato Growers' Marketing Cooperative Societies and suggest remedies.

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TABLE I

AREA TARGET UNDER POTATO DURING THE
FOURTH PLAN

(000' Acres)			
S.No.	Name of the Scheme.	Base Year (1968-69)	End of Fourth Plan(1973-74)
1.	Jammu & Kashmir	7	15
2.	Himachal Pradesh	35	40
3.	Punjab	40	75
4.	Haryana	12	50
5.	Uttar Pradesh	550	1000
6.	Madhya Pradesh	41	80
7.	Rajasthan	14	30
8.	Orissa	190	250
9.	Bihar	330	400
10.	West Bengal	274	350
11.	Assam	142	160
12.	Maharashtra	46	80
13.	Gujarat	20	55
14.	Mysore	60	120
15.	Madras	25	30
16.	Others	14	65
Total		1800	2800

BACKGROUND PAPER

INDIA

ROLE OF COOPERATIVES IN MARKETING, PROCESSING AND PRESERVATION OF FRUITS
AND VEGETABLES

by

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REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH COOPERATIVES"

TOKYO, JAPAN, 17th to 27th May 1970

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NEW DELHI
INDIA

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AGRICULTURAL COOPERATION IN ASIA
TOKYO, JAPAN

Role of Co-operatives in Marketing,
processing and preservation of
fruits and vegetables.

BY
V.G. PURANIK

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National Cooperative Development
Corporation, New Delhi.
INDIA.

Introduction

In India, annually about 25 million tonnes of fruits and vegetables are grown on about 3 million hectares of land. (Annexure I) Because of its geographical position, India produces almost all varieties of horticultural crops, temperate and tropical, grown over different parts of the world. However, on account of inadequate development of facilities for marketing, processing and preservation, quite a good deal of them are wasted or spoiled. Lack of these facilities also cause gluts in the markets during the peak periods, resulting in price depressions and consequent dis-incentives to grow more and better fruits and vegetables.

2. The frame-work for marketing, processing and preservation of fruits and vegetables, as it exists today, is by and large monopolistic and is thus in the hands of a few private traders. Consequently, country's horticultural trade has become a buyers' market and their sales are often made by the farmers under distressed conditions. At the same time, installed capacity to process fruits and vegetables and preserve

them in cold storages, is either inadequate or not modern enough to satisfy the competitive conditions. At present less than half per cent of the fruits and vegetables produced in India, are processed or preserved as against 40 per cent in USA.

3. The above factors have made the position of the fruit and vegetable growers vulnerable. From the recent study of apple marketing of one of the States in Indian Union, namely Himachal Pradesh, it was observed that the apple growers' share in the consumers price of apples was hardly 30 per cent. As a result, quite a good deal of wealth which otherwise would have strengthened the purchasing power of the farmers has been drained away from the rural sector of the State to the urban sector and that too in a few private hands. In the context of Indian conditions, strengthening of purchasing power of the farmer is of basic importance. To achieve this, what is needed is induction of a new institutional frame-work which would maximize the farmers' share in the consumers price of their produce.

Incentives to the farmers

4. Horticultural crops are known for yielding more wealth per unit area, compared to other crops. Increase in their acreage in the horticultural belts of India is, however, considered slow. One of the reasons for such a slow growth is attributed to non-existence of adequate incentives to farmers. Incentives to the farmers, among others, depend

upon how best the marketing arrangements are favourable to the orchadists for ensuring their legitimate share in the consumers price. To maximize the share of the orchadists in the consumers price of horticultural produce, their active involvement in the institutional frame-work, set up for marketing, processing and preservation of fruits and vegetables, is considered vitally important. This could be done only by developing a strong net work of cooperative infra-structure.

Cooperative marketing

5. Since recently, cooperatives have made a beginning in marketing of horticultural crops. So far, over 200 cooperatives have been organized for marketing of fruits and vegetables. In addition, a few multi-commodity marketing cooperatives also undertake their marketing and have provided cold storage facilities. The share capital of these 200 cooperatives was over Rs.3.8 millions by the end of the year 1968. The value of fruits and vegetables marketed by them amounted to over Rs.110 millions and their share in the export trade was of the order of Rs.8.8 millions.

Cooperative processing

6. The number of cooperatives undertaking processing of fruits and vegetables is also steadily increasing. Out of the total number of 927 fruit and vegetable processing units in the country, the cooperatives have organized 36. (Annexure II) Of this, 24 units have so far gone into production and the remaining are in various stages of

installation. These 36 cooperatives were given government assistance of Rs.6.8 millions upto March, 1969, of which Rs.1.4 millions were in the form of equity participation and Rs.5.4 millions as long term loans for meeting block capital cost. In terms of processed products, the annual capacity of these 36 units is approximately 20,000 tonnes which accounts for about 1/3 of the total national capacity. These cooperatives have raised share capital of the order of Rs.3.01 millions including the government contribution of Rs.1.4 millions. During the Fourth Plan (1969-73), it is expected that another 20 fruit and vegetable processing units will be set up by the cooperatives which would create additional capacity of over 15,000 tonnes per annum in terms of processed goods.

7. On the basis of the classification followed under the Government of India's Fruit Products Order (Annexure I) out of 927 fruit and vegetable processing units licensed, only about 11 per cent of them come under the large-scale category with annual production exceeding Rs.100,000. The rest of the units fall either in the category of small-scale or cottage-scale. As far as the cooperatives are concerned, majority of them have annual capacity to produce goods worth more than Rs.100,000 and, therefore could be bracketed in the category of large-scale manufacturing units. Most of the cooperatives have

installed modern machinery with diversified lines of production such as, canning, dehydration, concentrates, pulps, juice extraction etc.

8. During the last few years, the fruit and vegetable processing industry has introduced in the market many new products. These include, mango, guava and other fruit nectars, sweet lime and banana juice cocktail, banana and guava juices, mango and tomato cereal flakes, mango-custard powder, banana, mango and papaya fruits powders, soup powders and dehydrated vegetables like peas, carrot, cabbage, etc. Similarly, frozen fruits and vegetables have also been recently introduced. In order to maintain their competitive position and to help the farmers in getting benefits from all these new lines of manufacturing, cooperatives have also entered in the field of producing these products.

9. Cooperatives have broken another ground. Unlike private sector units, the fruit and vegetable processing units set up by the cooperatives are by and large located in the rural areas and not in the cities. The Government's policy is to increasingly inject industries in rural areas in a decentralized and in a democratic form, involving bulk of the rural population. Induction of cooperative processing units in the rural areas have created not only economic opportunities but also much needed self-confidence in the farmers. This self-confidence is of utmost importance in building up new industrial and business leadership

from the rural masses. When the farmers as a class feel confident of themselves, it is easier to carry out the goals set for the national economy. Like other cooperative processing units, the fruit and vegetable cooperatives have also made their contribution in this direction.

Grading and packing centres

10. Installation of grading and packing houses are of primary importance to the fruits and vegetable cooperatives. These houses are expected to function on the marketing side as collecting, grading and packing centres and on the production side as central agencies for providing extension services. Grading and packing would not be remunerative unless it is coupled with adequate arrangements for cold storages and processing. These arrangements need to be considered as an integral part of the arrangements made for marketing of fruits and vegetables.

Cooperative Cold Storages

11. For the preservation of fruits and vegetables, a network of cold storages is needed as an adjunct to marketing and processing of fruits and vegetables. The share of the cooperatives in marketing of fruits and vegetables is at present not significant mainly on account of lack of adequate cold storage facilities. Keeping this in view, steps have been taken to set up cold storages in the cooperative sector

especially in those areas where potatoes and other fruits and vegetables are extensively grown. By the end of June 1969, out of 1107 cold storages in the country, the cooperatives had organized 89 with 128,000 tonnes capacity (annexure IV). This accounted for over 10 per cent of the total national cold storage capacity.

12. Of the 1107 cold storages licensed, over 56 per cent have a capacity less than 1,000 tonnes per unit. In Indian conditions a unit of a 1,000 tonnes storage capacity is considered economically viable. The cooperatives are, therefore, installing the cold storages either of 1,000 tonnes capacity or above. A few cooperative cold storages which are below 1,000 tonnes capacity are advised to raise their capacity at least to a minimum level of 1,000 tonnes. Amongst the various commodities stored in the cold storages, potato is the most important. Over 85 per cent of the cold storage capacity is at present utilised for potatoes. Cooperatives are also not an exception to this.

13. Cooperative cold storages set up in the past have generally been independent societies of growers. The present trend is, however, to establish cold storages as adjunct to fruit and vegetable marketing/processing societies of growers so that the cooperatives could undertake not only storage of fruits and vegetables, but also their marketing, besides other functions relating to supply of inputs, etc.

14. Out of 89 cold storages organised in the cooperative sector, 62 with 85,000 tonnes installed capacity have commenced operations. More than 50 per cent of these units had 100 per cent occupancy. Only 6 per cent of the cold storages that were in operation had less than 50 per cent occupancy and most of these were in their gestation period. The 89 cooperative cold storages received Government assistance in the form of block loans amounting to Rs. 29.20 millions. It is expected that during the Fourth Plan (1969-73), another 100 cold storages may be organised in the cooperative sector with additional capacity of 100,000 tonnes.

Specialised structure

15. A view is expressed that a specialised structure for marketing, processing and preservation of fruits and vegetables is functionally superior to a multi-commodity marketing structure, undertaking marketing of crops of divergent nature such as cotton, oilseeds, foodgrains etc. along with fruits and vegetables. Problems of each of these crops are different and they need specialised handling. This is more so in the case of fruits and vegetables. On account of their perishable nature, an omnibus cooperative society dealing with different crops may not cope with the special requirements of horticultural crops. From the operational point of view also, a compact structure would be more effective in integrating services

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relating to production, picking, grading, packing, storing, transporting, processing, marketing of fruits and vegetables, besides undertaking distribution of seeds, fertilizers, insecticides, pesticides and supply of agricultural implements, packing material, etc.

16. In a specialized institutional framework, identification of interests is easier. The board of directors of such a cooperative society as would consist of representatives of a single interest - in this case of fruit and vegetable growers - the directors would have always a greater feel of the problems and more urge to find out timely solutions. There is one more angle to this problem. A cooperative society organized to undertake processing and preservation of fruits and vegetables is expected to link its share holding with the members' acreage under these crops for ensuring steady supply of raw material. This the society can do provided it is organized by fruit and vegetable growers only.

17. Cooperatives undertaking processing, preservation and/or marketing of fruits and vegetables are supposed to procure these commodities essentially from their grower members. The ability of the cooperatives to do so would depend, among others, upon the degree of their involvement in agricultural extension services for which a single interest membership is considered desirable. Such a cooperative society is interested in more and better

production of fruits and vegetables for larger turn over and so also the grower members, for increasing their purchasing power. To reap full benefits arising from such a mutuality of interests, the balance of advantage lies in organizing a specialized fruit and vegetable growers cooperative society than entrusting its functions to a multi-commodity society of an omnibus nature.

Arrangement for allied services

18. Growth of cooperative marketing and processing of fruits and vegetables is primarily dependent upon how efficiently and abundantly the fruit and vegetable growers are provided with the facilities of other allied services by the cooperative sector as a part of a functionally integrated system. If the majority of the fruit and vegetable growers in a given area are not involved in the cooperative framework at different stages and in different activities, induction of cooperatives for marketing or processing of fruits and vegetables alone may not become a self-sustaining growth. For instance, if the fruit and vegetable growers do not get adequate credit from the cooperatives, it may not become possible to involve cooperatives for marketing of fruits and vegetables to the desired extent. Therefore, alongwith the development of cooperative marketing, allied services will have also to be developed, side by side.

Social accountability

19. An integrated structure by virtue of its cooperative character is socially accountable. It is, therefore, supposed to function not merely as a commercial proposition with skills to identify profit opportunities only. Cooperatives are expected to provide leadership in two directions. Firstly, they have to shoulder the responsibility of making their operations commercially successful and secondly project their growth in such a way that they become catalytic agents in the process of rural reconstruction. The merit of the cooperative framework lies in its capacity to set in motion socio economic forces that would help to accelerate pace of agro-industrial development and build a new industrial and business leadership from down below. The fruit and vegetable cooperatives can not ignore this important aspect of their functioning.

Need for Planning

20. While organizing processing units, their systematic planning is essential. This is more so in the case of fruits and vegetables. Apart from the general problems which fruit and vegetable processing units share with agricultural processing units, the former have certain difficulties of their own. Due to their perishable nature, assured and steady supply of raw material from the grower members is a special problem of these units. The successful functioning of these units depends upon how

best they win over the consumers. This calls for setting up of a sales organization, standardization of qualities and hygienic controls etc. Therefore, before installation feasibility study of such projects and investigation into the availability of raw material within the area of operation of the unit, the extent to which the need for such a processing unit is felt by the growers and the prospect of attracting their loyalty, facilities of transport of raw material and disposal of finished products etc. need to be carefully looked into.

Stake of the growers

21. In the developing countries government is required to initially contribute to the equity capital of the cooperative processing units in view of limitations on the farmers to raise it from their own resources. However, to maintain the cooperative character and the interest of the farmers in the working of such processing units, it is important to create fairly good stake of the growers in such units. This could be done mainly by raising a part of the equity capital from the individual farmers who are growing concern agricultural produce or have potential to do so. If this aspect is neglected, the growers are likely to become indifferent towards the functioning of these units. Such share capital contribution also needs to be linked to the growers acreage with a provision in the by-laws based on such linking the grower members will supply raw material to the processing units. In other words, the membership

of the agricultural processing units need to be functional to which fruit and vegetable processing units can not be an exception.

Pooling

22. Linking of shareholding with the acreage of the grower members is also intended to facilitate orderly pooling of raw material for marketing and processing. Pooling is more important in a situation where a large number of farmers with smaller holdings supply raw material for marketing and processing of agricultural produce. Under such a situation to protect the legitimate interest of the small farmers and to secure equitable distribution of surpluses arising from the society's marketing and processing activity, pooling of raw material coupled with grading is considered indispensable.

Link with Consumers' Cooperatives

22. The role of the cooperatives undertaking marketing and processing of fruits and vegetables will become more effective when their trading activities are linked with consumers cooperatives. If the consumers cooperatives succeed in establishing retail trade in fresh and processed fruits and vegetables, the marketing and processing cooperatives will be able to secure steady and assured opening for sale of finished goods without exposing themselves to the hazards arising from competition in the open market.

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The support of the consumers cooperatives is, therefore, considered vitally important for enhancing the capacities of the farmers' cooperatives to make a real dent on this trade.

Financial assistance from the Government

24. In order to encourage the growers to take up processing and preservation of fruits and vegetables cooperatively, the schemes have been formulated by the State and the Central Governments for giving, among others, financial assistance to their cooperatives in the form of equity capital and/or block loans and/or subsidy. Such cooperatives are also encouraged to raise funds from various financing agencies including cooperative and commercial banks. The Central Government's assistance to the State Governments for processing activities is routed through the National Cooperative Development Corporation. This is a statutory organisation at the national level set up under an Act of Parliament.

The NCDC

25. The National Cooperative Development Corporation is charged with the responsibilities of planning, promoting financing cooperative programmes relating to production, processing, marketing, storage, export and import of agricultural produce, etc. In consultation with the States, the NCDC draws up an annual programme, listing physical targets and financial outlays. Besides financial

aid, the assistance to the States is provided by the Corporation through various promotional measures such as circulation of model blue prints, designs of godowns, laying down guide-lines for locational/area-wise planning of various cooperative activities etc. The Corporation also pools successful experience of various States for transmitting it to others.

26. One of the important functions of the National Co-operative Development Corporation is to provide financial aids for schemes of cooperative development. The funds of the Corporation are derived primarily by way of loans and grants from the Union Government. It has no equity capital. It maintains a fund called the National Cooperative Development Fund from which the cooperatives are financed through the State Governments. A set of Circulars which indicate patterns of financial assistance are placed at Annexures V, VI, VII and VIII.

Technical Guidance

27. In rural areas the problem is of providing technical know-how for taking up agro-industrial activities. In order to meet this gap, the state level cooperative marketing federations have set up technical cells to provide technical know-how to the member cooperatives. In those states where horticultural crops are grown, the state level apex marketing federations have employed fruit and vegetable processing experts to give guidance to the

259 cooperatives setting up cold storages, packing, grading units and fruit and vegetable processing units. As and when need arises, help of the technical consultancy firms is also sought by the cooperatives for studying feasibility of the projects, etc.

Points for consideration

- (i) To maximize the share of the growers in the consumers price of fruits and vegetables and strengthen their purchasing power, involvement of the cooperatives in marketing and processing of these crops need to be encouraged.
- (ii) The cooperatives should instal modern machinery with diversified production lines for improving their competitive position.
- (iii) As an integral part of the cold storages, marketing/processing units, the cooperatives should set up grading and packing centres.
- (iv) A specialized structure for marketing/processing and preservation of fruits and vegetables is considered functionally superior to multi-commodity omnibus structure undertaking marketing of crops of divergent nature.
- (v) For ensuring steady and assured supply of raw material, the fruit and vegetable processing societies should link their share holders with the horticultural acreage of the grower members.
- (vi) For more and better production of horticultural crops, the fruit and vegetable cooperatives need to be involved in agricultural extension services.
- (vii) In order to ensure steady growth of cooperative marketing, processing and preservation of fruits and vegetables, allied cooperative services such as supply of credit, agricultural inputs, etc. need to be simultaneously developed as a part of a functionally integrated cooperative system.

- : 17 : -

- (viii) The cooperatives are expected to function not merely as a commercial proposition with skills to identify the profit opportunities only but also to provide leadership in two directions, namely, making the operations commercially successful and projecting their growth in such a way that they become catalytic agents in the process of rural reconstruction.
- (ix) While planning the fruit and vegetable processing units, investigation into the availability of raw material, its need felt by the growers and the prospect of attracting their loyalty, facilities of transport of raw material and disposal of finished products need to be carefully looked into.
- (x) Creation of stake of the growers is important. For this a definite part of the equity capital need to be collected from grower members.
- (xi) To maintain the cooperative character and the interest of the farmers in the working of fruit and vegetable processing units, it is important to create fairly good stake of the growers by collecting reasonable amount of share capital from them.
- (xii) To protect the interest of the small farmers pooling of raw material coupled with grading is important.
- (xiii) The trading activities of the cooperative fruit and vegetable processing units should be linked with consumers cooperatives for steady and secured opening for sale of their finished goods.
- (xiv) In order to encourage the growers to take up processing and preservation of fruits and vegetables cooperatively, wherever necessary government should give assistance to them in the form of equity capital/block loans/subsidy.
- (xv) Where there is a problem of securing technical know-how at the level of the processing unit, the gap should be made good by the cooperatives at the higher tier, by providing necessary expertise and technical know-how.

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Area under fruit and vegetable in India
during 1965-66 and 1966-67

Name of the fruit/ vegetable.	Area (in '000 hectares)	1965-66	1966-67
<u>FRUITS:</u>			
1. Mangoes		530	530
2. Banana		211	210
3. Grapes		4	5
4. Citrus fruits		98	101
5. Pome fruits		7	14
6. Others		268	264
		<u>1118</u>	<u>1124</u>
<u>VEGETABLES:</u>			
1. Potatoes		471	469
2. Tapioca		272	290
3. Sweet potatoes		174	206
4. Onions		142	160
5. Others		804	829
		<u>1863</u>	<u>1954</u>
Grand Total		<u>2981</u>	<u>3078</u>

The Fruits and vegetables processing units organised and installed as on 31st March, 1970.

Name of the State	No. 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. Tamil Nadu	2	1
7. Mysore	5	3
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	-
	36	24

THE FRUITS PRODUCTS ORDER - 1955

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Under the Fruits Products Order 1955, it is obligatory for a manufacturers of fruit and vegetable products to obtain a licence for the manufacture of these for sale. This Order covers all fruit and vegetable products as also synthetic beverages, syrups, sharbats and vinegar. The Order, however, does not apply to fruit and vegetable products produced in non-municipal areas in quantities not exceeding 200 pounds in a year and to syrups containing fruit juice meant exclusively for medicinal use and declared as such on the label. The Order lays down minimum standards in respect of the quality of the products, hygienic and sanitary conditions of the factory, its surroundings and personnel, and machinery and equipment. It also sets limits for the use of permitted preservatives and colours and the presence of certain heavy metals in the products.

The Order classified the units manufacturing fruit and vegetable products into three categories on the basis of the value of their annual production or the annual capacity to manufacture products of that value:

- | | | |
|------------------|----|--|
| 1. Large-scale | .. | Exceeding Rs. 1 lakh; |
| 2. Small-scale | .. | Less than Rs.1 lakh but more than Rs.50,000. |
| 3. Cottage-scale | .. | Not exceeding Rs.50,000. |

The Order prescribes licence fees for the units on the basis of horse-power used by them. It also

stipulates minimum area of manufacturing premises and availability of potable water according to each category. In the case of large-scale manufacturers, the appointment of a qualified chemist to supervise the production as well as a well-equipped laboratory with specified floor area has been made compulsory under the Order.

The Order also lays down specifications regarding packing, marking and labelling of containers. It is obligatory for a manufacturer to make the following declarations on the label of a product:-

1. Name of the product and the kind and the variety of fruit or vegetable used
2. Net contents
3. Name and address of the manufacturer and the place of manufacture
4. F.P.O. licence number and code number indicating the date of manufacture
5. Whether permitted preservatives and colouring matter were used
6. The word "Synthetics" in bold letters and a declaration "Contains no fruit juice" if the product is synthetic.

The Order also specifies the types of containers that can be used for packing the different products and the mode of their secure sealing.

Under the Order, a Central Fruit Products Advisory Committee has been constituted by the Government whose

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object is to give advice to the Directorate of Marketing and Inspection on all matters pertaining to the fruit and vegetable preservation industry. The Agricultural Marketing Adviser to the Government of India is the Chairman of the Committee which has 15 other members nominated by the Central Government. They represent all sections of the industry including exporters, growers of fruit and vegetables and technical experts in the field. The tenure of the Advisory Committee is of two years.

Under the Fruit Products Order, 1955, powers have been given to the Agricultural Marketing Adviser or any other officer authorised by him to inspect factories to collect samples and to seize, detain, or destroy sub-standard and unauthorised products. The Agricultural Marketing Adviser is also authorised to suspend and cancel the licence of defaulting units and launch prosecutions.

