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INTERNATIONAL CO-OPERATIVE ALLIANCE

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FAO/UNESCO/ILO
WORLD CONFERENCE ON AGRICULTURAL EDUCATION AND TRAINING
COPENHAGEN, 28th JULY - 8th AUGUST, 1970



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INTRODUCTION

Millions of human beings are affected today by the spread of knowledge, which critically affects agricultural and social development in those parts of the world where food production is a crucial issue.

With the techniques available today, proper educational and training methods are becoming more than ever the most essential lever for the most effective application of means. In fact, without know-how, the techniques will benefit only a few, and millions will continue to starve.

Governments have done a lot to spread knowledge among farmers. However, this is still not enough. In order to speed up the dissemination of knowledge, voluntary mass organisations like farmers associations and co-operatives, based on self-help, should be brought in. In this way the farming community is not only an object of education but is getting involved in the whole process of education as an active progressive force. There are countries in which co-operatives have achieved success in educating and training farmers. This is to say that they developed a co-operative method of education using the co-operative organisation as a channel to achieve this goal.

In this booklet, published by the International Co-operative Alliance as the background material for the FAO/UNESCO/ILO World Conference on Agricultural Education and Training, it has been attempted to explain how the co-operative method of education has been carried through in some developing countries and in which fields. From the developed world, Japan has been selected because of its very ingenious work in this field and that with farmers who belong to the smallest farmholders in the most densely populated country in the world.

The papers deal with education of members of boards and members of co-operatives; farm guidance; agricultural extension work, and other aspects of farmers' education through co-operatives.

By their nature the papers are mainly related to the work of Commission III of the Conference: Vocational training for farming and related rural occupations.

CO-OPERATIVE EDUCATION FOR AGRICULTURAL CO-OPERATIVES IN SOUTH-EAST ASIA

by

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Introduction

An attempt will be made in this paper to discuss co-operative education in relation to agricultural co-operatives. Firstly, as background information, the nature of the co-operative movement and its contribution to agricultural development will be briefly outlined. Secondly, co-operative education activities carried out by the co-operative movements will be described. These activities may be broadly categorised in two parts.

- (a) Member education programmes including vocational training of farmers, and
- (b) Training of personnel employed by the co-operative movements.

This discussion will be carried out with reference to the co-operative movements in south and east Asia with which the ICA Regional Office and Education Centre is primarily concerned.

Thirdly, the activities of the international co-operative training centres including those of the ICA Regional Office and Education Centre for South-East Asia will be mentioned.

Finally, an attempt will be made to indicate the needs of the developing movements in the field of co-operative education to which the advanced co-operative movements can make contribution.

Some reservations to the discussions which follow may be indicated at the outset. As the region of South and East Asia is a vast one, the description

^{1.} The countries covered by the ICA Regional Office and Education Centre include 13 countries as follows:

Australia, Ceylon, India, Indonesia, Iran, Japan, Republic of Korea, Malaysia, Nepal, Pakistan, the Philippines, Singapore and Thailand.

of co-operative education in the region is likely to be broad and the remarks general in character. Also, no attempt will be made at comprehensiveness in view of the large scope of the subject.

Nature of the Co-operative Movement

A co-operative society is a form of business organisation which is established by the members, on a basis of equality, to promote their economic and social interests. For example, an agricultural co-operative society aims to provide farmers with the services needed by them at as low costs as possible, keeping in view the long-term development of the society. The management of the co-operative society is carried out by a Board of Directors elected by the members who exercise ultimate control over the operations of the society.

Co-operatives of individual members are called primary co-operatives. These primary co-operatives usually join together into a federation which performs commonly required functions involving more large-scale operations and higher resources than those of the primary societies. Thus, the federal structure of the co-operative movement, while enabling the primary societies to function independently, achieves for the constituent primaries significant financial, managerial and technical advantages. Through such vertical integration, the co-operative movement is able to achieve significant competitive capacity for the small farmers.

The co-operative way of doing business takes many forms from specialised to multipurpose co-operative societies. In South and East Asia, various types of agricultural co-operatives have been developed in the rural areas to provide support to the farmers in their tasks as producers. The bulk of these co-operatives, however, are agricultural credit societies, co-operative marketing societies, and co-operative processing societies. Co-operative farming societies have also been organised in some countries especially where new land had to be colonised. It may be added that at the primary level single purpose credit societies predominate in India, Pakistan, Thailand and Malaysia. In other countries, viz., Japan, Republic of Korea, Ceylon and the Philippines, the primary societies are generally speaking multipurpose in character.

Agricultural co-operative societies were systematically organised in India from 1940. In other countries also the Co-operative Movement among farmers originated in the early decades of this century. Thus, the agricultural co-operatives, which in some countries are 40 or 50 years old, have been rendering valuable services in bringing about improvements in farmers' economies. Co-operative societies in the Region generally provide the farmers with agricultural credit, production requisites and farm guidance services and undertake marketing of their produce. In the post-Independence period, governments in this Region have assigned an important role to co-operatives in their programmes of agricultural development, and co-operatives have made notable contributions in several countries to increasing agricultural productivity and improving farmers' incomes, especially in integrated agricultural development projects.

The statistical statement appended hereto gives figures of membership, working capital and turnover of agricultural co-operative societies in the Region.

Importance of Co-operative Education

Co-operative education is regarded by the Co-operative Movement as of paramount importance in view of the fact that co-operative societies are democratic bodies owned and controlled by members. It is essential that the members have sufficient knowledge and the capacity to assess the economic activities of co-operative societies and to elect suitable men to the Board of Directors. Similarly, the education of elected Directors and employees is essential for achieving successful operation and development of co-operative societies. In this connection, the ICA Commission on Co-operative Principles whose report was unanimously accepted by the ICA Congrees held in 1966 has the following to say:

"Co-operation requires of those who would practise it effectively the acceptance of new ideas, new standards of conduct, new habits of thought and behaviour, based on the superior values of co-operative association. No co-operative institution, therefore, can be indifferent, in its own interest and for its own survival, to the need for educating its members in appropriate ways."

The Movements in South-East Asia have devoted a great deal of attention to education of members right from the initial stages. In several movements, co-operative societies make financial contributions to the building up of co-operative education funds. In Ceylon, the co-operative societies contribute 5 per cent of the net profits to the Co-operative fund, and another 5 per cent to the District Co-operative Unions. Both these funds are mainly used for education. In Malaysia, the co-operative societies contribute 2 per cent of their net profits. Similar practices prevail in different countries of the Region.

Co-operative Member Education in South-East Asia

In order to carry out member education programmes, co-operative movements have established specialised institutions called Co-operative Unions or Federations, at the district, state and national levels. These institutions carry on several other functions such as conducting publicity for the movement and acting as spokesmen on behalf of the co-operative movement.

As an example, the member education programme in India is briefly described here. In 1969, there were 606 Instructors working in about 325 districts in rural areas for the member education programme. Under the programme, education for the following categories of co-operative workers was provided:

- (a) Secretaries and Managers through 4-weeks' classes;
- (b) Education of Office-bearers and Managing Committee Members through 5-days' classes;
- (c) Education of members and prospective members.

^{2.} International Co-operative Alliance, "Report of the ICA Commission on Co-operative Principles," London, p.34

The number of persons covered through the member education programme in India for the last few years is given below:

| | No. of | | Persons trained | |
|---------|-------------|----------------------------------|-----------------------------|---------|
| Year | Instructors | Managing Committee Members | Secretaries and Managers | Others |
| 1965-66 | 604 | 224,832 | 23,313 | 107,218 |
| 1966–67 | 690 | 209,274 | 25 , 724 | 109,832 |
| 1967-68 | 650 | 153,066 | 16 , 656 | 50,674 |
| 1968–69 | 606 | 145,686 | 13,237 | - |

A more intensive effort is being made in the field of member education in 11 districts (in ten States) in India where the intensive agricultural development programme (IADP) has been introduced for the purpose of stepping up food production. Thirty-eight Instructors have been deployed in these districts and they trained in all about 11,100 members during 1968-69. In addition, 198 Study Circles were organised by the Instructors. The education imparted in these districts is more agricultural production orientated than in areas where the usual member education programme operates.

Organising classes is only one method of co-operative education. Several other educational techniques, some of which are of informal nature, are also employed by the Co-operative Movements in the Region. These include use of mobile cinema vans for exhibiting co-operative films, use of radio for giving talks on co-operation under the Farmers' and other programmes, and use of the newspapers and the press for co-operative publicity. The Co-operative Unions also bring out periodical news letters and journals in vernacular languages as well as in English, produce publications on Co-operation and organise study circles and group discussions. Thus, a wide variety of methods are used for carrying on programmes of education for members and Board members. The emphasis in these educational programmes is generally on educating the members in the aims, principles and practices of Co-operation, in discussing current problems of the Movement and in informing them about the development programmes with a view to enlisting their support.

Farm, Guidance Activities

Farm guidance activities constitute a basic function of agricultural co-operatives in Japan and the Republic of Korea.

The farm guidance activities of co-operatives may be described as agricultural advisory sercices directed at increasing agricultural productivity and improving the incomes of farmers. Thus, farm guidance activities attempt

^{3.} National Co-operative Union of India - "Reports for the Years 1967-68 and 1968-69", pp.12 and 18 respectively.

to provide a more comprehensive nature of agricultural extension with regard to farm management to the members than that provided by government agricultural extension workers; it concerns itself not merely with the technical questions of fertilizer applications or introduction of new varieties of seeds, but also with the over-all question as to how the farmer can maximise his income through proper farm management and marketing operations. In Japan, 4,934 multipurpose co-operative societies had employed in 1967, 14,523 Farm Management Advisers and had spent US \$26 million excluding personnel expenses for the purpose. The beneficiaries contributed one-third of the expenses by way of fees and the remainder of the expenses were met by the co-operative movement itself. It may be added that the farm guidance activities of agricultural co-operatives are coordinated with agricultural extension department and research stations set up by the government.

The effectiveness of farm guidance activities provided by the co-operatives is greatly enhanced because of its coordination with the provision of agricultural supplies needed to introduce improved cultivation practices, provision of necessary credit facilities to purchase the required production requisites and finally arrangements for marketing of increased produce of the members at remunerative prices. In addition, certain production activities which cannot be undertaken by the farmer because of his small holding are jointly carried out by Farmers' groups or the co-operative itself. Such activities include establishment of joint facilities such as a Poultry Centre where chicks are bred up to 120 days after which they are sold to members, aerial spraying of insecticides, or construction of wells for irrigation purposes. Thus, the co-operative society takes over activities which call for heavy investments and are more risky.

In carrying out farm guidance activities, commodity groups are organised amongst the farmers-members. In order that these groups can function successfully, the minimum size of the farm which a farmer should have for the purpose of joining a commodity group is fixed. For example, in one agricultural cooperative society, the minimum number of farmers in a Commodity Group at the inception of the Group was prescribed as follows:

- (i) Pig rearers group: More than 20 farmers with a minimum of 50 pigs each.
- (ii) Poultry Farmers Group: More than 20 farmers with 1,000 hens each.
- (iii) Horticulturists Group: More than 20 farmers with over 10 are of land for a single vegetable.

The purpose of forming commodity groups is to provide specialised agricultural extension and other services to farmers. Each group elects its leader. These groups become a focal point not only for provision of farm guidance, but also for developing joint purchasing and joint marketing since the commodity handled is the same. For this purpose, village branches are established. For example, heads of each branch in a poultry group are responsible for collection of eggs and aged poultry, taking advance orders once a month for poultry feed and other requirements of farmers, calling for monthly meetings of members etc. Thus, the organisation of farmers into commodity groups has resulted in increased production and in better development of joint purchasing and marketing facilities for the farmers.

Since 1960, the Co-operative Movement in Japan has made systematic efforts for co-operative integration of productive functions in agriculture (called DANCHI system) or the scheme of co-operative agricultural complex. The objectives of the scheme are as follows:

- (i) to promote planned agricultural production;
- (ii) to secure such volume of production as to secure a favourable marketing position;
- (iii) to improve the quality of products in order to increase their commercial value;
- (iv) to promote cost reduction or production; and
 - (v) to implement effective marketing adjustments.

In 1968, there were 51 model complexes which served as experimental and demonstration projects throughout the country.

The co-operatives have also devised a system of payment to farmers which safeguards them against serious price fluctuations. The farm guidance advisers in Japan recommended for many societies that the farmers undertake poultry and livestock breeding. These lines were, however, more risky. In regard to livestock products a cycle of three years was generally prevailing during which the prices registered a sharp drop and a high point along the cycle. In order to safeguard the farmers against violent price fluctuations in the case of poultry, a Price Stabilisation Scheme was developed and a monthly salary system was adopted for poultry farmers under which the farmers received a fixed stable price for their eggs. The co-operative society entered into a five-year contract with members joining the scheme.

In Korea also, agricultural co-operative societies carry out farm guidance work. However, it is not as well developed as in Japan, and it does not include the Price Stabilisation Scheme.

In India, the Co-operative Sugar Factories and some large-sized agricultural co-operatives also carry on agricultural extension work for their members. Notable work in this regard has been done by the Kaira District Co-operative Milk Producers' Union Limited, Anand. The Union has a comprehensive range of services for the milk producers who are its members and has done much to improve both the breeding as well as management of cattle in the district. The Union operates an artificial insemination service centre whose major objective is genetic improvement of cattle to increase milk production, through an intensive use of small number of excellent breeding bulls. However, the artificial insemination programme also helps reduce the dry period of animals which enables the farmer to increase his income up to Rs. 300/- per buffalo per year.

^{4.} Agricultural Co-operative Movement in Japan, p.49

^{5.} Dr. M.K. Shah, "Production Enhancement and Co-operative Extension Activities of Amul" - A paper presented at the Regional Seminar on How to Establish a Co-operative Processing Plant, held in Bangalore in 1966.

The Union also operates Mobile Veterinary Dispensaries. In 1966, there were 12 such mobile veterinary dispensaries which visited regularly all the 540 village milk co-operatives once a week and provided free veterinary treatment to buffaloes, cows, bulls and young stock. Outside the routine visits, a veterinarian is available to make an emergency call for the treatment of sick animals on payment of a small fee of Rs. 10/-. In 1965-66, the Union maintained seven mobile veterinary dispensaries; the cases treated by these dispensaries were 31,800 on routine visits and 6,100 on emergency visist. In addition, the first aid veterinary facilities were established in all the villages served by the Union and the first aid workers trained by the veterinarians provided immediate assistance to the cattle until the veterinarian was able to reach the village.

The Union has established a cattle feed factory with the assistance received from OXFAM under the "Freedom from Hunger" Campaign of the Food and Agriculture Organisation. The Union has also been responsible for introducing the cultivation of lucerne, which is a protein-rich green fodder. Thus, cattle feeding practices have also been considerably improved.

Various extension methods have been used by the Union in collaboration with the village societies. One of the techniques worth mentioning is the women's visits to the dairy factory of the Union as it is the women who look after the milch cattle in Kaira district. It was noted that the villages from which the women participated in this programme showed a marked improvement in their response to the animal husbandry programme.

The ICA Regional Office and Education Centre held in September 1969 a Regional Seminar on Farm Guidance Activities of Agricultural Co-operatives in Seoul, Korea with a view to disseminate information regarding the importance and techniques of farm guidance work among co-operative workers of other countries. The seminar participants carried out one week study visits in Japan and Korea with a view to studying the farm guidance work at first hand. The seminar whose report has been widely circulated recommended that agricultural co-operatives in other countries should also undertake agricultural advisory services with a view to increasing agricultural productivity and farmers' incomes.

Training of Employees

The Co-operative Movements in the Region have also made provisions for providing training to various categories of employees working in co-operative societies. A co-operative training centre was established in the Bombay region of India as far back as 1918. During the post-war period, co-operative training centres have been established in Ceylon, Japan, Republic of Korea, Malaysia, Pakistan, the Philippines and Thailand. In all these countries as well as in India, facilities for co-operative training have been considerably augmented during the last few years. A brief outline of the training activities carried out in Ceylon, India and the Philippines is given in this paper.

One of the oldest training institution in South-East Asia is the School of Co-operation located at the picturesque site of Polgolla in Ceylon. This school was established in 1942. The school imparts training to officers in the Government Department of Co-operation as well as officers in other Departments. In addition, it conducts, through twenty-four training centres spread over the

islands, 2-months and 4-months courses for co-operative employees and prospective employees. The two-months course is also available as a week-end course. The subjects dealt with at these courses are Co-operation, Book-keeping and operational techniques of co-operatives.

In India, a network of co-operative training centres has been established to cater to the training needs of a vast co-operative movement. At the national level is the Vaikunth Mehta National Institute of Co-operative Management. This Institute earlier used to function as a national level co-operative training centre for providing training to senior personnel. In 1966, the Centre was given its present name and its activities were considerably enlarged. The Institute at present provides the following courses:

- (i) A one-year Diploma in Co-operative Business Management;
- (ii) Two short-term courses of about 14 weeks duration for senior officers of co-operative institutions and government co-operative departments;
- (iii) Special short-term courses for officers in charge of credit, marketing, processing, etc.;
- (iv) Refresher courses for its ex-trainees; and
- (v) Seminars, conferences and workshops for senior co-operative personnel including Chairmen and General Managers of co-operative institutions at the State and district levels.

The activities of the Institute are supported by research studies on selected aspects of the co-operative movement and the development of case studies and case material on the basis of such research.

In the Diploma Course, the subjects taught include Co-operation and Law, Economics, Statistics, Principles of Management and Personnel, Financial and Marketing Management.

There are 13 Regional Co-operative Training Centres for providing training to intermediate level personnel of co-operative institutions and government co-operative departments. These centres offer a general basic course of about nine months duration. At some of these centres specialised courses are also organised on Co-operative Marketing, Land Development, Banking, Co-operative Banking and Audit. The duration of these courses is 18 weeks each.

At the lowest level there are 63 co-operative training centres for training of junior co-operative personnel. The courses offered by these centres provide training to supervisors, salesmer, assistant accountants, secretaries and managers in co-operative institutions at the district and primary levels. The duration of the course is about seven months.

The following table gives statistics of the number of courses organised and the number of persons trained for 1967-68 and 1968-69:

| | | 1967- | -68 | 1968 | - 69 |
|--|---|-----------------|----------------|-----------------|----------------|
| ······································ | Type of Course | Courses held | No. trained | Courses held | No. trained |
| I. | Senior Level Officers | | | | |
| 1. | Diploma in Co-op. Business Management | <u>.</u> . | ~ | 1 | 21 |
| 2 . | Senior Officers Course | 1 | 29 | 2 | 35 |
| 3. | Other Programmes for Senior Officers including Refresher, Short-term courses, seminars, conferences, etc. | 11 | 199 | 14 | 393 |
| II. | Intermediate Level Courses | | | | |
| 1. | General Basic Course | 17 | 811 | 13 | 7 24 |
| 2. | Land Mortgage Banking | 4 | 106 | 8 | 300 |
| 3. | Co-operative Marketing | 6 | 111 | 8 | 95 |
| 4. | Banking | 2 | 67 | 3 | 105 |
| ō• | Auditing | 4 | 101 | 3 | 77 |
| 6. | Other courses including Refresher and short-term course | es 18 | 395 | 19 | 361 |
| III. | Junior Level Courses | | | | |
| 1. | Junior Basic Course | *** | 6,607 | | 8,002 |

In the Philippines, the Agricultural Credit and Co-operative Institute was established in April 1960, as a semi-autonomous unit of the University of the Philippines to train co-operative personnel. The Institute offers courses for personnel of agricultural co-operatives who include Managers, Secretaries, treasurers and book-keepers.

