

Report

Survey of Agricultural Cooperative Marketing Projects in South-East Asia

Part II

(Ceylon and the Republic of Korea)



INTERNATIONAL COOPERATIVE ALLIANCE

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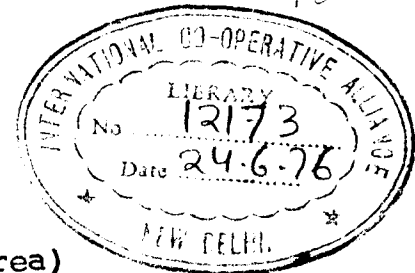
ON

THE SURVEY OF COOPERATIVE AGRICULTURAL MARKETING PROJECTS

IN SOUTH-EAST ASIA

PART - II

(Ceylon & the Republic of Korea)



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INTERNATIONAL COOPERATIVE ALLIANCE
Regional Office & Education Centre for South-East Asia
43 Friends' Colony (East), New Delhi-14
I N D I A

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October 29, 1971

Mr P.E. Weeraman
Regional Director
ICA Regional Office & Education
Centre for South-East Asia
43 Friends' Colony (East)
New Delhi-14
India

My dear Palita,

Re: Survey of Cooperative Agricultural Marketing
Projects in South-East Asia - Part II

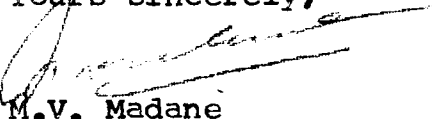
Kindly refer to your letter No.7.9 dated 25th August 1971 appointing me as the Leader of the Study Team for conducting the second part of the Survey of Cooperative Agricultural Marketing Projects in South-East Asia. Kindly also refer to your two letters of the same number dated 24th August 1971, appointing Mr G. Russell Holyoak and Mr Yong Jin Kim as members of the Study Team.

2. On behalf of the Study Team, I have great pleasure in submitting to you our Interim Report for the purpose of circulation among members of the ICA Sub-Committee for Agriculture and Trade and also members of the Advisory Council. The final report will be prepared and submitted to you in due course.

3. On behalf of the Study Team, I would like to express to you our grateful thanks for all the encouragement and kind assistance given by you for successful completion of this part of the Survey. I would also like to express our sincere thanks to our member organisations in Ceylon and the Republic of Korea as well as to the respective government agencies for their kind cooperation in our work related to the Survey.

4. Personally, I would like to extend my very sincere thanks to my colleagues in the Study Team - Mr. Russell Holyoak from Australia and Mr Yong Jin Kim from the Republic of Korea.

Yours sincerely,



M.V. Madane
Leader of the Study Team

Encl: One

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SURVEY OF COOPERATIVE AGRICULTURAL MARKETING PROJECTS
IN SOUTH-EAST ASIA

PART II

(Ceylon & the Republic of Korea)

INTERIM REPORT

Introduction

The second part of the Survey for Ceylon and the Republic of Korea was completed as a part of the overall regional survey concerning agricultural cooperative marketing. The terms of reference for this part were identical with the terms of reference formulated for the first part of the survey covering India, Indonesia and Australia.

The Study Team

The Study Team for the second part of the survey was composed as follows :

1. Leader of the Study Team Mr M.V. Madane,
Joint Director (TA&T)
ICA Regional Office,
New Delhi, India
2. Member Mr G. Russell Holyoak,
Export Manager,
Murray Goulburn Cooperative,
Melbourne 3000,
Victoria, Australia
3. Member Mr Yong Jin Kim,
Research Department,
National Agricultural Cooperative
Federation, 75 1st-Ka Choongjung-Ro,
Sudaemoon-ku, Seoul,
Republic of Korea

The Survey Schedule

19th September 1971	The Team assembled in Colombo, Ceylon.
20th Sept - 1st Oct.	Survey in Ceylon
6th Oct, 1971	Arrival in Seoul, Rep. of Korea
7th - 17th Oct, 1971	Survey in the Republic of Korea
18th - 20th Oct, 1971	Finalization of the main recommendations.

Report of the Survey

The final report of the Study Team on the second part of the survey concerning Ceylon and the Republic of Korea will be prepared during December at the Regional Office of the ICA in New Delhi. The following are only the main recommendations of the Study Team concerning the projects studied in the two countries.

C E Y L O N

Ceylon is an agricultural country with a dominating plantation economy. It has a population of about twelve and a quarter million. The major agricultural crops are rice, tea, rubber and coconut.

Agricultural Cooperatives

There has been a major reorganisation of agricultural cooperatives during recent months. A majority of the primary cooperatives have now been amalgamated into large-sized multipurpose cooperatives. Also, the earlier Multipurpose Cooperative Societies Unions have been dissolved and their assets transferred to the new large primaries. These primaries are expected to undertake all activities concerning agricultural producers. A number of these multipurpose cooperative societies are engaged in credit, marketing, consumer supplies and other services. A few cooperatives have their own processing facilities such as rice mills.

The amalgamations were brought about within a few months and the societies did not have much choice in deciding upon the issue of amalgamation. The government, through the Department of Cooperation, played a major role in this process. The Team hopes that the amalgamations will help integrate the various cooperative activities in the rural areas. As the ultimate aim of the government was to develop a healthy and democratic cooperative Movement the Team also expresses the hope that the cooperatives will be increasingly involved in the decision-making process on matters affecting their future.

Vegetable and Fruit Production and Marketing

Ceylon produces a number of fruits and vegetables most of which are tropical. Up-country vegetables are produced in the hilly areas. The vegetables concerning which marketing survey was conducted were potatoes, chillies, red onions, beans, cabbage, capsicum, knol khol, radish, tamatoes, sweet pumpkin, beet root and carrots. The Team also investigated the marketing of passion fruits which have been receiving special attention in Ceylon in terms of its production and marketing of its by-products.

Marketing of Fruits & Vegetables

Three agencies are involved at present in marketing of fruits and vegetables. They are : (1) the cooperatives, viz. the Ceylon Agricultural Producers Cooperative Societies Union, the Northern Division Agricultural Producers' Cooperative Union and a few cooperatives at the primary level. (2) The Marketing Department of the Govt. and three the Private Traders.