Statewise distribution of cooperative cold storages organised upto June, 1969 with their capacity and the number of units installed is shown in the following table:-

Sr. No.	Name of the State	Total units	Capacity (tonnes)	No. of units installed	Capacity of the units installed.
1.	Andhra Pradesh	3	2,400	-	-
2.	Assam	1	1,000	1	1000
3.	Bihar	11	15,600	6	8000
4.	Gujarat	3	3,400	2	2000
5.	Haryana	2	2,000	2	2000
6.	Jammu & Kashmir	1	400	1	400
7.	Madhya Pradesh	2	2,000	2	2000
8.	Maharashtra	2	1,000	2	1000
9.	Mysore	1	1,000	-	-
10.	Orissa	14	11,600	9	8000
11.	Punjab	15	18,700	14	18000
12.	Rajasthan	2	4,000	1	2000
13.	Tamilnadu	1	1,200	-	-
14.	Uttar Pradesh	24	51,100	16	30000
15.	West Bengal	6	11,000	5	10000
16.	Chandigarh	1	1,600	1	1600
Total:		89	1,28,000	62	85,000

NATIONAL CO-OPERATIVE DEVELOPMENT CORPORATION

Gram : 'COPCORP'
Phone: 73434/76121

C-56, South Extension
New Delhi-16

F.No. 2-1/64-P.

February 23, 1966.

From

Shri S.S. Furi, I.A.S.,
Secretary.

To

The Secretaries incharge of Cooperation,
All State Governments (except J&K and Nagaland).

Sub:- Pattern of financial assistance for cooperative agricultural processing units (other than cooperative sugar factories, export oriented processing industries and modern rice mills).

Sirs,

In view of the large programme of cooperative agricultural processing envisaged for the Fourth Five Year Plan, certain decisions have recently been taken by this Corporation to liberalise the pattern of assistance for cooperative agricultural processing units. This letter sets forth these decisions. These decisions cover all types of cooperative agricultural processing units, but do not cover the following:-

- i) cooperative sugar factories.
- ii) export oriented processing industries and modern rice mills.

Separate letters will be addressed to you shortly with regard to the pattern of assistance to cooperative sugar factories as well as export oriented processing industries and modern rice mills.

2. As the State Governments are aware, the existing pattern of financial assistance for cooperative agricultural processing units is based on the recommendations of the Saraiya Committee which made its report to the National Cooperative Development and Warehousing Board in 1961. For the medium and small cooperative agricultural processing units the Saraiya Committee recommended the following pattern of assistance:-

.../Contd.

- (a) In case of independent processing societies with a capital cost of Rs. 1 lakh or more, 60% of the capital cost should be found by way of long term loans from the State Finance Corporation and the State Government should assist the cooperatives to obtain such a long by standing guarantee for the loan. The remaining 40% of the capital cost should be raised by way of share capital, partly from members and partly from government. The Government contribution to the share capital should be subject to a certain minimum proportion coming from the members. This proportion may vary according to the level of cooperative development in various States.
- (b) Where the processing units proposed to be set up by independent processing societies are small and the capital cost is likely to be less than Rs. one lakh, it may not be possible to obtain loans from the State Finance Corporation. In such case, the entire capital cost may have to be financed by way of share capital partly from members and partly from Government in the proportion indicated above.
- (c) As regards marketing societies undertaking processing activities with a capital outlay of Rs. 1 lakh or more, 60% of the capital cost should be found by way of long term loans from the State Finance Corporation. The remaining 40% of the capital cost should be should by way of share capital. Ordinarily, it may not be possible for a marketing society to raise substantial additional share capital for the processing programme. Hence, government's contribution to the share capital will have to be larger than in the case of independent processing societies and in exceptional cases the Government may have to find the entire 40% of the estimated capital cost by way of share capital.
- (d) As regards a marketing society establishing a small processing unit with a capital cost below Rs. 1 lakh, it may not be possible to raise funds by way of loan from the State Finance Corporation and hence the entire capital cost will have to be raised by way of share capital. In this case also the Government's contribution to the share capital will have to be

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larger than in the case of an independent processing society and on the merits of the individual cases may have to be to the full extent of the estimated capital outlay.

3. The National Cooperative Development and Warehousing Board accepted the above pattern and communicated the same to the State Governments. In accordance with the pattern indicated in sub-paras (b) and (d) above, the State Governments have been assisting the processing units with a capital of less than Rs. 1 lakh with share capital contribution to the full extent of the estimated capital outlay. In regard to the units, costing over Rs. 1 lakh, the State Governments are expected to contribute share capital upto a maximum of 40% of the estimated capital cost of the unit, the remaining 60% being found by way of long-term loans from the State Finance Corporations or other financing agencies. In actual practice, however, cooperatives find it difficult to raise funds for block capital investments from financing agencies. From the reports received from 10 State Finance Corporations, it is observed that during the past 3 years, only 11 cooperative agricultural processing units availed of a sum of Rs. 8.82 lakhs from them. The cooperative banks in most of the States are also not in a position, for obvious reasons, to come to the rescue of those processing units with medium or long-term loans for block capital purposes. In these circumstances, many of the State Governments have been assisting the units costing over Rs. 1 lakh also with share capital contribution to the full extent of the capital outlay, after taking into account the share capital contribution to be raised from members wherever necessary. The National Cooperative Development Corporation has been giving the State Governments the requisite long-term loan assistance upto 75% of the share capital contributed by them for such units.

4. In the light of the difficulties experienced in the financing of capital cost of cooperative processing units, the existing pattern of financial assistance was recently reviewed by the National Cooperative Development Corporation. It was agreed that in case of cooperative processing units with a capital cost upto Rs. 10 lakhs, it might not be ordinarily possible to obtain loan assistance from the State Finance Corporations and hence the full cost of the units should be met by way of loan assistance from government and share capital from members and government. With regard to units costing between Rs. 10 lakhs and Rs. 20 lakhs, it has been decided that cooperatives may find 50% of the block cost through share capital contributed by members and state governments and the remaining 50% should be raised as a loan from financing agencies such as State Finance Corporations, I.F.C. etc.

...../Contd.

5. The details of the decisions that have been recently taken are indicated below:-

(i) For purposes of financial assistance, the cooperative agricultural processing units may be classified as under:-

- (a) Units with a block capital cost less than Rs.1 lakh
- (b) Units with a block capital cost of Rs.1 lakh to Rs.10 lakhs.
- (c) Units with a block capital cost of Rs.10 lakhs to Rs.20 lakhs.
- (d) Units with a capital cost exceeding Rs.20 lakhs.

For the purpose of classification, the block capital should be deemed to include all long-term requirements including cost of land, building, plant and machinery, erection charges and also the necessary provision for margin money for the purpose of raising working capital loan.

(ii) The block capital cost of processing units with an outlay upto Rs. 1 lakh may be financed, as hitherto, by way of share capital. Ordinarily, such a unit will be established by a marketing society as its adjunct and it may not be possible for the marketing society to raise additional share capital from its members towards the cost of processing units. In such cases, Government's contribution to the share capital may have to be to the full extent of the estimated capital outlay. Where, in exceptional cases, such units are established by independent processing societies, the share capital must be raised partly from members and partly from government.

(iii) In the case of processing units which involve a capital cost ranging between Rs. 1 lakh and Rs. 10 lakhs the concerned cooperative will be eligible to finance capital cost in the following manner:-

- (a) share capital from members and State Government. ... 25%
- (b) long-term loan from State Govt. ... 75%

- (iv) For units whose capital cost ranges between Rs. 10 lakhs and Rs. 20 lakhs, the concerned cooperative may find 50% of the block cost by way of share capital (members and government taken together) and the remaining 50% should invariably be found by way of loan from financing agencies, State Government, S.F.C. etc.

6. In the above cases wherever share capital is to be raised for a processing unit partly from members and partly from government, the proportion between Government share capital and members' share capital should be the same as that prescribed for primary marketing societies. It may be added that in the case of primary marketing societies the following proportion between government contributed share capital and members' share capital has recently been approved by the Corporation:-

Andhra Pradesh (except Telengana area)	∅	
Gujarat, Maharashtra, Madras, Punjab	∅	1 : 1
Uttar Pradesh (excluding eastern U.P.)	∅	
Kerala, Mysore		... 2 : 1
Assam, Bihar, Madhya Pradesh, West Bengal	∅	
Rajasthan, Orissa, Andhra Pradesh (Telengana area), Eastern U.P.	∅	3 : 1

The above ratios may be relaxed as indicated below:-

- (i) Deviation from the ratio of contribution by Government and members as prescribed may be made within a State depending on the backwardness of the area and other local factors, such as the need for development of special commodity societies, procurement operations on behalf of government/government nominated agencies etc.
- (ii) Government contribution towards the share capital of primary marketing societies upto the prescribed maximum may be made by State Governments in such instalments as they may deem fit, each instalment not exceeding Rs. 25,000/- in proportion to the members contribution on the basis of ratios indicated above. However, in cases where a society has not been able to raise the members' part of share capital in the prescribed ratio within one year from the date of government contribution, the State Government may release the instalment of government contribution to the share capital of such societies on the condition that the members' share of contribution will be raised within one year of the government contribution. Further instalment of government contribution will be released only when the societies have raised their members' share in the ratio prescribed against the previous amount contributed by government.

7. In order to facilitate the development of large-scale cooperative agricultural processing units costing not less than Rs. 20 lakhs, the Corporation has approved a financial pattern analogous to cooperative sugar factories, i.e. the larger processing units will raise 40% of the block capital by way of share capital from members and the State Government (on matching basis) and the remaining 60% will be found out by way of long-term loans from Industrial Finance Corporation/State Finance Corporation and other financing agencies.

8. For providing financial assistance to cooperative processing units, the State Governments will be eligible for central assistance on the following pattern from N.C.D.C. within the State Plan Ceiling:-

(i) As regards smaller and medium sized units capital costs of which is upto Rs. 20 lakhs N.C.D.C. will provide long-term loans to State Governments to the extent of 75% of the share capital contributed by the State Government towards the capital cost of the processing units.

N.C.D.C. will provide loans to the State Governments to the extent of 75% of the amount of loan that the State Government may sanction to the processing units.

(ii) As regards large-sized processing units having block capital cost not less than Rs. 20 lakhs, i.e. category (d) under para 5 above, the N.C.D.C. will grant long-term loans to the State Government upto 100% of the share capital contribution made by them to such processing units of growers subject to the following conditions:-

- (a) Release of assistance from the Corporation will be on a matching basis with the share capital collected from members;
- (b) At least 75% of the share capital collected from members should come from actual or potential growers of the agricultural produce or their cooperatives, if any, doing the marketing of the primary processing of such produce;
- (c) Arrangements similar to those existing in cooperative sugar factories for deducting compulsory deposits, at rates stipulated by the state governments or prescribed in their bye-laws, from the price of the produce supplied by members, should be evolved; and

- : 30 : -

- (d) The maximum amount of central assistance available to State Governments for each unit will be determined on the basis of the commodity processed, size of the unit and the total block cost involved.

9. It is requested that the above decisions may kindly be brought to the notice of all concerned.

Yours faithfully,

Sd/-

(S.S. Puri)
Secretary

Copy for information and necessary action to:

Registrar of Cooperative Societies,
All States (except J&K and Nagaland)

Sd/-

(S.S. Puri)
Secretary

Copy also forwarded for information to:

All Officers and Sections in N.C.D.C.

Sd/-

(S.S. Puri)
Secretary.

NATIONAL CO-OPERATIVE DEVELOPMENT CORPORATION

GRAM: 'COPCORP'
Phone: 623435/36

C-56, South Extension (II),
New Delhi-49.

No. NCDC.3-1/69-CC&I

Dated: May 4, 1970.

From

Shri S.K.S. Chib, I.A.S.,
SECRETARY.

To

The Secretaries in-charge of Cooperation,
All States (Except Jammu and Kashmir & Nagaland)

Sub:

Central Sector Scheme for financing small and
medium sized processing units.

Sir,

In continuation of this Corporation's letter of even number dated the 23rd December, 1969, (Copy enclosed) on the above subject, I am directed to say that the Corporation will refinance the Apex Cooperative Banks/ State Government under the Central Sector Schemes broadly on the following lines.

- i. Under the Central Sector Scheme, the National Cooperative Development Corporation will undertake refinancing of new small and medium size cooperative agricultural processing units such as cooperative rice mills, oil mills, cotton ginneries, cottonseed processing plants, cattlefeed factories, solvent extraction plants, fruit and vegetable processing units, cold storage etc. and their allied/bye-product industries individually and/or jointly.

Large size processing units such as cooperative sugar factories, spinning mills, jute mills, etc. for which financial assistance is available from the IFC, LIC, etc. will be excluded from the purview of the Scheme.

- ii. The cooperative processing units with blockcost not exceeding Rs.10 lakhs will be categorised as small size processing units and above Rs.10 lakhs to Rs.40 lakhs as medium size processing units.

...../Contd.

- iii. A minimum margin of security of 25 per cent of the total block cost will be required in case of small size processing units and 30 per cent in case of medium size processing units.

The margin of security will be found by the concerned cooperatives either from the share capital or/and reserves, if any.

- iv. Refinancing will be done primarily through the apex cooperative banks, after satisfying the technical and economic viability of the unit, against the guarantee of the State Government. If for any reason the apex cooperative bank is not considered viable or the State Government is unable to furnish requisite guarantee for the loan or for any other reason the apex cooperative bank is not able to receive the loan from the NCDC, refinancing to the processing units will be done through the State Government concerned.
- v. The processing units organised by national and inter-state-cooperative federations will be financed by the NCDC directly.
- vi. The NCDC will refinance the apex cooperative banks/state governments upto 75 per cent in respect of small size processing units and 70 per cent in case of medium size processing units of the total block cost of the project.
- vii. Under the scheme, financing of the processing units will be only in the form of block loans.
- viii. The NCDC may also consider refinancing for a part of the block loan requirement of the cooperative processing unit, provided the NCDC is satisfied that the remaining part of the block loan to be met from the banks/financing institutions/Govt. etc. is fully secured by the concerned processing unit.
- ix. Ordinarily the share capital interse between the members and the state government will be in the ratio of 1:2, provided that if the total equity in relation to the total block cost of the concern processing units comes to less than Rs.2.00 lakhs, then the ratio of share capital between the growers/their cooperatives and the state government will not be more liberal than 1:1 and if the total equity participation in relation to the total block cost exceeds Rs.2.00 lakhs, the share capital to

..../Contd.

contributed by the cooperative members should not be less than Rs.1.00 lakh.

It is also under consideration of the Corporation to what extent in affluent areas etc. increased member's share capital in the ratio of 1:2 (members and state government) and in weaker areas lesser members share capital compared to government contribution in the ratio 1:3 should be allowed and laid down. A further communication in this regard will follow after a policy decision is taken by the Corporation in regard to such areas.

- x. The NCDC's rate of interest to the apex cooperative bank is likely to be $6\frac{1}{2}$ per cent per annum. The exact rate will, however, be communicated separately. The rate of interest of borrowing by the cooperatives installing the processing units shall not exceed 1 (one) per cent over the rate of interest charged by the NCDC.

In the event of any default in the repayment of loans and payment of interest thereon, the interest rate will be increased by half per cent i.e. a higher rate of interest will be charged on the principal as well as on interest components of overdue instalments from the due date to the date of actual payment.

- xi. The period of loans to the apex banks and to the processing units will be for a maximum period of 15 years. Depending upon the feasibility of the project etc. the repayment period can be reduced, but in no case less than 7 years.
- xii. In suitable cases, if necessary, a moratorium for a maximum period of three years since the date of first drawal of loan for repayment of principal could be considered by the financing apex bank/state government to the processing unit and by the NCDC to the concerned apex cooperative banks/State Government.
- xiii. If a borrowing cooperative processing unit for which the NCDC has refinanced loan/loans, repays its loan earlier than the due date, apex bank/state government will repay to the NCDC all such instalments premature paid by the processing unit, until the NCDC's loan amount is fully repaid.
- xiv. The application for refinance to the NCDC shall be accompanied by a resolution of the Board of Directors of the concerned borrowing cooperative processing units and of the apex cooperative bank for availing of refinancing facility.

..../Contd.

2. The apex cooperative banks will send to the NCDC, for the purpose of examining technical and economic feasibility, the proposals of the small and medium size processing units which they intend to finance under the Scheme. The NCDC will then communicate to the apex banks the administrative and technical approval to those proposals which satisfy the conditions laid down under the scheme for financial assistance and are techno-economically viable. The apex banks will be eligible for refinancing in the case of only such proposals to which the NCDC has thus given administrative and technical approval.

If the apex bank/state government does not take effective action to finance the cooperative processing units within one year from the date of administrative approval, the administrative approval will be deemed to have lapsed.

3. It is expected that while financing the processing units, the apex cooperative bank/state government will release funds in relation to the progress made by the concerned processing units in respect of acquiring land, construction of buildings and purchase/installation of machinery, etc. In other words, the releases of the bank/government need to be progress based. Refinancing to the apex bank/State Govt. will be accordingly made in instalments depending upon the progress made by the cooperatives in implementing the project.

4. In giving assistance to the processing units under this scheme, preference should be given to those units proposed to be set up in the areas to be selected under the small Farmers Development Agency Scheme provided other things being equal and subject to the viability of projects being satisfied.

5. In the light of the above, the State Governments are requested to furnish suitable proposals for the purpose of refinancing under the scheme in consultation with the apex cooperative banks. The specimen documents for entering into loan agreement by the processing unit with the apex bank and of the apex bank with the NCDC and also Guarantee Form of the state government are being sent separately in due course.

6. Tentatively the approved allocation during the Fourth Plan period has been since revised from Rs. 7.5 crores to Rs. 9.00 crores.

.....Contd.

7. The receipt of this letter may be acknowledged.

Yours faithfully,
Sd/-
(V.G. Puranik)
Director
for Secretary.

Encl: One.

Copy to:-

1. The Registrar of Coop. Societies, All States (Except J&K and Nagaland).
2. The Manager/General Manager/Managing Director, Apex Cooperative Bank/Central Coop. Banks.
3. Agricultural Credit Department, Reserve Bank of India, Bombay.
4. The Joint Secretary (CP), Department of Cooperatio Ministry of FACD&C, Krishi Bhavan, NEW DELHI.
5. All Officers & Sections of the Corporation.
6. The Regional Officers, South & East, NCDC.
7. Planning Commission.

Sd/-
(V.G. Puranik)
Director
for Secretary.

NATIONAL COOPERATIVE DEVELOPMENT CORPORATION

Gram: 'COPCORP'
Phone: 623435/623436

C-56, South Extension (II),
New Delhi-49.

No.NCDC.3-1/69-CC&H

Dated the 23rd Dec., 1969.

From

Shri S.K.S. Chib, I.A.S.,
Secretary.

To

The Secretaries-in-charge of Cooperation,
All States (Except J&K and Nagaland).

Sub: Central Sector Scheme for financing small
and medium sized processing units.

Sir,

As you are aware, tentatively a sum of Rs.7.50 crores has been provided under a Central Sector Scheme for financing small and medium sized cooperative processing units outside the State Plans ceilings, as approved by the Planning Commission, during the Fourth Plan, of which, Rs.1 crore have been budgeted for the year 1969-70.

2. Under this Scheme the National Cooperative Development Corporation proposes to undertake direct and indirect financing and/or refinancing of small and medium size cooperative agricultural processing units such as cooperative rice mills, oil mills, cotton gins, cotton-seed processing plants, cattle-feed factories, solvent extraction plants, fruit and vegetable processing units, cold storages, etc. and their allied/bye-product industries individually and/or jointly. Large sized processing units such as cooperative sugar factories, spinning mills, jute mills etc. will not fall within the purview of this Scheme.

No assistance will, however, be available from the National Cooperative Development Corporation to the State Governments under this particular scheme for participation in the equity capital of the processing units irrespective of their size.

..../Contd.

3. For the purpose of the Scheme it is envisaged that the units with block cost not exceeding Rs.10 lakhs will be categorised as small sized processing units and from Rs.10 lakhs to Rs.40 lakhs as medium sized processing units. Margin money required for raising working capital during the gestation period of the projects, will be considered as a part of the block cost. For the purpose of financing the small and medium size processing units it is contemplated that a minimum margin of 25 per cent might be required in the case of small size processing units and 30 per cent in case of medium sized processing units. For instance, in the case of a small size processing unit, if its block investment amounts to Rs. 8 lakhs, it would be eligible to get a block loan of Rs.6 lakhs. The remaining amount will have to be raised in the form of share capital and/or reserves, if any. Similarly in case of a medium size processing unit, if its block investment is of the order of Rs.20 lakhs, the unit will have to raise in the form of share capital and/or reserves, if any, Rs.6 lakhs and the remaining Rs.14 lakhs it would get in the form of block loan under this Scheme.

4. The above indicates the outline of the proposed Scheme under consideration. The details about the procedure of refinancing under the Scheme, the agency for financing/refinancing, security required, rate of interest, the period of repayment etc. will be communicated after the scheme is finally cleared by the Ministry of Finance.

In the meanwhile, however, as the current financial year is at an advanced stage, it is suggested that the state governments may send suitable proposals with relevant data and estimates etc. of small and medium size processing units with block cost below Rs.40 lakhs, for the NCDC's consideration for financial assistance under this Scheme urgently and preferably before the end of January, 1970. It may, however, be mentioned that such proposals need to be furnished after examining their technical and economic feasibility as usual.

5. The receipt of this letter may be acknowledged.

Yours faithfully,
Sd/-
(V.G. Puranik)
Director (Processing)
for Secretary.

...../Contd.

Copy to:-

1. The Registrar of Cooperative Societies,
All States (Except J&K and Nagaland).
2. The Manager/Gen. Manager/Managing Director/
Apex Cooperative Banks.
3. The Manager/Gen. Manager/Managing Director/
District Central Cooperative Banks.
4. To all Officers of the Corporation
including Regional Officers (South) & (East).

Sd/-
(V.G. Puranik)
Director (Processing)
for Secretary.

NATIONAL COOPERATIVE DEVELOPMENT CORPORATION

GRAM : 'COPCORP'
Phone : 623435/36

C-56, South Extension (II)
New Delhi-49.

No: NCDC.3-2/70-CU&H.

Dated: March 12, 1970.

From

Shri S.K.S. Chib, I.A.S.,
SECRETARY.

To

The Secretaries in-charge of Cooperation,
All State Governments (Except J&K & Nagaland).

Sub: A Corporation Sponsored Scheme for providing assistance to the State Governments outside their plan resources for share capital participation in processing units for availing of block loan from the Commercial Banks.