Short-term courses are also offered by the Institute to co-operative officers of government institutions such as Loan Supervisors, Loan Appraisers and Auditors of the Agricultural Credit Administration and Co-operative Officers and Extension Officers working in the Agricultural Productivity Commission. The following tables give details of the training activities of the Institute for personnel of agricultural co-operatives and governmental institutions assisting co-operatives.

^{6.} Committee for Co-op Training: "Annual Report, 1968-69" pp.24, 25.

| Cate | egories of personnel | No. of training courses | Duration (weeks) | No. of participants |
|------|--|-------------------------------|---------------------|------------------------|
| I. | Co-operative Personnel | | | |
| 1. | FACOMA Managers | 8 | 7 | 335 |
| 2. | FACOMA Bookkeepers | 6 | 3 | 173 |
| 3• | FACOMA SEC-Treasurers | 7 | 4 | 182 |
| 4. | FACOMA Warehousemen | 6 | 4 | 165 |
| 5. | FACOMA Directors | 7 | 1 | 311 |
| 6. | Livestock Co-op Officers and Members | 2 | 12 (Saturdays) | 197 |
| - | - managaring and a second and a | 36 | | 1,363 |
| II. | Government Personnel | | | |
| 1. | APC Co-op Officers | 4 | 4-8 | 122 |
| 2. | ACA Co-op Auditors | 3 | 1-4 | 90 |
| 3. | RCPCC Prov. Directors | 2 | 2 | 52 |
| 4. | RCPCC District Supervisors | 2 | 3 | 82 |
| 5• | Others | 1 | 4 | 25 |
| | _ | 12 | | 371 |

(Note: APC = Agricultural Productivity Commission;

ACA = Agricultural Credit Administration;

RCPCC = Rice and Corn Production Coordinating Council (now called National Food and Agriculture Council)

International Co-operative Training

A number of advanced co-operative movements have established during the last few years, on a permanent basis, international training facilities for co-operative personnel from the developing movements. These facilities exist in Canada, Czechoslovakia, Denmark, France, Israel, Japan, U.K., U.S.A., and the U.S.S.R. The national level training centres in India and the Philippines also receive foreign trainees. In addition, on the non-governmental side, the International Co-operative Alliance and the International Federation of Agricultural Producers (IFAP), and on the governmental side, the F.A.O. and the I.L.O. offer short-term training seminars and fellowships for training of co-operators of the developing countries.

Since basic training facilities already exist in the candidates' own countries, the international training centres in the advanced co-operative movements generally educate trainees from the developing countries in the historical development, the present stage of development, the strong points as well as the current problems and developmental programmes of the host movement. Generally speaking, it is left to the trainee himself to interpret what lessons would be of value for his own co-operative movement, although in several training courses attempts are made to relate training imparted to conditions in the home countries of the trainees. Aside from the intrinsic value of the training given and the exposure of co-operators of developing countries to the achievements in advanced countries, the establishment of training facilities has brought about in an increasing measure solidarity among the co-operative movements of different parts of the world.

ICA Education Centre for South-East Asia

The international organisations such as the ICA, IFAP, FAO and the ILO have organised short seminars from time to time for co-operators from the developing countries. In these seminars an attempt is made to promote exchange of experiences among the co-operators from different countries about the problems, operational practices and developmental projects of their respective co-operative movements as well as to provide knowledge to the participants about appropriate techniques of operation of co-operative societies. Realising the need for carrying on such educational work on a continuing basis, the International Co-operative Alliance set up in 1960 an Education Centre for South-East Asia with headquarters at New Delhi. The Centre which is established with financial assistance from the Swedish Co-operative Movement, functions as an integral part of the ICA Regional Office for South-East Asia. During the nine years of its work, the Education Centre has organised 66 educational activities of various types in which over 1,700 co-operators have participated.

The main objectives of the Centre are to lend support to the member education and training activities being carried out by the member movements and to promote interchange of experiences among the movements in the Region. The Education Centre operates for about thirteen countries which include Australia, Ceylon, India, Indonesia, Iran, Japan, Korea, Malaysia, Nepal, Pakistan, the Philippines, Singapore and Thailand. The geographical area of the Centre is thus very wide. Also, the types of co-operatives represented in the Alliance are many such as agricultural co-operatives, consumer co-operatives, fishery co-operatives, housing co-operatives and Insurance co-operatives. In view of these factors, the Centre has decided, in order to increase its effectiveness, to concentrate its education and training facilities on personnel from agricultural and consumer co-operatives.

The Centre carries out research activities in selected aspects of the co-operative movement in order to support its educational programmes. Material collected through research and educational seminars is issued in the form of brochures and publications from time to time. The Centre also provides consultant services to the member movements in the field of education and training.

^{7.} We regard the involvement of Japan and Australia in the Centre's activities more from the point of view of contributing to the supply of knowledge and co-operative techniques rather than receiving them.

The table given below describes the various educational activities organised by the Education Centre from January 1960 to December 1969.

| Sr. | Subject | Exper No. | ts' Conference Participants | Regio | nal Seminars Participants | Nati No. | onal Seminars Participants |
|-----|------------------------------|--------------|--------------------------------|-------|------------------------------|-------------|-------------------------------|
| 1. | Co-operative Education | 2 | 40 | 10 | 238 | 11 | 332 |
| 2. | Co-operative Management | _ | _ | 2 | 51 | 4 | 235 |
| 3. | Agricultural Co-operation | 3 | 49 | 7 | 194 | 2 | 80 |
| 4. | Consumer Co-operation | _ | _ | 3 | 98 | 1 | 39 |
| 5• | Policy-makers Conferences | 2 | 57 | 2 | 101 | _ | - |
| 6. | Miscellaneous | 1 | 19 | 5 | 109 | 4 | 97 |
| | TOTAL | 8 | 165 | 29 | 791 | 22 | 7 83 |

It may be added that the Education Centre's work is closely coordinated with the activities of the Trade and Technical Assistance Division of the ICA Regional Office and Education Centre. Through such close inter-relation between co-operative education and activities relating to development of economic projects, the Regional Office and Education Centre is making sustained contributions to co-operative development in the Region.

Educational needs of the Movements in the Region

In the foregoing pages education and training facilities developed by the Movements in the Region have been outlined. While there has been considerable expansion of these facilities during the last few years, a number of problems exist. An attempt is made here to outline some of the problem areas to the solution of which technical assistance from the advanced movements and international organisations may be helpful.

The International Co-operative Alliance had held in February 1968, an International Conference on Co-operative Education. In this conference had participated the Directors of various International Co-operative Training Centres and co-operative leaders of the developing movements from South and East Asia having the responsibility to select participants for foreign training. The papers presented and the discussions held at this conference indicated the need of technical assistance from abroad in the following areas:

(i) While one or two movements had attempted to estimate the requirements of personnel and training in the context of co-operative development programmes formulated under their national plans, generally speaking, there is a lack of adequate man power planning and development of proper personnel policies so as to attract, train and retain personnel of high calibre.

- (ii) The training programmes in quite a few training centres are geared to training of personnel from government co-operative departments and personnel from Co-operative Credit institutions. In view of this, the courses offered emphasise subjects such as Co-operative Law, Bookkeeping, Accounts and Audit. It is necessary to introduce Business Management courses for personnel of co-operative institutions as has been done by the Vaikunth Mehta National Institute of Co-operative Management in India. There is, however, a dearth of qualified teachers and in view of this the co-operative training centres would benefit if experts in management were made available from the advanced movements.
- (iii) In order that training given is related to the functions performed by the personnel, it is essential to bring field situations in the class room through presentation of case studies etc. However, many co-operative training centres do not have the necessary funds and personnel to carry out the needed research work for the purpose.
- (iv) There is a dearth of text books and other educational material which is relevant to the local conditions. Preparation of such material is vital if the training programmes offered by the Centres are to be fully effective.
- (v) Although the training centres of late have started experimenting with several modern methods such as project work, use of case studies, use of audio-visual aids, teaching techniques by and large have remained traditional. This trend in the increased use of modern methods of education needs to be further strengthened.
- (vi) Research, training and consultant activities constitute a basic unity of functions for co-operative training centres. The training centres need assistance to build up the necessary consultant facilities so that they can play a vital role in co-operative development.
- (vii) Finally, the training centres need to evaluate the effectiveness of training programmes offered by them. Foreign technical assistance for the purpose could serve a valuable purpose in finding out the weaknesses and strong points of the present training arrangements and in suggesting ways by which they could be made more effective.

Conclusion

The trend of future direction with regard to organisational structure of agricultural co-operatives and their role in farmer education can be appropriately described by the following quotation from an article entitled "Tomorrow's Farm Co-ops" in the IFAP News, November, 1969 Issue:

"In addition to procurement of credit and requisites and marketing, agricultural co-operatives will be required to provide well integrated, market-orientated advisory services and coordinate other such services provided by governmental and other external agencies in order to meet the farmer's need to have these services provided through as few channels as possible.

In order to meet this challenge more effectively as well as increasing overhead costs, agricultural co-operatives will diversify their activities into new fields. Another reason for this trend toward multipurpose societies at the primary level is also the desire to pool resources which are scarce at local and regional levels."

As indicated earlier in this paper, co-operative organisations have a vital role to play in increasing agricultural production, farmers' incomes and their living conditions. The trend in South-East Asia is for rural co-operative organisations at the primary level to be multipurpose. Their functions should include not only member education in the general sense but also farm advisory services. As co-operative societies will increase in size, the need for proper member relations and training of employees will become greater. However, with the increase in the size of co-operative organisations and the strength of the co-operative movement, it will be possible for the movement to recruit not only more skilled and competent personnel but also to make better arrangements for their training. The Co-operative Movement is well poised to meet this challenge in view of its keen awareness of the importance of co-operative education for ensuring successful co-operative development.

* * * * * * *

CO-OPERATIVE STATISTICS OF MEMBER MOVEMENTS IN SOUTH-EAST ASIA

RURAL CREDIT SOCIETIES

| | Jee I | societies | Membership | Working capital | Loans | Source of information | Remarks |
|------------------|---------|-----------|------------|----------------------|-----------------------|--|--------------------------------------|
| Ceylon | 1967 | 3,853 | 165,649 | Rs. 315,94,000 | Rs. 232,10,000 | Report on the Ceylon Co-op. Movement for the year 1966-67: Dept. of Coopn. | |
| India | 1965–66 | 191,904 | 26,135,000 | Rs. 546,55,71,000 | 337,93,94,000 | Reserve Bank of India: Statistical Statements relating to Goop. Wovement in India, PertI: Credit Societics | |
| Malaysia | 1966 | 2,082 | 233,169 | N.A. | , N.A. | ICA statistics of sffiliated organi-sations, 1965-66' | |
| Pakistan West | 1966 | 15,496 | 756,068 | N.A.º | No.A. | ICA statistics of affiliated organi-sations, 1965-66 | |
| Theiland | 1966 | 698*6 | 154,180 | N.A. | Baht 129.5 millioa | The Coop. Movement in Thailand, by Ministry of National Development, 1967 | Only village Credit Co-ops. |

CC-OPERATIVE STATISTICS OF MEMBER MOVEMENTS IN SOUTH-EAST ASIA

MULTIPURPOSE CO-OPERATIVE SOCIETIES

| Country | Year | No. of societies | Membership | Working p capital | Loans issued | Turnover | Source Rer | Remarks |
|------------------|---------|------------------|------------|-----------------------|-----------------------------|--------------------------------|---|---------------------|
| Ceylon | 1967 | 5,059 | 935,476 | Rs. 136,948,000 | Rs. 34,286,951* | Rs. 299,915,129** | Rs. 299,915,129** Report on the Ceylon Coop.Movement for the year 1966-67: Dept. of Coopn., Colombo | n lombo |
| Tran | 1968-69 | 8,644 | 12,78,384 | Rials 1927,069,000 | 5041,337,000 | N.A. | Central Organisation for rural coops of Iran, 1968-69 | מ |
| Japan | 1967 | 7,209 | 6,790,000 | Ñ.A. | ¥ 1,292,500 (million) | ¥ 1399,602,634 (million) | * | |
| Korea | 1966 | 16,974 | 2,245,960 | Won 962,058,000 | Non 43,250 (million) | Won 39,303 (million) | Agricultural Cooperation in Korea, 1967 by NACF | Q. |
| Malaysia | 1966 | w | 859 | N.A. | N.A. | N.A. | Statistical statement relating to Coop. Movement in West Malaysia, 1966 | nt vement 966 |
| Pakistan East | 1964 | 4,200 | 10,15,821 | Rs. 66,685 (lacs) |) N.A. | N.A. | Cooperative Novement in East Pakistan, 1967 | t in |
| West | 1964-65 | 163 | 6,491 | 21.22 (lacs) |) N.A. | 15.36 (lacs) | Annual Report of the Working of Coop.Soc. in West Pakistan, 1964-65 | e • in 65 |
| Theiland | 1967 | 2 | N.A. | N.A. | N.A. | N.A. | Coop. Movement in Thailand by Covt. of Thailand, 1967 | ailand d.1967 |

Note:

^{*} Figures relate to agricultural produce only.

** Includes loans issued by Agrl. Production & sales societies numbering 172, with membership of 22,702.

CO-OPERATIVE STATISTICS OF MEMBER MOVEMENTS IN SOUTH-EAST ASIA

3. MARKETING SOCIETIES

| 1d. | The Coop.Movement in Thailand by Ministry of National Development, Bangkok. | n) N.A. | Baht 94.2 (million) | N• A• | 240 | 1965 | Theiland |
|--|---|-----------------------|--------------------------------|------------|------------------|-----------|---------------------|
| | Annual Report of Agrl. Credit Admn.of Philippines 1967-68 | 15,552,788.74 | 11,361,299.65 (enlythfid-up | 3,60,454 | 626 | s 1967-68 | Philippines 1967-68 |
| : | in West Pakistan, 1954-65 | 55.32 (lacs) | 44.76 (1acs) | 16,715 | 47 | 1964–65 | Pakistan |
| | | Rs. | Rs. | | | | # |
| In Malaysia statistics for marketing & processing socs. 7 are given together | Statistical statements relating to Coop.Move-ment in West Malaysia, 1966. | N.A. | N.A. | 85,507 | 571 | 1966 | Malaysia |
| | Reserve Bank of India: Coop.Statistics of non-credit, 1965-66 | Rs. 2,44,66,38,000 | Rs. 21,24,80,000 | 20,13,139 | 3,198 | 1965–66 | India |
| Remarks | Source of information | Turnover | Working capital | Membership | No. of societies | Year | Country |

Note: In Ceylon, Japan and the Republic of Korea, marketing is hendled by Multipurpose Co-operatives.

(O-OPERATIVE STATISTICS OF MEMBER MOVEMENTS IN SOUTH-EAST ASIA

4. PROCESSING SOCIETIES

| The Co-operative Movement in Thailand:Ministry of National Development, Bangkok. | N.A. | N. Á. | 3,910 | 20 | 1966 | Theiland |
|--|---------------------|---------------------|------------|------------------|---------|----------|
| | ¥ 16,741,104,000 | N∘A• | N.A. | 3,653* | 1967 | Japan |
| Reserve Bank of India statistices, 1966-67 | Rs. 948,437,000 | Rs. 8971,620,000 | 652,498 | 1,774 | 1966-67 | India |
| Source of information | Turnovor | Working capital | Membership | No. of societies | Year | Country |

Note: *Although these societies are part of Multipurpose Co-operative Societies, they are exclusively handling processing.

CO-ORDINATED APPROACH TOWARDS FARM GUIDANCE

- A Case Study from the Republic of Korea -

I. GENERAL REVIEW

1. RECENT DEVELOPMENTS IN AGRICULTURE

The Korean economy has maintained an average annual growth rate of 8.3 percent since 1962. The nation's economic growth rate reached 13.3 percent in 1968, the second year of the Second Five-Year Economic Development Plan, in spite of a setback in agricultural production resulting from drought.

Keeping pace with the development of the national economy, Korean agriculture recorded an average yearly growth rate of 6.3 percent during the 1962-66 period. Due to recurrent droughts during the 1967-68 period, however, the growth rate dropped by 6.0 percent in 1967, and the annual increase rate stayed at an extremely low 1.2 percent in 1968. As a result, the share of agriculture in the national economy continued to decrease.

In 1962, the nation's agricultural production constituted 39.7 percent of the CNP. In 1968, it dropped to 29.4 percent. However, agricultural production continued to increase during the 1962-67 period, and total agricultural production in 1968 showed an increase of 25.7 percent over 1962. Particularly sharp increases were recorded in livestock raising and in the cultivation of fruits and vegetables. Their respective increases were 29.9 percent, 57.6 percent, and 52.7 percent in 1967 over 1962.

2. THE NEED FOR FARM GUIDANCE IN AGRICULTURAL DEVELOPMENT

Under the Second Five-Year Economic Development Plan to be implemented during the 1967-71 period, the Korean economy is expected to grow at an average rate of 7.0 percent per year, while the average annual growth target for agricultural production is set at 5.0 percent. The Plan also indicates that agricultural production will increase 30 percent in 1967 over 1965, and production of food grains in particular will increase as sharply as 39 percent.

Some of the major objectives of agricultural policies include 1) increased production of food grains, 2) the elevation of farm productivity and farm income for the rectification of the gap between the rural and urban areas, and 3) structural improvement of agriculture following the liberalization of foreign trade.

Such goals of the development plan and the agricultural policies cannot be adequately achieved simply by means of the Government's investment and loan policies or farm price and marketing policy. The successful achievement of these goals requires farmers — the prime movers of agricultural development

to spontaneously and actively take part in the program to reform farm management.

Projects for creating production foundation such as the expansion of arable land, the rezoning of farmland, exploitation of underground water resources and the expansion of irrigation facilities, are prerequisite to agricultural development, and at the same time, effective means of promoting it. However, there is a limit to the effects of investment and loans on agricultural development and to the raising of funds required for investment and loans.

In addition, the farmers do not readily respond to fluctuations in farm prices and their capability of adapting themselves to price fluctuations is very limited, because agricultural production and agricultural development in Korea are hindered by the following economic and non-economic factors:

- 1) The submarginal scale of farmland per farm household and the excessive population,
- 2) Traditional farming methods and techniques,
- 3) Inadequate accumulation of capital,
- 4) Unstable farm prices,
- 5) The traditional sense of value and attitude on the part of farmers; and
- 6) Limitations imposed by unfavorable weather conditions.

Due to interactions of such socio-economic and physical factors, the Korean agricultural production remains stalemated and confined to the almost exclusive cultivation of rice and barley based on the traditional farming practice. In order to more effectively promote agricultural development, therefore, policies are necessary to induce, guide and enlighten farmers who are the prime movers of the project.

3. CHARACTERISTICS OF FARM GUIDANCE IN KOREA

The contents and scope of farm guidance in agricultural cooperatives vary in different countries and in different cooperatives. In some countries, farm guidance denotes nothing more than the provision of agricultural techniques. In general, agricultural techniques are studied and extended by government agencies with a considerable amount of funds appropriated out of the government budget. Therefore, the provision of advanced agricultural techniques is regarded as one of the most important tasks the government carries out for the development of agriculture.