Marketing by the Cooperatives

The Unions market between 7% to 15% of vegetables, the Marketing Department about 5% to 10% and the rest is marketed by private traders. The Colombo Union operates a terminal market in Colombo to which vegetables are brought in its trucks from various collection centres. A few multipurpose cooperative societies and others concerned with vegetable production collect the produce and deliver it to the terminal market. 10% is charged as commission for marketing in Colombo, out of which 5% is given to the cooperatives sending the

vegetables. Vegetables are not marketed by auction. The Union also sells a small quantity of vegetables packed in polythene bags at a few vantage retail points in the capital city. Most of the vegetables are packed at the farm in gunny bags and there is about 35% wastage due to bad packing and rough handling during transit. There is almost no cooperative outlet for vegetables in the retail market except a few shops of the Colombo Cooperative Society. No grading is done at the producing end and very little at the terminal market. The private trader is rather quick and more active in this field, collecting the produce from the farm, paying on the spot to the farmer, transporting vegetables to Colombo, and selling them to the retailer. The cooperatives somehow are in a handicap because of the lengthy process involved in their decision making and marketing practices and because of the large administrative machinery involved in the whole process. Although there are guaranteed price schemes in respect of several other agriculture products, many green vegetables and the passion fruit are not covered by the Scheme nor does it seem likely that these items can fruitfully be brought under such a scheme although the government is considering possibility of evolving a suitable formula which will bring a certain degree of control in vegetable marketing by private traders.

The following are the main recommendations concerning the three areas visited by the Team for studying the projects suggested for the development of agricultural cooperative marketing.

I. Attanagalla Fruit Production and Marketing Project (Passion Fruit)

The society visited by the Team was Nittambuwa Multi-purpose Cooperative Society which is a large primary recently established. It is located within the Colombo revenue district, 26 miles north of Colombo, situated in the Gampaha Cooperative Division. Information was also provided to us about the Urapola Multipurpose Cooperative Society which is also a large primary in the area. The Team was informed that both the above co-operatives are not at present handling the marketing of passion fruit,

although some of their members were engaged in its cultivation.

250 acres were at present under passion fruit cultivation in the areas of operation of the two societies and the number of cultivators involved were 225. A scheme has been drawn up to increase the acreage upto 1,250 involving a total of 3,600 cultivators. The average income per acre for passion fruit cultivation was Rs.2,000. The average holding under passion fruit per farmer was .75 acres. The farmer receives 35 cents per pound for passion fruits whereas the price paid at the processing end was around 45 cents.

The Attanagalla Fruit Growers' Association

There is a Fruit Growers' Association functioning in this area with more than 25 members. This Association is directly involved in marketing of the fruits, bulk of which is delivered to Processing plants in Colombo including the plant operated by the Marketing Department. Transport is organised by the Association and by the members individually. Some members of the Association are also members of one of the two cooperatives in the area. The Association operates a small kiosk for selling passion fruit juices and other by-products on the main highway connecting Colombo.

Processing of passion fruit

We were informed that there was a need for establishing a processing plant in the area for producing passion fruit juices and other by-products. Later the Team learnt that the government of Ceylon is negotiating the possibility of an agreement with the Yugoslav Government for the establishment of a fruit processing plant in the Attanagalla area with a capacity of 6,000 lbs per hour which will be able to process the bulk of the passion fruits produced in the area.

The Marketing Department processing plant in Colombo is currently processing passion fruit at the rate of about 8,000 lbs per day. We were informed that the Department is planning to purchase a modern passion fruit processing plant with a capacity of 6,000lbs per hour. In addition, there was

a proposal for establishing a third plant of similar capacity in some other part of Ceylon.

Efforts are being made to export passion fruit juices and other by-products in foreign markets as the domestic market has already been saturated with these products.

Recommendations

1. There was a definite indication available to the Study Team that the volume of passion fruit production will be increasing to a considerable extent in the near future.
2. The Team, therefore, suggests that the two cooperatives functioning in the area should start handling the marketing of passion fruit. The societies should also supply the necessary inputs from passion fruit cultivation and guidance for improving its production.
3. The main problem in the area is the speedy marketing of the fruit. The Team would like to suggest that the cooperatives in the area should organise transport services which can take the produce to the processing centres at a faster rate than at present. It was the impression of the Team that the Colombo market being very near, organisation of such services should not present a very serious problem.
4. As regards processing, the Team felt that additional capacity to process passion fruit will be created as a result of the reorganisation of the plant by the Marketing Department and the establishment of the two additional plants with Yugoslav collaboration. The Team, therefore, does not recommend any processing plant to be operated by the cooperatives as this will only duplicate the processing capacity. The Team would also like to sound a note of caution concerning the increased production of passion fruits and its by-products in view of the uncertainty of firm marketing outlets in foreign countries. We would like to suggest that the production of the fruit and its processing be planned in accordance with the demand in foreign markets for its by-products.

5. We would like to suggest that the activities of the Fruit Growers' Association vis-a-vis the cooperatives in the area be discussed and the roles of both of them be demarcated so as to avoid duplication of effort. If the Association itself is going to be registered as a cooperative, then we would not like to suggest involvement of the cooperatives in this activity at this stage. The best course would, however, be that the Association restricts its activities to the promotion of passion fruit cultivation whereas the cooperatives handle the economic aspects of production and marketing.

6. The Nittambuwa and the Urapola Multipurpose Cooperative Societies should be assisted by the Ceylon Agricultural Producers Cooperative Societies Union to secure adequate credit for production and marketing, to obtain hybrid varieties of seeds, fertilizers, chemicals, packing materials and other agricultural implements. The societies should also be assisted in introducing grading of the fruit.

7. The Colombo Producers Union should assist the primaries in the area to collect the passion fruit from the collection centres in the area and deliver it to the Marketing Department or to other processors.

8. The problem of production and marketing of pineapple was included in the project note submitted to the Study Team. However, in view of the fact that Pineapple Marketing Department and the Government of Ceylon were deeply involved in the question of production and marketing of pineapple, the Team did not make any detailed investigation regarding this proposal. The Team, therefore, has no recommendations to make on the subject.