Sir,

You are aware that since recently the possibilities of availing of term loans from the Commercial banks to meet block loan requirements of the Agro-Industrial units have improved. Some of the commercial banks have already approached the cooperatives for financing the agro-based industries. For example, the State Bank of India in their recent communication to the NCDC and the Registrars of Cooperative Societies have expressed their willingness to sanction term loans to the cooperatives to meet block cost of the processing units, if need be, by suitably liberalising their terms and conditions. Such financing would, however, depend upon the capacity of the cooperatives to offer the required margin of security for availing of term loans from the commercial banks.

2. The cooperatives would be normally required to offer at least a minimum margin of security of 35 to 40 per cent of the block cost of the project. In other words, if the cost of a project is Rs.40.00 lakhs, the concerned cooperative would be required to offer a minimum margin of security of Rs.14.00 lakhs to a commercial bank for securing a block loan of Rs.26.00 lakhs. This margin would normally consist of equity capital.

3. The majority of the farmers raising crops like paddy, cotton, groundnut, jute, etc. are economically

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weak. The processing units organised by them, therefore, may not be able to raise adequate share capital from the resources of the farmers for margin of security. In such cases, participation by the State Government in their equity capital would become all the more important. Therefore, where the state plan provisions for this purpose are likely to be inadequate, it was considered necessary to make some arrangement to supplement financial assistance so that the processing units could be enabled to avail of assistance from the commercial banks.

4. Keeping the above in view, the Corporation has sponsored a new scheme, under which the states may get assistance outside their plan resources for contribution to the share capital of the processing units on a selective basis. This scheme will come into effect from 1st April, 1970. Its outlines are as follows :

- i. The scheme will be applicable only in case of those processing units, the block loan requirements of which will be met entirely by the commercial banks.
- ii. Only those processing units will be considered for assistance under the scheme which are technically and economically viable.
- iii. Preference will be given to medium size processing units with the block ranging between Rs.10 to 40 lakhs.
- iv. No unit, the total block cost of which individually exceeds Rs.60 lakhs will fall within the purview of this scheme. In particular, the cooperative sugar factories, spinning mills and jute mills will not fall within the scope of this scheme.
- v. The minimum equity capital that will be required to be raised between the cooperative society and the state government would be about 35 per cent of the block cost of the processing unit. The ratio of share capital participation between the cooperative society, including the grower members' share on the one hand and the state government will be normally in the ratio of 1:2, i.e. the state governments contribution to share capital will be twice the contribution of the cooperative to the equity participation. However, where the cooperative society is well established and the farmers are cooperatively more affluent, the ratio may be 1:1, i.e. the

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cooperative society will have to raise an equivalent amount of share capital with that of the state government. In the case of weaker sections and weaker areas, the ratio of share capital participation between the cooperative society and the state government may be 1:3.

- vi. The National Cooperative Development Corporation will provide, after assessing the individual cooperative society's resources, the viability of the project etc., a loan to the state government which shall not exceed 50 per cent of the share capital participation made by the state government to the cooperative society for the processing unit, i.e. this Corporation will meet **half** the contribution of the state government to the cooperative society towards the equity of the cooperative society. The loan given by the Corporation to the state government shall be converted as share capital by the state govt. vis-a-vis the cooperative society.
- vii. The state government will be required to contribute to the cooperative society at least 50 per cent of the share capital due to the unit before the Corporation's loan is released to the state government.
- viii. The state govt. concerned will obtain **prior** administrative approval of the project from the Corporation before contributing to the share capital of the society from their own resources within or outside the state plan.
- ix. The loan from the Corporation to the state govt. for the purpose under the scheme in regard to individual processing unit will not exceed an amount of Rs.8.00 lakhs.
- x. For the purpose of assistance by the Corporation, other factors being equal priority will be given to those units which are located in cooperatively and/or economically under-developed areas in a state unless there is a distinct advantage in contributing to the economic growth of another area for increasing the productivity etc. in the case of other units.
- xi. The terms and conditions to the state government under this scheme will be analogous to the terms and conditions of loans sanctioned to the state governments under other Corporation Sponsored Schemes and in particular, the rate of interest of the loan sanctioned to the state government will be 6 per cent

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per annum and the period of repayment of such loan will be 15 years from the first drawal of loan to the state government sanctioned under the scheme.

5. Before releasing assistance under the scheme, it will be seen that a commercial bank has firmly committed to provide required amount of term loan to the concerned processing unit. Subject to the Corporation's resources position, the assistance will be released to the state governments either in lumpsum or in instalments, spread over a period of time, for the individual processing units.

6. It is requested that the details of this scheme may be brought to the notice of all concerned and the receipt of this letter may be acknowledged.

Yours faithfully,

Sd/-

(V.G. PURANIK)
Director (P)
for Secretary.

Copy to :

1. The Registrar of Cooperative Societies, All States, (Except J&K and Nagaland).
2. The Chief Executive Officers of Apex Marketing Federations.
3. The Secretary, Maharashtra State Cooperative Industries Commission, Bombay.
4. All Officers of the Corporation.
5. Regional Officers, NCDC, (South and East).
6. The Department of Cooperation, Ministry of Food, Agriculture, Community Development and Cooperation, Govt. of India.
7. The Member-Secretary, Committee for Cooperative Training.
8. The General Secretary, National Cooperative Union of India.
9. Director, Vaikunth Mehta National Institute of Cooperative Management, 5, B.J. Road, Poona.
10. Secretaries in-charge of Planning, All State Govts. (Except J&K and Nagaland).

.../Contd...

(Annexure VII Contd.)

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11. Chief Officer, Rural Credit Department,
State Bank of India.
12. Chief Officer, Rural Credit Department,
Reserve Bank of India.
13. All nationalised commercial banks.
14. Agricultural Finance Corporation.

Sd/-

(V.G. PURANIK)
Director (P)
for Secretary.

NATIONAL COOPERATIVE DEVELOPMENT CORPORATION

GRAM: 'COPCORP'
Phone: 623435/36

C-56, South Extension (II),
New Delhi-49.

No: NCDC.3-3/70-CC&H

Dated: March 12, 1970.

From

Shri S.J.S. Chib, F.A.S.
SECRETARY.

To

The Secretaries in-charge of Cooperation,
All State Governments (except J&K & Nagaland).

Sub: Provision of margin money for cooperative
processing units under Corporation Sponsored
Scheme.

--- . . . ---

Sir,

Some of the cooperative processing units organised before the commencement of the Fourth Plan have not been able to utilize their installed capacity fully on account of their inability to raise adequate working capital for want of liquid resources to offer margins. The provisions made by these units for margin money in the project costs were either inadequate or were used in the fixed assets on account of rise in the block costs or on account of delay in installation, in the pre-operative expenses.

2. Limitations on raising working capital may restrict the capacity of these processing units to procure raw-material for fuller utilization of their installed capacity. This Corporation, has, therefore, suggested to the state governments to provide, if need be, by formulating a special scheme, adequate funds for assisting those processing units which are short of liquid funds for the purpose of margin money. Where the State Governments would not be able to provide such assistance adequately for want of resources, this Corporation would consider to supplement financial assistance on a selective basis to a limited extent and has for that formulated a new scheme which will come into effect from 1st April, 1970. The outlines of this Scheme are as mentioned below:

- i. The State Governments would furnish to the Corporation a list of the processing units

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that would be identified under the scheme for giving assistance to raise margin money. Such units will be only those which were organised before the commencement of the Fourth Plan.

- ii. The processing units thus identified for assistance should have collected share capital from the grower members and/or from their cooperatives adequate enough to create their stake in the project.
- iii. The accumulated losses after excluding depreciation and development funds, if any, must not be more than the owned funds of the selected units.
- iv. After giving margin money to the processing unit, it should be able to procure raw-material from its area of operation. In other words, such unit need to be located in an area where the required raw-material is sufficiently available for fuller utilisation of the installed capacity of the concerned unit.
- v. While selecting the units under the scheme, it will be ensured that the arrangements made for managing the working of such units are efficient and satisfactory.
- vi. Only those processing units will be eligible for financial assistance under the Scheme which would be able to revive their working as a result of such assistance and stabilize financially in a reasonable period of time.
- vii. The Corporation will assist the State Govts. outside their plan resources, to an extent which shall not exceed 65 per cent of the assistance the state governments give to the processing units for margin money.
- viii. The Corporation will select, on merit, the units, state-wise for assistance. In doing so, if necessary, priority will be given to cooperatively under-developed areas.
- ix. Assistance given by the state governments to the processing units under the scheme should be preferably in the form of share capital contribution.

- x. The Corporation's assistance to the State Governments will be in the form of loans and will be released as reimbursement finance.
- xi. Where the state governments utilize the Corporation's assistance in the form of share capital contribution for margin money, the Corporation will charge 6 per cent rate of interest on such loans. If the state governments use it in the form of loans to the processing units for raising margin money, the Corporation's rate of interest to the state governments on such loans will be $7\frac{1}{2}$ per cent.
- xii. Term of repayment of loan etc. will be analogous to the terms and conditions of other loans sanctioned to the State Governments by the Corporation from its own funds.

3. In the light of the above, the state govts. are requested to furnish a list of the proposals to this Corporation for consideration by the 30th June, 1970. The receipt of this letter may please be acknowledged.

Yours faithfully,
Sd/-
(V.G. PURANIK)
Director.
for Secretary.

Copy to:-

1. The Registrar of Cooperative Societies, All States (Except J&K & Nagaland).
2. The Chief Executive Officers of Apex Marketing Federations.
3. The Secretary, Maharashtra State Cooperative Industries Commission.
4. All Officers of the Corporation.
5. Regional Officers, South and East, N.C.D.C.
6. The Department of Cooperation, Ministry of Food, Agriculture, Community Development and Cooperation, Govt. of India.

..../Contd.

7. The General Secretary, National Cooperative Union of India.
8. The Member-Secretary, Committee for Cooperative Training.
9. Director, Vaikunth Mehta National Institute of Cooperative Management, POONA.
10. Secretaries in-charge of Planning, All State Govts. (Except J&K and Nagaland.)
11. The Chief Officer, Rural Credit Department, Reserve Bank of India, BOMBAY.

Sd/-
(V.G. PURANIK)
Director
for Secretary.

Iran

MARKETING OF FRUITS AND VEGETABLES IN IRAN

by

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

REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH
COOPERATIVES", TOKYO. JAPAN. 17th to 27th May 1970

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE
New Delhi.

INSTITUTE FOR THE DEVELOPMENT OF
AGRICULTURAL COOPERATION IN ASIA
Tokyo, Japan

BY

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

Iran covers an area of 164,200,000 square meters. Almost 6,575,551 hectares of this country is devoted to producing agricultural products and orchards, and 29,000,000 hectares of which is devoted to natural forests and pastures. The value of agricultural products in Iran is equal to 14 million dollars. The amount of rain differs in different parts of the country, for example it amounts to 1350 millimeters in Caspian Sea's shores, 320 mm in Central part, 80 to 15 mm in salt-desert areas, and 70 to 200 mm in Persian Gulf shores.

62 per cent of the population of Iran is engaged in agricultural, and related crafts, activities. Therefore, the improvement of agriculture has a vital role in increasing the level of total national income. But there exists one problem on the way of achieving a sound marketing because of the existence of production surplus in small and disperse areas.

The performance of the advanced law of Land Reform, has directly affected the life of the producers. The conditions and situations of the villages is determined by Land Reform, therefore the act of production is carried out more hopefully and more energetically by farmers who now own land. Parallel to this, rural cooperative societies have gradually replaced ex-landlords and have undertaken the activities related to national rural economy. Thus, eventually these societies will not only be effective so far as provision of production elements is concerned, but they would undertake considerable efforts in purchasing and selling the farm products.

In Iran there exists a differing climate. The shores of Caspian Sea, which is in the north, have tropical climate with much rain. In these parts, the following products are cultivated: rice, cannabis, tobacco, citrus, figs, apples, pears, melon, watermelon, cucumbers, potatoes, eggplants, tomatoes, onions and other leafy vegetables.

In north-west, north-east, and west parts of Iran, which are cold regions, early fruits and vegetables are cultivated. In tropical areas in the southern parts, and in Persian Gulf shores, dates and other fruits and vegetables are produced.

According to the latest statistics, the types and the amounts of fruits and vegetables produced in Iran are as follows:

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<u>Products</u>	<u>Amount of production (Tons)</u>
Citrus	35,786
Apricots	50,951
Dates	145,651
Grapes	337,418
Apples	22,910
Potatoes	98,319

The general statistics of fruits and vegetables are as follows:

<u>Products</u>	<u>Amount of production (tons)</u>
Fruits	840,764
Vegetables	785,270

Fruits and vegetables, with the average production of 140,000 tons of dates and 60,000 tons of raisins, play an important role in the economy of Iran.

If the implications and meanings of marketing is taken into consideration, it is clear that at present, considering the known scientific methods, large share of the sales price of commodities is devoted to marketing expenses. Therefore, the objective of every sound marketing planning should be to reduce these expenses. It is also confirmed by qualified people that the establishment of marketing cooperative societies is one of the most effective ways to meet this objective.

CORC, which has the supervising role for rural cooperative societies and unions, has persued and led marketing services in these societies and unions, in view of this fact that the improvement of rural cooperative societies and unions will have an active role in social and economic welfare in various parts of the country.

In the course of marketing the fruits and vegetables, there are several problems as follows:

1. The wide dispersy of the products amongst various parts of the country and the lack of suitable access roads to transfer the products to the consuming centres.
2. Too much changes of supply and demand in different seasons resulting in too much fluctuations in prices.
3. Perishability of these products and the high storing and retaining expenses, and the lack of sufficient storing facilities.
4. The fruits and vegetables being voluminous and the transportation expenses being high.
5. Existance of unqualified intermediaries and pedlers in villages.
6. Involvement of some of the farmers in accumulative annual loans.
7. Lack of sufficient open-space markets to sell the produce.

Marketing Services of Rural Cooperative Societies and Unions for
Agricultural Products

The basic objective of rural cooperative societies and unions in undertaking the marketing services is, on one hand, based on collecting the products of member-farmers with suitable terms and selling them in appropriate prices; and on the other, providing their requirements cheaply. Experiments indicate that rural cooperative societies and unions can adjust the prices of products to their own interests by adopting the below policies and methods:

1. Act as an intermediary and retain the maximum profit for the members by eliminating the unnecessary expenses of marketing in sale price.
2. Undertake the necessary activities to present their products to the consumers. This will result in an increase in the amounts of products sold.
3. Undertake useful activities oriented towards increasing the demand through the bettering of quality and type of products, packing, grading, processing and searching new markets and new way of consumption for the products.
4. Supervise the markets of products.
5. Reduce the cost of production through use of machinaries, and increase the amount of product per unit of land, undertake other useful practical activities.
6. Monopolize the sale of product.

All the consumers wish the commodities to be presented in the sale centres in fixed prices and homogeneous terms. And the rural cooperative societies and unions hope to sell their members' products in fixed prices, because this is the only way through which they can have a precise account of the revenues and marketing expenses, and avoid large amount of losses.

Unfortunately, such a state is not to be easily achieved because the prices are controllable only when the elements of supply and demand are available and the fluctuations of price can be avoided.

It is clear that on one hand, the collection, purchase and retaining of the products of all the farmers, and even the majority of them is impossible for the rural cooperative societies and unions, and on the other hand, the consumers of these products are mostly non-farmers who are far from the range of activity of these cooperative units. Thus how can the cooperative units be able to stabilize and even control the prices?

The General Services of Rural Cooperative Societies and Unions in Different Stages of Marketing

1. Marketing

The purchase and collection of each product require seeking the wholesalers and retail purchasers, discussing over the purchase price, and determining the methods and conditions of delivery. This is the most important marketing activity, because so long as an appropriate market has not been formed for the sale of the product, the undertaking of the following marketing activities will be useless and basically unnecessary. Annually, the Commerce Department of CORC gets in touch with civil and military authorities and discusses over the sale of the products to them preceding the harvesting of the fruits and vegetables belonging to the members of rural cooperative societies. When the terms of transactions (qualitative and quantitative) are clarified, CORC announces the ease to producing rural cooperative societies and unions, and pays a down-payment to the farmers to improve these unions financially. In this part, a great attempt is made to provide the market and undertake the transactions right at the time when the farmers are in need of money to buy some of the consuming goods, and probably, production elements, so that the producers, due to their financial need, will not have to sell their product before the harvesting to the intermediaries, and get in debt. Another important activity undertaken by rural cooperative units in the field of marketing is the establishment of two centres for sale of vegetables in Gomrok square and in Rey square (both in Teheran). The improvement of sale activities undertaken by members of the rural cooperative societies in these centres is remarkable.

2. Retaining and storing

Since fruit and vegetables are produced in a special season of the year, but are consumed during the year, they require being retained. The provision of retaining facilities for these products is an important question of marketing in the present conditions of the country. The importance of this question is further shown in the case of perishable and semi-perishable products; to meet the expenses of retaining these kinds of products is a complicated problem for the rural cooperative societies and unions at present.

Apart from these problems, performing the marketing operations will not be possible for any organisation without having store-houses. This is why, in spite of the fact that CORC has got limited resources to give financial assistance to rural cooperatives societies, it has always attempted to give financial aid, and arrange some programmes, to build suitable store-houses in village level for rural cooperative societies, and in country (Shahrestan) level for rural cooperative unions. Apart from these activities, other efforts have been done in order to provide credit required for the establishment of the store houses in village level through encouraging the farmers and making use their self-help. Activities undertaken in this field are the following:

A. Village store-houses for rural cooperative societies

The building of the village store-houses consists of one store with 15-20 tons of capacity, an office, and the related services. For building the store-house, the direct investment of the members and their self-help are made use of. These stores are mostly used for retaining production elements like seeds, fertilizer, insecticides in the time of cultivation, and collecting fruits and vegetables in the time of harvest.

So far there have been 2,404 stores. Since the improvement of this project (establishment of store-houses in village level) depends upon the financial improvement of the rural cooperative societies and since one of the most important commercial activities of these societies is the purchase and delivery of the crop to the country's (shahrestan(s) crop department, some arrangements are made that for the purchase of each ton of crop, 200 rials will be collected in a special fund in the interest of the rural cooperative societies. When the amount of money collected is sufficient, stores and rural cooperative society's office will be built. In order to give a technical aspect to this activity, CORC requested the Ministry of Development and Housing to provide an appropriate model for these buildings. At present, almost 31 million rials have been collected, and the preliminary activities have been undertaken for the establishment of the store-houses.

B. Store-houses of rural cooperative unions.

The cost of establishment of these stores (with the capacity of 500-3000 tons) exceeds the financial possibilities of the rural cooperative unions, and is unfeasible unless the unions are financially supported. Realising the importance of these stores and their creative and useful effect on the economy of rural areas, CORC has devoted 50 million rials to the programme of building store-houses, and discussed the subject with the Ministry of Development and Housing to provide the initial plan for the establishment of the stores and to carry out the programme. At present, the agreements of building 16 stores with the capacity of 10,000 tons are signed by the two organisations (CORC and the Ministry of Development and Housing) and the contractor is appointed. It is hoped that by the end of this year, the necessary steps would have been taken to establish 15 more stores with the capacity of 10,000 tons.

C. Grading and Packing

At present the general pattern of grading in rural cooperative societies is to adopt a special packing for the consuming goods needed by the organisations and enterprises of the country which would meet the requirements of the buyers, and which would be favourable to them. For example, apples, citrus, and vegetables are graded and packed in the workshops of rural cooperative unions, and prepared to enter the market and be sold. In the case of the commodities that will be exported, it is tried to adopt the international standards.

For example, the rural cooperative societies' union in Maragheh, which owns a high factory for dried fruits and packing, has exported almost 385,808 kgs green raisins with international standards during last few years. It has been awarded prizes in each from the buyer country because of the purity of the product.

So far the attempts made to equip the rural cooperative unions with machineries and grading and packing facilities for fruits and vegetables are:

- a) Purchasing of two grading machines for oranges and apples. One is installed in Shahsavari, and the other in Neishabour. The capacity of each machine is 1.5 tons per hour. These machines are being utilised by the rural cooperative societies.
- b) Purchasing of modern machineries, and improving the dry fruits factory of rural cooperative union in Maragheh which has resulted in an increase in its efficiency (from 4 tons to 15 tons per day).
- c) Considering and undertaking the initial activities for establishment of green raisins cleaning and packing plants in Rezaiyeh (with the capacity of 6-10 tons per day) for the use of the rural cooperative societies.
- d) Considering the possibilities of establishment of an orange grading and packing plant in Shahsavari (with the capacity of 5,000 boxes each 20 kilos per day) for the rural cooperative societies of Shahsavari.
- e) Considering the possibilities of provision and installation of an apples grading and packing plant in Marand for Marand's rural cooperative union.

4. Transportation

Transportation is considered to be an effective factor in economic growth in the advanced countries of the world. Prof. Ashby, one of the most distinguished agricultural economists of England, says that if he could only do one thing to promote the economic activities of an agricultural area, he would build roads; and if he could undertake two more activities, again he would build roads. Obviously, the importance of roads is considered, and extensive programmes are undertaken by government. Since the access roads are of vital importance both for the transportation of farmers' fruits and vegetables to sale markets and for reaching the consumer goods in the villages, the members of the rural cooperative societies have been encouraged to establish access roads through self-help and collective cooperation. On this basis some third-class 1000 km of access roads have been established in rural areas. This has been very effective in regard to the extend of Iran.

5. Commercial Activities management of rural cooperative unions

Commercial activities management has a vital role in rural cooperative unions. In cases where the management is weak, the wrong commercial activities will result in losses for the enterprise. Generally, there is no big difference between commercial management and the management of other various spheres. But in commercial management, the function of marketing, general policy making is somehow distinguished. With respect to this fact, special programmes are arranged in rural cooperative unions, and 30 high school graduated employees have been trained in six months training courses and they have started their activities as rural cooperative unions' managers. This programme will be continued. Besides, in order to take into view the technical aspects of marketing, and the use of modern techniques, CORC is requested to invite an agricultural marketing expert to Iran for one year.

6. Volume of rural cooperative unions' transactions

In order to centralise on the volume of rural cooperative unions' commercial activities, we only regard to the total amount of purchase of fruits and vegetables in 1968 and 1969:

Fruits and Vegetables sold through the Unions	Year
1,802,024	1969
2,478,602	1968

It is necessary to note that in addition to the exportation of a large amount of raisins and dry apricots, a great deal of fruits and vegetables are exported annual to Saudi Arabia, Iraq, Jattar, Dubai and Oman.