The ultimate goal of cooperative farm guidance activities is to assure increased income for member farmers, which in turn will depend upon increased productivity in agricultural production and upon cooperative efforts of individual farm management ranging from production to marketing. The agricultural cooperative can make important contributions to farm guidance 1) in providing useful information and recommendations on improved technology and management, and 2) in organizating cooperative efforts of individual member farmers.

The adoption of improved technology on the part of farmers is closely related to cooperative business activities, since the application of new technology usually requires improved seeds, improved farm materials and equipments, along with additional financial requirements. Thus we know that the cooperative guidance activities including credit service, marketing, supply, utilization and processing.

The cooperative farm guidance activities can play an important role in the following field:

- a. The cooperative farm guidance activities can be effecti vely directed toward developing a cooperative system of production on the basis of proper farming in the proper area, and such a cooperative production program can readily be geared into the type of business activities performed by the cooperative.
- b. The improvement of agricultural land is prerequisite to the cooperative farm planning. The cooperative can be a useful organization in developing irrigation system, rezoning and rearrangement of agricultural land.
- c. Joint purchase of improved seeds, farm materials and equipments can be greatly facilitated through cooperative guidance activities.
- d. The cooperative guidance activities can contribute to joint adoption of improved technology, specialization through division of labor, and joint prevention of crop diseases, which will save a lot of labor costs.
- e. The contributions cooperative guidance activities can make in developing joint inspection, storage and processing of farm products will increase quality standardization and improve marketing benefit to farmers.

The necessity for such comprehensive guidance activities in agricultural cooperatives has long since been recognized in Korea. The multi-purpose cooperative organization in Korea has proved to be extremely successful in combining cooperative business and guidance activities as an integrated whole.

II. CASE STUDY

(Yongheung-Ri Agricultural Cooperative)

1. GEOGRAPHICAL AND AGRICULTURAL CONDITIONS OF THE AREA

Yongheung-Ri Agricultural Cooperative is situated in Yongin-Gun. Kyungki Province. It is about 40 kilometers south of Seoul.

There are 333 farm households in the area. The arable land covers 4,512 hectares and the acreage per farm household is 1.3 hectares, which shows much higher than the nation's average, 0.9 hectares. Also, by size of farm, the number of farm households with more than 1 hectare occupies 64.1 percent of the total farm households, indicating far greater than the nation's average of 32.2 percent.

The Production of rice and barley has so far been predominant. But recently, since the opening of the Seoul-Pusan Expressway, the pattern of agricultural production is being switched to a combined suburban style - the cultivation of rice and truck crops plus livestock raising. It is generally considered that the easy access to the big consuming areas such as Seoul and Suwon is the most affecting factor.

2. OUTLINE OF THE YONGHEUNG-RI AGRICULTURAL COOPERATIVE

Yongheung — Ri Agricultural Cooperative was inaugurated in 1957 by only 20 members in the village of Borari which was called Borari Agricultural Cooperative. Several months after the inauguration, the membership was expanded to 57 members, and it established a rice mill and opened a cooperative store. In 1966, five cooperatives were merged, and the present Yongheung — Ri Agricultural Cooperative came into being with the membership of 333 farm households.

The Major developments since the merger are as follows:

- In 1967 Built a food processing plant.
- In 1968 Bought a power-tiller, built warehouses for fertilizer and potato storage and a brick-making plant, and opened an agricultural marketing centre.
- In 1969 Planned to buy a truck.

There are a general meeting and a general representative meeting. A president, 17 directors, and 5 auditors are elected from among the member farmers. There are five departments such as the General Affairs, the Farm Guidance, the Living Improvement, and Business Department. The Cooperative employs 8 fulltime employees including a general manager and managers in charge of each department.

As a multi-purpose cooperative, the Yongheung - Ri Agricultural Cooperative conducts credit services, marketing, supply, utilization and processing.

At the end of 1968, the liabilities and the capital reaches 6.8 million won. The capital amounted to 3.6 million won or 54 percent of the total operating fund. The total fixed assets including rice mill, processing plant, cooperative stores, warehouses, and sweet potato silo valued at 5.3 million won which was equivalent to 78 percent of the operating capital.

The turnover of the businesses during 1968 reached 29 million won or more than four times as much as the capital. The turnover by activity was:

Credit service (Loan): 17.9 million won

Supply of fertilizer,
farm chemicals and
production materials: 8.9 million won

Marketing of farm
products: 1.3 million won

Utilization and
processing: 0.9 million won

TOTAL :29.0 million won

3. FACTORS DETERMINING INTRODUCTION OF FARM GUIDANCE

The Cooperative has formulated a **development** plan with stress on production of truck crops and livestock raising. Such farm development plan was motivated by the following factors:

- a) Paddy land occupies most of arable land in this area, and its acreage per farm household is greater than that of nation's average. Nevertheless, the economic situation is little better than that in other area because the traditional farming method depending on the cultivation of rice and barley has so far been practised. Therefore, the scale of the cooperative activities has to be naturally limited due to the limited scale of its marketing. In this context, it was required to switch the pattern of agriculture from the production for self-consumption to that chiefly for sales. And as a result, the marketing activity of the cooperative could be expanded to the satisfactory extent.
- b) The recent opening of the Seoul-Pusan Expressway provided the area with a better access to Seoul and Suwon, both large consumer cities. Therefore, the geographical conditions made this area favourable for the operation of livestock raising and thecul cultivation of truck crops, which are rapidly growing as suburban agriculture.
- c) The sharp rise of land prices in this area resulting from the opening of the Seoul - Pusan Expressway has led to the relative disadvantage of the previous agricultural pattern concentrating on the cultivation of rice and barley.

tors,

d) In addition to the above-mentioned socio-conomic factors, the local populace has come to be interested in livestock raising and horticulture on the encouragement measures of the Government and the NACF. Nevertheless, individual farmers had difficulties in getting breeding livestock and initiating truck crop cultivation. Lack of funds and techniques, and poor information on marketing conditions has been most vital.

The plan was accepted at the general meeting in 1968. It was recommended at the meeting that every member farmer should actively participate in the development plan. It was also considered that the advisory and consultant services of the Cooperative are prerequisite to the performance of the plan. Needless to say, the plan had been backed by energetic measures from Gun Cooperative and the government agencies.

4. ORANIZATIONAL SET-UP, AND METHOD AND TECHNIQUE OF PROMOTING FARM GUIDANCE

According to the nature of farming of individual farm household, eight project groups were established, as shown in the table below. Each group has a leader and a technician. They are all voluntary.

FARM GUIDANCE DELT

| Rice Culti vation Group | Native Beef Cattle Raising Group | Pork Swine Raising Group | Breeding pig Raising Group | Poultry Raising Group | Sweet Potato Seedling Growing Group | Horti- cul - tural Group | Floral Group |
|----------------------------------|--|-----------------------------------|-------------------------------------|-----------------------------|---|-----------------------------------|-----------------|
| 333 | 65 | 40 | 20 | 14 | 191 | 33 | 6s |
| house- | house- | house- | house- | house- | house- | house_ | house- |
| holds | holds | holds | holds | holds | holds | holds | holds |

Each group holds meeting at least once a month. At the meeting, the members discuss the problems faced. Especially, their discussions are focused on the marketing information, joint sales and the new farming methods.

Meanwhile, each group has its major activities. For examples, the Rice Cultivation Group is engaged in the joint control of blights and insects, and the cooperative procurement or renewal of seeds.

Cooperative purchase of feed stuffs, farm chemicals, production materials, etc., are performed. Hatchery service was done by the Cooperative and the incubated chickens are kept for 30 days in the Cooperative raising house. The Cooperative storage facilities are provided. And Cooperative marketing of the products is functioned.

After setting up the above organization, the Cooperative requested the county cooperative and the NACF to supply funds and materials, and the ORD local guidance centre to provide technical guidance. The first request was concerned with the livestock raising project. What the Cooperative did for this project is as follows:

a) Financial Assistance:

The most difficult problem facing the farmers in raising livestock is how to raise funds for buying livestock. In consideration of the present situation of this country, it is beyond the individual farmer's capability to raise enough funds to initiate livestock raising. Therefore, the Cooperative naturally came to request the county cooperative and the NACF for the special allocation of low — interest intermediate or long-term loans, and received 12 million in intermediate and long-term loans. Co-op. thus reallo—cated the loans ranging from 50,000 to Won 1 million to each farm household. The loans helped to foster 14 chicken raising farm households, 30 swine raising farm households, and 67 beef cattle raising farm households in this area.

b) Supply of Materials and Feeds:

The next problem is related to feed stuffs. By-products from crops per farm household in this country, on the average, can feed only 0.54 head of cattle, 0.60 head of swine or 9.82 head of chicken. Therefore, they should purchase 14 to 20 percent of the required feed. The Yongheung-Ri Agricultural Cooperative purchases the required feed from the county cooperative or a neighbouring live-stock cooperative and distributed it to its livestock raising members at fair prices as a means of encouraging livestock raising in addition to the supply of fertilizer and farm chemicals to ordinary crop cultivating farmers. The total amount of the Cooperative supply of feed reached 749,000 in 1968.

Standardization, grading, packing and quality control for the better merchandise are another important role of the cooperative marketing. In order to have better produce to meet growing market, it is very natural that the Cooperative tries to supply proper seeds and other supplies as well as technical information.

c) Technical Guidance:

Technical guidance to member farmers is primarily conducted by the group leaders and technicians who are all voluntary workers. However, some technical matters, which are beyond the ability of individual members or voluntary workers within the association, are usually carried out by the specialized technician of the upper organizations and government agencies.

d) Exploitation of Marketing:

No less important than funds and feeds in raising livestock and growing horticultural crops is the exploitation of market. Unless market is available, the stockraising and horticulture fostered with the integrated assistance of funds, material and techniques are destined to end in failure. Therefore, the cooperative has concentrated efforts for the exploitation of market and cooperative marketing. Eggs have been sold through the marketing channels of the livestock cooperative, and vegetables and fruits are jointly sold at the Marketing Centre in Seoul which is operated by the NACF. The total amount of vegetables and fruits the co-op sold through the Marketing Cent- reached 1.3 million in 1968.

e) Education and Training:

The Education and training of the voluntary leaders including the group leaders and technicians have been delegated to the county cooperative, the NACF, and the ORD guidance centre. The member education is conducted mainly at the cooperative by those voluntary leaders. Various information and knowledge required for farm operation are exchanged through panel discussions and the monthly meetings of each group. Also, information is being frequently exchanged between the cooperative and its members through the group leaders. Various publications supplied by the NACF are circulated among member farmers.

f) Others:

The cooperatives are being used as a service centre for purchase, supply, castration of livestock, epidemic control, sterialization, joint use of facilities and equipment, joint spray of farm chemicals etc.

5. RESULT OF FARM GUIDANCE

The guidance activities have made great contribution to the increase of the income of the member farmers. In 1968, each farm household acquired an additional # 15,000 to # 28,000 on the average by raising beef cattle, pork swine, and chicken, and the cultivation of flowers and other horticultural crops. A particularly great amount of additional income was acquired from the swine raising. Swine raiser earned an average of # 21,000 per household. However, due to the continuous drops in the prices of pork swine, eggs during the fourth quarter of 1968 to the first half of 1969, farmers suffered loss. In 1969, therefore, many farmers had to either discontinue or reduce the scale of swine or poultry farming. Instead, the farmers are paying greater attention to the cultivation of truck crops and flowers.

Therefore, the Cooperative is planning to encourage 125 member households to grow flowers and truck crops while maintaining the scale of its livestock raising at the current level.

The following obstacles and problems have been encountered in the course of guidance activities of the Yongheung - Ri Agricul - tural Cooperative:

a) Excessive Dependency on Support from Outside:

Due to the individual farmer's financial weakness, external help of funds, materials and techniques is necessary, as explained above. Now, the problem lies in the fact that the need for external assistance desired by the farmers is beyond the fiscal capability of the government or the financial capability of the NACF.

b) Dependence Attitude by External Assistance:

The concentrated external assistance to the Yongheung-Ri Agricultural Co — op resulted in reducing the independent and self-help activities and in fostering the reliance upon the outside help. This situation is well reflected by the fact that the cooperative has come up with a request for the supply of \$\infty\$18 million from outside to cultivate horticultural crops after it received 12 million in financial assistance for the development of livestock raising.

c) Inadequate Adaptability to Fluctuations in Farm Prices:

The domestic markets of livestock products and truck crops are still rather unstable. Thus, the fluctuation of their prices is more intense and frequent than those of such staple food cereals as rice and barley. According to agricultural outlook survey, however, the demand for livestock and horticultural products will increase more sharply than that for rice, barley and other cereals, and accordingly their prices will soar at sharper rates. In addition, the long-range trends have so far shown that the prices of livestock and horticultural products have soared at sharper rates than those of rice or barley.

In order to encourage the cultivation of horticultural crops or livestock raising, therefore, it is necessary for the concerned farm households to counter those fluctuation in prices. At present farmers in Korea are very vulnerable to the fluctuations in prices. This is a serious problem. For example, many farmers used to give up their raising of swine and chicken simply because of temporary drops in prices of pork, chicken and eggs.

d) Inefficiency of Marketing:

In operating a farm, marketing is no less important than production, especially in case of livestock products or horticultural crops. Nevertheless, the cooperative generally lacks satisfactory marketing services for livestock or horticultural products. Moreover, the cooperative and higher-level cooperative cannot so easily exploit markets or strengthen the cooperative marketing functions as they provide financial and technical assistance for livestock raising or the cultivation of horticultural crops.

It is clear that the local cooperative had to let individual farmers sell livestock products individually without exploring new markets or promoting cooperative sale in spite of the loss they suffered from the drop in prices of livestock products while a large portion of vegetables and fruits were sold through the NACF Marketing Centre in Soul.

e) Submarginal Scale of Farm Operation:

Another problem also lies in the submarginal scale of farm operation. This makes farmers prefer to rely on external assistance rather than on their self-help endeavours and deters the expansion of business volume.

f) Rise of Land Price and Lack of Farm Labour:

Rise of land price, which was caused by the opening of the Expressway going through this area, hindered the agricultural development. Naturally, farmers have paid more interest in the souring price of land than in the earnings from the farming. In addition, industrialization and more job opportunities in the field of public engineerings caused the storage of the farm labours.

7. CONCLUSIONS

This case study has so far been made on the organization, contents, methods, results and problems of farm guidance conducted by the Yongheung-Ri Agricultural Cooperative. In conclusion, it is clear that the farm guidance enforced by agricultural cooperatives is essential for the effective development of the Korean agriculture. They provide funds and materials, help to improve the marketing conditions by means of exploitation of markets and promotion of cooperative sales, promote cooperative farming, and extend education, training and technical guidance to the farmers. Moreover, it has been learned that farm guidance activities have made great contribution to the increase of farm income. But, of course, as is clear in this case study, the farm guidance activities of agricultural cooperatives face many problems and are still at an immature stage in some sense.

Therefore, it is recommended that special consideration be given to the following matters in conducting farm guidance activities:

a) Discontinuation of Excessive Dependence of External Assistance and to Foster Independent and Self-help Efforts:

In order to more effectively develop regional agriculture, individual farmers and the local cooperatives should minimize the dependancy of assistance from outside. They have to formulate and implement their farm development plans based on their independent, self-help and creative efforts.

b) Intensive Guidance by Performance of Farm Operation and Scale of Farm:

In order to induce the farmers to end reliance on others and make greater efforts for self - help, external support should be appropriately given to them depending on their actual necessity determined on the basis of the farm operating performance and scale of individual farms. The uniform outside assistance or excessive grant of loans with no regard for farm operating performance and scale of individual farmers should be discontinued.

c) Strengthening of Cooperative Marketing Functions:

In order to encourage the production of livestock and horticultural crops which are on the increase, greater efforts should be made for the cooperative sales and the exploitation of market rather than for guidance for production. It is also necessary for farmers to be able to meet temporary fluctuations in prices of livestock and horticultural products by means such as Price Stabilization fund operation, cooperative storage and processing facilities.

d) Cooperation in Production:

Cooperative way of production, such as the joint growing of seedlings, joint incubation, joint breeding, and the joint operation of farm machinery has to be encouraged.

e) Special Assistances for Suburban Agriculture:

Advisory and consultant services particular to the suburban style of agriculture should be given for its development in the rural area near the big cities.

It may be concluded that the farm guidance means a series of integrated efforts to harmonize and coordinate all the activities of agricultural cooperatives in favour of producer-farmers. In this sense, the farm guidance activities in agricultural cooperatives are prerequisite to the rural development in the developing countries.

FARM GUIDANCE ACTIVITIES OF AGRICULTURAL CO-OPERATIVES IN JAPAN

I. LEGAL FRAMEWORK AND HISTORICAL REVIEW

1. Legal Basis

In the post-war agrarian reform of Japan, three major policies emerged in the shape of Agricultural Land Law, Agricultural Co-operative Society Law, and Agricultural Improvement Encouragement Law.

Article 1 of the Agricultural Co-operative Society Law of November 1947 provides that "the objective of the law shall be to encourage the development of farmers' co-operative organisations and thereby foster agricultural productivity and improvement of their economic condition" Here lies the legal foundation upon which the agricultural co-operative movement is to take up services directly relating to development of agricultural productivity along with other multifarious activities like marketing, supply and credit etc.

Article 10 of the Law details the activities as follows:

- (i) Organisation of joint farming practice and installation of facilities for improvement of farming labour efficiency (Article 10-1-4)
- (ii) Reclamation, improvement or maintainance of land for agricultural purposes, and installation or maintainance of agriculturally-related water facilities. (Article 10-1-5)
- (iii) Educational activities for advancement of the level of members' knowledge relating to agricultural techniques and co-operative services, and installation of facilities for general information services to members (Article 10-1-10).

These functions are new assignments upon the agricultural co-operative movement of post-war Japan and they were not undertaken in the pre-war era of the Industrial Co-operative Movement. (Note: In the pre-war period, guidance services on agricultural production techniques were carried out by "agricultural technical experts" of the Imperial Agricultural Society - an organisation which is separate from co-operative bodies - under government financial support.)

2. Farm Guidance in the Post-war Period

In the post-war Japan, channels for technical guidance on agricultural production were diversified; agricultural extension service by government authority, farming guidance service of agricultural co-operatives and technical guidance service of agricultural insurance societies. Farming guidance services of agricultural co-operatives started with personnel transmitted or inherited from the Imperial Agricultural Society which laid emphasis on technical guidance on production. Although in 1950, practically every co-operative unit had one

personnel in charge of technical guidance, their number decreased to 4,200 (or 0.4 man per co-operative unit) by 1952, partly due to a slump in business management of co-operatives and partly due to consolidation of agricultural extension services of the government.

In the period from 1951 to 1954, when the land reforms were almost completed and agricultural reconstruction was well under way, the issue of reorganising agricultural organisations came to the fore. Unification or monolification of diversified guidance channels and reorganisation of representative organ of farmers' and agricultural interests were the major topics. The issue was at last setcled by establishing a co-ordinating relationship between the extension services of the government and the farming guidance services of agricultural co-operatives.

The issue of reorganising agricultural organisations cast a starting point on agricultural co-operatives to rebuild their farming guidance functions which were at one time set back while the movement was undergoing rehabilitation of its business and re-consolidation of its organisations during the period from 1950-1959. The "Three-Year Co-operative Renovation Plan" initiated in 1957, summarised the characteristics of farming guidance services as follows:

- (i) Farming guidance services of agricultural co-operatives intend improvement of overall farm economy and progress of co-operative business by means of joint activities relating to agricultural production.
- (ii) Farming guidance activities of agricultural co-operatives should be such as would set guidelines for members' farming management and establishment of a firm foundation thereof as well as giving an orientation to co-operative business along the direction.
- (iii) Farming guidance system of agricultural co-operatives should be established by their own efforts and initiative.