II. The Palugama Vegetable Production & Marketing Scheme

The project is centred around Udapalatha Multipurpose Cooperative Society located in the Badulla Revenue District. The area is surrounded by the Nuwara Eliya, Raggala and Bandara-vella mountain ranges with an elevation of 3,500 ft. above sea level. It is located 125 miles east of Colombo.

The society covers 18 villages with a population of 31,418 comprising 5,200 families. The main occupation is cultivation of paddy and vegetables, the most popular crop being potatoes.

The main vegetables produced are potatoes, beans, cabbages, tomatoes, knol khol, radish, chillies, carrots, red onions, beet roots and sweet pumpkins.

This society provides agricultural inputs to farmer producers for vegetable cultivation and markets the vegetables partly through the Colombo Agricultural Producers Union and partly through its own wholesale outlets in Colombo. 18 collection centres have been organised by this society to collect vegetables and two wholesale points to market them.

The cost of production of vegetables is rather high due to a steady increase in the cost of seeds, agro-chemicals and fertilizers. On the other hand, there is a wide gap between the price received by the producer and the one paid by the consumer. The middleman is very dominant in the area in marketing of vegetables. The age old systems of packing and grading still continue. The transport is organised partly by lorries owned by cooperatives and the Marketing Department and partly by the private traders. There are several transport companies operating in the area for transport of vegetables. The cooperatives find it hard to compete with the private traders who have been functioning in the area long before the cooperatives were established.

Recommendations

1. The Team gathered the impression that vegetable production in the area was profitable and the Vegetable producers have been able to gradually improve their living standard. The Team would, therefore, like to suggest continuation of effort in increasing vegetable production in the area. The Udapalatha Cooperative Society should continue to provide agricultural inputs and other services for improved vegetable production.

2. We were told that most of the seeds at present are imported. It was possible to produce seeds locally although the cost of production was rather high than the imported seeds. The Team recommends that more attention should be paid to production of seeds on a scale large enough to make it economical. A few farmers should be selected for exclusive production of seeds and all assistance and encouragement should be given to them for producing quality seeds. The Agriculture Department is already active in the area and we suggest that the cooperatives and the Agriculture Department should jointly formulate a programme for seed production on the lines suggested above.

3. The society has a sound financial position with large amounts in deposits by members. The Rural Bank attached to the society's office is able to finance to some extent the producers' current marketing operations, but these loans are not adequate. There was, therefore, a felt need for speedy loans to the society for its marketing operations. We would like to suggest that the People's Bank of Ceylon be requested to provide speedier loans to vegetable marketing cooperative societies at a concessional rate of interest.

4. The Team suggest that a pilot project be started by the Udapalatha Society with the assistance of the Agricultural Producers' Union in introducing the new practices suggested above in a limited area and the practices may be further extended to other areas only after reviewing the progress made in the pilot project.

5. As a part of the pilot project, the Ceylon Agricultural Producers' Union and the Udapalatha Society should formulate a joint vegetable marketing programme which can enable the Union to assist the Society in starting the following services at the production centres.

a) Grading : Proper grading of vegetables in respect of a selected few items in the initial stages. Best quality vegetables should be diverted to markets which have a demand for such quality products. The grading and

trimming of vegetables like cabbages at the production centres reduces the volume to be transported to the cities, thereby reducing the transport cost. Proper grading also facilitates easy and compact packing.

b) Packing : The gunny bag packing should gradually be replaced with bamboo baskets, wooden boxes or baskets made out of a softer variety of cane produced in the area. The Union and the Society should start experiments with a variety of raw-materials for producing suitable packing cases so that the vegetables will be properly packed at reduced cost.

c) Market Intelligence : The Union and the Society should have a continuous communication system through telegrams, telephones and other wire services. The facility of fixed time telephone calls should be used for speedy and timely communication. The Union should be able to advise the society from time to time as to which markets the trucks loaded at the collection centres should be diverted. We suggest that according to seasonal market situation, especially during harvesting seasons, the Union should divert surplus production to other major markets in the country so as to regulate flow of vegetables in the Colombo market.

d) Storage : It may be necessary to store vegetables in cold storages if the market prices during the harvesting seasons are not attractive. We suggest that the cold storage operated by the Marketing Department in Kandy be used by the Udapalatha Society and the Union, to store surplus vegetables. We feel that the cost of storing will be much less than the additional price the producers may procure by selling the vegetables in off seasons. As a long-term proposition, the Udapalatha Society may have to establish a cold store on its premises so that the produce of the members can be stored at a low cost for a long-time. Climatic conditions in Udapalatha could make this an economical proposition.

e) The possibility of introducing a system of planned production of vegetables so as to diversify the crops according to market situation should be examined.

6. Price Stabilisation Fund

The Udapalatha Society and the Colombo Agricultural Producers' Union should jointly establish a price stabilisation fund to compensate the producers in case of losses due to market fluctuations. We suggest that an initial contribution to this fund may be made by the Government and the subsequent additions should come from a small percentage of the price received by the producers for the vegetables sold through cooperative.

7. There is a need for training of the staff working with this cooperative in respect of grading, packaging and market intelligence.

III. Valigamam North Division Vegetable Production and Marketing Project

The project area is located in the Valigamam North Divisional Revenue Officers Division located in the Jaffna Revenue District in the northern part of Ceylon. The project is around the area of operation of the Chunnakam Multipurpose Cooperative Society. The distance from Colombo is 250 miles.

The project area covers 58 sq.miles with a population of 111,200. Large-scale irrigation is scarce as the area is under the dry zone. However, well-irrigation is common. The land is with a rich heavy loam and very fertile, but much of the uncultivated land has large rocks scattered all over. Efforts are being made to reclaim these lands.

Vegetable Production and Marketing

50% of the vegetable producers own less than one acre of land. Vegetables produced are beet roots, egg plants, pumpkins, drum sticks, tomatoes, green chillies, plantains, bitter gourd, snake gourd, king yam, mamoi, elephant foot yams, etc. Both the Marketing Department and the cooperatives operate in this region and purchase substantial quantities of vegetables

although bulk of these purchases are in respect of items covered by the Guaranteed Price Scheme (G.P.S.). These are (apart from paddy) onions, chillies and potatoes. Potatoes fetch a better price outside and very little quantity is bought by the Department and the cooperatives.