In order to facilitate the export of fruits and vegetables to the above mentioned countries, the following steps have been taken:

- a. Establishing export centers in Teheran, Isfahan, Shiraz, Bandar-Abbass, and Abadan.
- b. Reducing the freight rate.
- c. Standardising fruits and vegetables and the packing of them with the best conditions to compete with similar products of other countries.
- d. Arranging a transit agreement between Iran and Iraq for the transportation of the product.
- e. Transportation services with the trucks which are equipped with refrigerators.
- f. Accelerating the custom arrangements for these commodities.

7. Establishment of Cooperative retail stores, and provision of farmers' consuming goods

The farmers' beside being producers, are also consumers. The provision of consuming goods and production elements with easy conditions and cheap prices are not only effective for the betterment of their conditions of life, but also are indirectly effective in reducing the cost of production and marketing through reducing the farmers' cost of living. Regarding this fact, and the historical background of the rural areas, where pedlers and intermediaries would plunder a large share of the profit and would actually exploit the farmers, the establishment of cooperative retail stores in villages is taken into consideration.

So far these cooperative retail stores directly buy the first-class consuming goods with easy conditions from the private and governmental producers, centralise them in the stores and sell it to the farmers. The most important commodities are sugar, tea, oil products, chemical fertilizer, chemical insecticides, sprayers, tobacco products, vegetable shortenings and oil stores.

To visualise these retail stores in the rural areas, it is sufficient to note that only 4,762 rural cooperative societies have petroleum sale stores over 1,118 unit of these sale stores are equipped with 13,000 litter petroleum reservoirs. A large amount of these sale stores own simple hand and engined sprayer, which the farmers can buy or hire.

8. Collecting the marketing information

As it was mentioned above, the most important problem of marketing the agricultural products is the high fluctuations of the prices. These fluctuations sometimes cause the price of the simplest products like onions and potatoes to raise to even ten times the normal price, against the benefit of the consumer, and sometimes cause the prices to decrease so low which it is not economic to harvest the product, against the benefit of the producer.

So long as there is no precise information about the level and volume of agricultural products and the level of the consumption in

Joint ICA-CUAC Seminar
May 17-27, 1970

Outline of Fruits and Vegetable Marketing
in Japan

Submitted by Mr. Haruo Sakaki
Manager, Fruits and Vegetable
Department
Zenhanren

(b) Fruits and vegetables for processing

Breakdown of processing items is; radish for pickling 540 thousand tons, tomatoes for juice and catchup 230 thousand, oranges for coming and juice making 140 thousand, apples and peach for processing 100 thousand and toris 60 thousand tons. (Ref: Table IV).

(3) Propensity of Consumption

Along with advance of living standard of the people consumptive pattern of foodstuff in also changing. Fruits, vegetables and livestock produces are on the increase while that of rice on the decrease. The extent of growth in production differs by item depending on the extent of consumption. Lettuce and green pepper increased the most in production and cucumber, tomato and onion the next while latus-root, chinese cabbage, welsh onion and radish on the decrease. In fruits, mandarine orange, peach and grapes increased, but apples decreased. (Ref: Table V)

Consumption of vegetables per capita in 1967 accounted for 122 kg, ranking after Italy, but the consumption of fruits is still so low, only 55 kg per capita, not yet reached to the levels of European countries and the U.S.A.. (Ref: Table VI). Marketing Activities of Fruits and Vegetables of Agricultural Cooperatives.

(a) Amount of Marketing

The total amount of sales of fruits and vegetables in 1967 by the agricultural cooperatives (multi-purpose cooperatives only) at village level amounted to 205 billion Yen, prefectural level (prefeatural economic federation or prefectural marketing and supplying federation) 110 billion and national level (National Marketing Federation of Agricultural Cooperatives) 48 billion Yen. When compared with that of 1960, the ratio of growth at the respective levels was 444% at village level, 597% at prefectural and 689% at national level. (Ref: Table VII).

(b) Organizational system of marketing and current problems

Although the amount of marketing of fruits and vegetables at the

respective levels has shown a great advance along with constant improvement in the method and system of marketing within cooperative movement, the market share of village multi-purpose cooperative in the cities of more than 50 thousand population is not more than only 31% and prefectural economic federation 16.3% and national federation 7.1% in the year 1967, still so low. (market share at the central wholesale markets, however, is 59% with village cooperatives, 33% with prefectural federations and only 14% with national marketing federation).

The major components of the low market share of cooperative are (1) smallness of the scale of farming of farmer in general, much difference in quality of products and too many varieties of produces, besides perishing nature. With these factors, the starting of marketing business of cooperative lagged behind merchants, (2) cooperation and unity of the farmers in the nearby areas of consuming cities, particularly of vegetable farmers that have a large market share, is not easy, (3) in the marketing of fruits, particularly in mandarin orange, special purpose federations at prefectural and national levels are doing marketing business of such fruits, which is marketing the market share of the National Marketing Federation of Agricultural Cooperatives low, (4) the practice in wholesale market is auction, so the producer has now power in the decision of prices, etc..

	1960	1963	1965	1967	1968
Rices	889 (48.5)	1,105	1,334	1,851 (46.0)	1,963 (46.5)
Wheat, Barley	106 (5.8)	34	94	90 (2.2)	95 (2.2)
Peas	49 (2.7)	52	52	57 (1.4)	48 (1.1)
Potatoes	58 (3.2)	85	79	81 (2.0)	69 (1.9)
(Total)	1,102	1,276	1,559	2,079	2,175
Vegetables	152	254	358	509	468
Fruits	115	169	209	251	282
(Total)	267 (14.6)	423	567	760 (18.9)	750 (17.8)
Industrial Crops	82 (4.6)	123	154	205 (5.0)	196 (4.7)
Misc.	58 (3.2)	66	91	109 (2.7)	135 (3.2)
(Total)	140	189	245	314	331
(Grand Total)	1,509 (82.4)	1,888	2,371	3,153 (78.4)	3,256 (77.2)
Sericultured	56 (3.1)	81	73	128 (3.2)	114 (2.7)
Livestock	266 (14.5)	474	600	742 (18.5)	848 (20.1)
Total production	1,831 (100.0)	2,443	3,043	4,024 (100.0)	4,218 (100.0)

Note, Figure in parenthesis is ratio.

Table II Production of Major Vegetables and Fruits

Items	1960 (A)		1965		1968 (B)		B/A %	
	Acreege	Yield	Acreege	Yield	Acreege	Yield	Acreege	Yield
Unit: (Yield, ton / Acreege, hectare)								
<u>Vegetables</u>								
Radish	102,700	2,859,000	98,400	3,085,000	90,800	3,095,000	1,094	1,891
Carrot	20,100	281,400	23,900	400,400	25,400	505,600	244	348
<u>Total of Root Vegetable</u>	173,170	3,708,800	163,280	4,132,500	154,640	4,232,200	89	164
Chinese cabbage	41,000	998,100	49,600	1,541,000	50,800	1,902,000	124	191
Cabbage	32,300	686,300	43,000	1,157,000	46,000	1,602,000	354	570
Welsh Onion	25,800	409,500	29,500	568,300	29,000	638,800	112	156
Onion	26,100	600,500	33,600	859,600	32,700	1,029,000	125	171
Lettuce	-	-	2,670	48,100	5,510	112,700	206	234
<u>Total of Leaf Vegetables</u>	185,000	3,421,600	251,143	5,492,750	238,551	6,172,607	129	180
Green Pepper	-	-	2,740	52,600	3,590	95,600	131	182
Eggplant	27,600	449,400	30,000	623,300	27,700	714,500	100	159
Tomatoes	13,200	242,400	18,900	531,500	20,500	849,500	155	350
Cucumber	27,100	461,500	34,500	773,000	33,000	983,600	122	213
<u>Total of Similar Vegetables</u>	151,810	1,791,000	160,960	2,681,400	150,280	3,334,200	99	186
Misc.	25,800	257,300	28,650	268,060	26,612	283,380	102	110
<u>Total</u>	537,780	7,178,700	604,033	12,574,710	570,083	14,022,307	106	195

Table III

Volume and Amount of Vegetables and Fruits
transacted through Wholesale Markets in
cities with more than 50 thousand population

Unit: Volume, 1,000 tons
Amount, one million
Yen

Markets	Items	1968		1964	
		Volume	Amount	Volume	Amount
Total (A)	Total	13,022	715,543	9,235	401,790
	Vegetables	7,884 (26)	353,482 (2,131)	6,113	187,023
	Fruits	5,138 (472)	362,061 (66,382)	3,122	214,767
	Total	5,855	350,180	4,472	213,309
Central Whole- Sale Markets (B)	B/A	44.9	49.0	48.4	51.1
	Vegetables	3,521	174,214	2,866	96,143
	B/A	44.6	49.3	47.0	51.4
	Fruits	3,334	176,466	1,606	117,166
	B/A	45.4	48.8	51.4	54.5
	Total	7,167	364,863	4,763	188,431
Other Markets	Vegetables	4,363	179,268	3,247	90,880
	Fruits	2,804	185,595	1,516	97,601

Source, "Fruits and Vegetable Market Research" by the Ministry of
Agriculture.

Note, Figure in parenthesis in column (A) is the amount of
imported item.

Table IV

Volume of Fruits and Vegetables used for processing

(Unit: 1,000 tons)

Items	Vegetables		Items	Fruits	
	1965	1968		1965	1968
Radish	402	540	Mandarin orange	140	217
Bamboo sprout	26	19	Summer orange	19	23
Chinese cabbage	10	13	Apple	103	142
Ginger	16	17	Pear, persimmon	13	15
Eggplant	8	15	Persimmon	35	49
Tomatoes	86	227	Grapes	35	56
Cucumber	16	33	Peach	58	76
Onion	4	14	Plum	16	12
Asparagus	8	11	Others	7	13
Others	14	27			
Total	590	916	Total	416	603

Source, Fruits and Vegetables Marketing Statistics by the Ministry
of Agriculture

Note, Items taken up here are the items used for processing purpose
more than 10 tons in the Year 1967.

Sweet and Irish potatoes are excluded.

Table V

Market Share of Fruits and Vegetables of Multi-Purpose Coops and its Federation

		(Unit: billion Yen)			
Coops	Items	1960(A)	1965	1967(B)	B/A
Primary Coop (Multi-purpose)	Vegetables	17	57	88	510.5
	Fruits	29	85	117	404.5
	Total	46	142	205	443.8
Prefectural Fed.	Vegetables	9	42	68	713.7
	Fruits	9	28	42	474.4
	Total	18	70	110	597.3
National Market- ing Fed.	Vegetables	3	14	27	896.7
	Fruits	4	13	21	532.5
	Total	7	27	48	688.6

Source: Agricultural Cooperative Statistics by the Ministry of Agriculture.

Table VI Annual Consumption Volume and Amount Spent for Vegetables and Fruits per Family in Cities with more than 50 thousand population

Items	1963 (4.17 members per family)		1965 (4.11 members per family)		1967 (4.01 members per family)		1968 (3.94 members per family)	
	Volume	Amount	Volume	Amount	Volume	Amount	Volume	Amount
Cucumber	19	1,509	19	1,805	22	2,173	21	2,245
Eggplant	13	759	12	983	14	1,136	12	1,107
Tomatos	15	1,231	15	1,383	16	1,470	16	1,544
Green pepper	2	204	2	322	3	436	3	474
Cabbage	27	1,112	29	1,274	28	1,480	29	1,175
Lettuce	-	-	-	214	3	386	3	443
Onion	19	1,179	22	1,196	21	1,496	21	1,332
Welsh Onion	12	791	11	928	11	1,072	10	1,010
Radish	31	805	29	937	28	1,148	28	1,126
Carrot	8	517	8	653	8	701	8	694
Irish Potato	22	1,076	23	1,041	21	1,277	20	1,051
Total (Vegetables)		16,595		10,382		23,057		23,059
Apple	27	2,204	26	2,062	24	2,128	22	2,076
Orange	30	3,344	44	4,524	50	5,216	56	5,328
Pear	9	660	10	749	12	969	12	978
Grapes	4	483	5	735	6	1,040	5	929
Peach	3	330	4	445	5	597	5	550
Total (Fruits)		10,975		14,307		17,243		18,003
Grand Total		27,570		33,689		40,300		41,062

Table VII International Comparison of Annual Consumption of Vegetables and Fruits per Capita

(Unit: Kg)

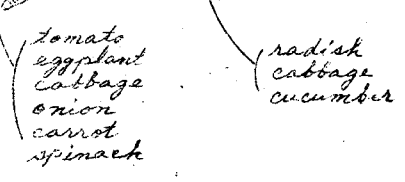
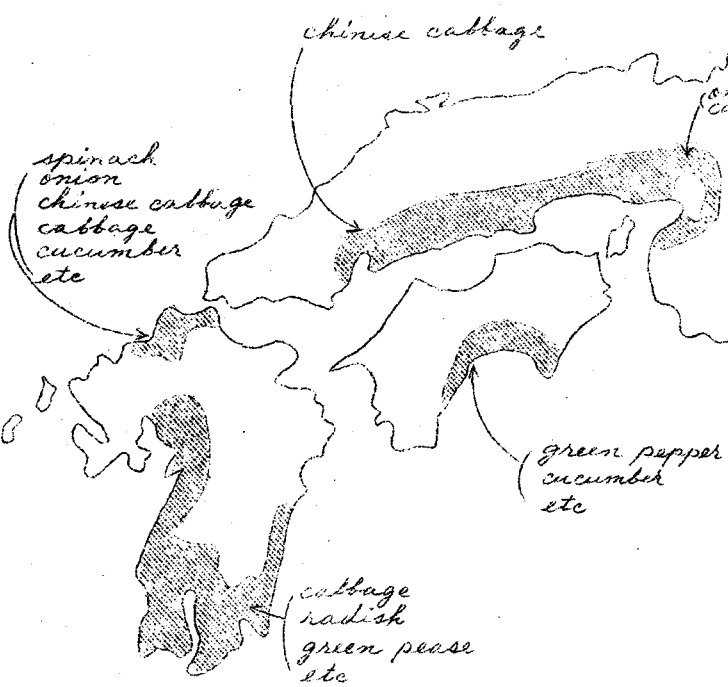
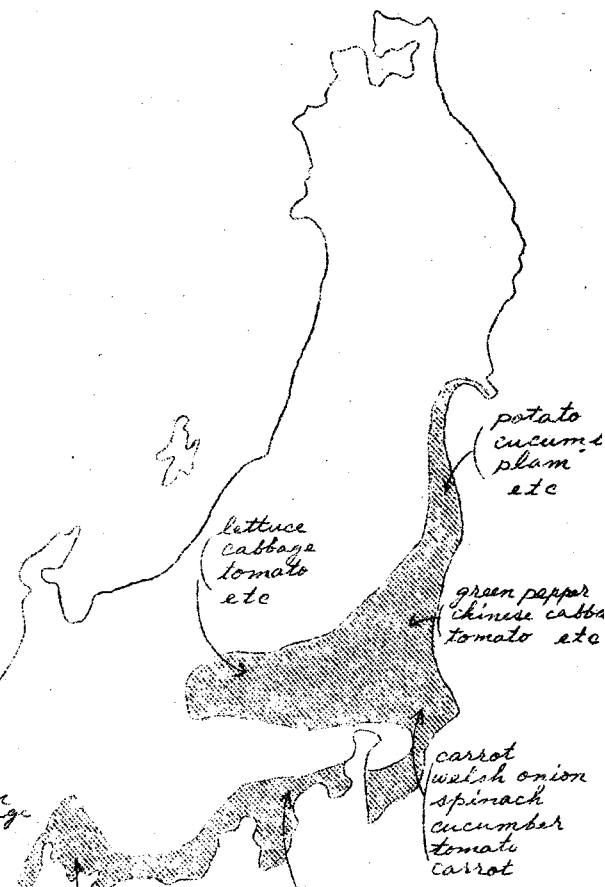
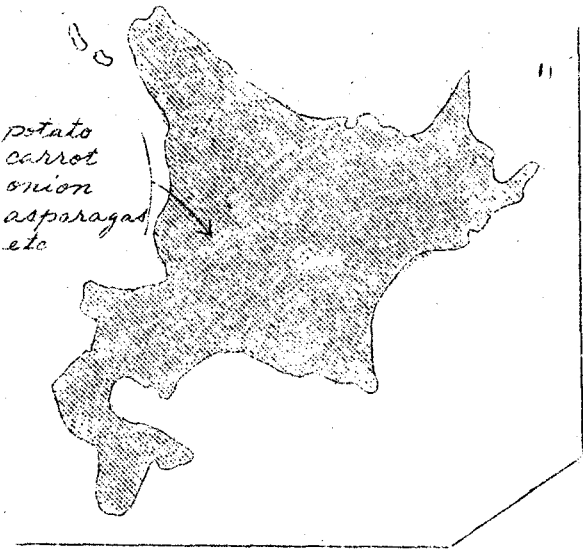
Year	Canada	U.S.A.	Denmark	France	W.Germany	Italy	Nether-lands	Norway	Sweden	Switzer-land	England	Japan
1959-60	76.3	97.8	63.5	120.4	43.7	136.1	63.5	24.9	74.5	50.3	92.1	
62-63	81.7	96.5	66.2	136.8	48.0	135.1	69.5	35.7	76.4	56.6	110.1	
63-64	69.4	98.0	68.0	136.8	53.4	141.5	73.7	38.5	31.5	60.5	119.4	
64-65	73.4	97.2	63.3	132.1	51.1	149.1	70.6	34.4	34.2	61.4	111.3	
65-66	79.7	97.8	54.4		50.8	151.8	63.3	36.5	35.5	59.7	116.5	
66-67					56.5	155.7		38.7		61.5	122.5	

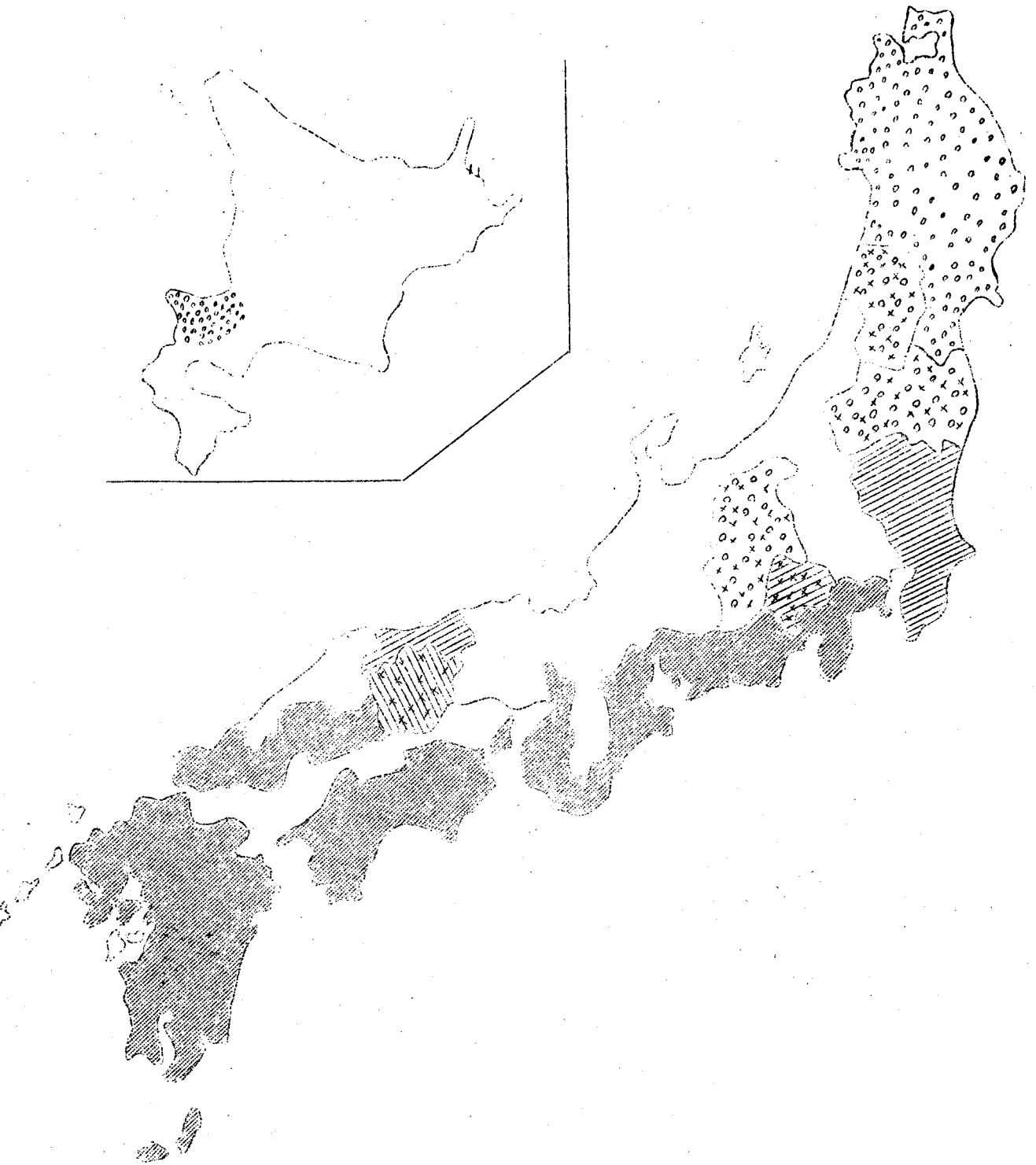
Fruits

Year	Canada	U.S.A.	Denmark	France	W.Germany	Italy	Nether-lands	Norway	Sweden	Switzer-land	England	Japan
1959-60	65.7	77.2	51.7	45.7	75.8	78.1	51.9	58.6	71.1	102.4	48.9	33.4
62-63	60.2	72.4	63.0	60.1	93.3	87.8	65.0	58.7	73.5	112.5	46.0	37.7
63-64	61.4	68.6	65.3	67.7	101.4	94.3	67.6	61.5	75.5	112.3	48.0	41.0
64-65	60.1	69.2	74.1	64.5	92.6	95.7	75.3	61.7	80.3	126.7	46.8	45.4
65-66	62.1	70.7	72.1		91.3	101.4	71.5	62.9	76.7	110.0	48.2	40.1
66-67					98.7		112.4		62.9		47.8	52.5

Chart 1.