Besides the above mentioned points, "planning of farm household economy" was taken up in the "Three Year Co-operative Renovation Plan". It was based on the understanding that the sole way of protecting small-scale farming and the livelihood of farmers was to combine the efforts of members under co-operatives by planning their economy and building them up on co-operatives.

(Note: Farm guidance is agricultural advisory services of agricultural co-operatives combined with their economic activities such as credit, supply, marketing etc. Agricultural extension services are generally undertaken by government agencies and rather confined to improvement of production techniques. However, co-operative farm guidance puts more emphasis on the economic aspects of farm management in order to help farmers to increase production, reduce production cost and to provide the best possible marketing conditions so that better economic

returns may be ensured. Farm guidance is also an education process to change attitudes of farmers and create an interest and willingness among farmers to improve their farm management)

2. Farm Guidance in the 1960's

The Co-operative Constitutional Improvement Campaign, which was started in 1960, was aimed at directly linking members' farm and livelihood management with co-operative credit, marketing and supply business. Concepts like supervised purchases, supervised credit and supervised marketing stem from this campaign.

The campaign's beating upon farm guidance activities of agricultural cooperatives was two-fold:

- (i) Setting "the objective of farm management improvement" for the area in which the co-operative does business.
- (ii) Formulation and implementation of "regional plan for farm management improvement".

It meant development of co-operative measure from individual approach under the name of "planning your farm economy" to a more regional approach with wider scope under which members are to plan improvement of their own farm management that is to be realised through joint efforts of members of the area. The change in the way of approach is based on the recognition of, for one, advancement of agriculture from labour intensive type to a capital intensive one resulting from technical progress, and for another, limitation of individual effort and approach to improve the market position which is necessitated by progress of commercial farming.

4. Consolidated Farming Area (Danchi) as a new Approach

In the practical implementation of the regional approach to improvement of farm management arose in 1966, the scheme of organising a co-operatively consolidated farming area (or co-operative farming Danchi). As a background for this the change in the environment of agriculture brought about by the rapid economic development after 1955, the following can be pointed out:

- (i) Progress and diversification of demand for food resulting from increase of national income demand of expansion for livestock products and green perishables and rise of necessity to expand production on select lines.
- (ii) Progress of technological innovation in farming like large-scale mechanisation.
- (iii) Increase of labour outflow into secondary and tertiary sectors, increase of part-time farming and abandoning of farming.
- (iv) Urbanisation of rural areas.
- (v) Advancement of private capital into rural community vertical integration of livestock industry by lending capital to marine industry.

- (vi) Development of transport and communication, accompanying progress in distribution revolution.
- (vii) Progress in foreign trade liberalisation.

Under such circumstances, agricultural productivity continued the path of relative decline and the number of farmers that could not earn sufficient income only from farming was on the increase. For agricultural co-operatives the following problems relating to farm guidance activities were presented:

- (i) The undeniable limitation of individual effort to improve farm management.
- (ii) The direction of improvement of farm management should be to foster simplification of the farm management of individual holdings and its specialisation, standardisation to realise large-scale economy's merit by mass production and thereby to establish farms as commercial farming units.
- (iii) Resulting from the expansion of demand for livestock products and green perishables, there arises an increasing necessity of strengthening the position in markets. Standardisation and quality unification, cost reduction and regularised market delivery being pre-requisites for securing a favourable bargaining position in markets, the scale of production area should be enlarged to assure a certain volume of produce to be marketed.
- (iv) It is becoming increasingly important for the agricultural cooperatives to have and offer for joint utilisation by members large-scale production and distribution facilities because they are beyond individual farmers' capacity to get well equipped both from the technical and financial points of view. But the technological innovation of farming calls for capital intensification.
- (v) In order to upgrade the area as a commercial commodity production area, the agricultural co-operatives on their part should provide for themselves specialised handling system covering from production to marketing.
- (vi) In converting the area as Danchi joint activities of farmers of the same line are called for. That means that members should be organised into commodity groups of each basic product rather than relying upon the existing groups on hamlet basis.
- (vii) In order that the co-operative society could function as control tower for the area it should strengthen business competency and provide a system in itself that can offer in integrated fashion credit facilities, input supply and guidance with key equipment for production and distribution.
- (viii) However, the road to accomplish such tasks is a long one. Hence a flexible approach should be taken to that a co-operative may start with what can be done within its capacity.

(ix) Last but not least in importance is the question of having competent personnel for the task. It should make all the efforts to secure able workers.

5. Farm Guidance as a new Strategy of Co-operatives

The scheme of co-operative consolidation of farming (formation of co-operative farming Danchi) was formulated on the basis of consideration of the above mentioned points. What should need attention in this connection is the fact that the concept of co-operative farm management guidance service has gradually evolved into clearer shape with the above scheme's emergence, which has undergone changes in the post-war development of the agricultural co-operative movement.

In other words, the farm guidance service was placed behind co-operative management, especially in the period of co-operative reconstruction and renovation when it was regarded merely as a means of promoting or expanding other business, like credit, supply, marketing and insurance. Or it was considered to be entrusted to extension service of the government because it was not a profit making section but rather a service sector.

The scheme provides that it is wrong to put farm guidance function in a subordinate position to other functions like marketing, supply etc. because all the functions of the agricultural co-operative movement is meant for improvement of members' farm management as a matter of principle. All the functions of the agricultural co-operatives including guidance, marketing, supply and credit etc. should be rendered in integrated fashion for improving members' farming position. With the above idea in mind it was decided to promote the establishment of a farm guidance service system in co-operatives. Danchi promoters (Danchi Sennin Shidoin) and farm guidance advisers are appointed with their roles clearly defined along specialised lines of produces.

After 20 years of growth of post-war agricultural co-operative movement, the 11th National Congress was held in November 1967 in which a resolution on co-operatives "basic policy for agricultural development" was adopted. Efforts in the field of agriculture in rapidly advancing economy along with trade liberalisation shall be to establish a highly productive and efficient agricultural system. For that, a development of production system that overcomes the limitation of small scale farming is called for. But rapid expansion of individual units of holdings will be difficult. The agricultural co-operative movement should therefore foster and organise group or joint farming units centering on full-time farms but embracing part-time farming as well. In relation to marketing the co-operative should, on the basis of joint farming units, promote the organisation of a co-operatively consolidated farming area (or co-operative farming Danchi) which would be able to conduct planned production and planned marketing. The crux of the resolution is to extend the Danchi coverage to all agricultural areas of the country towards the 1980's so that co-operatives can assume a leading position in agricultural markets. Danchi formation is the main theme of guidance activities of agricultural co-operatives today.

II. CURRENT STATUS OF FARM GUIDANCE ACTIVITIES OF AGRICULTURAL CO-OPERATIVES

1. Farm Guidance Advisers

(i) Multi-purpose unit agricultural co-operatives of Japan generally have staff in charge of farm guidance services which are conducted closely with other co-operative functions like marketing, supply and credit. The number of co-operative farm guidance advisers is on a steady increase year after year (as has been shown below) and they outnumber governmental extension officers.

| 1962 | 11,900 |
|------|--------|
| 1963 | 12,205 |
| 1964 | 12,620 |
| 1965 | 13,163 |
| 1966 | 13,579 |
| 1967 | 14,523 |

- (ii) According to the agricultural Census of 1967, 69,61 multipurpose co-operative societies had employees numbering 224,211 of which 14,523 were farm guidance advisers. Percentage-wise they are 2.1% of all employees. As regards technical staff of unit co-operatives there are some 5,073 staff members in charge of technical guidance on agricultural machinery, and 1,477 co-operative betterliving advisers.
- (iii) The figures given below show more detailed distribution of farm guidance advisers among unit societies (in 1967)

| No. of advisers of a society | none | 1 | 2 | 3 | 4 | 5-6 | 6–10 20 11–20 | Total |
|------------------------------|-------|-------|-------|------|------|------|------------------|-------|
| No. of societies | 2,027 | 2,311 | 994 | 541 | 290 | 333 | 244 178 43 | 6,961 |
| Percentage | 29.1% | 33.2% | 14.3% | 7.8% | 4.2% | 4.8% | 3.5% 2.5% 6% | 100 |

70 percent of all multi-purpose unit co-operatives have at least one farm guidance adviser and 30% have none at all. With the furthering of the co-operative merger, the number of societies with more than two farming advisers is on the increase. They are providing the system of specialised advisory service for each line of produce together with the efforts of forming Danchi.

(iv) Academic achievement or school education, career of co-operative service and qualification of the farm guidance advisers are given below. (1967)

| Level of education | No. of advisers | Length of experience | No. of advisers | Qualification acquired |
|----------------------------|-----------------|----------------------|-----------------|----------------------------|
| High School (12 yrs) | 8 , 987 | 5 years | 4,900 | Extension Officers (2,275) |
| Junior College (14 yrs) | 1,879 | 5-10 y ears | 4,578 | Technical Experts 2,180 |
| University (16 yrs) | 457 | 10-15 years | 2,637 | Veterinary Surgeons 287 |
| Others | 3,200 | 15-20 years | 1,617 | Other title4,662 |
| | | 20 years | 791 | without title 5,119 |
| Total | 14,523 | | 14,523 | 14,523 |

In terms of academic achievement the majority is high school graduates counting 62%. Most of those in "other" categories are graduates of training institutes attached to agricultural experimental stations after graduation from agricultural high schools.

In terms of co-operative service career, those with less than ten years of service are the majority counting 65%. And one third of co-operative farming advisers are possessing qualification either of extension officers or of technical experts.

(v) The assignment of advisers is specialised as indicated in the following table (percentage-wise)

| ΠS | е | u |
|---------|---|---|
| | | |
| | | |

| Year | Grain | Livestock | Vegeta- bles | Fruit | Sericul- ture | Farm manage- ment | Machine | Other | Total |
|------|-------|-----------|-----------------|-------|------------------|-------------------------|---------|-------|-------|
| 1962 | 18.9 | 19.0 | 13.6 | 11.0 | 3.7 | 19.1 | | 16.2 | 100 |
| 1967 | 13.8 | 24.5 | 11.7 | 17.0 | 3.7 | 17.0 | 2.9 | 5•3 | 100 |

2. Content of Farm Guidance Services

(i) Agricultural Census of 1967 reveals types of services relating guidance on agricultural production and facilities for joint utilisation relating to agricultural production. As for guidance on agricultural production, services relating to rice culture, vegetable and fruit growing, livestock breeding and joint disease and insect preventive practices, and lease of animals are the major ones. The co-operative societies have joint utilisation facilities relating to both production and distribution for such produce. Recently such facilities are assuming key importance as a nucleus of guidance services.

Number of co-operatives as seen with practising different type of guidance service relating to agricultural production:

| | No. of co-operatives offering such services | Percentage to total No. of co-operatives | |
|---|---|---|---|
| Land consolidation, improvement and management | 836 | 12.0% | |
| Installation and management of water facilities | 577 | 8.3% | |
| Rice culture | 4,978 | 71.5% | |
| Fruit growing | 3,011 | 43.3% | |
| Vegetable growing | 3,876 | 55 •7 % | |
| Prevention of rice disease | 4,520 | 44.9% | |
| Vegetable seed field | 401 | 5.8% | |
| Joint Animal Husbandr | y 409 | 5•9% | |
| Lease of animals | 2,288 | 32.9% | |
| Medical treatment of animals | 983 | 14.1% | |
| Artificial inseminati | on 1,395 | 20.0% | • |
| Pasture Maintainance | 243 | 3.5% | |

Number of co-operatives possessing joint utilisation facilities: (1967)

| Types of facilities | No. of Co-ops | Types of facilities | No. of Co-ops |
|---|------------------|--|------------------|
| Types of facilities | 2,407 | Meat cattle breeding centre | 72 |
| Rice centre | 2 7 5 | Joint grazing pasture | 92 |
| Country Elevator | 18 | Livestock collection centre | 225 |
| High speed sprayers | 492 | Milk collecting facility | 689 |
| Joint Silk-worm breeding | 591 | Cooler station | 74 |
| Green perishable collecting depot | 1,665 | Livestock product cold storage | 82 |
| Green perishable market | 149 | Milk and milk product facilities | 52 |
| Green perishable assortment facility | 1,044 | Bulk feeds installation | 102 |
| Green perishable storage facility | 168 | Feed processing facility | 44 |
| Cold storage facilities for green perishables | 101 | Agricultural machinery service station | 1,943 |
| Incubation facilities | 26 | Oil supply depot | 1,875 |
| Brood | 419 | Joint riding tractors | 821 |
| Egg assortment facility | 404 | Fattening pig supply centre | 179 |
| Broiler processing plant | 93 | Others | 634 |
| Animal breeding stations | 153 | | |

The farm guidance activities of today's agricultural co-operatives are conducted along the line of co-operative Danchi formation by enlarging guidance on production techniques on an individual basis. What farming members want from the co-operative is not only technical instruction of production but information and guidance as to how to manage their farming enterprises to get increasing income and to enjoy better living. In the following passage, let me give you the relationship of such desires with the functions of the co-operative societies.

How should farm management be conducted to get increased income and enjoy better living?

- (i) What should be produced and how much?
 - selection of choice of commodity
 - formulation of production plan
 - setting farm management pattern according to income target
- (ii) How to carry good farming or production?
 - selection variety
 - unification and guidance of production (farming techniques)
 - including the making of farming itinerary
 - selection and supply of production input
 - supply of credit facilities for farming.
- (iii) How to manage favourable marketing?
 - quality unification and standardisation
 - consolidation of joint assorting and packing facilities
 - selection of outlets
 - improvement of price and bargaining method.
- (iv) How could the management be stabilised?
 - Implementation of management stabilisation measures on a voluntary basis (long-term average payment, price support, scheme of co-operatives)
 - appeal to administrative authority on agricultural policy.

The subject of farm guidance of agricultural co-operatives of today is to respond to and meet the expectations of the farming members. For that purpose the scheme of co-operatively consolidated farming area is the clue. How the scheme is implemented and realised shall be accounted by an example of Ogawa-cho agricultural co-operative society at an other occasion. Here it suffices just to mention how it is promoted on a nation-wide scale.

The formation of a co-operatively consolidated farming area has been undertaken since 1961 as the co-operatives' voluntary and autonomous project. First, the "Manual for Co-operative Livestock Danchi Formation" was made by the joint office for livestock enterprise composed of national level agricultural co-operative organisations. The work of propagation and promotion of the Scheme has been conducted through Unions of agricultural co-operatives by staff in charge.

The survey conducted in November 1964, reveals that 834 co-operative farming Danchi in 36 prefectures had been formed. But they have not necessarily developed successfully since then due to difficulties caused by a price slump in agricultural produce and a slump in management of key facilities of Danchi. The Central Union of Agricultural Co-operatives then decided to advance the project by adopting an improved model Danchi method which will now be carried cut in co-operation with prefectural unions in accordance with the idea

incorporated in our "Co-operative Basic Policy on Agricultural Development". In 1968, 51 national models and 71 prefectural models have been selected and efforts will be put on these model Danchi which would function as the key from which further efforts of Danchi promotion will be conducted on a planned basis.

3. Cost of Farm Guidance Service

According to some statistics of 1967, the multi-purpose agricultural co-operatives spent 11,034 million yen in total or 1,585,000 yen per co-operative on guidance activities. The figure does include some 30% of expenses for better living and cultural activities but personnel expenses on farm guidance advisers are omitted. The total expenditure incurred in connection with farm guidance amounts to over 15,000 million yen. Revenue relating to farm guidance is 9,297 million yen and a third of which or 3,153 million yen is fees collected from the members.

Income and Expenditure

| | | Total ¥ | Per Co-op. ¥ | No. of co-ops. collecting fee |
|----|-------------------|-------------------|-----------------|-------------------------------|
| 1. | Income | 9,297,843,000 | 1,335,000 | |
| | Fees from members | 3,153,181,000 | 768,000 | 4,101 |
| 2. | Expenditure | 11,034,254,000 | 1,585,000 | |
| 3. | Net result | (-) 1,736,411,000 | (-) 249,000 | |

 $US \$ 1 = \mathbb{X} 360$

4. Organisation System of Farm Guidance Services

(i) Position as internal organ of agricultural co-operatives

Generally most of the societies have a farm guidance section on a parallel line with other business sections like credit, marketing, supply, etc. But recently the idea of reorganising internal structure, centering on commodity-wise integration of all related functions so that the society can cater from production to marketing consistently on commodity basis, is gaining ground and now there are a number of societies whose business section set-up is like the agricultural section, livestock section, and horticultural section etc.

(ii) Producers' Group

The co-operative societies up to date used to have their suborganisations based on the geographical bondage or unit known as hamlet group.
But the hamlet subgroup is showing more internal heterogeniety these days as
a result of increase in the number of part-time farms, specialisation and
enlargement in the size of operation etc. Therefore, reorganisation of producers into commodity groups or professional lines is under way now so that
the co-operative society can have a better channel or objective through or to
which it can extend guidance service.

Besides the commodity group the co-operative societies have youth groups as their fraternal organ. There are not a few cases in which the youth groups are playing a key role regarding farm guidance activities.

(iii) Association of Farm Guidance Advisers

There are a number of prefectures where the farm guidance advisers have organised themselves into an association whose main and common purpose is to deepen personal and intellectual exchange among themselves. They are in most cases run under the guidance and co-operation from the Unions of Agricultural Co-operatives and their main activities are to arrange study meetings, lectures, pay study visits to other prefectures who have achieved a greater degree of success, meetings for exchange of experiences, rewarding good workers (colleagues) and activities relating to the enhancement of their social status, etc. Associations of farm guidance advisers in different prefectures have affiliated and formed themselves into a National Association of Agricultural Co-operative Officials and Employees.

5. Collaboration with related Organisations and Institutions

(i) Relationship with Agricultural Extension Services

Farming instruction in rural communities of present Japan is conducted mainly by agricultural co-operatives and by agricultural extension service men. Although there are differences between the two in terms of their status, qualifications, and functions, farming instruction for farmers is their common task. The extension service men are working mainly for education and propagation of new production techniques developed by agricultural experimental stations and research institutions, while other co-operative farm guidance advisers are giving their service in economic matters relating to farming i.e. their work is closely associated with business economics and facilities available from the society established for the members' economic benefit. In this sense, farm guidance of agricultural co-operatives is more than a propagation of techniques, but it has a direct bearing on the economic result of members' labour.

We are not short of good examples where agricultural co-operatives are so nicely collaborating with governmental institutions in order to reach the common goal in their respective area that their farming instruction is bearing rich fruits.

Concretely illustrating there is a tendency among extension service men to take charge of a wider area on a specific produce and the grass root or direct guidance service is more and more left upon farm advisers of agricultural co-operatives.

(ii) Relationship with governmental administration

In implementing farm guidance functions, agricultural co-operatives cannot ignore administrative agricultural policies and measures. Usually, the agricultural co-operatives play a key role in implementing such measures. Therefore, there is positive co-operative participation in planning such measures and in practical implementation the co-operatives do not spare in lending helping hands to administrative authorities taking, of course, a co-operative stand and coordinating them in favour of the members and the movement.