The Northern Division Agricultural Producers Union is the major cooperative agency for purchases of the above products under G.P.S.

Very little is being done by the Chunnakan Society and the Union for fresh vegetable marketing although the Chunnakan Society has three branches which market fresh vegetables.

The largest market in Jaffna District is a "Fair" located at Chunnakam where vegetables are brought by the producer and purchased by the dealers for transportation to wholesale markets.

Problems

The vegetables which are marketed under the guaranteed price scheme do not need much intervention by the cooperatives as the producer invariably brings it to the cooperative or the Department if higher prices are not available in the open market. The Chunnakam Multipurpose Cooperative, which has 27 branches, deals mainly with consumer supplies, agricultural services and contract services. It has a large volume of business of distributing rationed articles. It also markets onions, chillies and potatoes under the overall supervision of the Northern Agricultural Producers Union and receives commission for handling them.

Most of the fresh vegetables are marketed locally due to heavy demand in the Province. However, a large quantity of tomatoes, pumpkins and beet roots is sold outside the District. The major problem, therefore, is of marketing these three items.

Recommendations

1. We suggest that the Chunnakam Multipurpose Cooperative should gradually shift its emphasis from consumer supplies to agricultural production and marketing activity.

2. It should undertake the marketing of tomatoes, pumpkin and beet root in collaboration with the Northern Agricultural Producers Union. The Society should provide agricultural inputs and organise farm guidance to improve production. The Northern Union should organise marketing of the produce outside Jaffna District.

3. A pilot project for intensive marketing be introduced around the area of operation of the Chunnakam Society for intensive production and marketing of tomatoes, pumpkins and beet-root. The following are our suggestions for improving production and marketing through the pilot project.

a) Tomatoes : Tomatoes produced in the area are mostly bought by the Marketing Department for its processing plant. However, we suggest that the society should make serious efforts to improve the quality of tomatoes through supply of inputs and guidance. The tomatoes so produced should be collected by the society and graded. Top quality tomatoes should be sent to Colombo market through the Northern Union and should be marketed in Colombo by the Ceylon Agricultural Producers Union. Quantities required by the Marketing Department should be supplied and the rest should be sold in the local market. Wooden boxes for packing tomatoes should be provided by the Union.

b) Pumpkin :

This is a commodity which fetches good price in the market locally. However, the production is high and can be further increased. The Chunnakam society should collect pumpkin and organise its sale in the local market. The supplies to the Marketing Department should be continued. However, the entire marketable surplus should not be sent to Colombo during peak production period. Pumpkin is easy

to store and lasts for several months. We, therefore, suggest that the Northern Union and the Colombo Union should jointly organise a plan of storing surplus pumpkins at vantage points either in the warehouses owned by the Union or the societies. These stocks can be diverted to various markets as per the demand during off seasons. Some pumpkins can be sent to up-country areas and in exchange vegetables such as cabbage could be brought in by the Union for Jaffna market from Udapalatha. We suggest that increased attention be paid to the marketing of pumpkins from the area as a priority item. If funds permit the Northern Union should make direct purchases and store the produce for a better price during off seasons.

- c) Beet Root : Beet root is not in great demand in the local market. There is an urgent need for locating better markets elsewhere. We were informed that the colour of beet root produced in the area is not deep scarlet which is generally favoured by the consumers in other areas, although the taste is satisfactory. We suggest that the Northern Union and the Chummakam Society should work out a production plan for improving the quality and colour of the beet root in collaboration with the Department of Agriculture. Soil tests need to be conducted to determine the nature of seeds and inputs needed to produce the desired quality. As beet root has a better market outside, Jaffna District, it is necessary to produce the quality favoured by the consumer in the prospective markets. If the acreage under beet root increases and if large-scale production is envisaged the feasibility of producing sugar beet instead of red beet should be examined.

4. We suggest that the Chummakam Society and the Northern Union organise grading and packing services for their members produce. Grading for items such as tomatoes, beet root and pumpkin is easier, and should be done either at the producer's end or at the society level. Produce to be sent to outside markets should be properly packed to ensure minimum damage.

5. The Northern Union should be encouraged to function in close collaboration with the Chummakam Society. This Union has a long experience in marketing and is financially sound. It has its own building and a few facilities.

6. A strong business link should be established between this Union and the Colombo Union for continuous exchange of market information, for diversification of produce to different markets and for improving grading and packing standards. The pamyrah leaves available in the area should be extensively used to prepare packaging materials for produce from this area as well as from others.

7. The marketing of other vegetables should be undertaken by the Chumakamm Society through its branches and through the Chummakam Fair.

8. A market feasibility study be made to determine if a small processing plant for producing tomato ketchup and other suitable products can be profitable to absorb the surplus products such as tomatoes and pumpkins.

IV. General

1. The pilot projects to be started around Udapalatha and Chummakam Societies should be formulated in consultation with all the agencies concerned with vegetable production and marketing, viz. the Ceylon Agricultural Producers Cooperative Societies Union, the Cooperative Department, the Marketing Department, the Department of Agrarian Services and the Department of Agriculture. For the purpose of Chummakam Project the Northern Union should be involved.

2. The activities of the two Agricultural Unions should be further strengthened. Even if the present structure of these Unions is reorganised, their identity and functions should remain as distinct as possible. The Ceylon Union which is by far the largest vegetable marketing organisation in the cooperative sphere was extensively reorganised in 1970. When a new Board of Management mainly Govt. nominees was appointed by the Commissioner of Coop. Development and Registrar of Coop. Societies.

Since then the Union has made good progress and has been placed on a much sounder financial basis.

We feel that this important Union would progress much further if a full-time President were appointed to direct its affairs.

The Colombo Union and the Northern Union should gradually be governed by Boards representing the vegetable producers. They should play a major role in providing centrally organised services to the affiliated cooperatives in the project areas.