Distribution of Major Vegetables Producing Areas





orange	
apple	
peach	
pear	
grapes	

Background Paper

Korea

COOPERATIVE MARKETING OF FRUITS AND VEGETABLES IN KOREA

by

Kim Seong Ki
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Marketing Research Section
National Agricultural Cooperative Federation
Seoul, Korea

REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH
COOPERATIVES, TOKYO, JAPAN. 17th to 27th May 1970

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE
NEW DELHI
INDIA

INSTITUTE FOR THE DEVELOPMENT OF
AGRICULTURAL COOPERATION IN ASIA,
TOKYO, JAPAN.

Cooperative Marketing of Fruits & Vegetables
in Korea

By: Seong Ki Kim
Assistant Chief of
Marketing Research Section

National Agricultural Cooperative Federation
Seoul, Korea.

I. Present Status

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1. General Status

Compared with grain crops, fruits and vegetables are featured in that they are cash crops and are cultivated mainly for gaining cash income. The demand for them is increasing steadily as the national income increases.

The marketed amount of fruits and vegetables are extraordinary greater than other agri-products and most of them are distributed to consumers through marketing channel.

As is shown below, the average commercialization ratio of grain crops is 40%. The highest commercialization ratio of them is that of rice, 50%, and other items are less than 20-30%. But the commercialization ratio of fruits and vegetables is very high; apple; 96%, grape; 95.5%, radish 66.7%. Then the ratio of marketing through cooperatives is low; apple; 20%, grape; 4. radish; 5%. (Table 1)

Most of fruits and vegetables in Korea are delivered to the end-users through three steps of channel, collection, concentration and distribution. And the wholesale markets are the centerplace concentration and distribution of them.

Agricultural cooperatives established Marketing Centers in five major cities and play the wholesaling function in competition with the central wholesale markets. Agricultural cooperative in fact plays the wholesaling function in place of the central wholesale markets in the five major cities of twenty larger cities. (Table 2)

2. Storage

As for the storage of apple which is the principal item of fruit products in Korea, the amount of apple to be stored is 161 thous. M/T. However, only thirty percent of it is stored in warehouses agricultural cooperatives and the rest of it is marketed with out being stored in the storing facilities.

The storing facilities of other fruits and vegetables are also poor in Korea. (Table 3)

Agricultural cooperative marketing centers perform the function of collecting fruits and vegetables in production areas and delivering them to the end-consumers through appointed dealers.

Agri-co-op established marketing centers in five major cities; Seoul, Pusan, Taegu, Taejeon and Kwangju.

The marketing centers either distribute the fruits and vegetables collected from production areas by regional cooperatives to the appointed dealers in large amount by means of competitive auction or sell directly to consumers through their own selling centers. The appointed dealer is a merchant, belonging wholly to co-op marketing centers, owning his retailer shop in the same downtown and having provided his security to marketing centers for guaranting his credit. (Table 6, 7)

Only the appointed dealers can attend the open auction of fruits and vegetables in the marketing centers. They can, if succeeded in the auction, either transfer the fruits and vegetables to other merchants for receiving commission from them or can bring to their own shops to retail. The handling commission returning to the centers is 6% of the sold price.

On the other hand, agricultural cooperatives supply fruits and vegetables to the armed forces in Korea. (Table 8)

In 1970, the cooperatives contracted with the whole army in Korea--our army and foreign army. Therefore, it is anticipated that the supply of fruits and vegetables to the army in 1970 will be a epoch-making business.

Agricultural cooperatives supply sweet potatoes to processing plants and in 1969 they supplied 234 thousand M/T of sweet potatoes for starch and 176 thousand M/T of sweet potatoes for alcohol. And thus, the sweet potatoes are supplied in Korea entirely by agricultural cooperatives.

II. Problems

1. Shipment through co-op marketing channel is sluggish. Considerable amount of fruits and vegetables are sold on individual marketing basis. As a result, the marketing of them through co-op channels is sluggish and agricultural cooperatives can't control the marketing channels of them.
2. Short facilities of storage.

The storing facilities for fruits and vegetables are almost none in Korea. Until now, apples were stored under ground or on the ground

without any facilities for low temperature and refrigeration. It is very difficult to store them for a long period with present storing facilities.

3. Grade and standard

The facilities for selecting good and bad fruits & vegetables are very poor and most of existing facilities are vacant warehouses used for that purpose. On the other hand, the standard for selection of fruits & vegetables is also unscientific and the selection is performed entirely by eyesight.

4. Transportation

There are no transportation mediums of fruits and vegetables with refrigerating facilities and frequent handling of them in transportation brings much damages to them.

5. Competition among merchants

Even though the agricultural cooperative marketing centers and the central wholesale markets receive various support and protection from the Gov't under the Agricultural Cooperative Law and the Central Wholesale Market Law respectively, their function is very weak compared with that of similar markets which are not protected by the Gov't and such Laws.

The reasons are as following:

- a). As the agricultural cooperative marketing centers and the central wholesale markets have no capacity to assume the entire dealing of fruits and vegetables with their present facilities, a considerable amount of which is dealt by the similar merchants.
- b). All the operators of the agri co-op marketing centers and the central wholesale markets are salary men and their activities are very passive compared with those of similar merchants who perform their dealing activities on their own accounts. Concretely speaking, the former are not active in providing market informations and supplying payments in advance to shippers compared with the latter.

III. Plans of Improving

1. Rearrangement of marketing channel and its guiding system.
The shipping channel should be rearranged into two; channel of movement in real and guidance channel.

These two channels should be rearranged as following. (Table 9)

- a). Returning commission should be sent directly to Ri/Dong (village) cooperatives without being passed through Gun (county) cooperatives.
 - b). Gun cooperatives should reward for shipped merits to Ri/Dong cooperatives in their operational areas.
2. Dispatch of marketing centers personnel to agri-coops in production areas.

It is necessary to dispatch the marketing centers personnel to agri-coops in production areas in order to;

- a). Report the amounts of production and shipment by day.
 - b). Guide on selection and processing of fruits & vegetables.
 - c). Recommend transportation facilities.
 - d). Allocate payment in advance.
 - e). Propagate about marketing centers.
3. Guidance of end-users for the elimination of merchant middlemen in marketing channel.
It is necessary to develop the demand of institutions in consumption areas for the purpose of connecting production with consumption. (Table 10)

(Table 3)

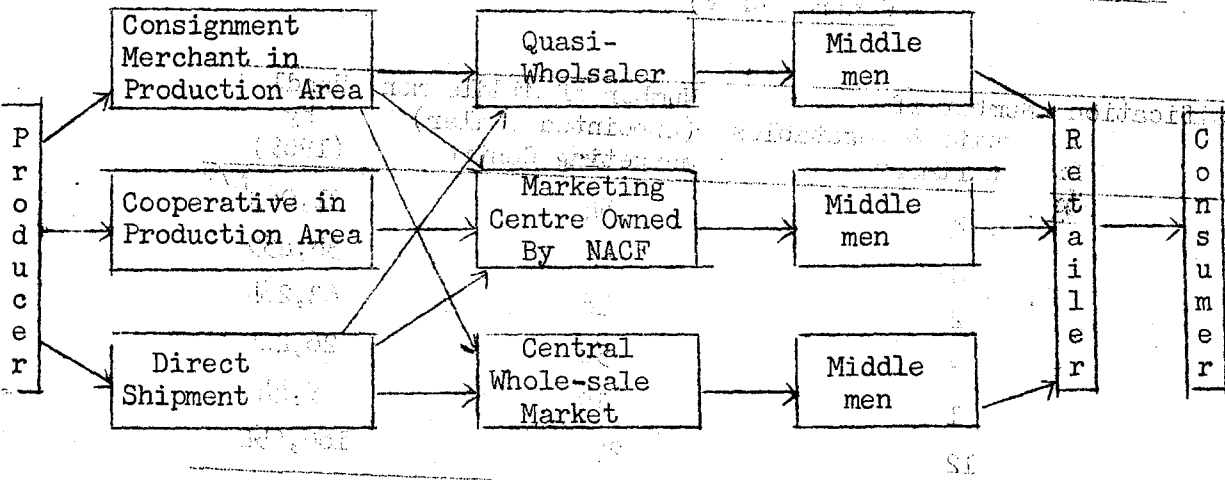
Status of Storage Facilities in Three Major Apples
Production Areas

Places	Number of Storage House	Total Floor Space of Storing House	Storing Capacity
		Pyongyang	M/T
Under the Kyungbuk Apple Co-op.	2,782	46,099	49,909
Under the Choongju Horticulture Co-op.	743	5,945	6,420
Under the Yaesan Apple Co-op	116	1,463	2,480
Total	3,641	53,507	58,809

Sources: NACF Horticulture Section.

(Table 4)

Marketing Channels of Fruits & Vegetables



(Table 5)

Total Quantity Flowed-in the Seoul by Train and Ratio
by Wholesaler

(1964 - 1967 year average)

Total Quantity Flowed-in by Train	7,846 Thousand Box	100 %
Quantity Handled by Marketing Centre (NACF)	1,746 "	22.3 %
Quantity Handled by Central Wholesale Market	1,752 "	22.3 %
Quantity Handled by Quasi-wholesaler	4,348 "	55.4 %

Note: One Box = 18 Kg.

Sources: Marketing Operation Dept., NACF.

(Table 6)

Status of Fruits & Vegetables Department of Market
Centre (NACF)

Area	Classification	Number of Fruits & Vegetables Department	Number of Middle men (Appointed dealer) Marketing Centre	Handled by (1969)
Seoul		2	84	31,063 ^{M/T}
Pusan		4	56	38,459
Taegu		2	48	63,264
Kwangju		3	52	26,426
Taejun		1	19	9,442
Total		12	259	168,654

Source: Marketing Operation Dept., NACF.

(Table 7)

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Marketing Conducted by Cooperative Marketing Centre of
Fruits & Vegetables

(Unit: 1,000 M/T)

Year	Accomplishment
1962	50
1963	53
1964	85
1965	101
1966	115
1967	119
1968	183
1969	169
1970 (plan)	195

Source: NACF.

(Table 8)

Supplies to the Armed Forces of Fruits & Vegetables

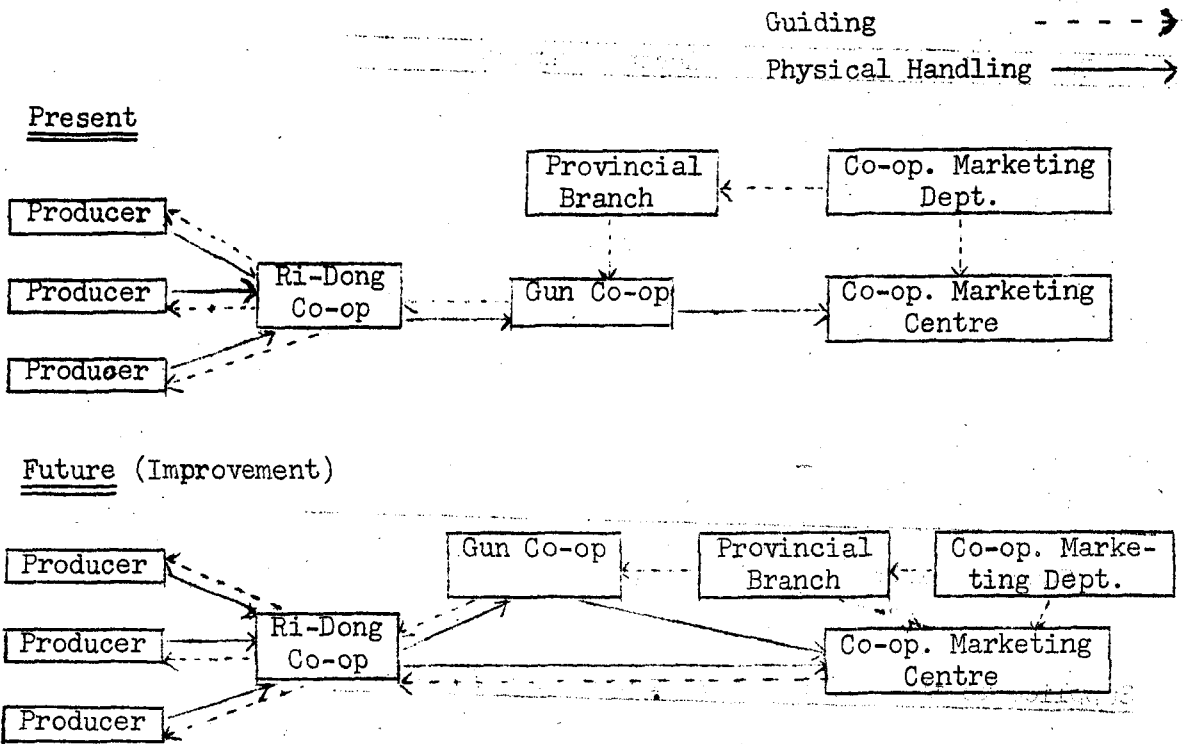
(Unit: M/T)

Year	Korea Army Forces	UN Forces	Total
1963	20,433	122	20,555
1964	36,596	480	37,076
1965	32,065	935	33,000
1966	30,925	2,602	33,527
1967	29,198	2,643	31,841
1968	27,886	1,916	29,802
1969	27,445	2,502	29,947

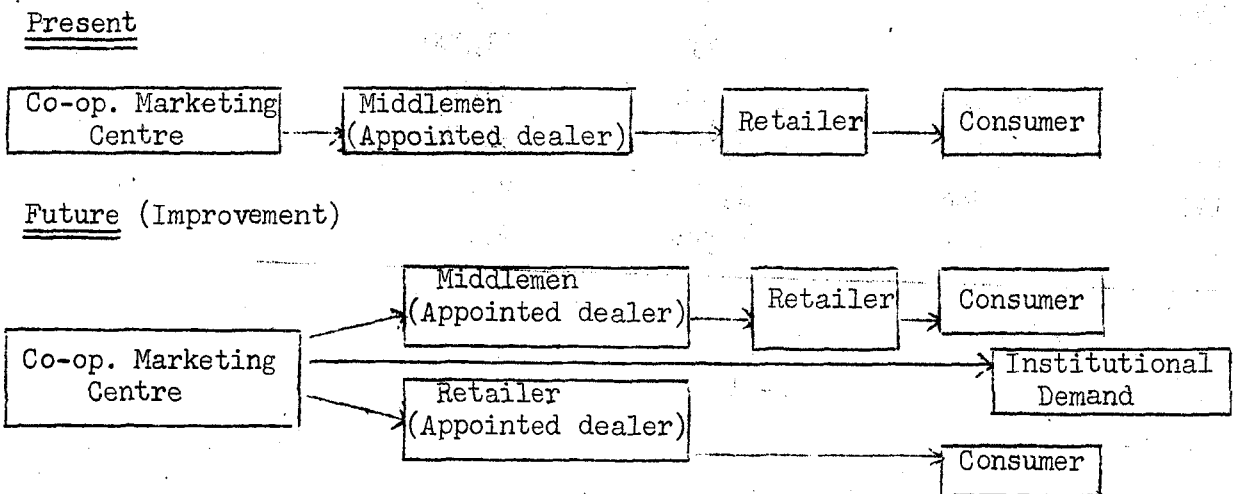
Source: NACF.

(Table 9)

Rearrangement of Marketing Channel & its guiding system



(Table 10)



(Table 11)

Major Fruits Production

Unit: Area: ha
 Yield per 10a: Kg
 Production: M/T

Year	Apple		Pear		Grape		Peach					
	Yield Area per 10a	Production	Yield per 10 a	Production	Yield per 10a	Production	Yield per 10a	Production				
1962	11,571	1,019	117,905	3,742	728	27,247	1,152	651	7,500	3,386	580	19,645
1963	11,704	941	110,162	3,584	657	23,560	983	655	6,439	3,466	555	19,244
1964	12,838	971	124,693	3,804	746	28,364	2,097	521	10,936	5,066	687	34,821
1965	15,006	878	166,778	5,175	764	39,541	3,462	536	18,563	10,607	512	54,345
1966	19,532	893	174,396	5,610	737	41,358	3,845	589	22,631	10,817	583	63,088
1967	19,798	958	189,651	5,885	693	40,799	4,314	581	25,083	11,398	620	70,663
1968	20,202	984	198,711	6,169	775	47,796	4,520	609	27,539	11,633	615	71,538

Source: Agricultural yearbook 1969.

(Table 12)

Major Vegetables Production (1)

Unit; Area: ha
Yield per 10a: Kg
Production: Thousand M/T

Year	Radish			Chinese Cabbage			Cabbage			Onion		
	Area	Yield per 10a	Production	Area	Yield per 10a	Production	Area	Yield per 10a	Production	Area	Yield per 10a	Production
1962	35,797	1,285	460	34,188	1,252	428	905	2,563	23	1,665	1,312	22
1963	34,903	1,197	418	32,861	1,118	367	944	1,835	17	1,125	1,315	15
1964	38,136	1,314	501	35,509	1,266	450	1,058	1,746	18	1,821	1,336	24
1965	41,579	1,411	587	39,039	1,230	480	1,517	1,812	27	2,721	1,560	42
1966	42,218	1,413	597	39,131	1,329	520	1,633	1,951	32	2,868	1,834	53
1967	44,589	1,301	580	49,313	1,235	609	1,516	2,230	34	3,677	1,620	60
1968	49,340	1,398	690	50,709	1,381	700	1,811	2,111	38	3,763	1,813	68

Source: Agricultural yearbook 1969.

(Table 13)

Major Vegetables Production (2)

Unit: Area: ha
Yield per 10a: Kg
Production: Thousand M/T

Year	Garlic			Sweetmelon			Watermelon			Tomato		
	Area	Yield per 10a	Production	Area	Yield per 10a	Production	Area	Yield per 10a	Production	Area	Yield per 10a	Production
1962	7,870	498	39	4,394	928	41	2,441	1,309	32	1,067	1,227	13
1963	7,521	486	37	4,690	827	39	2,676	1,205	32	1,175	1,092	13
1964	8,895	532	47	5,821	849	49	3,836	1,213	47	1,531	1,259	19
1965	8,790	508	45	6,042	882	53	4,904	1,176	58	2,326	1,066	25
1966	10,554	626	66	6,184	969	60	4,037	1,369	55	2,217	1,343	30
1967	13,154	549	72	6,648	1,034	69	4,913	1,755	86	2,485	1,952	49
1968	13,300	564	75	6,638	1,118	74	5,807	1,787	104	2,806	1,987	56

(Table 14)

Major Fruits & Vegetables Produced & the Volume of
Marketing/Processing through Cooperatives

(Unit: M/T)

(1968)

Items	Production	Volume of Marketing through co-op.	Volume of Processing through co-op.
Apples	198,711	33,618	73
Pear	47,796	7,087	3
Grape	27,539	2,437	290
Peach	71,538	2,609	606
Radish	689,728	33,917	-
Chinese Cabbage	700,131	36,190	-
Cabbage	38,231	135	-

BACKGROUND PAPER

Malaysia

PRESENT POSITION, PROBLEMS AND PLANS OF IMPROVEMENT
OF FRUITS AND VEGETABLES MARKETING IN WEST
THROUGH COOPERATIVES IN WEST MALAYSIA

by

Cheong Chong Shing
Senior Cooperative Officer
Ipoh, Perak.

REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH
COOPERATIVES", TOKYO, JAPAN, 17th to 27th May 1970

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INTERNATIONAL COOPERATIVE ALLIANCE
NEW DELHI
India

INSTITUTE FOR THE DEVELOPMENT OF
AGRICULTURAL COOPERATION IN ASIA
TOKYO, Japan

A. Introduction to West Malaysia.

1. Geography and Climate:

The Peninsula of West Malaysia is situated at the southern most tip of the Asian land mass, between $1^{\circ}12'$ and $6^{\circ}50'$ N and between $100^{\circ}5'$ and $104^{\circ}20'E$. It is bounded on the north by Thailand, on the east by the South China Sea and on the West by the Straits of Malacca. The coastline extends for over 1000 miles.

Physically it is dominated by several mountain ranges which divide the country into two unequal portions, the larger of which lies to the east. The country is drained by a few large and numerous small rivers.

West Malaysia's climate is equatorial, the characteristic features being uniform and fairly high temperatures throughout the year, abundant rainfall and high humidity. The daily range of temperature is from $10^{\circ}F$ to $15^{\circ}F$ on the coast and from $15^{\circ}F$ to $20^{\circ}F$ inland. The seasons are marked by the incidence of rainfall rather than by the changes in temperature. On the coast the maximum day temperature is usually 88° to $90^{\circ}F$ whilst the inland temperature is about 93° to $95^{\circ}F$. The east coast has the highest rainfall with averages of over 120 inches. In other parts of the country, the averages lie between 80 and 120 inches.

There are two hillstations in West Malaysia - Cameron Highlands, about 5,000 feet above sea level with a temperature varying from 47 to $77^{\circ}F$ and Frasers' Hill, about 4,000 feet above sea level and with temperature varying from 56 to $80^{\circ}F$.

2. Communications:

The main transport routes by coastal waters, railways, road and air stretch North and South through the length of the peninsula but in general, connections between the eastern and western parts of the country are few. Moreover there are not enough branch routes, especially in the eastern half and too few feeder roads in rural areas.

3. Population:

The total population of West Malaysia in 1966 was 8,415,488.

B. Present position of fruits and vegetable production.Fruits:

4. West Malaysia produces a variety of fruits; a total sole crop equivalent to 163,000 acres is grown, the biggest acreage being devoted to pineapple, bananas and seasonal fruits like durian and rambutan. Other fruits produced include mangosteen, citrus fruits like the lime, mandarine orange and pameló. Many of the seasonal fruit trees are old and neglected and undergoing rehabilitation under the Fruit Replanting/Rehabilitation Scheme.

5. Acreages of principal fruits in 1967.

<u>Fruit</u>	<u>Total Sole Crop Equivalent (acres)</u>
Pineapple-canning	37,911
Pineapple-other	10,261
Banana	38,596
Durian	22,898
Rambutan	22,478
Citrus	8,367
Mangosteen	4,722
Duku & Langsat	13,138

6. Pineapples:

The main varieties of pineapple grown are the "Singapore Spanish" and the "Selangor Green". These two varieties are characterised by fruits of satisfactory shape and quality; usually weighing from 2 to 4 lbs. Some pineapple of the Maritius variety is also grown. This is not suitable for canning purposes, and is cultivated on a small scale for sale as fresh fruit for table purposes. Some 57,530 acres of land are devoted to the growing of pineapple in 1967. The bulk of the crop is used for canning purposes. An average of some 4 million cases of canned pines valued at M \$50 million are sold to some 62 countries annually.