6. Secondary and National Organisations undertaking Farm Guidance

Central and Prefectural Unions of agricultural co-operatives are carrying business relating to farm guidance in order to activate and propagate farm guidance activities of the primary co-operative societies. The activities of the Union include the making of guidelines and plans for farm guidance, training and education of farm guidance advisers, information and intelligence activities relating to farm guidance, liaison with related organisations and institutions. They are conducted by an independent section set up in the Union.

Farm Guidance Business of Prefectural Unions

(i) Japan is divided into 46 administrative units known as prefectures. A Union is set up in each of the 46 prefectures consisting of primary co-operative societies and federations of them at prefectural level. Establishment of the Union is based on a special legal provision in the Agricultural Co-operative Society Law.

The objective of the Union is to help its members in their sound development. Guidance conducted to this effect includes guidance on organisation, management and business operation, education and information services to member societies, liaison and mediation of disputes relating to the member societies, making appeals to administrative authorities related questions, etc. To conduct such business most of the unions have divisions in charge of planning, general affairs, legislative activities, education and information public relation, farming and household management of co-operative's members, management and auditing. Strength of staff of the unions range from 50 to 200 with average budget of 100 million yen.

(ii) The set up of a particular section for farm guidance in the union is something like follows. Normally the farm guidance section has 5 to 10 staff members in the main office besides what they have in branch offices. In the branches there are usually one or two staff members.

Business relating to farm guidance by the union usually includes the following:

- a) Establishment of farm guidance system in unit co-operatives
 - consolidation of farm guidance organisational set up
 - mediatory agent function
 - holding training courses

- b) Activities relating to farming improvement
 - holding of joint meeting of offices relating to farm guidance
 - promotion of Danchi formation on commodity basis (formation of model Danchi, field implementation, guidance on management of Danchi facilities)
 - production campaign
 - guidance on making regional agricultural development plan
 - measure to improve farm management (large scale farming, joint management, independent management: fostering and guidance
 - guidance on farming book-keeping
 - liaison with related organisations

Farm guidance business of the Central Union of Agricultural Co-operatives

(i) The Central Union has as its members prefectural unions and indirectly their members: unit co-operative societies and federations as well as national level federations. The role of the Central Union is to organise united will of the members, orientate the whole movement towards a set direction and take leadership and guidance function both within and outside of the movement.

Internal structure of the Central Union is something like follows: Official Secretariat, Central Affairs Dept., Farm Guidance Dept., Living Improvement Dept., Education & Public Relation Dept., Agricultural Policy Dept., Organisation and Co-operative Management Dept., Auditing Dept., and International Dept., The Union has 129 staff members of which those in charge of farm guidance business is 16. The budget scale of the Union for business year 1968 as referred from its general account is 534 million yen.

- (ii) The business relating to farm guidance of the Central Union includes:
 - management of activities of the Central Office for promotion of Co-operative Basic Policy on Agricultural Development
 - Plan making and its implementation on co-operative farming Danchi formation
 - encouragement of model Danchi organisation (holding of experience-exchange meetings, holding of achievement study meetings, granting promotion subsidy etc.)
 - guidance on management of group farming organisation
 - promotion of commodity-wise grouping of producers
 - promotion of commodity-wise measure
 - training of the staff of prefectural unions in charge of farm guidance and 'Danchi' promoters.
 - propagation of field accident insurance system
 - guidance on contract farming of beer barley
 - publication of "Danchi Information"
 - liaison with related organisations.

ACTIVITIES OF OGAWA-CHO AGRICULTURAL CO-OPERATIVE SOCIETY WITH SPECIAL REFERENCE TO FARM GUIDANCE

I. GEOGRAPHICAL AND AGRICULTURAL CONDITIONS OF THE AREA WHERE OGAWA-CHO CO-OPERATIVE SOCIETY IS SITUATED

The area in which the society is operating is largely a plain field and it does not have what would be called mountain areas. Plain field of the 20 to 30 metres above sea level is used as crop field and lower dampish field around inland sea Kasumigaura connecting to the Pacific Ocean is used as one crop paddy field.

As a water resource for farming, we have Sonobe river of 30 metres width flowing from south-western part of the area to eastern direction pouring into Kasumigaura.

The society does not have a nearby consuming centre or markets worth mentioning. But it has a large consuming centre 100 km away i.e. Metropolis Tokyo and Yokohama. Thanks to the improved national traffic route, time required for transportation has been cut and the area is enjoying greater attention as the Metropolis's kitchen.

Some basic figures of the area are given below.

(i) Area of Farming Field

| paddy field | 315 ha |
|------------------|---------------------------|
| crop field | 668 ha (other than paddy) |
| mulberry orchard | 70 ha. |

(ii) Co-operative Members 634 households

(iii) Classification of farmers

| full-time | farmers | | | 205 hc | useho | olds | 32.5% |
|-----------|---------|---|---|--------|-------|------|-------|
| part-time | farmers | 1 | • | 336 | 71 | | 53.0% |
| part-time | farmers | 2 | | 93 | 31 | • | 14.5% |

(iv) <u>Classification of farmers by size of land-holdings</u>

| Less than 50 a. | 36 | households | 5.7% |
|-----------------|-----|------------|-------|
| 50 - 100 a | 103 | 11 | 16.3% |
| 100 - 150 a | 271 | 99 | 42.8% |
| 150 - 200 a | 161 | *** | 25.4% |
| 200 - 250 a | 40 | 24 | 6.3% |
| 250 - 300 a | 11 | 11 | 1.7% |
| 300 a | 12 | " | 1.8% |

(v) <u>Population</u>

| Total population | 6,496 |
|-------------------------|-------|
| Agricultural population | 3,456 |
| Working population | |
| Male above 15 years | 849 |
| Female above 15 years | 913 |

(vi) Average size of land-holding and average income per 10 a.

| Paddy field | 50 a. | ¥ 50,000 |
|-------------|--------|-----------|
| Crop field | 105 a. | ¥ 30,000 |
| Total | 155 a. | ¥ 565,000 |

(vii) Average Income per Farm Household

Agricultural income ¥ 565,000 Non-agricultural income ¥ 600,000

Note:

- (1) Hectare $(\underline{ha}) = 100$ are $(\underline{a}) 2.5$ acres
- (2) Part-time farmer 1 = farmer who is deriving his major income from agriculture
- (3) Part-time farmer 2 = Farmer who is deriving his major income from non-agriculture
- $(4) \times 360 = US \$ 1$

II. OUTLINE AND ACTIVITIES OF OGAWA-CHO AGRICULTURAL CO-OPERATIVE SOCIETY

The Ogawa-cho Agricultural Co-operative Society was established in 1948. It was established in a rural community where the inhabitants were earning their income by running small farms and/or small shops of family business. The area used to be known as local agricultural trade spot from and to which agricultural produce and input (mainly fertilizer) were brought in and out. The Ogawa-cho Credit Society, the antecedent of the present agricultural co-operative society was operating which was known as the leading credit institution of the area. The area being a local trade centre, there were many private traders and merchants: rice trader, fertilizer merchant and jack-of-all-trades type of stores. There were times when farmers were driven into a desperate position with their lands in the possession of these commercial interests from and to which farmers obtained inputs and delivered the result of their sweat.

1. Deficit Account

At the time of the society's inception, it inherited from the Agricultural Association (government controlled organisation established during the World War II and all co-operatives were merged into this association. Membership was compulsory.) bad assets. Together with it deficit accumulation of the noodle making mill (rural industry) drove the society almost into a position where it could not reimburse the deposit to the members. In 1961, the society was designated object of special governmental measure as Rehabilitation Society. Then the accumulated deficit amounted to 5,200,000 yen. The present President or the Managing Director of the society made up his mind to present before the members this bare fact and started reconstruction work by having discussions as to how to improve the position. Reconstruction work has been implemented with the conviction that hand in hand with the farmers who were planning to build their lives solely on farming there would be no insurmountable difficulty.

Comparative Business Position

| | | | Unit: Yen |
|---|---------|--|--|
| Credit and financial position | | <u>1965</u> | <u>1968</u> |
| Deposits Loans advanced Fixed assets Members' deposits Borrowings Share capital | (total) | 18,958,000 26,271,000 7,216,000 27,916,000 25,049,000 5,069,000 32,284,000 | 234,707,000 310,137,000 40,260,000 512,935,000 30,366,000 14,915,000 319,220,000 |
| Supply | | | |
| Fertilizer Feed stuff Agricultural input Seedlings Farm chemicals Living necessities Others | (total) | 15,313,000 13,991,000 1,617,000 820,000 543,000 | 29,069,000 153,972,000 31,304,000 1,258,000 5,404,000 17,893,000 80,293,000 511,149,000 |
| Marketing | | | |
| rice wheat & barley livestock other cereals fruit & vegetables others | | 29,070,000 17,472,000 27,594,000 2,506,000 5,119,000 283,000 | 174,747,000 59,413,000 207,630,000 582,000 38,189,000 30,588,000 |

It should be mentioned here that there existed three rivalry credit institutions and seven rice-fertilizer merchants.

2. Rehabilitation of the Society

With a firm conviction that where there is a will there is a way, meetings and discussions were held every night and day in hamlets and in members' homes. Finally members reached a conclusion that all efforts shall be made by them and by the co-operative society to revive the society into a position where it can walk on its own foot in next five years.

The year 1961 cast the turning point for the society when concensus was reached at the general meeting that the members should unite under their co-operative and that the co-operative should provide unremitting services to members in order to help establish a firm foundation for their farm management. Annual average income of the members was at the time only 360,000 yen.

In order to attain the set target it was realised necessary to reorganise internal structure of the co-operative society in such a way that the co-operative can assist in the farming management of members. Increase of farm income is possible only by increased output which in itself is a contribution to improvement in the living standard and to development of agriculture of the area. How then could output expansion be realised? One solution is to have more farming field or to expand the area of cultivable land, which could be achieved either by opening wood and wild field or by land reclamation. Another solution is the intensification of the capital component in the factors of production. It is often pointed out that Japan's agriculture is short of financial resources and hence capital. Agriculture has to be developed under conditions of limited land and limited labour. Therefore increased capital investment becomes the only solution, in this direction. However, increased capital investment in agriculture is not without risk.

Yet the latter was exactly the conclusion considered to be the only solution left toward better future. Even a small sized farmer with only 50 a. crop area would not be earning a small income if he keeps 1,000 poultry and earns something from that also. It was realised that the co-operative society should lend a helping hand there. It should help members to reform their farm management by unremittingly availing of its full functions and knowledge towards better living of the members.

3. Steps towards Expansion of Agricultural Output

In the meetings and discussions held among the members, argument arose as to whether the co-operative rebuilding or the increase of income of farmer-members should come first. The conclusion was that the latter should have priority over the former, because members are the masters and co-operatives' officials and workers are their servants. On the basis of an understanding that the increase in members' income and the development of an area's agriculture are the foundation for co-operative rebuilding, a number of meetings were held and a programme of agricultural development of the area was formulated at the initiative of the members and the co-operative society with attendance of people concerned of the town of prefectural government, upper organisation of agricultural co-operatives and of agricultural extension office. There the same conclusion was reached that the development of agriculture of the area would be possible only by intensification of capital investment though it might mean importation of a risky factor in the management.

The general pattern of farm management of the time could be characterised by much, perhaps too much diversification within each unit of management. Multifarious commodities were grown on a farm and the farmer was engaged in many enterprises. For example, one could see rice grown on dry field of 20 a., groundnuts on 30 a. and sweat potato on a 10 a. size field. From the view point of management, such farming practice did not pay because it could not gain a strong bargaining position in the market. It was a wrong way for increased farm income.

Then the co-operative society promoted a new farm management pattern. It advised members to grow rice as the principal crop and side by side take up cattle breeding, farming which was considered to be very promising. Simplification of the management pattern was the first step encouraged by the co-operative.

With Japan's agriculture centering traditionally on rice culture, not only the management pattern but also the working system was built up on this line. The system of farming work along other lines was not well established at the time and yet farmers started new lines. At busy season priority was given to rice at the cost of other lines.

Farms with 2.5 hac. rice field might do well to ignore the other new line at their busy time but what about the farms with only 50 a. of rice field and perhaps 2,000 poultry? Obviously, the poultry section is important for such a farm in terms of the money invested, yet to a normal psychology of a traditional farmer, rice section looks more important. At any rate, efforts have been directed to promote simplification of farm management by advising members to specialise along one line in the subordinate sections.

4. Organisation of Producers into Commodity Groups

Once the direction was set that expansion of agricultural production should be pursued along livestock farming, the next step was to organise the producers into commodity groups. Commodity groups were formed for poultry producers, pig rearing farmers, and dairy cattle farmers.

If a farmer has enough rice farming field then he could well specialise along single crop rice culture. To farmers wishing to develop compound enterprises, i.e. rice culture and a line of livestock, the co-operative society offered them free choice as to which of the livestock enterprise they would like to choose.

However favourably a farm may be bestowed with the endowment of labour, fertile land and good standards of techniques, none can expect much from it, unless it is also bestowed with willingness. Quite normally, therefore, the choice of the new livestock line was cast before them. On the basis of a commodity group thus organised by willing members, production and marketing plans were formulated. It meant for each farm concentration on selected lines and simplification of management pattern on the one hand and planned diversification of agriculture for the area on the other.

Organisation of producers into commodity groups was not realised without difficulty. One such difficulty was caused by joining of farmers, though on the same line, but possessing different sizes of land. In other words, smooth

operation of a commodity group, let us say, poultry farmers, is not easy if one member of this group possesses 10 to 20 poultry and another member possessing 500 to 1,000 simply because the importance attached to management of poultry farming by these two members differs.

Encountering a difficulty of this nature, the co-operative society devised a scheme and set a minimum standard size for each line below which farmers were categorized into part-time groups and above which into foll-time groups.

Poultry constantly 300 and more constantly 25 and more Dairy cattle constantly 5 and more

Classification of farmers into above category helped a lot in making up their decision and nurtured willingness to specialise in one line in which they envisaged better future and concentrated capital investment. The traditional type of excess diversification of farming pattern was reorganised along simpler lines and the system of bulk production and planned marketing was prepared.

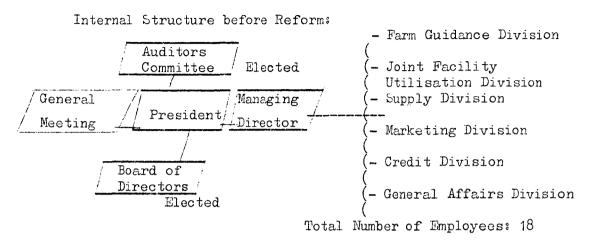
5. Reorganisation of Business Structure of the Society

Now that the farmer-members were organised into commodity groups, the internal business structure of the society itself had to be reorganised. In order to improve business efficiency, the working system of the society was divided into an administrative section and a field or front service section. The Farm Guidance section was the most important one in taking closest contact with the members as far as their farming activity was concerned.

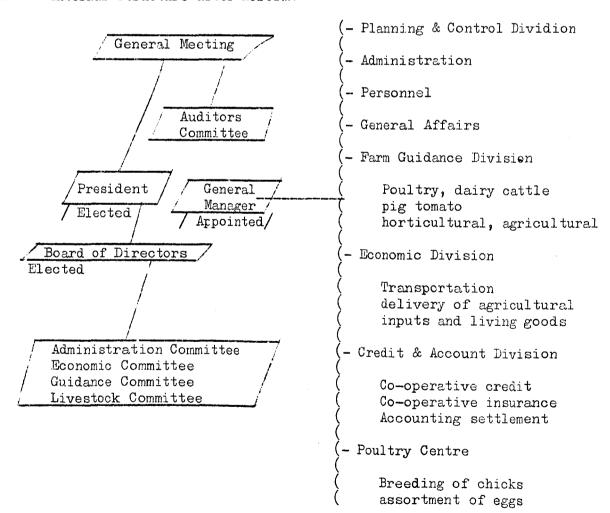
The main task of the co-operative farming advisers up to that time was the propagation of a monthly magazine published by a co-operative publisher, and its distribution. Besides no clear division of function along distinctive lines of farming was set among the co-operative farming advisers or co-operative employees in charge of farming guidance. Everyone looked after every commodities, i.e. vegetables, grains like rice, wheat and barley, livestock and fruit. It was not rare to find them assisting lorry drivers in loading and unloading cargo at warehouses and at farm gates. Thanks to the reform of internal structure a clear division of labour is established today and every farming adviser is concentrating his time and energy on each assigned duty. Besides, settlements of accounts arising out of marketing of each members produce is now undertaken by the administrative section. Before the Farming Guidance division was strengthened, employees with little knowledge of keeping poultry, pig or cattle were working at times as farming advisers. Today everyone in charge is sent to training courses and seminars and they are making a contribution in levelling up farming techniques and techniques of management of the members as a whole, to higher and same standard. They learn the most advanced techniques of the members and try to spread it among the whole members.

It was in 1962 that the internal structure of the society was reformed. As a result the farming guidance division now has five advisers; two for poultry and one each for gig, dairy cattle and vegetable. Each of them are functioning also as the secretary of each producers group. Commodity-wise appointment and assignment is known as vertical system. As a result ways have been paved for the expansion of the production size, promotion of planned production, bulk and planned marketing and delivery, which all has struck the basis in establishing co-operative livestock farming settlement.

In order that farms of each group can, through joint efforts with and under co-operatives, promote simplification of work, standardisation of techniques, planned production and marketing and attain a stronger position in markets, minimum standard numbers of farms must join the group. The minimum standard for each line is given in the attached appendix A.



I Internal Structure after Reform:



6. Management of Producers' Commodity Groups

In order to realise the expansion of agricultural output, reorganisation of producers into commodity groups and reformation of co-operative structure have been implemented.

Next question is how to manage the organised producers' groups. In this connection, the appointment of the group chief assumes importance. The chiefs of producer groups have been elected at the will of each group among the members, and the co-operative society did not make an attempt to suggest nor appoint them. Because of the more intimate and closer relationship with the co-operative society, these groups are carrying on activities like joint marketing and joint purchasing much better than the former voluntary producer associations. Co-operative farming guidance advisers are also there to help in secretariat works for the groups. These groups have branches in hamlets as more frontier units for action. For poultry and pig there are 17 hamlet branches each and the dairy group has ten. Heads of each branche, to take example in the poultry group, are responsible for delivery of eggs and aged poultry, making advance orders once a month, calling monthly or regular meetings in each hamlet, and for introducing chicks etc. They are responsible for the overall aspects of poultry farming in each of their branches. Duties are carried on with a firm sense of head and with enthusiasm.

Here the co-operative should always remember a note of warning. It should never behave at the ignorance of the commodity groups as far as such behaviour is related to the interests or affairs of the group concerned. Otherwise it will lead to destruction of the group and help arousing anti-co-operative sentiment. Activities carried out by the group or by the branches of the group should never be interfered with by the co-operative society. What can be solved within the group or branches should not be touched upon by the society directly. Besides the co-operative society should never take a bureaucratic stand like sliding more problematic matters down on the group.

On the basis of such lessons and experiences a Five Year Plan for Livestock Business was formulated in 1962, by which expansion of agricultural production was envisaged along poultry, pig rearing and dairy cattle industry as 'plus x' enterprise of 300 farms of all 634 member households. Average annual income of the members households at the time was only 369,000 yen. Average per household population was 5.9, annual living cost per head some 96,000 yen. Living cost per household 576,000 yen plus depreciation of machinery amounted together to some 600,000 yen and that certainly exceeded earnings by 200,000 yen. One could not make both ends meet in such a situation. The Five Year Plan envisaged to make up that gap by establishing 'plus x' sections. 80 farms keeping constantly more than 25 pigs, 150 farms with more than 1000 hens and 70 farms with more than five cattle i.e. creation of 300 livestock farms was the idea incorporated.