3. We suggest that the system of open auction, which is very common in many parts of the world, should be introduced in the market operated by the Colombo Union.
4. The Study Team has not been able to study in greater detail the role of the Marketing Department in vegetable marketing. However, it is obvious that for historical reasons, the Department is deeply entrenched in this activity. We would like to suggest that the Marketing Department should gradually transfer its functions of vegetable marketing to the Producers Union. This should, however, be done in stages and commensurate with the increased strength of the cooperatives. We feel that a Department with such a vast administrative machinery, is not well suited to undertake such a commercial type of activity.
5. The finance required for greater turnover of vegetables and passion fruits as well as for storage should be made available by the People's Bank.
6. The Cooperative Federation of Ceylon should be requested to undertake project areas in collaboration with the Producers Union an intensive member education programme for vegetable producers in respect of production, grading, packaging and other marketing practices.
7. The Cooperative Department of Ceylon, should extend its full financial and personnel support to the Producers Union and the Federation in implementing the scheme formulated as a part of the pilot projects.

3. International organisations should assist the vegetable marketing projects in (1) improving seed production, (2) in providing technical know-how and training for personnel working in project areas and if necessary (3) in establishing facilities such as cold storage when the need for such facilities is felt by the cooperatives.

REPUBLIC OF KOREAI. Introduction

South Korea is also an agricultural country with a population of 31 million. The major crops are rice, barley, wheat, soyabeans and potatoes. Over 15 million people are engaged in occupation related to farming.

Agricultural Cooperatives

The agricultural cooperative movement in South Korea is centrally organised through the National Agricultural Cooperative Federation (NACF). The NACF has provincial branches through which it coordinates almost all activities of Gun (County Cooperatives). The Gun Cooperatives have as their members Ri-Dong Cooperatives which are multipurpose societies functioning at the primary level. Currently, efforts are being made to amalgamate the smaller societies into large primaries.

The societies dealing with fruits and vegetables are known as Horticultural Cooperatives and those concerning with cattle farming as livestock societies. These societies are known as special cooperatives and are affiliated directly to the NACF.

The project areas

The Marketing Survey in South Korea related to the marketing of fruits grown in three provinces viz. Choong Buk Province, Chung Nam Province and Chun Buk Province. Three projects were suggested to us for study, each project centering around a special cooperative dealing with fruits and vegetables. Our comments and recommendations relate mainly to the situation in these areas.

Fruit Production and Marketing

There is a wide variety of fruits grown in South Korea. The main fruits are apple, pear, peach, grapes, persimmon, strawberry and melons. The total area under fruit orchard during 1969 was 55,700 hectares. There has been a gradual increase in acreage under fruit during recent years although the horticultural cooperatives still market a very small percentage of the total produce. Private trade is still dominant in this field.

Central Markets

The NACF operates five regional markets for providing better facilities to producers in selling their produce. These markets are located at Seoul, Taejon, Taegu and Kwangju.

The produce brought to the market by the producer or by the cooperatives is auctioned by auctioneers approved by the Marketing Centres. Designated or authorised dealers who act both as wholesale and retail merchants are entitled to take part in the auction. In order to ensure proper conduct on behalf of these dealers, a security deposit is taken by the cooperatives or by the Centre from them. The Marketing Centres charge a certain percentage as commission to producers which is shared among the Centre, the dealers and the cooperatives. Dealers in the Centres are given shops on rent for their transactions and for retailing the produce purchased in the auction.

Horticultural Services

The NACF has a horticultural Section for dealing with horticultural cooperatives and for providing them guidance and assistance. However, there is no staff in the Provincial Branch Offices specially responsible for these cooperatives, with the result that the NACF has to service all the special cooperatives direct. This situation has to some extent, left the horticultural cooperatives to fend for themselves.

The NACF has, however, provided substantial assistance to a few selected horticultural cooperatives with a view to strengthening their operations and to increase their facilities. At the end of each year a special meeting of horticultural cooperatives is called by the NACF to discuss their performance in the light of audit and inspection reports. As a result of these discussions, quite a few non-functioning cooperatives have been dissolved. The NACF is contemplating greater exchange of information among horticultural cooperatives with a view to exchanging experiences. A few mergers are also likely among the special cooperatives.

II. The Projects

1. Choonju Fruit Marketing Project

The project area is located in Chong Won County of Chung Buk Province. The project centres around the Choong ju Horticultural Cooperative located at Choong ju.

The Choong ju Horticultural Cooperative, which was established in 1946, has 826 members. Its main functions are supply of agricultural inputs, marketing of apple and pear, and guidance to fruit producers. The society has a long experience in horticultural products and has sound financial position as well as good leadership and management.

Cooperative Market

The society operates a central market in the city of Choong ju for fruit marketing. This market has been given to it for management by the City Council. It provides facilities for producers to market their fruits through the society itself or through private dealers. It has a warehouse in the market yard for storing packing material, for weighing and for grading the fruits. Most of the produce brought in the market is by small producers. Fruits belonging to large producers are packed on the farm and directly transported to Seoul market in vehicles provided by the cooperative. The society charges a low rate of only 2% as commission to farmers for marketing the fruits.

Problems

1. Most of the fruits are graded by the farmers on the farm before packing them in wooden boxes. Some bring it to the market without grading and do it at the market.
2. A number of farmers store apples for winter in their own stores with a view to market them after 5-6 months. However most of these stores are not satisfactorily built and the storing is done without much thought to proper grading for quality.
3. The prices in the market vary to a very great extent during harvesting and off seasons. There is a gradual rise in prices after Winter, but a sudden drop at the end of the storing period after which the fruit must be sold. If the storage period could be extended for a few weeks, the chances of securing better prices would be better.
4. The society has drawn up a long-term plan for production and marketing of fruits with a view to increase production and marketing activity in a systematic manner. At the end of 1974, the production is expected to increase by more than 50%. The society, however, at present faces the problem of over production shortage of finance and lack of storage facilities. With a view to coping with the increased production, it is in need of additional finance at a concessional rate of interest. It has also prepared a project for a fruit processing plant in order to absorb the surplus fruits, so that market supply and prices could be regulated to some extent.
5. The society has no cold storage and is desirous of establishing one at Choong ju.
6. Most of the marketing is done on a consignment basis and the society needs large funds to advance money to farmers during the harvesting season. A small percentage of marketing is done on outright sales basis.