7. Bananas:

This is a very valuable food crop which finds a ready market. It is cultivated in plantations throughout the country and many farm homesteads also

grow a few plants. One of the chief commercial varieties cultivated is Pisang Embun, considered to be identical with the Gros Michel or Jamaica banana. It is excellent for dessert. Other popular types include the pisang Mas and the Pisang Rastali, both of which command a higher price than other varieties. Production is considerable and the estimated production is about 5 tons per acre. In 1967 some 19,400 tons to the value of M \$1,949,400 were exported.

8. Durians "DURIO ZIBETHNUS MURR":

Durian is grown at random in the deep rural areas and no specific survey has yet been made of its economic impact on the rural dwellers. There are some 38,971 acres of durian trees and under the Fruit Replanting and Rehabilitation Scheme about 11,000 acres have been rehabilitated since 1966. Fruit growers are being provided with planting materials, fertilizers and fencing materials. Durian trees are widely distributed throughout the country. The main crop is in July and August with a subsidiary crop at the end of year.

9. Rambutan "NEPHELIUM LAPPACHEUM".

This well-known fruit has a main crop in August and September and is followed by a secondary crop towards the end of the year. Acreage consists of some 33,900 acres.

10. Mangosteen "GARCINIA MANGOSTANA":

This is one of the best and most sought after trees. The main crop is in August and September with a smaller crop in November. Some 8,500 acres are estimated.

11. Papaya "(CARICA PAPAYA)":

Papaya grows well. It grows rapidly and in suitable soil will produce ripe fruits within one year of the sowing of the seed. Papaya fruits throughout the year.

12. Citrus Fruits:

Included in the wide range of fruits are some citrus fruits and they include

Lime	-	Citrus Acida
Orange	-	Citrus Aurantium
Pamelo	-	Citrus Maxima

VEGETABLES

13. Vegetables are produced mainly by smallholders living near towns and villages and their produce is marketed in big towns. Vegetables produced in the Cameron Highlands, besides being locally consumed, are transported to the main Malaysian towns in West Malaysia. Food crops such as maize, sweet potatoes, tapioca and groundnuts are becoming increasingly important under the policy of diversification of agriculture production. Total sole crop equivalent under vegetables and food crops amounted to 111,648 acres in 1967. It is however, observed that in vegetables gardening, the products do not go far from the districts where they are grown and in many cases do not even leave the districts at all.

14. In 1967, the import of vegetables amounted to about 52,875 tons valued at M\$15,755,400. This consists of vegetables like onions, garlic, tomatoes, cabbages. Climatic conditions preclude the local production of many of these vegetables. Fresh vegetables consumed are grown locally by market growers who develop small holdings near important centres of population. Most of the gardens are centred near railway stations or where there are facilities for easy despatch to local markets.

15. The following vegetables are grown and most farmers raise several types of vegetables so that few farmers produce any one type in sufficiently large quantities for market at any one time to make it possible to ship in carload quantities.

Low Elevation

Carrot
Cucumber
Radish
Brinjal
Chillies
Chinese cabbage
Groundnut
Lettuce
Maize
Soya bean
Sweet potato

High Elevation

Beetroot
Cabbage
Carrot
Celery
Cauliflower
Cucumber
Green pea
Capricum & Tomato
Leek
Onion
Potato

Yam

Radish

Pumpkin

Lettuce

C. MARKETING STRUCTURE OF FRUITS AND VEGETABLES:

16. The producers in selling to consumers utilize (i) roadside stands and (ii) retail markets for the disposal of a part of the fruit and vegetables crops which are produced adjacent to the large urban centres. These have enabled producers to dispose of small non-commercial quantities which could not otherwise be easily sold. There are, however, limitations, for example the difficulty of securing graded products. Standard measures are sometimes not available.

(i) Roadside markets: These have an important role to play for seasonal fruits like durians, rambutans and highland vegetables. However, farmers realise that the time spent in this operation may often be better employed on the farm.

(ii) Retail markets: Sales through retail public markets are an important form of direct marketing. Physical facilities of such markets are usually provided by the market authorities - the Municipalities; City Councils, Town Councils and Local Councils. Facilities include well-built sanitary market houses. The combination of numerous sellers in such markets offers the widest variety and most extreme assortment of perishable agricultural commodities that may be found in any form of retailing.

However, the bulk of the vegetables and fruits is grown in rather specialised production regions and is therefore consumed in much more extensive markets namely (a) Local growers' markets

(b) Wholesale or central markets

(c) Retail markets

Local growers' markets are close to areas of production and afford an opportunity for the farmer to dispose of his products to one of the several middlemen operating therein. Wholesale or Central markets provide facilities for concentration and dispersion of farm products in large quantities. Supplies come from the local growers' markets and directly from producers and are sold to wholesale middlemen in smaller markets, to retailers, and to large consumers such as restaurants, contractors and institutions. They also serve to supply retail merchants with produce or bring it nearer to its final destination. Retail markets exist whenever final or household consumers purchase their

supplies. In the retail markets there are retailers for fruits, vegetables and other commodities.

D. PROBLEMS:

17. The principal problems of marketing arise from an absence of recognised standards of grades of quality, poor transport and communications in some rural areas, a lack of information on market conditions and factors which tend to reduce or eliminate competition among buyers. Conditions in the marketing of vegetables and fruits are far from satisfactory and the factors could be listed as:-

- (a) Vegetables are highly perishable and they require a quick and efficient transport system;
- (b) the farmers lack the experience, marketing connections, and market intelligence;
- (c) they lack sufficient working capital and are not organized;
- (d) relatively few farmers produce any one type of vegetables or fruit in sufficiently large quantities for economic marketing;
- (e) insufficiency of refrigerated trucks and cold storage in the country.

18. In appreciating the difficulties encountered in the marketing of vegetables through cooperatives, the existing system by which garden produce is disposed of to wholesalers is briefly outlined. In this set-up there are three stages viz:

- (i) the farmers' produce are passed on to the middlemen collectors;
- (ii) from the collectors the vegetables reach the wholesalers;
- (iii) and from the wholesalers distribution is made to the retailers for ultimate distribution to consumers.

19. Some of the middlemen collectors are financed and controlled by the wholesalers. Others work on their own. Their job is to contact the farmers and if necessary to make advance payment for the crops. As the prices of vegetables are determined by supply and demand, the prices offered hold good for the following day. On this basis, the middlemen collectors are able to withhold the true market value of the various produce and to pay a price which will always leave a substantial margin of profit for himself. Farmers have therefore been organized into Cooperatives to market their produce. However some of these societies are not very effective for the following reasons:-

- (a) too much reliance is placed on private wholesalers to market their produce. They not only offer unfair returns but also delay payments to societies as long as possible;
- (b) lack of a central cooperative organisation in large towns where the produce of primary societies can be forwarded directly without having to channel through private whole-salers;
- (c) lack of cooperative retail stalls in the main markets;
- (d) high prices offered by middlemen to undermine the loyalty of members.

20. The solution does not lie in the formation of cooperatives alone. The joint-sale method as in practice does not fulfill all the conditions for the successful operation of a marketing cooperative. Alternative outlets must be found for the produce of primary societies. This could be done with the establishment of organised wholesale markets where the farming and marketing co-operatives can expect to get a fair deal for their members.

Thus the course of action suggested would have to be in two stages:-

- (i) The establishment of co-operative wholesale markets and retail stalls in the markets, to be followed by
- (ii) the formation of primary marketing societies

21. In the organisation of wholesale markets a great deal of organisation work has to be done and obstacles to be overcome, the main being:-

- (a) the existing wholesalers operate a chain of financing agents at various centres. The agents maintain direct contact with the producers and they provide them with credit. Such organised business will no doubt offer very keen competition to any new co-operative organisation;
- (b) all wholesalers have connections with their counterparts in other towns so that commodities can be easily directed from place of plenty to place of scarcity. Until co-operative wholesale markets are established in different areas there is the risk in loss sustained arising out of unsold perishables;

(c) suitable wholesale market spaces for storage are difficult to obtain and extremely expensive for the new organisation.

22. In the running of retail stalls problems encountered include:-

(a) in the retail sale of vegetable there is no effective control on the stock since it is not only highly perishable but also subject to shrinkage resulting in losses. Prices fluctuate during the day in accordance with the state of freshness of these commodities,

(b) varieties of the commodities supplied by societies are limited and therefore will not attract a steady and sufficient patronage thus making the economical maintenance of such stalls open to question.

23. To sum up our practical problems in and proposed plans for marketing of fruits and vegetables are as follows:-

(a) Without a successful wholesale organisation, no co-operative undertaking marketing can survive for long. There is a need to establish a wholesale organisation which would provide marketing co-operatives with a suitable and assured outlet for their produce. This would obviate their dependence on the private wholesalers;

(b) Once this Cooperative wholesale control organisation is established, and with confidence built up, the existing multi-purpose cooperatives which have as one of its objects the disposal of produce of agriculture should be implemented;

(c) To narrow the gap between the producer and consumer, retail stalls might be established in the main markets and run by the wholesale organisation;

(d) Even if the societies are assured of a suitable outlet members could be disloyal by supplying poor quality to their societies. The middlemen could proceed to producing areas and offer terms which members think are better than their own organisation's. Thus cooperative education

could play an important role towards the solution of this problem.

- (e) Disloyalty among co-operative members can not be wholly overcome and it is a very serious problem resulting in the failure or drawback of a number of societies. The answer to this could be through legislation requiring all farmers to bring all their produce to a specified market place in the respective producing areas for open sale.
- (f) The question of auction of agricultural produce in the main market towns in the country under proper supervision should be seriously considered.

E. Role of Cooperatives for Marketing of pineapples:

24. In West Malaysia Cooperatives have achieved progress in the field of Pineapple Marketing. They organise smallholders into bodies which aim in an orderly manner to improve pineapple holdings by facilitating maintenance and fertilising. They carry out direct marketing of small growers' fruits to canneries, thus by-passing the middlemen. They undertake primary grading and selection of fruit delivered. They supply fertilizers on short-term credit and aim to promote the interest of their members. Prior to the establishment of cooperatives such services as supply of fertilizers, short term cash advances, collecting and marketing of fruits were provided by middlemen at high costs. Cooperatives have brought considerable benefits to small-holders.

There are in all 11 Pineapple Cooperative Societies in West Malaysia with a total membership of 1592, and a share capital of M\$56,043.00.

All these societies act as marketing agents for their members. Outright purchase is not practised. Marketing services include the transporting of the fruits from the collecting centres to the canneries and receiving payments on behalf of their members. Societies which do not possess lorries generally hire them from private sources or from cooperative societies and charge the members the appropriate transport. Commission charge by members for services range from 1 to 3% of the value of the fruits to cover the operating expenses of the societies.

F. Marketing of vegetables and fruits through Consumer Societies.

25. There are 146 consumer co-operative Societies established in the Rural Areas of West Malaysia. These societies supply essential consumer goods such as food-stuffs, cooking oil, rice, sugar, wearing apparel, fruits and fresh vegetables. The total annual sales of these societies amounted to some \$12,800,000. Although no surveys have been made to determine a breakdown in value of the various types of commodities supplied to members it is estimated that about 8% of the value of goods supplied represented vegetables and fruits. In terms of Malaysian Dollars the rural co-operators would have spend some M\$1 million on vegetables and fruits, annually through the 146 consumer societies.

These societies have a total membership of 22,978 with dependants totalling some 100,000 persons.

RESULTS ACHIEVED BY PINEAPPLE COOPERATIVE MARKETING SOCIETIES FOR THE YEARS 1966 to 1969.

YEAR \ TYPES	1966		1967		1968		1969	
	Quantity (Tons)	Value (₹1,000)	Quantity (Tons)	Value (₹1,000)	Quantity (Tons)	Value (₹1,000)	Quantity (Tons)	Value (₹1,000)
Pineapple Canning	16,538	1,092.4	14,057	1,302.1	24,601	1,462.9	29,291	1,888.5
Pineapple Others	495	52.8	601	41.7	450	23.0	294.5	13.6
Total	17,033	1,045.2	14,658	1,343.8	25,051	1,485.9	29,585.5	1,902.1

SUPPLY OF FERTILIZERS TO MEMBERS FOR THE YEARS 1966 TO 1969

1966	1967		1968		1969		
	Quantity (Tons)	Value (₹1,000)	Quantity (Tons)	Value (₹1,000)	Quantity (Tons)	Value (₹1,000)	
352	67.7	365	71.9	218	41.1	210	35.1

Types of fertilizers used include:

1. N.P.K. Ground mixture
2. Urea
3. muriate of potash

N.P.K. Ground Mixture:

A mixture containing 3 types of chemical fertilizer in the following proportions:-

Amonium Sulphate	(N)	57.5%
Rock Phosphate	(P)	9.0%
Muriate of Potash	(K)	35.5%
		100%

WEST MALAYSIA

Area Under Fruits, 1967.

FRUIT	Area in Acres			
	Total Sole Crop Equivalent	Sole Crop	Main Crop	Mixed Crop
Pineapple (Canning)	37,911	33,437	-	8,948
Pineapple (Others)	10,261	3,941	2,872	8,332
Banana	38,596	7,348	8,501	49,745
Durian	22,898	5,850	1,948	31,173
Rambutan	22,478	9,481	3,181	21,223
Mangosteen	4,722	622	718	7,124
Citrus	8,367	5,107	1,058	4,933
Duku & Langsat	4,329	766	122	6,942
Others	13,138	3,665	2,053	15,867
Total	162,700	20,217	20,453	154,287

Source: Statistical Digest, March 1969.

	Fresh Pineapple	Canned Pineapple
PERIOD	Tons	Tons
1963	190,522	c
1964	208,169	c
1965	254,294	54,515
1966	254,088	57,093
1967	275,284	67,555
1968	n.a.	n.a.

c Not available due to secrecy requirements

n.a. Not available

Source: Monthly Statistical Bulletin of West Malaysia - February, 1969.

PINEAPPLE EXPORTS: WEST MALAYSIA

PERIOD	Fresh Fruit		Canned Fruit		Canned Juice	
	Tons	M\$ Million	Tons	M\$ Million	Tons	\$
1963	50,857	3.1	38,681	29.0	777	363,926
1964	55,876	3.3	42,884	32.7	857	440,734
1965	52,320	3.1	53,018	40.1	919	486,788
1966	43,482	2.6	58,032	43.6	885	495,973
1967	41,086	2.6	61,810	43.3	976	516,941
1968	27,969	1.8	66,058	47.9	954	487,717

Source: Monthly Statistical Bulletin of West Malaysia June 1969.

PERIOD	TOMATOES		ONIONS		GARLIC		CABBAGES		OTHER FRESH VEGETABLES	
	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000
1963	104	47.2	138	38.3	139	80.8	9	2.0	15271	3,875.4
1964	282	142.7	949	309.6	120	61.1	4	1.5	18675	5,181.2
1965	340	130.9	793	214.8	191	95.3	15	3.8	19628	3,998.3
1966	443	126.1	710	208.2	77	55.8	3	0.7	22531	3,730.3
1967	1599	466.9	266	82.3	102	91.0	6	1.4	26278	3,990.2

IMPORTS OF VEGETABLES - WEST MALAYSIA

PERIOD	TOMATOES		ONIONS		GARLIC		CABBAGES		OTHER FRESH VEGETABLES	
	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000
1963	1418	550.8	22,780	6,153.2	4,053	2,300.2	4,869	990.5	11,955	3,259.1
1964	1831	840.9	25,986	7,845.1	3,556	1,664.8	5,456	1,771.4	5,026	2,946.9
1965	1897	768.2	25,735	6,704.3	4,423	2,289.9	5,643	1,575.2	5,137	3,000.4
1966	2542	831.5	27,931	8,593.2	4,952	2,963.8	6,525	1,868.2	5,437	2,813.3
1967	2311	493.2	29,616	7,900.9	4,991	3,305.3	10,183	1,764.0	5,774	2,292.0

EXPORTS OF FRUITS - WEST MALAYSIA

Period	Oranges, Mandarine Fresh		Other Citrus Fruits, Fresh		Banana		Tropical Fruit, except Banana & Pineapple		Other Fresh Fruit	
	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000	Tons	M\$1,000
1963	103	33.3	64	22.4	21,496	3,315.9	10,303	3,214.5	604	114.6
1964	16	6.8	43	21.5	23,164	3,674.2	3,068	1,214.1	878	174.1
1965	205	66.9	53	13.4	20,197	2,733.3	17,084	4,402.1	2141	457.7
1966	190	72.4	24	14.5	19,593	2,300.7	6,179	2,513.4	1820	258.9
1967	29	13.9	201	63.7	19,400	1,949.4	14,991	4,856.5	2142	328.6

Background Paper

Malaysia

BRIEF ON FRUITS AND VEGETABLES

by

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Kuala Lumpur

Regional Seminar on "Marketing of Fruits and Vegetables through Cooperatives"

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N.W DELHI

CENTRAL UNION OF AGRICULTURAL
COOPERATIVES, TOKYO.

FRUIT:Introduction

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1. The total acreage under fruits in 1968 in West Malaysia was 165,877 acres (sole crop equivalent). Some of the main fruits grown are Pineapple, Bananas, Durian, Rambutan, Mangosteen, Mandarins, Mango, Chem-pedak, Duku Langsat, Papaya and Chiku. Of these the four major fruits grown are Pineapple, Bananas, Durian and Rambutan - which together account for over 80% of the total acreage under fruits.
2. Pineapple alone occupies 47,955 acres and accounts for 28.9% of the total area under fruits. Banana takes second place with 39,524 acres (or 23.8%); Rambutan comes third with 23,393 acres (14.1%) and Durian a close fourth with 22,808 acres (or 13.7%). Other fruits worthy of note are Mangosteen, Citrus fruits (Mandarins, pomelo, lime, etc.) and Duku Langsat with over 4,000 acres each.
3. The main fruit producing states in West Malaysia are Johore, Perak, Trengganu, Kedah, Pahang, and Selangor. Johore alone accounts for 52,656 acres, followed by Perak with 23,681 acres; Trengganu 18,994; Kedah 14,691; Pahang 14,526; and Selangor with 14,289 acres.
4. Pineapple, Particularly the canning variety, is largely grown in Johore and Selangor - 90% in Johore and 10% in Selangor. However, the non-canning variety is largely grown in Perak and Trengganu - 23% and 18% respectively. In the case of Bananas, it is mainly grown in Perak (22%); Pahang (17%) and Johore (15%). Together, these three states account for over 54% of the total area under Bananas in West Malaysia.
5. Durians and Rambutans are largely grown in Johore and Perak. Perak accounts for 16% of the total area under Rambutans, while Johore accounts for 14%. In the case of Durians, Perak accounts for 19% while Johore 15%. The remaining acreages under Durians and Rambutans are found scattered over all the states of West Malaysia. Specifically, the details of the acreage under fruits and their distribution by States in West Malaysia is shown in Table I.

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6. The total acreage under Vegetables in 1968 in West Malaysia was 18,262 acres (sole crop equivalent). The distribution of vegetable areas is shown in Table 2. It will be observed that Perak accounts for the largest acreage (4,301) followed by Kelantan (3,325); Pahang (2,807); Selangor (2,619) and Johore (1,515).

7. The main types of vegetables grown may be classified into three broad categories - leaf vegetables, fruit vegetables and sweet potatoes. A detailed breakdown of production by State for the first quarter of 1969 is shown in Table 3.

PROBLEMS FACING MARKETING OF FRUITS AND VEGETABLES

8. The general basic problems of marketing fruits and vegetables in West Malaysia may be discussed under 3 broad headings:-

1. Problems emanating from the nature of the commodities themselves;
2. The structure and organisation of the Marketing System;
3. The question of promotion or growth of the industry.

Commodity Problems

9.1 A number of serious marketing problems emanate from the nature and characteristics of the commodities themselves. Briefly there are 3 main problems here - namely that of perishability, seasonality, and inconsistency in quality.

9.2 Malaysian fruits, particularly, are noted for their relatively exceptional perishability. Compared to Apples, Oranges, Pears, Grapes, etc. for instance, Malaysian fruits like Durian, Papaya, Banana, Mangosteen, etc. are exceptionally perishable. Hence, this tends to create a number of problems for the marketing of these produce. Among the problems that arise as a result are:-

- (i) the need to have a system of speedy transport and distribution;
- (ii) the commodities cannot take advantage of storage as a factor in stabilising prices, i.e. in time of glut, one cannot hope to hold back the supply in anticipation of better future prices;
- (iii) the market, in terms of the geographical boundary, is necessarily limited i.e. due to perishability, the produce cannot be transported over very long distances.

e.g. Vegetables incur a great loss in weight in transit. A specific example may be cited. The cabbages transported from Cameron Highlands to Kuala Lumpur Wholesale Market incurs an average, a net loss of 30% in weight.

9.3 Seasonality in supply is another characteristic feature of many Malaysian fruits. This again has various repercussions on the marketing of these produce. For one thing, it leads to irregularity and uncertainty of supply. In turn it causes two main complications;

- (i) complications in the arrangement of transport facilities.
e.g. In the case of durian, for instance, it is difficult to predict in advance, how much fruits a tree would yield. Consequently, one cannot estimate the exact 'degree' of transport required i.e. a collector may bring in a 5-ton lorry to collect durians over a particular area but may find that he can fill only half the lorry. As a result, complications will arise over calculating the cost of transporting the fruit - the greater the distance to be covered, the more severe the complication;
- (ii) Difficulty of processing the commodities.
e.g. Durians or Rambutans do not easily lend themselves to processing. Contrast this with pineapples (a perennial).

The pineapple acreage in fact, has tremendously increased over the years. (Pineapples, today, occupy the largest fruit acreage in the country - i.e. about 28.9% of the total acreage). This is mainly because, since Pineapples do not suffer from the problem of seasonality in supply, an industry has long been set up canning it on a large scale. It is difficult to do this for the seasonal fruits as the industry would not be able to operate all the year round.

9.4 Coupled with the above problems of perishability and seasonality, is the further problem of inconsistency in the quality of our fruits. This feature of quality-inconsistency again, creates a host of problems for efficient marketing of the produce. Amongst the problems arising as a result of this are:-

- (i) grading of the produce is extremely difficult;
- (ii) it lends itself to easy exploitation by the buyers;
- (iii) difficulty of ensuring consistency and uniformity in pricing.

Marketing System

10.1 There are 4 broad categories of problems in this regard. These are:-

- (i) Defects in the overall orientation in production;
- (ii) Defects in the wholesaling system;
- (iii) Lack of organisation at producer-level;
- (iv) Difficulties in transport.