Members being heterogeneous in size of arable land possessed, in labour available and in perference to livestock, simplification of specialisation along a selected line has never been an easy task. The co-operative society on its part started with a resolution that it will carry out the plan with an earnest and willing member, with three or four joining members at beginning maybe. At the beginning of the second year of the Plan the number of joining members were seen to have increased as following:

| Poultry | 30 farmers | 10.000 hens |
|--------------|------------|-------------|
| Pig | 30 farmers | 1,300 pigs |
| Dairy cattle | 35 farmers | 200 cattle |

We were always convinced the organisation of producers into commodity groups promotion of bulk production and marketing with a resulting stronger marketing position lead to our final target of increase in agricultural production, and improvement of the living standard of members.

7. Defensive Measure against Price Fluctuation

Formation of producer groups and development of agriculture along livestock lines with intensive capital investment plunging into farming of more risky nature. Government lacked policies for price stabilisation for the so-called promising products and resulting loss had always been shouldered by farmers. Livestock cycle of three year period was in force and it meant sharp drop and skyrocketing prices along the cycle when the market went into demand-supply disequilibrium. We have been convinced, however, if member farmers take longer time perspective they were certainly earning or making profit by livestock industry over years though markets may slacken and jump at times.

With that conviction in mind, discussions and meetings were held with the members, which lead to the conclusion, referring again to an example of poultry, that a monthly salary system should be adopted for poultry farmers. For the pig rearer group a similar measure is adopted, which is known as a long-term average payment system, one of the pooled accounting schemes. Besides the well known merit of pooled accounting it has the objective of reforming household and farm management into regular and planned ones like household management of urban wage earners. The co-operative society concluded the five year contract with members joining such schemes. The basis of calculating the amount of monthly payment was fixed after discussions with poultry farmers on the number of laying hen cages, which is fixed as far as the number of hens is fixed.

Basis of Salary Calculation

| 1 | laying ratio | 65% | lo | | |
|---|----------------------|-----|-----|-----|-----|
| 2 | annual renewal ratio | 709 | lo | | |
| 3 | price of egg | 175 | yen | (54 | g) |
| 4 | aged hen | 150 | yen | | |
| 5 | dung | 6 | yen | per | kg |
| 6 | cost of feeding | 4 | yen | _ | _ |
| 7 | renewal cost | 700 | yen | per | hen |
| 8 | depreciation | 92 | yen | per | hen |

Based on that standard of calculation, production cost of one egg is something like follows:

| Proceed of an egg | $\mathbf{A}^{'}$ | 9.50 yen | 100.0% |
|-----------------------|------------------|----------|----------------|
| feeding cost | В | 6.25 | 65 . 7% |
| renewal of hen | C | 1.62 | 17.0 |
| depreciation | D | 0.38 | 4.0 |
| chemical, medicine | E | 0.22 | 2.3 |
| A - (B+C+D+E) | H | 1.03 | |
| proceed of hen's dung | \mathbf{F} | 0.55 | |
| H+F | | 1.58 | |

1.00 yen is deducted out of 1.58 yen for repayment of facility loan. On that basis 0.50 yen per hen is paid every month. If a farmer keeps 2,000 hens his daily income would be 1,000 yen and he gets 30,000 yen, let us say one 10th of every month. The co-operative society is advising him to live within that income and in case he finds difficulty then he is advised to increase the number of hens on his farm. It is our objective that their household economy management becomes regularised too.

As mentioned, the objective of the system was to offer a bumper or cushion within the co-operative society itself so that the income of the poultry farmers got regularised whatever the market position and prices are. The system has been in force since 1963. Initial borrowing of poultry farmer was 1,700 yen per hen. Hence if he keeps 1,000 hens his total borrowing at the time of inception was 1,700 yen per hen. Thus the first session of the monthly salary system ended in success and we are today in its second session.

Similar success was achieved in the pig producer group, too. The long-term average payment system allows producers 2,000 yen per pig and he gets 1,500 yen in cash at the time of marketing, the rest of 500 yen repaid for the facility loan to the co-operative society. The period of one term is also five years.

These devices are appreciated highly as farmers' voluntary defensive measures against ever moving prices for livestock products. They are recognised as good examples of joint effort of farmers under a co-operative society.

| | Price of | Egg p€ | er Kg in | the last | 5 years | <u> </u> |
|-----------|----------|--------|-------------|-------------|---------|-------------|
| | t | 63 | ' 64 | ' 65 | 166 | 1 67 |
| February | 2 | 16 | 198 | 152 | 237 | 189 |
| March | 1 | 64 | 186 | 165 | 174 | 187 |
| April | 1 | 59 | 151 | 148 | 187 | 153 |
| May | | 67 | 151 | 140 | 167 | 135 |
| June | 1 | 78 | 145 | 140 | 182 | 134 |
| July | 1 | 61 | 142 | 150 | 160 | 141 |
| August | 2 | 07 | 152 | 173 | 166 | 172 |
| September | 2 | 21 | 170 | 216 | 194 | 185 |
| October | 2 | 04 | 159 | 203 | 196 | 185 |
| November | 1 | 95 | 154 | 213 | 182 | 192 |
| December | 2 | 04 | 173 | 230 | 204 | 215 |
| January | 1 | 73 | 147 | 213 | 183 | 207 |
| Averag | e 1 | 87 | 159 | 183 | 185 | 172 |

Synopsis of Implementation of Monthly Salary System for Poultry Group and the one for Pig Group are attached together with contract formula as appendix B.

8. Agricultural Structure Improvement Project - Measure of Government

Now the steps have been taken under Five Year Plan for Livestock Business for increasing farmers' income along livestock lines. The Co-operative has come to a realisation that it should help members by undertaking a more risky process of capital intensive and risky livestock farming and thereby facilitate expansion of the size of unit holdings.

Among three lines i.e. poultry, pig and cattle, of livestock industry the main direction was set at poultry farming. After consulting with the members, the co-operative society instituted in 1963 the Poultry Centre. In order to develop the area as an egg producing centre it was found necessary to have a chicks breeding station, egg assortment facility and aged hens disposal station. Thus the area of Ogawa-cho co-operative society has come to attract wide attention as an egg production centre fully equipped with related facilities.

About the same time the government was initiating a new agricultural programme known as Agricultural Structure Improvement Project, the aim of which was to expand agricultural production by land consolidation on the one hand and encouraging growing or expanding lines on the other. The co-operative society never failed to take this opportunity and made an application for the project centering on poultry farming development. The idea was to set up by the project facilities capable of doing business for 120,000 hens. In 1963, the then existing facilities were consolidated and expanded in size which is today known as the Poultry Centre. The operation of such facilities by the co-operative society, which meant some 50 to 60% of the poultry farming undertaken by the society, helped members a lot in simplifying their work and also in cutting the capital investment.

Now let me mention briefly the business of the Poultry Centre. There developed a clear division of labour in poultry farming as among the co-operative society and the members. Chicks are bred in the poultry centre unit up to 120 days and the members get them when they are almost ready to lay eggs. Then the members feed the hens in their laying period while the collection and marketing of eggs are done by the co-operative society. That meant a drastic change in the poultry farming practice on the part of farmers. Under traditional practice hatched chicks had to be bought and fed by the farmers during breeding days. It needed chick breeding facilities and capital investment for that purpose. Moreover, the expansion of the size was very difficult under such circumstance. Now that 50% of the work is done, and the part is unproductive and more risky, capital investment by each member is reduced and better use of available fund becomes possible. Result is that we have more farmers with more hens each and their work much simplified.

| 1962 1963 | 30 farms 60 farms | 10,000 hens (average size about 300 to 400 hens) 50,000 hens |
|--------------|----------------------|--|
| - | · 300 4 00 | 8 farms |
| | 400-500 | 17 |
| | 500-600 | 6 |
| | 700–800 | 5 |
| | 800-900 | 10 |
| | 900-1000 | 4 |
| | 1000-1500 | 3 |
| | 1500-2000 | 3 |
| | 2000 | 1 |

9. Completion of the Co-operative Rehabilitation

Thus co-operative facilities for joint utilisation by the members were consolidated, organisation of members into commodity groups also came to show effect gradually and preconditions for production expansion were provided. The marketing position of the co-operative society has been much improved and farmers' income has increased year after year. Strives and efforts for development of agriculture of the area have borne good fruit. Moreover, the five year programme of co-operative reconstruction itself completed in success and the previous deficits and losses were done away with, as a result of reformation of co-operative management based on the needs and voices of the members.

The fact that the co-operative rebuilding has succeeded firstly by striving to increase and improve the income of the members and after long years of various difficulty owes much to tear-provoking hard work and co-operation of the members. Since then efforts have been made to extend the co-operative's helping hands to the field hitherto left untouched for better services to members. It is our great honour that such efforts resulted in the Central Union's Prize which is awarded to co-operative societies of excellent performance.

10. Five Year Plan for Better Farming

i) Members' opinion Survey

After completion of the Five year Plan for Livestock Business, the cooperative society then decided to extend improved services, on the basis of commodity groups, of guidance on farm management and to consolidate service structure so that all the commodity fields were covered. With this idea in mind the Five Year Plan for Better Farming was formulated and started.

All the previous plans and programmes had been made not necessarily properly based on the voices and wishes of the members. But the present Five Year Plan was made fully based on the wishes of the members. It is based on the result of an inquiry through various methods into members' opinions. Let me present an example. The co-operative society, for one, caught members' opinions by inquiry sheet. Of all the 634 member households 523 or 82.5% replied.

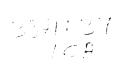
RESULTS OF INQUIRY

(1) What is your idea on farm management in future?

| a. h. | Expect income improvement by agriculture Keep the present farming position as it is | 336 households |
|----------|---|------------------|
| C. | | 12 , |
| d. | enough at subsistence level No definite idea | 82 2 6 |

(2) How do you expect to improve your farming position?

| a. | specialise on rice culture | 123 households |
|----|-------------------------------|----------------|
| b. | specialise on poultry farming | 11 |
| c. | specialise on pig rearing | 12 |
| d. | rice + poultry | 24 |
| e. | rice + pig | 67 |
| f. | rice + dairy cattle | 50 |





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(111) Consolidation of Kelated Facilities

- administrative section -- mechanisation of clerical work
- field section --- i. construction of poultry mansion
 - ii. expansion of agricultural warehouse
 - iii. construction of pig gathering sty
 - iv. introduction of large tractor

What is noteworthy among the above mentioned points of improvement are (i) introduction of large tractors, three sets, (ii) construction of poultry mansion, (iii) consolidation of guidance system.

3. Participation of the Society in its Implementation

Current position of the propagation of agricultural machinery is that large cultivators and small tractors are both introduced in parallel while the joint farming practice or joint operation and standardisation of variety are not practised. That means that mechanisation on an individual basis endangers the management of farming because the burden of depreciation as well as initial spending would not be negligible. In order to overcome such a position, also to intensify land utilisation and to promote land improvement, large scale machinery is introduced by the co-operative society.

As to the construction of the Poultry Mansion, it has been done with a view to upgrade the area as an egg supply centre with 100,000 hens. We encountered many difficulties in increasing the number of hens from 50,000 above in 1963. A careful study of the situation revealed the following points as the cause of bottleneck.

- (i) Not a few poultry farmers were keeping only 300 to 500 hens and their principal enterprise was grain. In short, poultry was their secondary occupation.
- (ii) Expansion of the size of poultry farming was difficult because they were raising their poultry farm in the backyards of their houses.
- (iii) Facilities for disposal of dung were inadequate and it created a public nuisance.
- (iv) Measures to attract new farmers to take up this occupation (poultry keeping) were lacking.

On the basis of the result of the analysis and in consultation with the member-farmers and related organisations, construction of a Poultry Mansion was decided. Together with the Poultry Mansion, the following measures were considered to promote expansion of the size with the aim of increasing farming income.

- (i) Encouragement measures shall be adopted to create a condition under which one man can keep 4,000 to 5,000 hens, which would finally lead to bulk production and marketing with still stronger position in markets.
- (ii) Living environment shall be improved by separating the place of living from that of farming. Poultry farming shall be shifted to forests and farming areas where it is possible to expand the size unlike the case in a housing site. Poultry houses of the size of 1,200 to 1,600 hers shall

be concentrated in such a place where the poultry farmers became commuting workers like city workers.

- (iii) Particularly where the farming community is changing rapidly into housing sites of commuting city workers poultry farming shall be shifted to sparesely populated areas to avoid public nuisance.
- (iv) As a financial measure to expand the size, a joint management system by members for a fund has been established.

If one wants to start a poultry business with 5,000 hens it would necessitate 6,000,000 yen since initial cost per hen is 1200 yen. That is obviously beyond one's capacity, if it is to be done on an individual basis. Therefore, the co-operative society decided to assist them by providing poultry houses and supplying chicks so that only work to be done by the member is feeding (brave new credit policy).

The idea behind it is the development of poultry farming by the younger generation where they can do the business with shorter working hours and enjoying more leisure.

(4) Promotion of the Five Year Plan

Once the points of improvement and blue print for better farming and living are prepared, members of the co-operative society have begun to show a more positive response to the Better Farming Plan. The Better Farming Plan is implemented with catch phrase '3 Up 35 Campaign for Richer Lives'. 35 means income target of 350,000 yen per head for the five year period of the Plan. By 3 Up is meant:

- (i) Pick Up: Members are prompted to pick up principal commodity along which they are to plan income and better living.
- (ii) Tie Up: However earnestly and hard the co-operative society and its members may strive, there is limitation to what we can do by ourselves alone. The development of agriculture of the area has to be undertaken with tie up collaboration with the upper co-operative organisations and town authority, extension office etc.
- (iii) Level Up: Once the principal commodity lines are selected by the members, levelling up of the standard of farming techniques becomes necessary to increase income along the lines.

It is our sincere hope that the objectives and targets provided in our Plan be achieved with co-operation and efforts of the member farmers and for which all the town be involved in view of regional or community development. Credit should also go to the members for the fact that the co-operative society could do away with the deficit in three years which had been assumed to take five. With members groups into professional interests, internal structure reformed, agriculture structure improvement project adopted, price stabilisation measures provided and Better Farming Plan formulated and initiated, the co-operative society together with members is now ready to step into a new road for a brighter future of members.

FARM GUIDANCE PROGRAMME AS A MAJOR FACTOR CONTRIBUTING TO AGRICULTURAL DEVELOPMENT AND REHABILITATION OF THE SOCIETY

1. Practical Method of Programming

The agricultural co-operative is the only organisation of farmers in rural areas. Its most important task is, therefore, to help farmers in increasing agricultural production and in improving marketing conditions. Successful implementation of such functions will be resulted in ensuring better income and improvement of life to farmers. When technical assistance on production and consultative service on farm management are made available to farmers they increase agricultural production. This is what the society intends to undertake through farm guidance.

However, only to get higher income is not sufficient to achieve the objectives of agricultural co-operatives. Further effort is yet to be made to attain the ultimate goal which is to improve the living conditions in rural areas in the field of housing, food habits and health control. Thus the guidance activities of agricultural co-operatives must be for both farm management and life improvement which are the two wheels of a cart.

In the past, guidance on life improvement was not given much attention in the activities of agricultural co-operatives, though the importance was talked about and each farmer had to make an improvement, on individual basis, of cooking stove, sewer system, rooms etc. Therefore no impact was seen on the living conditions in a village as a whole. The guidance and education in the field of live improvement must be an integral part of the activities of agricultural co-operatives to make such small individual investments most effective in achieving the purpose. The guidance activities of agricultural co-operatives must be planned on the long-term basis.

2. Survey on Agricultural Conditions in the area of the society:

General Survey on agricultural conditions of 634 members of the society has provided the most important data for formulating improvement programmes of farm management of individual members.

The society conducted this survey to collect information on the following points:

- i. Total production of each type of agricultural produce in the area;
- ii. Marketing ratio of the produce-rate of commercialisation;
- iii. Structure of farming population;
 - iv. Family structure;
 - v. Size of land holdings and number of livestock owned by farmers;
- vi. Profit and loss of farm management.

In 1962, the society made a five year plan to promote the livestock industry and had made a lot of effort to improve the basic conditions of production. In 1963, Ogawa-cho area was chosen as an Agricultural Structure Improvement area by the government and the improvement of basic conditions of production had been very much accelerated.

However, the Five Year Plan of the society could achieve only 50 per cent of the target at the end of the Plan. In evaluation of the result, it was found that the lack of basic information and disregard of the interest of members were the most important factors of its failure. The society had been too much absorbed only in the increase of production without having sufficient information of members.

On the basis of this evaluation the society decided to conduct a survey on agricultural conditions in the area and to work out a long-term farm management programme as a first step for agricultural development in the area.

3. Summary of the result of the Survey

- i. Regarding structure of farming population the survey shows an increase of young part-time farmers and of older full-time farmers.
- ii. It was also found that the successors of agriculture are not sufficient in this area. Most of the junior high school graduates have lost their interest in agriculture and do not remain on the farm. Only some of the senior agricultural high school graduates come back to the farm. A lot of effort is to be made to keep these young people in agriculture.
- iii. As to the farming pattern, most of the farmers are engaged in upland farming, and rice production is additional. The annual agricultural income per farm family is $\frac{1}{2}$ 900,000 (US \$ 2,500).
- iv. The size of a family is 5.2 persons but it is estimated in the future that it will be four persons.
- v. The expectations of the farmers with regard to the improvement of farm management are as follows:

(1) With regard to the size of the Farm management:

- a. to expand paddy fields and to rationalise the paddy production (212 farmers)
- b. to increase the number of dairy cattle and to become a full-time dairy farmer (43 farmers)
- c. to expand the size of pig raising (53 farmers)
- d. to expand the size of poultry farming and to become a full-time poultry farmer (45 farmers)
- e. to increase income by way of mixed pattern of farming paddy production and sericulture as additional (86 farmers)
- f. to increase income by way of upland farming as main, and horticulture as additional (102 farmers)
- g. to increase the size of sericulture and to become a full-time sericulture farmer (20 farmers)
- h. Uncertain (73 farmers)

(2) With regard to a successor:

| a. | There is a successor | | (310 fa | armer | (a |
|------------|----------------------|---|---------|-------|----|
| b . | Not decided yet | • | (256 | 99 |) |
| c. | Others | | (68 | ** |) |

After the survey, the society has organised group meetings throughout the area to make the farmers fully understand the result of the survey and to discuss the measures to be followed.

4. Regional Agricultural Development and the Target to be achieved:

As a result of the group meetings the society decided its regional agricultural development programme with unanimous support from members.

(i) Method of Implementing programme

- (a) After a detailed study of the basic data from the point of view of future trend of price and of consumption of agricultural and livestock products, the society has decided the major items to be produced more in the area. In making this decision much attention was paid to whether such items would be accepted by farmers and would be suitable for establishing a consolidated production area. Then the society worked out the detailed programme to increase production and productivity of such items.
- (b) The society organised its members into small groups according to the pattern of farm management expressed in the survey, and decided the minimum size of management in consultation with such small groups to standardize the management.
- (c) The members of each small group worked out the individual production programme and on that basis the society formulated a regional production programme of major items (Table 1).