7. There is no coordinating body in central markets such as Seoul which can help the horticultural cooperatives in marketing or exporting their produce nor is there any coordination concerning the utilisation of facilities which are available in Seoul for storing the agricultural produce during harvesting seasons.

Recommendations

1. The Choong ju Horticultural Cooperative is at present handling only apples and to certain extent pears. It is suggested that it should extend its activities to cover other fruits in order to fully utilise market and other facilities owned by the society. As the processing plant planned by the society is expected to handle a number of fruits, it will be appropriate for the society to initiate marketing of these fruits in order to attract the producers to the society. In the absence of such marketing services, it will be difficult for the society to attract raw-material for the processing plant at a later stage.

2. Cold Storage : There is certainly a need for establishing cold storage facility at Choong ju in order to store fruits for a period longer than it is possible to store them at the farm. We were informed that apples stored in ordinary stor s at the farm level cannot be kept beyond May the following year. If the cold store is available at Choong ju it will be possible for the producers to keep the fruits for longer duration and regulate the supply to the market.

The system of operating the cold store will have to be evolved by the society in consultation with the producer members. As a number of farmers are already storing the fruits at the farm, there should be no difficulty for them to store it at the society level as they would be benefitted later by higher prices through marketing the produce at a time when there are comparatively less arrivals in the market. If it is possible for the society to purchase the fruits outright and store it on its own responsibility, it is certainly the best arrangement that can be made. However, this will require locking up of a large capital of the society in the produce

so stored.

In order to raise adequate funds for establishing a cold store, the society will have to tap additional sources. External finance is difficult to obtain unless NACF organises soft loans for the society. The main source will have to be the members who could be requested to credit to the society a small percentage of the price received by them after marketing the fruits through the society. As the members would be benefitted by getting higher prices, they should be willing to part with this amount in order to create a fund for the cold storage. The society has already demonstrated its willingness to help the members by charging only 2% commission for fruit marketing. The members will have to demonstrate their willingness to help the society to create a facility like the cold store which will naturally be of great benefit to the members.

To begin with it may be possible for the society to start with an ordinary store which can later be converted into a cold store. We understand that the NACF is negotiating with the I.D.A. the possibility of securing loans for cold storage and Choong ju is included in the list of these projects. If the society is able to get such a cold storage, the need for raising additional finance for this purpose may not arise.

3. **Grading :** The members of the Study Team discussed at great length the question of grading the fruits in order to fetch better prices in the market. However, there was a strong feeling among the leadership of the society that the grading done by the farmers as well as by the employees of the cooperative is sufficient to meet with the present demands of the consumers in the market. It was also felt that a grading machine was not in a position to handle grading for quality. Although it may not be necessary at this stage to introduce mechanical grading, the Team felt that, as the volume of business increases, it may be desirable to introduce mechanised grading in order to introduce in the market more sophisticated grades

of fruits thereby educating the consumers to gradually become more and more grade and quality conscious.

4. Packaging : The packaging of fruits is at present done in wooden cases with straw stuffed in between the rows so as to minimise damage during transport. It may be possible to pack more fruits in the boxes if the necessity of adding straw while packing is done away with. This can be done only if the fruits are properly graded so that a certain number of fruits can be fitted into the box without adding the straw. There may be a need for putting the straw at this stage because of the bad condition of roads approaching Choong ju. However, gradually with improved grading the packing without straw could be introduced.

5. The society is at present marketing bulk of the produce on a consignment basis charging only a commission for the services rendered. A certain percentage of the produce is purchased directly and sold on the responsibility of the society. It is suggested that gradually the percentage of direct sales may be increased.

6. Market Intelligence : The society should reorganise its market intelligence services and integrate them with the storage and transport operations. The society should be able to organise the delivery of fruits to various markets by informing the producers or the stores regarding the supply needed in these markets. It should be possible for the society to inform the members of the market situation sufficiently in advance so as to enable him to organise the delivery of the produce accordingly.

7. Possibilities of coordinating the marketing activities of Choongju society with other horticultural cooperatives should be explored in collaboration with the NACF.

2. Tae Duk Fruit Marketing Project

The project is located in the Tae Duk County of Chung Nam Province and in the area of the Tae Duk Horticultural Cooperative.

The Tae Duk Horticultural Cooperative

The Tae Duk Horticultural Cooperative, which was established during 1971, has 816 members. It is located in the premises of the Tae jon marketing centre of the NACF. Its main functions are supply of agricultural inputs and marketing of fruits and vegetables. The main commodities marketed are grapes, strawberry, radish and cabbage. The society also occasionally supplies salted cabbage to the army.

Cooperative Marketing of Fruits

The society has 50% of the producers in the area as its members. 10% of the produce is sold in the Tae jon marketing centre amounting to 1500 M/T. 600 M/T is delivered to a private processing plant located outside Tae jon and the rest is sold through designated traders in the Seoul market.

Most of the grapes and other fruits were delivered by the farmers themselves to the market. The cooperative has also motor tricycles for collecting produce from the members. These tricycles visit the farmers at fixed hours and give a receipt to the producers after obtaining the supplies. Each farmer's produce is separately tagged.

The society charges one per cent commission for marketing of grapes. 0.5% of this is added to a capital mobilisation fund and the balance of 0.5% is used for meeting the costs of marketing.

The society has introduced a seedless variety of grape in the area through special process of chemical treatment to the plants during the flowering season. We were informed that the processing plant functioning near Tae jon is planning to produce a seeding machine which will do the job of 300 labourers for taking out seeds from grapes before canning.

The society has a system of entering into contract with private transporters for picking up farm produce and transporting it to the terminal markets in Seoul. We were informed that this system is functioning in a satisfactory manner.

Grading : Grading of grapes is done by the farmers by sizing the bunch. It is decided according to the number of grapes on each bunch varying from 130 to 80. At present there was no problem of grading of grapes in this area.