Orientation

10.2 The present system of marketing fruits and vegetables in the country is more production, rather than consumer orientated. That is to say, there is no exact feedback of information of consumer demand and preferences to the producers. Thus for example, producers in Slim River continue to grow bananas of the 'Berangan' variety when the consumer demand for bananas of that variety in the Kuala Lumpur market for instance, is exceptionally

poor. This is reflected by the relatively low price fetched by the bananas of that variety in the Kuala Lumpur market i.e. 6 cents per kati, as against 12 cents for Rastali, 11 cents for Mas, and so on. Similarly, many areas in Perak, Kedah, Trengganu and Kelantan continue to grow 'Pisang Awak' which fetches only about 4 cents a kati. This is due largely to lack of information as to what the consumers prefer and what can best be grown and marketed from particular areas. Equally important is that Malaysia suffers from a lack of organised channels of communication of vital market information i.e. a poor Market Intelligence and dissemination service.

Wholesaling System

10.3 This is the major problem at present. The wholesale system is supposedly to operate on a system of consignment where the wholesalers determine the prices on the basis of auctioning. It is also claimed by them that they only charge a 10% commission on all transactions. However, it appears that this is hardly so indeed, the margin is usually considerably higher. Further it is alleged both by producers and collectors that wholesalers are often very arbitrary in their dealings. Grading for example, is determined by them. Hence, if a Collector sends a particular consignment of say, Grade A Mandarins (perhaps because he is informed that prices in the Kuala Lumpur Market is highest for that grade) he will invariably find that after a few consignments the Wholesaler will start scaling down the Collector's Grade A's to Grade B's and C's and pay them accordingly. It is also alleged by the producers that wholesalers take no particular risk - they always maintain a certain definite margin of returns - irrespective of how low are the prices the producers receive. Consequently, the whole brunt of price fluctuations is thrust upon the Collectors and through them to the Producers.

10.4 Consequently, it appears that the present wholesaling structure for fruits and vegetables appears to be quite archaic, inadequate and tends to rely rather heavily on the element of trust. It is archaic in the sense that its working is highly unscientific. A few examples may make this point clearer.

- (i) The term "wholesaling" normally implies dealing only in bulk. This is not the case with the Maxwell Market. Small ordinary buyers, like housewives may also buy

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there, but at slightly higher prices. Thus, the Wholesale Market, is strictly speaking, not exactly or purely wholesale in its operations.

(ii) There is no auctioning of the produce. What actually happens is that potential buyers (without any credit obligations to particular wholesalers) first survey the quality and prices of various wholesalers, before settling down to buy from a particular wholesaler.

(iii) There is very little competition in the wholesale market. In fact according to one M.I. posted there, he suspects collusion between wholesalers. This seems to be true, especially when prices quoted by the different wholesalers dealing in the same product appear to be almost identical. Secondly, the number of wholesalers dealing in any one commodity is often small, e.g. for bananas there are only 2 large wholesalers dealing it (over 80% of the total supply coming in). Similarly, for Rambutan there are 6, for Pineapples 4 and so on.

10.5 This necessarily limits competition to a tremendous extent. Hence, the reason for saying that the wholesaling structure in at least the Kuala Lumpur Maxwell Market seems to be pretty inadequate. What is more is that the system tends to breed two major obstacles to future growth. These are namely the problems of quality improvement and the problem of incentive, i.e. this system discourages any commercialized planting because of the uncertainty of the market and the accompanying fluctuations in prices. Further, there is little incentive for improving the quality. In contrast if there is contracting, whereby there is some continuity in supplies of for example, bananas, then it will enable the dealer to systematically develop the market potential on the one hand, and will mean stable prices and assured income to the producers, on the other. Finally, the other basic feature of the wholesaling system is that it is almost ridiculously based on trust. Thus, the Collector hopes and trusts that the particular wholesaler to whom he consigns will get him the best price for the producer. Again, the money is simply sent by the wholesalers to the collectors via transport

agents on trust. Thus any new collector wishing to cut in will invariably meet with a host of very informal norms. Thus the system unwittingly perhaps, tends to encourage the establishment of long and vested interests.

"

Producer's Organisation

10.6 Another basic defect in the system is the lack of organisation among Producers. Consequently, transport costs become high when collectors have to deal separately with a large number of small and scattered operators. Thus, any producer organisation can not only help in regard to dissemination of important market information, but also assist in coordinating supplies, and thereby rendering transport more economic and in the final analysis, help the producers to secure better and higher prices.

To this extent, the Perak State Government is now actively fostering the development of these producer organisations.

Transport

10.7 Transport is yet another problem in marketing. Generally, the main complaint here seems to lie in the very high rates charged. For e.g. an operator of a 5-tonner lorry in Slim River charges \$1.25 cents per mile. So it would cost about \$75 to deliver bananas from Slim River to Kuala Lumpur (a distance of 60 miles). Thus, in view of the very high charge, it was necessary for the Department of Agriculture to employ its own lorry to transport the produce.

Growth of the Industry

10.8 In this case there are 3 basic problems:-

- (i) Lack of any active export promotion;
- (ii) Competition from imports;
- (iii) Lack of large retail outlets.

Export Promotion

10.9 Export promotion is a very necessary element for growth of an industry. In the case of fruits and vegetables there has been hardly any attempt to do so, with of course, the possible exception of pineapples. As regards bananas, an attempt was in fact made in 1966 to ship them to Japan, but apparently, was not successful. Since then, there has been no follow-up operations.

Although no survey on production and consumption has ever been carried out in Malaya, it is a fair assumption that the "present local market for bananas is fairly saturated and any further expansion in production would have to look for a market elsewhere (namely an export market)"¹. Further even the I.B.R.D. in its report on Malaysia's Development Prospects felt that "the prospect for banana exports look sufficiently attractive for investigation, and a market is available in Japan."

As for the other fruits, no feasibility study has yet been made to seek markets elsewhere. Thus this lack of any active export promotion is one important factor that has kept the local fruit industry in virtual stagnation.

Competition from Imports

10.10 Competition from imported fruits and vegetables is yet another serious impediment for the growth of the local industry. The fact that foreign fruits like Oranges, Apples, Grapes, Pears and so on, come in such consistent quality, gives them greater relative advantage in sale. Hence, whereas the local fruit industry is growing only at the rate of about 2-4% annually², the value of imported fresh fruits is increasing steadily since 1960, and last year rose to \$33 million. This is not only quite a drain on foreign exchange, but also a tremendous obstacle to the growth of the local fruit industry. Further it also appears that there is a certain popular

1 Report on the 'Production and Marketing of Bananas', by the Ministry of Agriculture, D.I. 2480/PT 11/12.

2 Statistical Digest, Ministry of Agriculture. The figure is computed by using 1965 as the base year and relates for the period 1965-1968.

public prejudice against local fruits vis-a-vis imported fruits. This is also a serious handicap working against local fruit consumption.

Retail Outlets

10.11 Lack of any large retail outlets is yet another major problem. In the absence of these, local fruits are sold either through the ordinary markets or through the roadside stalls. This means there is no quality control and no systematic development of the market. On the other hand, a system of large retail outlets would not only help to improve quality of our local fruits but also ensure some stabilising of prices and assured income for producers - by operating on the basis of contracts.

10.12 Associated with the lack of retail outlets is the lack of knowledge particularly within Government organisations as to the availability of outlets other than wholesale markets. Indeed in several cases - citrus in Trengganu, vegetables in Tangkak, bananas in Slim River - the biggest problem appears to be the need for new outlets capable of absorbing all that the producers wish to offer for sale.

CONCLUSION

11. The above problems of a lack of knowledge of outlets; the inadequacy of the wholesaling structure which tends to stultify the marketing process; the prejudice of local consumers to local fruits; and the problem of transport are amongst the most serious problems facing the marketing of fruits and vegetables today. Other secondary problems, though less pressing, are those relating to grading, market information dissemination, importation of competing fruits, both legal and illegal (e.g. Mandarins from Thailand through Golok); small-scale and scattered nature of production; lack of any quality control, etc. which also nevertheless, require urgent attention. Below is a diagrammatic summary of the problems.

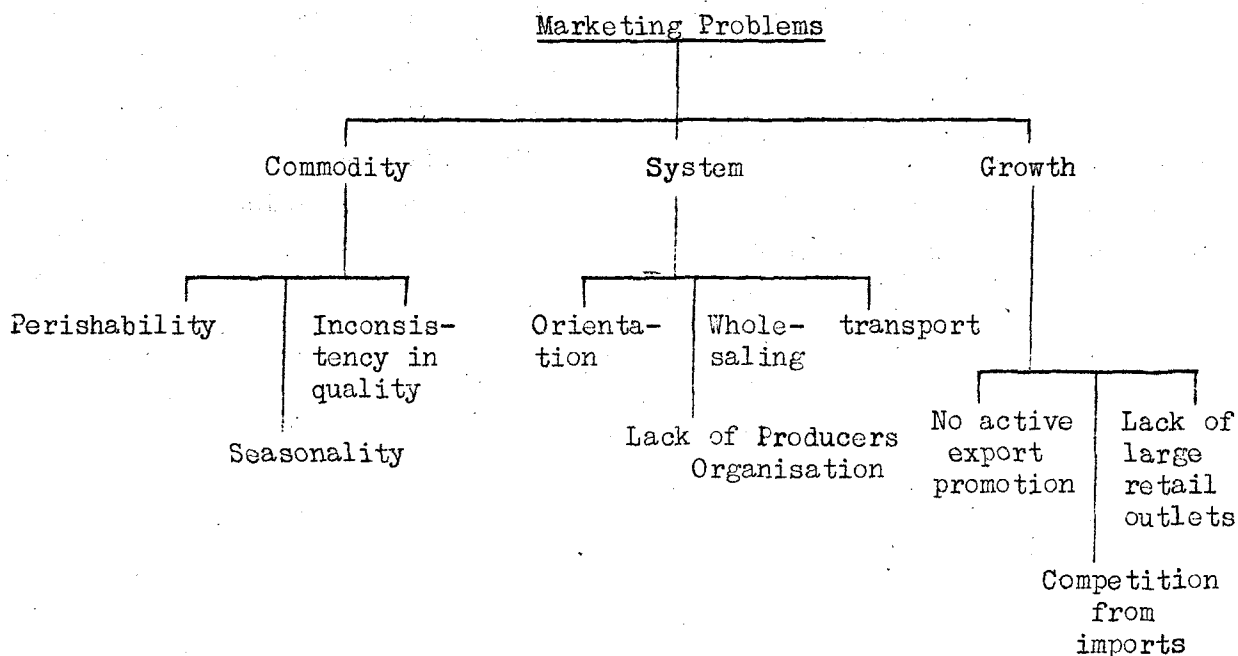


Table II

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Vegetables - '68 Acreage

State	Sole Crop	Main Crop	Mixed Crop	Total Sole Crop Equivalent
Johore	466	" -	2,098	1,515
Kedah	109	20	322	285
Kelantan	2,444	-	1,762	3,325
Malacca	180	-	1,652	1,006
N. Sembilan	40	-	1,040	560
Pahang	2,408	-	798	2,807
Penang & P.W.	855	221	224	1,133
Perak	3,396	200	1,511	4,301
Perlis	-	-	190	95
Selangor	900	60	3,349	2,619
Trengganu	223	62	692	616
Total - West Malaysia	11,021	563	13,638	18,262

Source: West Malaysia Acreages of Miscellaneous
Crops, 1968
Min. of Agriculture & Co-ops.

Table III

Vegetables - Production (1st Quarter 1969)

(In Pikuls)

State	Leaf Vegetables	Fruit Vegetables	Sweet Potatoes	Total
Perlis	350	65	-	415
Kedah	7,700	4,128	8,707	20,535
Kelantan	6,277	4,225	2,480	12,982
Trengganu	526	714	395	1,635
Pahang	20,705	25,872	5,108	51,685
Penang & P.W.	6,900	6,300	6,400	18,308
Perak	28,800	36,840	55,560	121,200
Selangor	10,880	7,720	9,300	27,900
Malacca	4,930	7,200	3,184	15,314
N. Sembilan	630	765	2,182	3,577
Johore	235,200	26,880	13,440	275,520
Total W. Malaysia	322,898	120,709	106,756	549,071
Last-Quarter	321,535	349,383	107,391	

Source: Laporan Suku Tahun, 1st Quarter 1969
Div. of Agriculture Extension Branch

Background paper
Pakistan

FRUIT AND VEGERABLE INDUSTRY IN PAKISTAN : SOME BASIC FACTS

by

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

REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH
COOPERATIVES" , TOKYO. JAPAN. 17th to 27th MAY 1970

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OF AGRICULTURAL COOPERATION IN
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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 a land 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 sq miles and 45.7% in West Pakistan with density of population as 138 per sq 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 1967-68 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. Auxiliary 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 compare 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 due 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. bottle 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 2½ 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.

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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

Background
Paper

Joint ICA-GUAC Seminar
Marketing of Fruits and Vegetables Through Cooperatives
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PRESENT SITUATION OF VEGETABLES AND FRUIT
PRODUCTION AND MARKETING IN THE PHILIPPINES

Submitted by:

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INTRODUCTION

For many centuries the Philippines has been an agricultural country. Its vast, water and mineral resources have been the main source of livelihood for the great majority of its people. Although there has been a gradual shift from agricultural to non-agricultural activities during the past two decades, agriculture continues to dominate Philippine life. It is estimated that 2/3 of Philippine population is dependent on agriculture and 57 per cent of the labor force are engaged in it. The country's economic problems arise from the agricultural sectors inability to provide adequate food supplies to the growing population. Studies have shown that as money income increases, more quality of food are demanded by the consumers. This means that the nutritional requirement of the population improves as income increases. It will mean more intake of protein rich food like vegetables, fruits, meat and milk relative to the intake of cereals and other carbohydrate foods.

In terms of the nutritional value, vegetables represent one of the most important crops in the country. However, vegetable intake of the Filipinos are low representing only about 52% of the nutritional standards recommended by the Food and Nutritional Research Center of the Philippines. With the very rapid increase of population growth at the rate of 3.2% per year and increase in per capita consumption of 1.2% annually, supply of vegetables cannot cope with its present demands so much so that the Philippines continually imported from other countries. However, with the government program to increase production the gap between production and consumption requirement is bright.

STATUS OF VEGETABLE PRODUCTION

The total cultivated area in the Philippines is about 7.9 million hectares and only about 216,000 hectares is devoted to the production of vegetables. From 1950 to 1967 the aggregate production of tomatoe, eggplant, Irish potatoe, garlic, radish and beans was observed to increase at the rate of 4% annually. Average production was about 210,000 metric tons. Onion production alone was about 16 million kilos per year from 1960 to 1967 (Table 1.)

Kinds of vegetables grown: Practically all different types of tropical vegetables can be grown throughout the country. However, in certain regions of the country some vegetables can only be grown during certain seasons of the year. For instance, some areas in the southern part of the country vegetables can be grown in the year round. The most important producing area is Mt. Province where a combination of cool climate and adequate rainfall favors vegetable production. In the Central Luzon areas, onion, radish, pechay, cabbage and garlic are also raised.

Marketable supply. Generally perishables must be used soon after harvest. Table 2 showed that onions and camote had the lowest estimated share of the total output being marketed, 93 and 92 per cent respectively. Eggplant and mongo less widely grown ranked next in the share of the output represented by the marketable supply. For other items practically the entire output was estimated to be marketable due to their perishability.

STATUS OF FRUIT PRODUCTION

Fruit production in the Philippines has three general characteristics in relation to marketing. First, production is very widely spread. The limited range of climatic conditions in the country means that all the tropical fruits can be grown almost everywhere. Some fruits are heavily concentrated in some areas. Second, we grow a wide variety of fruit ranging from avocados, bananas, calamansi, down to the alphabet. Third, most fruits are produced on small scale basis except citrus and pineapple. Examples are

are bananas grown on roadside, mountainside and homelots almost every where. The decentralized production contribute to highly decentralized marketing structure. Fruit production has increased substantially from 1955 to 1967. Further increase is to be expected. Among the fruits produced, the output of citrus, mandarin has increase more than five-fold, calamansi has increased eleven-fold. Of the non-citrus fruit in 1967, bananas were most important representing over half of the total production (Table 3). In spite of these increases the country continue to import fruits and mostly in fresh form.

Marketable supply. All fruits are relatively perishables and unless stored must be properly used to avoid spoilage. In addition, many producers have an immediate need for money, there are high proportion of annual production of fruits produced are marketed. The marketable supply of various fruits are indicated in (Table 4). Bananas as a result of its being produced on a great number of farms represented 84% of the total output as marketed. Mangoes and papayas, an estimated 96% of the annual output is marketed. All other fruits 98% or more is marketed.

STATUS OF VEGETABLE MARKETING

Marketing of vegetables in our country varies widely depending largely on the type of production involved. Darrah and Tinson (1969) pointed out that there are three types of production involved such as; 1. those undertaken in home garden primarily for home use, 2. those produced as a secondary crop after rice and corn, and 3. those produced on commercial/specialized either as a large-scale or truck garden. The first two dominate the Philippine vegetable industry.

Production of vegetables for home-use is mostly widely spread but less important from the marketing viewpoint. Although the output in excess should only be sold many producers sell their produce for lack of cash. In total this amount is important component of the supply but is usually small on the individual farm or household basis.

Vegetables as a secondary crop are planted after rice is harvested and marketing usually occurs during the latter part of the dry season. Limited numbers of vegetables are involved but the output is substantial.

The most important area for specialized production is Mt. Province especially Benguet where La Trinidad Valley, the "Vegetable Bowl" of the Philippines is located. Adjacent to the urban areas vegetable truck garden is very common.

MARKETING PRACTICES FOR VEGETABLES

Pre-sale practices

Post harvest operations include removal of dirt clinging on the the vegetable with the use of water. There are no definite standards followed in sorting except for Irish potatoes and camote. After washing, vegetables are packed in bamboo baskets, crates or sack container having a mixture of various grades, forms and sizes. In preparing leafy vegetables farmers remove the dead and severely damaged parts. Green and leafy vegetables are sold by weight thus farmers don't remove parts of the plant than absolutely necessary thus more loose leaves and larger stalks are left than maybe desirable for shipping to distant market.

Packaging

The most common packaging materials used by vegetable farmers are jute sacks, kaings, bamboo baskets and wooden crates. From the standpoint of keeping spoilage while in transit to minimum, wooden crates would be highly preferable. However, the most common material used are bamboo baskets and "kaing" because these materials are relatively cheap for its "one way use". Bamboo baskets and "kaings" are constructed with weak structure and such size to contain 30 to 35 kilos. In loading them, they are laid on their sides

and one container is placed on top of the other. Since these containers have no sidewise strength so much losses in all but on the top containers have been incurred which amounted to 20-30%.

Transportation:

Practically no transportation specialized in hauling of vegetables is utilized at present. Freight trucks, in-land transportation, and inter-islands vessels are used to transport a variety of commodities. The Philippines is composed of 7000 islands which means that the development of inter-islands facilities are very essential. There are hundreds of small ports which are congested and not well maintained. Added to the lack of transportation facilities are the absence of farm to market roads.

Storage

Production of vegetables in the country is highly seasonal. Peak harvesting occurs during the first six months of the year and low during the second half. Since most vegetables are highly perishables, adequate and efficient storage facilities to keep the commodity longer is very critical from the point of view of providing adequate remuneration to producers and making the commodity available to consumers.

Storage facilities for vegetables at the farm level are very crude. Vegetables are kept at ordinary room temperature in the house or improvised bodega. Containers used range from jute sacks bags to wooden boxes. It was estimated that losses due to poor storage is about 1-8kg per 100kg stored per week.

Grading and standardization

At present the only vegetables that has been standardized by Bureau of Standards is potato. Although the law authorizes the Bureau of Standards to promulgate grades for all types of commodities, it has been greatly hampered in its work due to lack of personnel. The GREATER MANILA TERMINAL FOOD MARKET INC. (GMTFM) has established grades for different fruits and vegetables (Appendix A). Added to the problem of standard grades is the problem of no standard unit of sales for vegetables. The procedure is to sell vegetables by head, by piece or by kilo.

In addition to problems related to the various marketing practices mentioned above the following beset the marketing of our farm products especially fruits and vegetables.

1. Inadequacy in the distribution process such as haphazard marketing channels, costly interruptions in the transport of goods or lack of up to date price and marketing information.
2. Dearth of marketing credit
3. Lack of quality control

All these problems trigger a chain reaction which make life miserable for all. Farmers get low income as they are forced to sell their product to middlemen who usually dictate the price.

PLANS FOR IMPROVEMENT

Responding to the long felt need to establish an efficient and effective marketing system, the GREATER MAINLA FOOD TERMINAL MARKET INC. (GMTFM) was established in 1968. It has an authorized capitalization of ₱160 million (\$27 million)

The GMTFM envisioned the following objectives:

1. To reduce and /or stabilize farm prices.
2. To induce increased and improved the quality of farm produce,
3. To minimize spoilage and waste of perishables through mechanized handling and modern storage facilities.

4. Eliminate undesirable distribution practices
5. Determine superior varieties of food crops from standpoint of nutritional value
6. Establish an efficient food marketing system including advanced trading techniques to prevent hoarding of goods and price manipulation as well as market information system that will benefit all groups involved in the marketing and production of farm produce.

The important features of GMTM will be the provision of financial assistance for producers/farmers cooperatives and trucker merchants. Providing loans will eliminate the traditional dependence of these group upon unscrupulous financiers. Production loans will be granted to buy the necessary inputs. Commodity loans against goods covered by warehouse receipts and marketing loans to be extended mostly through marketing cooperatives to finance costs of warehouse construction, acquisition of grading and transportation equipment.

The GMTM will provide space and facilities for the farmer's produce such as wholesale stores, farmer's shade, auction halls, central warehouses, central refrigerated storage, rail system, repacking station and auxiliary services such as dormitories, restaurants, banks and maintenance shops.

Another important feature of the terminal market is the promotion of the farmers' marketing cooperative. To make the GMTM effectively operational, it must be assured that a significant volume of desirable types of farm food commodities are channelled through the market. As farm planted to individual crops are relatively small and widely scattered it is physically impossible for GMTM to deal with them individually. The alternative is to organize them into cooperatives, to deal with the existing cooperatives or to reactivate dormant cooperatives.