(ii) Improvement programme of major items:

Taking into consideration that Ogawacho area is located within a distance of two hours of the big consuming area, the society selected the major items for increased production to get rid of the traditional agricultural management towards the profitable and commercial agriculture, and to strengthen the bargain power in the market. For this purpose the detailed improvement programme is very essential. The following are the brief description of these programmes:

(a) Rice:

At the time of compilating the basic data, the cultivated area of rice was 436 hectares and the volume of production was 1,829 tons. The possibility of expanding rice production in this area was only through the reclamation of swamp land and forest. The target of the improvement programme is to produce 3,501 tons of rice with 576 hectares of land by 1972.

However, it is presumed that the shortage of farm labour will be more serious because of such reclamation of land. In view of this the society has decided to put the primary importance on the promotion of mechanisation and joint farming in collaboration with the Village Administration, Prefectural Government, Extension office and Prefectural Union of Agricultural Co-operatives.

The Society has also made a programme to increase the productivity by means of selecting a better variety of rice, better fertilisation scheme and soil improvement.

(b) <u>Cucumber</u>

Cucumber is a rather traditional production in this area and its production techniques have been standardised. The society has decided upon the target of producing 660 tons with 11.0 hectares of land by 1972, as against 24 tons with 0.6 hectares in 1968. To attain this target the society decided to standardise the variety and grade, to establish a consolidated production area and to establish better marketing conditions through co-operatives.

The standard size of management for cucumber production is between 0.1 and 0.15 hectares.

(c) Tomato

In case of tomatoes it was decided to maintain the contract farming for processing purpose. The target of production to be achieved by 1972, is 21,000 tons with 30 hectares as against 101 tons with 2 hectares in 1968. Also it was decided to provide joint seedbed, joint pest control and other new production techniques whereby the cost of production will be reduced.

On the other hand the society has made a programme for those members who are producing tomatoes for fresh consumption on a limited scale. However, it requires farm labour of 120 persons per 0.1 hectare, the large size production may not be recommendable.

(d) Sericulture

Most of the sericulture farmers are living in rice producing areas and they are engaged in both rice production and sericulture. This was made possible by the provision of young silk-worm centre by the society, well-balanced distribution of labour in rice production and sericulture, and simplified raising techniques of silk-worms. The sericulture farmers are getting good economic returns through a well planned production system.

The society has decided to further expand the programme of facilities of mechanisation and of diffusion of new techniques. The target set for 1972 is 81,600 kg. of cocoon and 68 hectares of mulberry field as against 23,000 kg of cocoon and 23 hectares of mulberry field in 1968.

(e) Poultry

This is the most important one among the major items for production in this area. At the time of survey the total number of chickens in this area was 50,000 and total egg production was 640 tons. The target to be achieved by 1972 is 105,000 chickens and 1,344 tons of eggs. For this purpose the society will make efforts to improve chick rearing centres, to make effective use of egg grading centres and to provide chicken processing plants and to rationalise the egg marketing system so that the production cost may be minimised.

With regard to the size of poultry farming it was decided that the standard size should be 5,000 chicken per head engaged in poultry farming. The average number of chickens per family at present is only about 1,200 but in the improvement programme it was taken into account that raising techniques will be further simplified and that large scale of poultry farming would be made possible.

For the purpose of stabilisation of management the society will also continue to improve the present long-term Average Payment System for eggs. However, the feedstuffs entirely depend upon the purchased one, so that further effort is to be made to produce feedstuffs by themselves.

(f) Pig-raising:

In keeping pace with the increase of demand for pork in recent years, the number of pigs being raised by farmers has remarkably increased and even the price has been well maintained.

The target set for 1972 is to sell 7,500 head of pigs as against 4,460 head in 1968. At the same time the society has made the plan to introduce a superior variety of pig as well as to improve the marketing system. However, rapid expansion of the size of pig raising has resulted in the shortage of piglets, therefore in the improvement programme the society decided to purchase breeding pigs of a superior variety. This will make it possible for the society to produce sufficient piglets within the area and will ensure planned production and marketing.

The long-term scttlement of account system for pig will be maintained to protect the farmers from price fluctuation whereby management of pigraising will be stabilised.

(g) Dairy Farming

In general the livestock industry in this area depends entirely upon the feedstuffs provided from outside, which makes the livestock industry unstable. But in the case of dairy farming 40 per cent of the feedstuffs are produced locally by farmers and 60 per cent are purchased from outside. This is an important factor to stabilise the dairy farm management.

In the improvement programme, it is suggested to secure 0.1 hectare per dairy cattle for self production of feedstuffs and to raise eight dairy cattle per person engaged in dairy farming.

With regard to the price of milk, the Milk Price Guarantee System of the government has made a considerable contribution to the stabilisation of dairy farming. In addition to this, the society decided to start the retail sale of fresh milk for stabilising the management and for better economic returns.

According to the recent data, the number of dairy farmers is decreasing and on the contrary the size of dairy farming is expanding. By 1972, the number of dairy cattle will be increased to 400 from 200 in 1968, so that increased production of milk will be ensured. The income of dairy farmers will also be sufficiently enough to be independent full-time dairy farmers.

5. Programme of the Society to promote the Development Programme of Major Items.

As explained in the preceding chapters, the society has made the individual improvement programme of farm management and the regional target for expansion of production. The destination, toward which the agricultural development is to be directed, was identified before the members.

The programme may be adjusted according to the change of economic conditions in future but ultimate destination of these programmes is to ensure the income of $\frac{1}{4}$ 350,000 per head.

The table No. 3 shows the trend in price of agricultural and livestock products.

The society, in order to meet the requirements of such programmes should strengthen the farm guidance service, to employ experts on different commodities, to establish better facilities, to provide credit facilities and to supply production materials.

For example, many farmers are suffering from labour shortage, so that the society will extend the following services:

- i. Promotion of land consolidation and land improvement.
- ii. Joint purchase of big agricultural machinery and joint farming using this machinery.
- iii. Simplification of poultry farming by establishing Chick Rearing Centres.
- iv. Establishment of poultry mansion
- v. Encouragement of large-scale poultry farming.
- vi. Improvement of living conditions in rural areas.
- vii. Establishment of Chicken processing plant.
- viii. Simplification of silk-worm rearing centres.
 - ix. Standardisation of raising techniques.

The agricultural development programme has been implemented with active support of members and with the help of the society in various ways mentioned above including financial assistance.

6. Recruitment and Training of Co-operative Farming Advisers and their Roles

The farm advisers are recruited as general or ordinary employees of co-operative society. Then they are to work for the first three to five months in other divisions of the society during which period they learn co-operative business and acquire the position of member farmers. When the orientation period is over they are assigned to farming guidance services. It is our principle that each adviser should be given a single or specialised field. In a short time they should become specialised farm advisers.

Their role or the field of work is two-fold in their specialised assignment; guidance on farm management and guidance on production techniques. Let me take the case of a poultry farming adviser. He is responsible for sixty poultry farms and his itinerary service includes prevention of disease and infectious diseases. He has also to look after the poultry houses and see that they are well maintained. That is called technical instructions. But for such farmers who would build their career solely with poultry business - such farmers generally have high and sometimes higher technical standard than advisers - an adviser would have to step into their farm management as a whole in order to assist in income improvement.

The poultry farming adviser is soon encountered with a question of why farmers are short of operational funds every year when they are making a profit in the poultry business. It was found that the farm management or household management as a whole had been carried with single book or in mixed accounts. Farm guidance service to assist members improve their farming management thus, lead to guidance on living improvement.

It was disclosed that profit accruing from the poultry business was found to be utilised as funds for electrification like purchasing washing machines, colour television etc. or to rebuild farm houses. It is therefore realised necessary that the member's kitchen be disclosed to co-operative advisers so that advisers can make proper suggestions and help him make a proper plan for his better living. Guidance aiming ultimately at realising better living of members should therefore not be confined to technical instruction of production and farm management alone but also it should cover household management of members.

As an example of intimate and intensive guidance let me present the livestock boo-keeping campaign. Under this campaign the co-operative guidance section is making members of poultry groups keep a book or record every day. Such record is submitted to regular meetings of the poultry group for examination and discussion among all the poultry members. Their performance of excellent management is presented also and it is taken as a model to be followed by others.

Records include such items like egg laying ratio, ratio of hen cage occupation and weight of eggs, etc. which are important for knowing monthly revenue and expenses of each farm. On that basis, a farming adviser can make instruction to further improve the position. Henceforth such farmers who do not keep records are even disqualified from the membership of the poultry group. That means the loss of the advantages which he was getting from the co-operative society such as itinerary visits by the adviser twice every week, prior consideration in case of using co-operative loan for his farming etc. By such intensive guidance the co-operative society is trying to enhance the level of poultry farming of the area as a whole.

7. Impact of Guidance Services

Since the volume of the business of the society was given in the Case Study, only the average volume of utilisation by a member was shown here. In keeping pace with the increase of business the society has also increased its membership. The factors of such success could be seen in what the society has done in the past five years.

In 1964, the society was designated as a reconstruction and a revitalisation society. But after three years the society could pay off the debt of \$ 5,200,000 thanks to the support and collaboration of the members.

In 1964, it was decided to place the primary importance on farm guidance activities as the restarting year of the society. As a result of this, the average amount of utilisation by a member had increased to \(\frac{3}{790,000}\) in 1968, from \(\frac{3}{3}\),000 in 1964. This remarkable increase is largely due to the reclamation of the paddy field and promotion of large-scale poultry farming and pig-raising which have brought the increase of income to farmers. For example, the first factor was that the society, which sold 90 per cent of rice in 1964, could sell 100% in 1968; the second factor was the expansion of paddy field by 70 hectares and the third factor was expansion of the livestock industry.

The tasks of a farm adviser of the society in reclamation were to arrange the financial facilities, the bulldozers and well drilling for irrigation. While arranging such services, the farm advisers have made efforts to call as many farmers as possible for the same purpose so as to reduce the cost. The implementation and strengthening of farm guidance activities of the society could ensure a better economic return to farmers and in turn the loyalty of the members towards the society has increased.

and Marketing Training Finance Government and Supply Central National Agri. of Agri. of Agri-Fed. of Agri. Co-ops. Financial Corporation Contral Union Association Mutual-Relief National cul ture Ministry Co-operatives Fed. of Agri. National Marketing National Purchasing for Agri. National Level Co-op. Bank Chamber ment Agri. policy Org. & Life Improve-Farm Guidance management cal Conf. Agri. Techni-Extension & Policy Dept. ORGINISATIONAL STRUCTURE Station Experimental Netional Agri. Economic Fed. Prefecture Union Pref. ment Govern-Pref. Federation Credit Prefecture Conference Mutual-Relief Pref. Agri. Pref. Fed. of Association Prefectural Level policy Management Farm Guidance life improvement Agri. cul tural Agriment Sec. Improve-양 FARM GUIDANCE Agri. Stantal Experime-Agri Branch culture, Horticulture. Dairy, seri-Agri. affairs Business Centre Branch Office & alon Egti. Country Level office IJ Branch Office Office AGRICULTURAL Officers Experts Agri.Experts District CO-OPERATIVES Society Town & Village Multipurpose Guidance Sections Supply and Fin. Marketing APPENDIX Experts Council Agricultural Village Administration Economic Section Association dericultural Agri. Mutual-Relief Leve groups members Specialised Member Farmers

APPENDIX 2.

BUSINESS PERFORMANCE OF THE CO-OPERATIVE SOCIETY (1961 to 1958)

| | 234,707 | 40,200 512,953 | 30,366 | 319,227 | 29,097 | 153,973 | 2,404 | 14,739 | 79,805 | 72 807 | 17,074 | | 511,150 | 141641 | 59,413 | 73,455 | 021, CO | 41,863 | 582 | 30, 100 37, 704 | , |
|-------------|------------------------------|-------------------|------------------|---------|------------|-------------|----------------|-----------|-----------|----------------------------------|-------------------|--------|-----------|----------|----------------|--------|----------------------|-------------|--------------------|--------------------|---------|
| | 198 ,39 7 234,010 | 413,064 | 28,520 12,817 | 280,060 | 26,760 | 156,951 | 3,312 | 13,997 | 7.867 | 17 031 | 0.57.0 | 74134 | 509,000 | 1,26,036 | 109,202 | 87,267 | 75,341 | 33,288 | 1,197 | 19,986 30,687 | • |
| ues 00 | 175,871 213,390 | 371,080 | 33,850 10,049 | 273,818 | 22,598 | 16,4036 | 3,307 | 5,517 | 0000 = 0 | 4/4/4 4/4/4 4/4/4 | 01-60 | 7,630 | 397,442 | 100,350 | 79,792 | 93,283 | 78,790 | 29,488 | 625 | 8,770 6,336 | 2 |
| Unit. 1,000 | 230,007 164,416 27,856 | 343,593 | 47,233 | 282,080 | 18,956 | 144,366 | 2,450 | 8,563 | 120,1 | 40,04 1,000 1,000 1,000 | 0,000 | 0,436 | 311,182 | (4,700 | 61,972 | 88,536 | 57,209 | 23,904 | 750 | 13,629 | |
| | 130,235 | 240,999 | 34,938 8,184 | 172,902 | 17,800 | 109,312 | 1,241 | 7,403 | 7,215 | 22,032 | 4, (43 | 5,555 | 241,651 | 63,781 | 53,178 | 54,350 | 41,290 | 17,290 | 1,054 | 9,850 858 |)) |
| | 81,035 108,438 | 160,065 | 33,637 | 101,527 | 16,852 | 72,811 | 1,059 | 3,440 | 921 | 0 (0) | 2,620 | 3,024 | 203,693 | 55,135 | 30,368 | 47,590 | 40,050 | 15,290 | 1,223 | 8,789 | 7.440 |
| | 52,390 92,390 | 85,930 | 31,445 | 92,190 | 16,329 | 57,364 | 890 | 9,540 | 718 | O (| 3,020 | 4,329 | 173,341 | 45,287 | 27,297 | 32,946 | 16,161 | 12,379 | 8,108 | 6,540 | 14,9023 |
| | 18,724 54,070 8,210 | 45,136 | 36,140 5,706 | 60,655 | 15,815 | 37,431 | 550 | 2,930 | 1,306 | O . | 0 | 2,623 | 113,570 | 33,548 | 20,287 | 14,314 | 20,145 | 8,498 | 1,895 | 3,721 | 11,302 |
| | deposit loan | Members' deposit | borrowing | supply | fertilizer | feed stuffs | ferm chemicals | machinery | seedlings | breeding stock | daily commodities | others | marketing |) Oju | wheat & barley | , | 50 12.00 13.00 | rte milk | Other cereals than | & ve | others |

(A) GENERAL PRINCIPLES FOR ORGANISING COMMODITY GROUPS

Objective:

Article 1

In order to enrich member farmers' lives through farming occupation, favourable bargaining position in agricultural markets has to be obtained, for which bulk production of standardised commercial produce is the precondition. For that purpose, a joint effort of the member farmers under the co-operative society is necessary. The general principles for organising commodity groups are provided with the above mentioned points in mind.

Nomenclature:

Article 2

Commodity group organised on the basis of this principle shall be called _____ Producers' Group of Ogawacho Agricultural Cocperative Society.

Conditions of Organisation:

Article 3

When more than the following number of members in each professional line, who are permanently engaged in that line of farming as his/her principal enterprise, wish to initiate an autonomous group activity at their own initiative, they shall organise a commodity group under the co-operative society by the decision of the board of directors. The minimum number at the time of inception of the commodity group shall be as follows:

1. Pig Rears' Group: more than 20 farmers with more than 50 pigs each.

2. Poultry Farmers' more than 20 farmers with more than 1000 hens each (target 3000 hens)

3. Broiler Farmers' more than 20 farmers with annual marketing of over 3000 poultry.

4. Dairy cattle more than 20 farmers with farmers' group: more than 5 cattle each

5. Horticulturists' more than 20 farmers with group: over 10 a field for single vegetable

more than 20 farmers with orchard area of over 0.3 hectares for fruit.

6. Grain farmers' when grain farmers (rice, group: beer barley etc.) join together.

Applicants for the groups who do not satisfy the above mentioned qualifications shall be temporarily treated as qualified in view of the previous Standing Rules of Commodity (livestock) groups.

Qualification of Member Commodity Group:

Article 4 Any member farmer who satisfies the minimum requirement of size mentioned above and who is ready to develop his farming occupation together with the co-operative society is eligible to organise or to join the commodity group. Affiliation to or withdrawal from the commodity group is his/her free choice.

Office-holders and Management of the Commodity Groups:

Article 5 Each commodity group shall elect, from among the members, a head of the group. The head shall be such a member as can make positive contributions to the group. The group activities shall be managed by the members' autonomous action within the framework of provisions of these general principles.

Relationship of the Commodity Group and Agricultural Co-operative Society:

Article 6 The commodity group shall be the only objective through which the co-operative society may provide farming guidance services.

Activities:

Article 7 The commodity group shall conduct the following activities:

- 1. Formulation of production planning
- 2. Standardisation of farming techniques
- 3. Formulation of marketing plan
- 4. Planning of joint purchasing of production inputs
- 5. Planning of procuring financial resources
- 6. Research and investigation
- 7. Other activities as necessity arises.

Contract for Exclusive Utilisation of Co-operative Services:

Article 8 The Commodity Group shall conclude a contract for exclusive utilisation of co-operative services for their marketing and purchasing needs.

Recording (Documentation):

Article 9 The group shall keep records of member lists, production plans, marketing plans and so forth.

Sub-Organ of the Commodity Group:

Article 10 The commodity group shall have a hamlet branch as its sub-organ.

Management Committee:

Article 11 The head of each commodity group shall be appointed to management committee and they shall participate in the planning and implementation of co-operative society's activities in related fields.

Expense:

Article 12 All the expenses of the commodity group shall be met by commodity group's membership fee and subsidy from the co-operative society.

Secretariat:

Article 13 The farming guidance section in the co-operative society shall undertake the function of secretariat to the commodity group.

Guidance and liaison services shall be provided by the co-operative employee in charge of the guidance service.

Standing Rules of the Commodity Group:

Article 14 Any Commodity group organised on the basis of these general principles shall have standing rules of its own.

Amendment and Abolishment of the general principles:

Article 15 Amendment and abolishment of these general principles shall be decided by the board of directors.

Supplementary:

The General Principles for organising Commodity Groups shall be effective from ______ onwards.

STANDING RULES OF POULTRY FARMERS' GROUP

Objective:

Article 1 The objective of the poultry farmers' group shall be to pursue common interest of members under their joint efforts through the co-operative society with a view to establish members' farm management on a firm basis and thereby to achieve improved living standard.

Nomenclature and Location of Office:

Article 2 The group shall, as its formal nomenclature, be called Poultry Farmers' Groups of Ogawacho Agricultural Co-operative Society.

The office of the group shall be located at the co-operative society.

Geographical coverage:

Article 3 The geographical coverage of the group shall be the same as that of the co-operative society.

Membérship:

Article 4 The group shall be organised by poultry farmers of the area who are willing to make positive co-operation with others in the group with a view to establish a firm management basis for poultry farming along the line of the objective provided in Article 1.

Affiliation to and withdrawal from the group shall be by autonomous decision of the poultry farmers.

Office-holders and their Term of Office:

Article 5 The group shall have the following office-holders. A term of office shall be two years and no one shall be prevented from being elected more than once.

Head 1 Deputies 2

Associates several

Remuneration:

Article 6 The office-holders of the group shall be remunerated.