Packaging : The society has prepared cartons of cardboard for providing them to the producers. Grapes are wrapped in paper and are packed in these cartons. It has also evolved a plastic container for retail marketing of strawberries. However, the society is planning to produce a cheaper form of packing for strawberries as the plastic container is rather expensive.

Market Intelligence : We were informed that at present there was no need for introducing market intelligence services as the farmers were generally well aware of the market situation.

Problems

One of the most important problems brought to the notice of the Study Team was the accumulation of stocks in the market during the harvesting season. As grape was a delicate fruit, it is not possible to keep it much longer and has to be sold within a few days. It was, therefore, necessary to lift a part of the produce from the market and absorb it in processing. The private processing plant operating near Tae jon was not able to absorb more than 600 M/T of grapes annually. The society is, therefore, anxious to establish a processing plant for canning of grapes and other fruits. It has also a plant for canning black beans and for preparing sweet corn. We were informed that the City Government of the area is providing subsidies for encouraging production of black beans and corn.

The salted cabbage and radish supplied by the society to armed forces has not yielded much benefit as the society has run into losses due to this transaction.

Storing : The society has no cool or cold storage. The need is being felt for storing strawberries and other fruits during harvesting seasons so that supplies could be regulated in the market. The most important need was a cool store.

Recommendations

1. The Study Team felt that the society is performing useful services to the fruit and vegetable producers in the area. During the period of last twelve months the society has made good recovery from its weak financial position. The society should, therefore, be encouraged to increase its volume of activity for marketing of fresh fruits by providing soft loans during the harvesting season.
2. We feel that the establishment of a separate processing plant in the area in the immediate future would not be advisable. The private processing plant is already absorbing 600 M/Tons and it is not unlikely that this plant may increase its capacity. Also, there were other processing plants such as Suntory and those owned by the cooperatives in the nearby provinces such as Chun Buk. Possibilities should, therefore, be explored of providing raw materials to existing processing plants. A fruit processing plant may be treated as a long-term proposal and if in future, owing to the increase in the volume of fruit marketing, the need is felt for an additional processing plant, a feasibility study be made regarding the proposal.
3. The Study Team would like to suggest more intensive efforts to increase and strengthen the marketing activity in respect of fresh fruits. With a view to organising such marketing activities, the following measures are suggested :
 - a) A cool store be established at Tae jon for storing fruits. Fruits may be stored in cool stores if it is proved that the varieties produced by the society can be preserved for a specific period. Cold storage facilities are available in stores organised by Agriculture and Fisheries Development Corporation in Seoul and in other cities.

- b) The Society should continue to improve packaging materials and organise their large-scale production so that the costs of the same will be minimised. If necessary, the NACF should be approached to organise production and supply of packaging materials on a centralised basis.
- c) A market intelligence service should be introduced with a view to bringing the producers closer to the cooperative society. The need for market intelligence services is felt more keenly by small producers who do not have the facility of reaching the bigger markets for obtaining the information. The society should establish a system of communication between its office and the producing centres and circulate as much information as possible concerning the market situation from time to time. The primary cooperatives should be involved in this process.
- d) The need for expanding the market in Seoul and other major cities was felt by the Study Team in view of the increased supplies received in the Tae jon market. The possibility of using the facilities operated by NACF through the marketing centres should be utilised in order to expand the market in Seoul and other cities. The NACF should assist in expanding the fruit marketing activity of the society in terminal markets. The NACF should also assist the society in marketing the fruits through the chain stores which have been opened recently in several parts of the country.
- e) At present the fruits are brought into the market by the producer himself and the primary cooperative society in the village is not involved in fruit marketing. We suggest that the primary society be involved to some extent in organising collection and delivery of fruits to the central markets. This will also strengthen the link between the primary cooperative and the Tae Duk Horticultural Cooperative.

3. Chunju Fruit Marketing Project

The project is located in Wan Chu County of Chunbuk Province. The project is centred around the area of operation of Chun ju Fruit Cooperative.

Processing activities of the County Cooperative

Before visiting the society related to the fruit project, the Study Team visited the processing plant operated by the Wanchu County Cooperative. This plant is processing several kinds of fruits such as peach, pears, grapes, in addition to livestock and fishery products. It processes approximately 10,000 M/Tons of fruits per year amounting to 6 to 7 per cent of the fruits produced in the area and this has helped to some extent in reducing the seasonal heavy selling in the local market. The society purchases raw materials from the farmers through village cooperatives at comparatively higher prices than those in the market. The plant at present produces 520,000 cans with a ten hour shift and in a processing period of nine months. Approximately 70 per cent of the capacity at a 10 hour shift is utilised. With two shifts extending to 16 hours it is possible to increase the capacity of the plant to produce 1,538,000 cans a year.

Marketing of processed fruit products

The cooperative relies entirely on the Army for marketing its processed products. Although the Army has no firm contract with the cooperative for supplying specific quotas every year, an indication is available from the Army PX stores regarding the requirements from time to time. The Army is buying from the society since 1969. Earlier, the society marketed its produce in the open market and had suffered heavy losses. Although the Army has come to the rescue of the cooperative in buying the stocks, it is not certain that it will continue to buy the same quantities from year to year. During 1970, it did not buy the expected quotas. With a view, therefore, to organise planned production and reduce the finished product stocks already accumulated at the processing plant, it is necessary

for the society to start planning marketing of its products in the open market. It may be necessary to advertise the products and use the cooperative chain stores and other outlets available within the cooperative movement. In addition the society should seek the assistance of NACF in opening up new marketing outlets in the absence of which the society is likely to face serious difficulties in clearing the stocks which have locked up its funds for several months. We hope that the new sales manager appointed by the society will take up the marketing of its products in open market. If additional markets are secured by the society, it will be possible for the processing plant to increase its capacity and absorb substantial quantities of surplus fruits during the harvesting seasons.

4. Chunju Fruit Cooperative

The cooperative, which is located in Chunju City, has 519 members. It operates two wholesale markets in the city of Chunju. The Cooperative Marketing Centre which handles fruits and vegetables is exclusively operated by the society. It also operates the fruits and vegetables section of the wholesale market owned by the City Government. The fruits marketed by the society are apple, pear, peach and grapes. It also markets a variety of vegetables.