Table 1. Production of important vegetables in the Philippines, 1950-1967

VEGETABLES	1950	1955	1960	1965	1966	1967
		million	kilos			
Eggplant	19	66	53	47	52	54
Pechay	2	8	10	13	14	14
Garlic	1	1	6	11	11	13
Tomatoes	16	59	53	73	72	74
Cabbage	5	17	29	32	32	35
Radish	13	11	10	10	10	10
TOTAL	66	164	162	185	192	200
Others:						
Dry beans	5	13	12	7	7	6
Mongo	10	27	30	18	17	15
Onions	6	13	17	15	16	16
Irish potato	a/	7	7	16	17	17
Total	87	224	228	241	249	254

a/ Not available

Source: Bureau of Agricultural Economics, Dept. Of Agriculture and Natural Resources, Philippines

Table 2.- Approximate marketable supply of vegetables, Philippines, 1967

ITEM	Production (Million kilos)	Per Cent For		Approximate Marketable Supply (Million kilos)
		Home Use	Marketing	
Eggplant	54	4	96	52
Pechay	14	Insig.	100	14
Garlic	13	1	99	13
Tomatoes	74	2	98	73
Cabbage	35	Insig.	100	35
Radishes	10	Insig.	100	10
Camote	687	7	93	639
Dry beans	6	Insig.	100	6
Mongo	15	3	97	15
Onions	16	8	92	15
Potatoes	17	Insig.	100	17

Source: Darrah and Tiongson, Agricultural Marketing in the Philippines
U.P.C.A. College, Laguna, Philippines

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TABLE 3.- Production of important fruits in the Philippines, selected years

YEAR	Citrus Fruit				Total
	Mandarin	Oranges	Calamansi	Pomelo	
Million kilos					
1940	3	3	3	6	13
1946	4	3	2	10	21
1950	3	4	1	12	20
1955	6	6	1	17	32
1960	12	7	4	22	43
1965	29	9	10	23	71
1966	31	9	11	25	75
1967	31	10	11	27	79

Year	Non-citrus Fruits					
	Atis	Avocado	Banana	Caimito	Chico	Guyaban
Million kilos						
1940	3	a/	609	a/	a/	5
1946	2	3	505	1	1	4
1950	2	3	584	1	1	5
1955	2	3	295	2	2	4
1960	2	6	307	4	3	5
1965	3	14	685	12	6	8
1966	4	16	683	14	6	10
1967	4	17	765	16	7	10

Year	Non-citrus fruits (concluded)					
	Jackfruit	Lanzones	Mongo	Papaya	Pineapple	Watermelon
Million kilos						
1940	90	10	45	55	25	12
1946	75	10	42	30	14	4
1950	73	10	41	35	57	6
1955	73	10	41	35	57	6
1960	67	18	50	32	103	12
1965	73	22	129	59	176	19
1966	80	20	131	58	188	21
1967	85	22	134	62	208	17

a/ .5 million kilos or less

Source: Bureau of Agric. Economics, Department of Agriculture and Natural Resources, Philippines

Table 4- Approximate marketable supply of important fruits, Philippines, 1967

ITEM	Production Mil(Kilos)	Per Cent For		Approximate Marketable Supply	
		Home Use	Marketing	Million kilos	
Citrus					
Mandarin	31	Insig.	100	31	31
Oranges	10	2	98		10
Calamansi	11	Insig.	100		11
Pomelo	27	Insig.	100		27
Non-Citrus					
Atis	4	Insig.	100		4
Avocado	17	22	98		17
Banana	765	16	84		643
Caimito	16	2	98		16
Chico	7	Insig.	100		7
Guayabano	10	Insig.	100		10
Jackfruit	85	2	98		83
Lanzones	22	Insig.	100		22
Mango	134	4	96		129
Papaya	62	4	96		60
Pineapple	208	2	98		204
Watermelon	17	Insig.	100		17

Source: Darrah and Tionson, Agricultural Marketing in the Philippines.
U.P.C.A. College, Laguna, Philippines, 1969

APPENDIX A

GRADED FRESH PRODUCE
by the
GREATER MANILA TERMINAL FOOD MARKET RESEARCH STAFF

FRUITS

Avocado
Banana
Bungolan
Lacatan
Latundan
Saba
Caimito
Chico
Calamansi
Guayabano
Ladu Orange
Lanka
Lanzones
Mandarin Orange
Mangoes
Papaya
Pineapple
Pumelo
Strawberry
Swinkom
Valencia Orange

FRUIT VEGETABLES

Ampalaya
Calabasa
Chayote
Chicharo
Cowpea
Cucumber
Eggplant
Habitchuelas
Lima beans
Upo
Melon
Cantaloups
Honeydews
Watermelon
Okra
Papaya (Green)
Patola
Sitao
Sweet Corn
Sweet Pepper
Tomato

FLOWER VEGETABLES

Brocoli
Cauliflower

LEAFY VEGETABLES

Cabbage
Celery
Chinese Cabbage
Leeks
Lettuce (head)
Lettuce (Leaf)
Mushrooms
Pechay

SUBTERRANEAN VEGETABLES

Beets (Topped)
Carrots
Gabi
Garlic
Ginger
Onions (bulb)
Onion (Green)
Peanut (Shelled)
Peanut (Unshelled)
Potato
Radish
Turnips
Sweet Potato

Source: Dolendo, A. Grading and Standardization. Paper presented at the UN-FAO Seminar on Marketing of Fruits and Vegetables in Asia and the Far East held in Manila, Philippines, Dec. 10-20, 1969

BACKGROUND PAPER
THAILAND

MARKETING OF FRUITS AND VEGETABLES IN THAILAND

by

Kahn Chuvarnond
Ag Chief, Farm Product Marketing, Coop Division
Department of Credit and Marketing Cooperatives,
Ministry of National Development
Bangkok.

REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES THROUGH COOPERATIVES"

TOKYO. JAPAN. 17th to 27th May 1970

Jointly organised by

INTERNATIONAL COOPERATIVE ALLIANCE
NEW DELHI
INDIA

INSTITUTE FOR THE DEVELOPMENT OF
AGRICULTURAL COOPERATION IN ASIA
TOKYO, JAPAN

By

KAHN CHUVARNOND

Wide varieties of vegetables are grown in Thailand and their commercialized growing mostly is around the radius of km. 50 of the large cities. There are some winter crops which require mild and cool weather growing in the northern part of the country.

The situation is different with fruits growing. They are grown in accordance with the suitability of soil, weather, amount of rain fall and land availability, particularly fruit trees. Consequently, it is normal to find large plantation of some fruit trees in some certain part of the country.

Growing of fruits and vegetables is increasing. Naturally, it is because of the growing population, growing demand and marketing efficiency.

Type of Market.

There is no perfectly organized market for fruits and vegetables. In principle, it has local agents functioning locally for collection, wholesale agents and retail handlers. There are terminals where traders perform their wholesale trade. These terminals are provided by the Government (Internal Trade Department, Ministry of Economic Affairs) and by private enterprises, and they are accessible by trucks or boats, or both.

Method of Sales.

Integrity of those who involved in this type of trade separately sets rules of sale in itself. Some wholesalers sell commodities on commission basis. In this type of sales, there is chain performance between wholesale handlers, local collectors and growers. Some advances use to be given to growers. Methods of sales in terminal markets used are both tender and FOB sales. The latter method is adopted also by some growers or local collectors. It is to be understood that sales are not totally made in cash. Condition of credit sales on terms both parties agreed upon are also practiced.

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Grading and Standardizing

Trading in fruits and vegetables is keenly competitive, particularly as vegetables are too perishable. For vegetables, their standard grade bases on their freshness, age and size. Grading is made at local collecting points. It is regraded at wholesale markets in order to ensure their freshness because, transporting in bulk, some may be spoiled.

Packing and transportation.

Packing varies according to crops and type of transportation used. Vegetables growing in the vicinity of the city and for daily consumption are transported in bulk and unpacked. Some asparagus, onion or spring cabbage which are transported from the distance (Northern part of the country) by rail are packed in bamboo crates. It is also for longan, rambutan and lichee. Some fruits such as citrus are packed in wooden box.

Process fruits and vegetables.

As mentioned, growing of fruits and vegetables is increasing; it is therefore natural that, production exceeding demand for consumption in times it gluts the market used to be happened. Production of pineapples had ever experienced such consequences. Price dropped to the negligent point, much lower than cost of production and growers badly suffered. Canning and processing industries were organized to solve above problem. Now, fruits such as longan, rambutan, waterchest nut, grape, lichee, pineapple, young corn, bamboo shoot and some vegetables are canned. Some are processed into jam and marmalade.

Farmers Market.

The government is of concern to promote the production of fruits and vegetables, since it is an important daily diet. Endeavor has been made to stabilize the price. Providing market place where farmers will have a direct part at wholesale market such as mentioned earlier is a result. It also organized the sunday market, the weekly meeting place for housewives and farmers, where they can have a direct trade to each other.

Price, demand and supply.

Naturally, demand and supply influences the price. It usually happened that growers or local collectors destroyed a large portion of vegetables harvested. Such practice was adopted in order to keep demand becoming strong.

The Ministry of Agriculture is now conducting the study on in this face of transaction. So far, no report of this nature is available. But since fruits and vegetables is perishable products, it is understood that, large part of price formation is attributable to marketing costs.

Cooperative Marketing of fruits and vegetables.

No cooperative in Thailand, so far, handles fruits and vegetables. Officially, there is yet no plan to persuade growers to organized into cooperative society. Since Thailand professes free economy, matter is left to growers' own consideration and it seems that they have no need at present to form themselves into cooperative society. Besides, business in this field assumes much risk and cooperatives are not yet experienced.

Marketing of fruits and vegetable in future.

Thailand has more potentiality to increase the production of fruits and vegetables. Processing and marketing efficiency play important part, besides population growth, in creating demand. Fresh fruits and vegetables are sold now in the supermarket and in the department stores. Canned and processed fruits and vegetables are in shops during off-season. Some are exported. Those who are involved in this face of business are untiringly working in promoting the sales so that the increasing production will be met.

ICA / CUAC REGIONAL SEMINAR ON " MARKETING OF FRUITS AND VEGETABLES
THROUGH COOPERATIVES", TOKYO, JAPAN . 17th to 27th MAY 1970

.....

Recommended temperature, relative humidity, approximate storage life and highest freezing point of selected fresh fruits and vegetables in commercial storage - USA

For Information

FRUITS

Commodity	Temperature	Relative Humidity	Approximate storage period	Highest freezing point
	$^{\circ}\text{F}$	%		$^{\circ}\text{F}$
Apples	30 - 40	90	3 - 8 months	29.3
Apricots	31 - 42	90	1 - 2 weeks	30.1
Avocados	40 - 55	85 - 90	2 - 4 weeks	31.5
Bananas	56 - 58	90 - 95	-	30.6
Berrico - Raspberries	30 - 32	90 - 95	2 - 3 days	30.0
Strawberries	32	90 - 95	5 - 7 days	30.6
Cherries - sweet	30 - 32	90 - 95	2 - 3 weeks	28.8
Dates	0 - 32	75 or less	6-12 months	3.7
Figs - fresh	31 - 32	85 - 90	7 - 10 days	27.6
Grapes, Venifera	30 - 31	90 - 95	3 - 6 months	28.1
Guavas	45 - 50	90	2 - 3 weeks	-
Grapes, american	31 - 32	85	2-8 weeks	29.7
Lemons	-	85 - 90	1 - 6 months	29.4
Limes	48 - 50	85 - 90	6 - 8 weeks	29.1
Lychees	35	90-95	3 - 5 weeks	-
Mangoes	55	85-90	2-3 weeks	30.3
Oranges - Florida	32	85-90	8-12 weeks	30.6
Papayas	45	85-90	1-3 weeks	30.4
Peaches	31-32	90	2-4 weeks	30.3
Pears	29-31	90=95	2-7 months	29.2
Pineapples	45-55	85-90	2-4 weeks	30.0

Vegetables

Commodities	Temperature °F	Relative humidity %	Approximate storage period	Highest freezing point °F
Asparagus	32-36	95	2-3 weeks	30.9
Broccoli	32	90-95	10-14 days	30.9
Cabbage, Chinese	32	90-95	1-2 months	-
Cauliflower	32	90-95	2-4 weeks	30.6
Celery	32	90-95	2-3 months	31.1
Cucumber	45-50	90-95	10-14 days	31.1
Garlic, dry	32	65-70	6-7 months	30.5
Greens, leafy	32	90-95	10-14 days	-
Kale	32	90-95	10-14 days	31.1
Lettuce	32	95	2-3 weeks	31.7
Melons - Cantaloup	36-40	85-90	15 days	24.9
Honey dew	45-50	85-90	3-4 weeks	30.3
Watermelon	40-50	80-85	2-3 weeks	31.3
Mushroom	32	90	2-4 weeks	30.4
Onions - dry	32	65-70	1 - 8 months	30.6
Peas - green	32	90-95	1-3 weeks	30.9
Peppers - chili (dry)	32-50	60-70	6 months	30.7
- sweet	45-50	90-95	2-3 months	30.7
Potatoes - early crop-see note				
Tomato - mature green	55-70	85-90	1-3 weeks	31.0
- firm ripe	45-50	85-90	4-7 days	31.1

For many fresh fruits and vegetables different varieties will need different storage temperatures and each often requires different storage periods. The following summarize a few of the main fruits and vegetables.

Apples

The range of temperature as shown in the table covers the requirements of most varieties, although as a general rule, the temperature falls between 30-32°F. Somewhat light temperatures are recommended for several varieties because of their susceptibility to disorders induced by low temperatures. For example, Jonathan apples sometimes develop soft scald in storage at 32°F, McIntosh apples should be stored at 38°F. The light storage temperature for varieties such as McIntosh is compensated by controlled atmosphere storage, methods which may double storage period of that in regular cold storage.

Pears

<u>Variety</u>	<u>Safe storage period at 30°F - months</u>		
Bartlete	2½	to	3 months
Bose	3	to	3½ months
Parkham	5 - 6 months		

Potatoe

As a general rule potatoes that are free from serious bruising and decay can be held 4-5 months at 40°F, if they are cured four days or longer at 60-70°F before storage. They can be stored 2-3 months at 50°F without curing.

Regional Seminar on Marketing of Fruits and Vegetables through
Cooperatives, Tokyo, Japan

Questions for Group Discussion on 25th May 1970

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Group A :

If your group were to influence the Agricultural Credit Administration (ACA) and the Cooperative, would you recommend the ACA_Cooperative Financing-marketing scheme? In explaining your answer please consider the cooperative capital formation programme, pricing policies, liquidation and mode of payment etc.

Group B :

If your group were to influence the Greater Manila Terminal Food Market (GMIFM) and the Cooperative, would you recommend the GMIFM - Cooperative Marketing Scheme? In explaining your answer please consider the grading, guaranteed floor prices, mode of payment and liquidation etc.

Regional Seminar on Marketing of Fruits and Vegetables through
Cooperatives, Tokyo, Japan

Questions for Group Discussion on 26th May 1970

...

1. If you were recommending to your governments or cooperative the need for marketing research in order to diminish the risk of marketing fresh fruit or vegetables either by over-producing through no plans or producing too few fruits or vegetables through traditional planning, which institution or institutions in your countries should this marketing research take place? Should the research be conducted by one group or subdivided into a number of groups? Why?

2. Commercial advertising usually has negative reaction to the traditional cooperative group. If it is desirable to advertise for marketing fruits and vegetables, what recommendations can we make to monitor the advertising. Is it desirable to monitor the advertising? What role does the consumer oriented marketing research have in guiding the cooperative advertising?

CUAC REGIONAL SEMINAR ON "MARKETING OF FRUITS AND VEGETABLES THROUGH
 CO-OPERATIVES", TOKYO, JAPAN. 17th to 27th May 1970

Division of Groups for Group Discussion

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Group A

Mr H Wiekramasinghe, Ceylon
 Mr J.B.L.Khaehi, India
 Mr V.G.Puranik, India
 Mr Mehdi Hendesi, Iran
 Mr Lee Duk Hoon, Korea
 Mr S.T.Sundram, Malaysia
 Mr Hamid Ahmad, Pakistan
 Mr G.R.Spinks, FAO
 Mr A Israngkul, APO
 Mr Narciso Deomampo, Philippines
 Mr K Tsutsumi, Japan

Group B

1. Mr G.K.Sharma, India
 2. Mr Jameswar Dash, India
 3. Mr Kim Seong Ki, Korea
 4. Mr M Arulandan, Malaysia
 5. Mr Cheong Chong Shing, Malaysia
 6. Mr Hasan Khan, Pakistan
 7. Mr Kahn Chuvarnond, Thailand
 8. Mr K Teteno, Japan
 9. Mr E Chobanian, Resource Person
 10. Mr C.J.R.Bogollagama, "
 11. Mr B.G.Lowe, "
 12. Dr V.U.Quintana, "

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Each group will elect its own Chairman and Secretary.

Reports of the Group should be prepared by the Secretary and submitted to the office the same day so that copies could be circulated to other participants in time for the plenary sessions on the group discussions.

ICA/JUAC REGIONAL SEMINAR ON "MARKETING OF FRUITS AND
VEGETABLES THROUGH COOPERATIVES", TOKYO, JAPAN

QUESTIONS FOR GROUP DISCUSSIONS ON

May 22, 1970

1. How and to what extent we can introduce planned production for quality control and effective marketing of fruits and vegetables through cooperatives under the present conditions of the countries in the Region? Can production also be influenced by day to day market conditions?

2. What marketing facilities are required for and how the cooperatives at different levels can provide them?

Regional Seminar on "Marketing of Fruits and Vegetables through Cooperatives"

Tokyo, Japan

REPORT OF GROUP DISCUSSIONS

: GROUP A

22nd May 1970

Chairman

Mr G R Spinks

Secretary

Mr J. B. L. Khaehi

Question 1.

Japan and Australia are beyond the per-view of this group in view of their peculiar conditions.

The group was of the opinion that within the developing countries of the region, there is limited scope for the introduction of planned production for quality control and effective marketing. Nevertheless, it has been accepted that the objectives are indeed laudable. The reasons for this opinion are:

1. Lack of technical skills in agriculture for the majority of producers.
2. The highly seasonal nature of production particularly because of limited variety testing aspect of vegetables.
3. The range of fruits and vegetables which are consumed in tropical and sub-tropical areas of the region is very large, e.g. in Thailand it has been estimated that the main market in Bangkok handles over 100 different varieties of vegetables during the year. This may be largely true of other countries especially like India, Malaysia Ceylon and Pakistan.
4. The absence of a commercial outlook towards agricultural production by producers. However, this will depend on the pattern of markets emerging in the different countries of the region as a result of the proper fixing of priorities. For instance, the domestic markets will have to directly rely for their supplies etc. in bulk to institutions, both government and public.
5. Lack of adequate and timely supplies of farm inputs like fertilizers and irrigational facilities.

For quality control the group felt that it is highly desirable to have the quality control but at this stage it has limitations in this region. To be effective it would require standardised grades and the implementation throughout the entire marketing system as well as considerable consumer education in quality aspects, some of which are foreign to consumers in this region, for example, shelf-life. In low income countries any sophisticated grading system can add to consumer prices. Cooking and buying habits for the bulk of consumers is not conducive to quality control systems at this stage especially for domestic markets, though this is a must as far as the international or regional markets are concerned.

Marketable Supply

This group has assumed that the word 'production' in the question means day to day marketable supply. However, it was agreed that past day to day price fluctuations may be useful in forecasting production and marketing plans. To be effective the marketable supplies could be influenced by an efficient and effective market news and information service to growers. However, only rudimentary steps have been taken in this matter throughout the region. Depending on the market at which the produce is aimed day to day movements in prices may have no place, for example, in contract, production for home consumption, processing and export facilities will have to be explored in order to maintain stable prices and guarantee "assured markets". The group also assumed that in the context of the question standardised grades for fruits and vegetables have been implemented and enforced. If not there is probably a need to enforce them, before getting benefits.

The group was unanimously of the view that cooperatives in the introduction of planned production, quality control and effective marketing could be really useful. However, the cooperatives should clearly be aware of the markets which they are aiming at, fresh produce (institutional and consumer), processing and export marketing; it was agreed that the cooperatives in the region should aim at markets which they feel they could supply and it was stressed that in domestic marketing of fresh fruits and vegetables (for bulk supplies) institutions should be given highest priority. The supply of raw material to processing units is another area at which cooperatives can introduce all the important marketing facilities and services mentioned above. The export trade will have to be planned on sound and efficient basis. It was also felt that intra-regional trade should be a benefit among cooperatives by supplying temperate fruits like apples etc. from India, Pakistan and Korea. However, it was also realised that the cooperative movement still requires considerable strengthening of the general marketing abilities in terms of finance, training, management personnel, member education and discipline.

Question No. 2:

The group was of the view that the required marketing facilities will be determined largely by the market at which the cooperatives aim at. The group also felt that the outline provided by Mr Nakata is more than adequate to show the facilities needed by the cooperatives at different levels but also stressed the difficulties the developing countries are facing in finding finance and trained technical and managerial personnel. Some concern was expressed that care should be taken that the capacity, methods and management of these facilities should be determined by detailed pre-investment feasibility studies. Such studies should cover both technical and economic aspects. Within the region it was felt that cooperative movements without considerable government support would be able to provide facilities for specialised markets such as high income export markets and specialised processing units.

Regional Seminar on "Marketing of Fruits and Vegetables through Cooperatives"
Tokyo Japan

REPORT OF GROUP DISCUSSIONS ON 22nd May 1970 : Group B

Chairman : Mr P.G.Lowe

Secretary Mr Hasan Khan

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The questions were discussed in detail. It was felt that

planned production in Japan has created price-umbrella for producers keeping their interests as foremost and consumer privileges have been ignored. Mr Okada agreed that consumer group is weak because economic structure is passing through transition period and marketing channels upto consumer point are still undergoing process of rationalisation. And so far as Japan is concerned, the introduction of "support price" concept may be a necessity for some time.

The group was of the view that quality controls can also be achieved otherwise as in the existing situation the planned production is not strictly resorted to by countries in the region. The mechanism of demand and supply works and quality controls involving controls and inspection at various segments of overall marketing mechanism are practised although the degree of control differs due to lack of know-how and facilities and climatic and local conditions. Cooperatives, should, however, try to improve the existing situation through advanced established practices existing in different efficient economies.

It was also pointed out that in some countries of the region the harvest period is short and the markets are flooded resulting to various problems in this field. However quality controls along with modern storage facilities need be provided in order to regulate supply, minimise perishability factor and bring price stabilisation. Although this requires resources, cooperatives should make arrangements to further strengthen the movement to ultimately save the consumer from malpractices of the private trade.

The discussion closed at 16.40.