The society has recently constructed a new building for providing facilities for marketing and auctioning of fruits and vegetables. The office of the society which is at present located in the Cooperative Marketing Centre will be shifted to the new building in the near future. It has also constructed a warehouse near the new building. We were informed that because of the fact that the new building was located at a distance from the present marketing centre, it was not possible to make use of it immediately as the farmers and traders were unwilling to move to a new area for marketing their produce. It was, however, expected that gradually the farmers and the traders will get used to the new area in which the society plans to have a bigger space for marketing the produce.

The fruits and vegetables brought to the Cooperative Marketing Centre and the city market are auctioned by auctioneers appointed by the society.

The society is exploring the possibilities of bulk supplies to large consumers such as hospitals, schools, prisons etc. To begin with it intends to organise these supplies through the designated dealers in the market by strengthening their financial position. However, it ultimately expects to organise these supplies directly to the consumers.

The society has introduced a new carton for packing strawberry and is continuously experimenting to make it more suitable and less expensive. It has sought the assistance of the local Government in providing model packaging materials to the producers and has thereby assisted the producers to get increased returns.

The society has placed great emphasis on marketing activity and the volume of its marketing turnover is 95% of the total business turnover. It has recently decided to gradually increase the purchasing and supply of inputs to farmer members. The Study Team felt that despite limited facilities the society has organised the marketing activity in a much more systematic manner than in other places.

Problems

1. The production of fruits in the area is increasing and the need is felt for absorbing the additional production in a processing plant.
2. There is no proper storage at present for regulating supplies to the markets. The society however has constructed a ware-house which it may be possible later to convert into a cool store, if necessary.
3. The society is facing severe shortage of operational funds and we were informed that occasionally it has to borrow from money-lenders to sustain the heavy seasonal operations.

Recommendations

1. The society should as early as possible utilise its own premises especially the warehouse which has been specially built for storing fruits and vegetables. If necessary, the warehouse should be converted into a cool store for keeping the fruits and vegetables for a certain period in order to regulate supplies in the market.
2. The society should as far as possible try to have direct contracts with hospitals, schools and prisons for providing bulk supplies instead of through the designated dealers. If it is necessary to support the designated dealers in their activity, this should be done in involving them in the deliveries on behalf of the society.
3. The NACF should provide short-term finance to this cooperative for its seasonal marketing operations. We suggest that the need for borrowing from money-lenders should be minimised as early as possible.
4. We do not suggest the establishment of a processing plant in the near future. If the need is felt for lifting some of the fruits received in the market, it should be done by arranging supplies of these fruits as raw materials to the processing plant operated by the Wanchu County Cooperative or by other processing plants. A separate processing plant by the society should be treated only as a long-term proposition.
5. The society should continue to develop new packing materials and should be encouraged by NACF in obtaining the necessary raw material and technical know-how. As suggested in respect of other societies, the NACF should try to coordinate manufacture and supplies of packing materials.
6. Even though the society does not feel the need for market intelligence to producer members, we strongly suggest that it should start sending out information to producers in order to attract them to the cooperative and to help them to obtain information at their end without much effort. As mentioned earlier, such services are needed by smaller producers who are not able to obtain it through their own means.

7. The society has already organised the system of grading by training the producer in hand grading. However, we suggest that as the volume of marketable surplus increases, a more sophisticated system of grading be introduced through the society. This will enable the society to cater to more sophisticated markets in the big cities.

III. General

We recommend that in future the NACF should pay more attention to the problems and the requirements of horticultural cooperatives. We would like to suggest the following action on the part of the NACF in order to coordinate this activity.

- a) Information regarding the activities of the horticultural cooperatives functioning in various Provinces should be made available to other cooperatives in the country. In the magazine published by NACF, there are a few pages related to horticultural cooperatives. However, we suggest that a separate publication dealing exclusively with technical organisational and operational problems of horticultural cooperatives should be introduced by the NACF.
- b) The present services which are being organised by individual cooperatives such as packaging and market intelligence should be centrally organised by NACF and passed on to the various cooperatives. This will enable the societies to obtain the services easier and at cheaper rates.
- c) Soft loans for operational purposes should be provided to horticultural cooperatives as we feel that shortage of such funds has restricted activities of some cooperatives during heavy marketing seasons.
- d) We feel that NACF should also circulate information concerning the production and marketing of processed products by various horticultural cooperatives. If necessary a daily market intelligence bulletin be issued by the Horticulture Section of the NACF.

- e) NACF should organise training facilities for technical personnel working in the cooperative processing plants. It should also organise member education programmes for fruit processing farmers. In addition it should provide farm guidance and extension services in collaboration with the Office of Rural Development of the Government.
- f) NACF should try to explore export markets for the products of horticultural cooperatives. Even though at present it may not be able to export the agricultural products direct, it should explore the markets and organise the exports through the designated dealers. We, however, would like to suggest that ultimately NACF should function as one of the export houses for fruits from the country. If necessary, it may also take up import of bananas and other fruits and organise its marketing through the channels already available to it. If direct marketing is not feasible it should distribute the imported produce among the retailers.
- g) The NACF should inform all horticultural cooperatives regarding the cold storage facilities available in Seoul and other places especially the facilities recently created by the Agriculture and Fisheries Development Corporation.

IV. Recommendations to International Organisations

1. The ICA Regional Office should assist the NACF in exploring foreign markets for fresh and processed products of horticultural cooperatives. The NACF should try to take greater advantage of the services offered by the Regional Office in this field.
2. The ICA should try to assist the NACF in obtaining facilities for technical training for personnel working in some of the processing plants of horticultural cooperatives.

3. As the ICA has already taken keen interest in assisting the fruit processing plant at Choon ju, we suggest that it should explore every possibility of providing such assistance.
4. International organisations, interested in cooperative development, should provide to these cooperatives technical know-how and guidance in developing packaging and grading services.
5. The ICA Regional Office should organise a Workshop-cum-training course for personnel engaged in packaging services.
6. A Special Training Course should also be organised in vegetable and fruit marketing for the personnel working in the projects selected for Ceylon and the Republic of Korea.

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