Activities:

- Article 7 The group shall conduct the following activities with cooperation of the co-operative society:
 - i. Introduction of good stock poultry, matters relating to improvement of poultry farming management.
 - ii. joint marketing of eggs, joint purchasing of related inputs such as fertilizer and joint utilisation of related facilities etc.
 - iii. matters relating to fund for poultry management.
 - iv. research and investigation into matters relating to farming techniques and distribution (marketing).
 - v. Other matters necessary to achieve the objective.

Sub-Organ:

Article 8 The group shall have branches in hamlets (smallest geographical unit). Standing rules of the sub-organ shall be made after the Rules of the Group.

Recording (Documentation):

Article 9 The head of the group shall keep all the records of the group such as member list, poultry book, marketing plan etc.

Expense:

Article 10 The expenses of the group shall be met by the membership fee and subsidy from the co-operative society and others.

Qualifications of Members and Disqualifications:

Article 11 An applicant becomes a member when the application is admitted together with the application form. He shall be disqualified at the decision of the office-holders meeting in case the member's behaviour transgresses provision of rules.

Supplementary:

The standing rules shall be effective from onward.

(B) SYNOPSIS FOR IMPLEMENTATION OF SALARY SYSTEM FOR FULL-TIME POULTRY FARMERS

Objective:

Article 1

The objective of the salary system is to provide conditions to poultry farmers who are engaged in this line of livestock farming as their principal enterprise in accordance with Livestock Farming Development Plan of the Co-operative Society, under which they are assured a stable annual income despite sharp fluctuation of the producer price of eggs.

Pre-requisite for Beneficiaries (Qualification):

Article 2 Beneficiary shall conclude a long-term contract with the society under which he/she is required to keep a certain minimum number of hens constantly. The number of hens to be kept by the beneficiary shall be decided by the president of the co-operative society.

Method of Implementation:

Article 3 The co-operative society shall transfer the proceeds of the beneficiary (contract member) arising from egg, dung, and aged poultry into his/her overdraft account for the livestock operational fund after deduction of incurred costs. It shall be done so whatever the prices (marketing prices) may be.

Payment:

Article 4 On a certain day of every month, 0.50 yen per hen shall be transferred from the said account to his/her ordinary deposit account. The number of hens shall be that which is provided in a separate affirmation form.

Duty:

Article 5 The beneficiary (contract member) shall keep the number of hens constantly, which is provided in the contract, during the period of contract.

Enforcement:

Article 6 The co-operative society shall be able to enforce the introduction of a contracted number of hens into the contract member's farm.

The date of bringing in shall be decided with consultation of the member.

Stock-taking:

Article 7 The co-operative society shall make a member carry out stock taking (checking the number of hens) twice a year and submit an account of revenue and expenditure.

Obligation of Contract Member:

Article 8 The contract member shall make an endeavour to improve the management techniques of poultry farming.

Facilities:

Article 9 The co-operative society shall recognise the contract member as a full-time poultry farmer (member of full-time poultry group) and shall provide him/her with key facilities and services.

Collateral:

Article 10 The co-operative society shall be able to request a contract member to present a collateral against his/her overdraft in the account of livestock operation fund as deemed necessary.

Affiliation to Guarantee Association:

Article 11 The contract member shall affiliate himself/herself to livestock price guarantee association in order to develop the engaging line on a stable basis.

Change in the Number of Hens:

Article 12 The contract member cannot change the number of hens unless the term of contract is over.

Penalty:

Article 13 The system shall be operated on a basis of trust between the co-operative society and the contract member, henceforth it has no penalty provision.

Amendment and Abolition:

Article 14 Amendment and abolition of the provision of this synopsis shall be decided at the board of directors.

The synopsis shall be effective from _____ onwards.

CONTRACT FOR SALARY SYSTEM FOR FULL-TIME POULTRY FARMERS

I shall conclude contract for salary system for full-time poultry farmer with the Ogawacho Agricultural Co-operative Society in full agreement and affirmation of the following provisions:

- Article 1 I shall conclude this contract with _____ hens in accordance with the Article 6 of the Synopsis for Implementation of Salary System for Full-time Poultry Farmers.
- Article 2 I shall promise to keep the contracted number of hens constantly and in case there arises shortage no complaint shall be made against the forced introduction of lacking number of hens by the co-operative society.
- Article 3 I shall entrust to the co-operative society marketing of eggs, aged poultry and dung under full consignment.

- Article 4 I shall make no objection to the co-operative society if the society recovers outstanding balance of loan in my overdraft account of livestock at the end of term (or upon maturity) by proceeds accruing to me.
- Article 5 I shall agree to presentation of collateral at the time of concluding overdraft contract for livestock account as required.
- Article 6 The term of the contract shall be made one year and in case no side proposes amendment or nullification it shall be extended to next year.
- Article 7 The contract shall be made both in original in copy, either of which shall be kept by contracting parties.

Year Month

Date

Farmer's signature:

INTRODUCTION

Soon after India achieved Independence, Planning Commission was set up under Government of India's resolution dated 15th March 1950. The resolution emphasised that planning in the country was intended to "promote a rapid rise in the standard of living of the people by efficient exploitation of the resources of the country, increasing production and offering opportunity to all for employment in the service of the community". This was in pursuance of the Directive Principles of State Policy which seeks to ensure that the "State shall strive to promote the welfare of the people by securing and protecting as effectively, as it may, a social order in which justice — social, economic and political — shall inform all the institutions of the national life".

2. India is the seventh largest country in area and second most populous in the world. Its geographical area is 3.28 million square kilometers. The estimated population in October 1968 is 527 million which has been increasing at the rate of around 2.5 percent annually. Five out of every six persons live in rural area. Three out of every four persons working in the rural area depend on agriculture for their livelihood. The cultivated land per capita is less than one-third hectare. The average size of a land holding is about 2.6 hectares; and two out of every five holdings are of less than an hectare in size. Agriculture provides nearly one-half of the national income and supports 70 percent of the working force. However, productivity in agriculture, on an average, continues to be low and this is reflected in widespread under - employment.

About three-fourths of the cultivated land is used for food crops and the rest for cash crops. But the total value of food crops is about twice that of cash crops. The main food crops are rice and wheat. Rice takes up about 23 percent and wheat 8 percent of the cropped area. The main cash crops are oil-seeds, sugarcane, cotton and jute. A little less than 20 percent of the area under crops is irrigated. On an average, two out of every five acres of irrigated land get water from canals, one from tanks and the remaining two from wells and other sources. The use of chemical fertilizers has been spreading in recent years. In 1964-65, the consumption of ferti lizers was as low as 3.49 kilograms of nitrogenous fertilizers (in terms of N) and 0.95 kilograms of phosphates (F₂0₅) per hectare of cropped land. In 1967-68, the yield per hectare was 1031 kilograms of rice, 1111 kilograms of wheat and 787 kilograms of all foodgrains taken together. In order to raise the level of production, various measures have been taken from time to time. In the new agricultural strategy, emphasis is laid on high yielding varieties of paddy, wheat, jowar, sorgham, maize and bajra (pearl millet).

A GRICULTURE EXTENSION -A RETROSPECT

- 4. The basic idea of intensive development aiming at reaching every family in the countryside and at securing coordinated development of rural life as a whole, is not a new concept. It has been tried even before the National Extension Movement in term of the Community Development Programme was launched on October 2, 1952. A pioneering effort was made by Mahatma Gandhi through his constructive programme which emphasized intensive programmes of agricultural and animal husbandry development in the village, maximum use of local manurial resources, introduction of the basic system of education which enabled the children to learn through work, and to acquire skill and dignity for manual labour. Spinning and weaving formed integral features of the village economic programme.
- In 1921, Rabindranath Tagore started the rural reconstruction work in the villages attached to his university "Vishwa Baharati" with cooperative, village health scheme and revival of village crafts, promotion of education etc. Tagore encouraged people's participation and an integrated approach in the rural uplift work. In Kerala, Dr. Spencer Hatch, a missionary launched his programme in 1921 round the demonstration centres, training workers and rural uplift work based on self-help and faith in God and fellowmen. The experience gained in rural reconstruction work in Baroda (Gujarat) as early as 1928 under the guidance of Mr. V.T. Krishnamachari, offered guidelines to introduction of the programme of community development in free India. In the early thirties, Mr. F.L. Brayne, District Magistrate and Collector of Gurgaon (Punjab) distinguished himself in rural development work. Brayne's work in Gurgaon district contributed constructively to the community development thinking in free India.
- 6. With the advent of independance in 1947, a village development scheme popularly known as "Firka" (20-25 villages Development Scheme" was introduced in Madras. The object of the scheme was to attack the rural problem as a whole as well as in several parts through shortterm and long-term plans. The short-term plan was for the development of rural communication and rural water supply, formation of panchayats, organisation of cooperatives covering every village, rural sanitation, etc. The long term plan was designed to further the attainment of selfsufficiency through agricultural, irrigational and livestock improvements and development of cottage industries. In 1948, Etawah Pilot Project in Uttar Pradesh was started on the basis of the initial thinking in action provided by Albert Mayer and Horace Holmes in this experiment. The programme laid special emphasis on agriculture which was the vital industry of India and needed to be tackled with a regular extension service specially trained for the purpose. Mention may also be made of the agro-industrial development experiment carried out for the displaced persons at Nilokheri (Haryana) which paved the way for the adoption of an agro-industrial economy for the future pattern of development of rural areas. In 1951, Paul Hoffman, President of the American Ford Foundation decided to initiate a village development programme on the lines of Etawah in 19 pilot projects. A scheme of training centres for the training of extension personnel was also agreed to. Earlier in 1950, the Fiscal Commission of which Mr. V.T.Krishnamachari was Chairman, recognising the significance of agriculture in

India's economy, suggested a comprehensive programme for rationalisation of agriculture and drawing away surplus labour force from land into industries. The Commission also observed that " the greatest need at present in India is an extension service with the object of bridging the gap between research and the practices of producers".

7. After a careful review of the various efforts made in the direction of grow more food and rural development, the Grow More food Enquiry Committee which reported to the Government of India in June 1952, inter alia, recommended that there should be organised a National Extension Movement. The First Five Year Plan 1951-56, made definite proposals on "Community Development and Rural Extension" and the N.E.S. blocks were started on October 2, 1952. This scheme has since then been accorded a significant place in Five Year Plans in the name of Community Development and Panchayati Raj.

INTENSIVE AGRICULTURAL DISTRICT PROGRAMME

- 8. "The Intensive Agricultural District Programme (IADP) was built the country had made in the First and Second Five upon the progress Year Plans. In that period of substantial progress, more land was brought into use, irrigation was expanded, a national extension and community development service was set up and certain other measures were taken including the beginning of more modern ideas and methods in the field of agricultural education and research". For instance, the production of foodgrains which was 54.87 million tons on the eve of the First Plan in 1950 - 51 increased to 80.79 million tons at the end of the Second Plan. Despite this progress, food production was unable to meet rising demands because of the higher than estimated increase in population and also rise in per capita income. The population increased from 361.1 million in 1951 to 439.2 million in 1961. The per capita income at 1948-49 prices increased from Rs.247.5 in 1950-51 to Rs. 293.3 in 1960-61. It was in this context that a team of agricultural experts sponsored by the Ford Foundation undertook a study of the Food production problem in India in 1951. In its report entitled "India's Food Crisis and Steps to Meet it" the Team, inter alia recommended that instead of spreading the efforts on a uniform basis throughout the country, intensive efforts for production should be made with a combination of man-power and resources, in selected areas which had the optimum conditions for stepping up agricultural production. To give a precise shape to this recommendation a second team of agricultural experts, sponsored by the Ford Foundation visited this country the same year. It suggested a "Ten Point Pilot Programme" for increasing food production. The Programme was broadly as follows:
 - Adequate farm credit, based on production potential, made readily accessible through strengthened service cooperatives,
 - ii. Adequate supplies of fertilizers, seeds, pesticides, etc. made readily accessible through service cooperatives.
 - iii. Price incentive to participating cultivators through assured price agreements announced two years in advance,

- v. Intensive educational, technical and farm management assistance made available in every village,
- vi. Participation of all interested cultivators, both big and small, in direct individual farm planning for increased food production,
- vii. Village planning for increased production including livestock improvement and strengthening of village organisations such as cooperatives, panchayats etc.
- viii. A public works programme using local labour to undertake drainage, bunding, minor irrigation etc.
 - ix. Analysis and evaluation of the programme from the day of its initiation, and
 - x. Coordination on a priority basis at the village, block, district, state and central levels of all resources and manpower.
- The programme was introduced in selected favourable areas with maximum irrigation facilities and minimum natural hazards. It was decided in 1960 to launch the programme in one district of each State and now the programme is in operation in 21 out of 337 districts. These include the districts of Ludhiana (Punjab) and Aligarh (Uttar Pradesh) which have been studied for the purpose of this paper. These districts can be broadly grouped into the following two categories. Districts where maximising farm producation of major selected crops is aimed at; and where emphasis is laid on mixed farming. The programme recognises the special agro-economic characteristics of the area and attempts to increase output and income of the participants. The cooperative societies have been assigned a crucial role in the IADP in providing timely and adequate credit based on production potential, in the supply of inputs such as fertilizers, seeds, pesticides and insecticides, implements, etc. in arranging for the marketing of agricultural produce and in promoting the processing of agricultural produce and other allied activities for increasing production and ensuring higher income to the cultivators.
- 10. The achievements of IADP during eight years of its working have been evalued by the Expert Committee on Assessment and Evaluation of the Intensive Agricultural District Programme. Its fourth report entitled "Modernising Indian Agriculture" for the period 1960 68 interalia, brings out the following:
 - 1. " in the seven districts which have had the longest experience in the programme, the production of three crops went up as follows: rice by 38 percent, maize by 100 percent and wheat by 240 percent. Inputs increased proportionately.
 - 2. Large, medium and small farmers, almost without exception, welcomed the programme and wanted more of it in the future.

- 3. The time has come to move from the limited focus in the IADP districts to an Intensive Agricultural Modernisation Programme geared to the potential of the farmers in all districts.
- 4. The increasing availability of modern technology and the need to adopt it locally to bring about modernisation of agriculture is creating the need for drastic administrative changes in favour of more local direction of agricultural programmes;
- 5. Staff competence to replace the traditional "recipe" approach by the scientific "farm management" approach is essential for modernising agriculture."

PERSONNEL PATTERN

11. Extension is an integral part of the planning both at the central and state levels. As an educational process, it has necessarily to be supported by technical guidance, supplies and services. This is being done through the additional administrative staff and subject matter specialists in addition to the normal functionaries at various levels. For the provision of extension services and implementation of community development programmes, the whole country is divided into 4725 blocks. These blocks have been set up in a phased manner over a period of time. In each block, the following technical extension functionaries, as a team of extension workers under the leadership of Block Development Officer, are provided:

| 1. | Block Development Officer | 1 |
|-----|-------------------------------------|-----|
| 2. | Extension Officer, Agriculture | 1 |
| 3. | Extension Officer, Animal Husbandry | 1 |
| 4. | Extension Officer, Cooperation | 1 |
| 5• | Extension Officer, Panchayats | 1 |
| 6. | Extension Officer, Rural Industries | 1 |
| 7. | Overseer, Public works | 1 |
| 8. | Social Education Organiser | 1 |
| 9• | Lady organiser | 1 |
| 10. | Village level workers | 10 |
| 11. | Lady workers | . 2 |
| 12. | Stockman, veterinary | 2 |
| 13. | Medical officer | 1 |
| 14. | Compunder | 1 |
| 15. | Sanitary inspector | 1 |
| | | |

- 16. Lady health visitor
- 17. Midwives

1

- 12. Under the scheme of Intensive Agricultural District Programme, the existing staff has been strengthened at the district block village level by providing subject-matter specialists amongst others at the district level, The normal and additional staff in the IADP districts of Ludhiana and Aligarh has been shown in the Appendix.
- 13. In addition, staff have been provided for research studies, assessment and evaluation, transport, up-keeping and maintenance and office. In the case of Ludhiana, the staff meant for Agricultural Workshop and Soil Testing Laboratory stand transferred to the Punjab Agricultural University, Ludhiana.
- 14. Besides the Government officials, the employees of cooperative institutions e.g. service cooperative, cooperative banks, marketing societies etc. are also directly involved in agricultural development programme. The participation of farm leaders is ensured through direct involvment of progressive farmers and through their organisations like cooperatives, panchayats, farmers forum, tonnage club, etc. The contribution of the Punjab Agricultural University and its staff in farm extension work in Ludhiana district has been excellent. The U.P. Agricultural University, Pant Nagar, has started organising programmes in this direction in Aligarh district and also in other selected areas. The cultivators have appreciation for the interest the university was taking in farm development programmes at the village level.

SPECIAL TRAINING FACILITIES

The extension personnel are given training at the training institutions established specially for the purpose. The village level workers undergo an integrated training course for two years in village level workers training centres before joining service. During service they receive three months refresher course training. Some of them receive one year's intensive training with particular emphasis on agricultural subjects in upgraded training centres for village level workers. The cooperative extension officers are trained at the Cooperative Training colleges and cooperative sub-inspectors / supervisors at the cooperative training centres. The orientation of the Block Development Officers, social education organisers and other extension officers, district heads of technical departments, non official leaders etc. is arranged at the orientation and study centres. The key administrative and technical staff of Central Ministries and State Governments, Members of Parliament and Members of State Legislature, Chairman of Zilla Parishads / Panchayat Samities, district panchayat officers, and trainers of various training institutions are given orientation at the National Institute of Community Development. The Agricultural Universities prepare men to act as Agricultural Extension Officers. The IADP staff also undergo training and

orientation in the said training institutions. The senior personnel of cooperative department and institutions are trained at the Vaikunth Mehta National Institute of Cooperative Management.

16. At the project level, special conferences and workshops are organised to acquaint the extension personnel with the latest developments. The progress and problems in the field are also reviewed with a view to exchanging experiences. Selected progressive farmers are also invited to participate in these events. Demonstrations and study tours form an integral part of the training programme. The extension personnel as well as the farmers take advantage of these facilities. Mass communication media like radio, newspapers, etc. are increasingly used to educate the workers and participants.

LUDHIANA PROJECT

- 17. The district of Ludhiana has ten extension blocks consisting of 988 inhabited villages. The total population is estimated at over 1.1 million consisting of estimated 200 thousand families. The rural population accounts for about 783 thousand, and urban 323 thousand. There are about 40,000 farm families with a population of 210 thousand. 95.5 percent of the rural population has been covered by cooperatives as against 73 percent in 1961 62 when the IADP was launched in the district. Out of the total area of 375 thousand hectares, the area under cultivation is 314 thousand hectares. About 73 percent of the total cropped area is irrigated out of which 85 percent by minor irrigation works i.e. well, pumping sets and tubewells and 15 percent by government canals.
- 18. The average size of operational holdings in the district is about 5.6 hectares. 43.6 percent of cultivators operating up to 4 hectares holding have a command over only about 1/5th of the area. 38.8 percent cultivators having 4.1 to 8 hectares holding operate 2/5th of the area. 11.1 percent cultivators of 8.1 to 12 hectares have 1/5th of the area and the remaining 6.5 of the cultivators operate 1/5th of the total area. 77 percent of the total area under operational holdings is owned by the cultivators and 23 percent of the area taken on lease or on share cropping basis. 40-50 percent of owner cultivators under all categories of holdings take land on lease or on crop share basis.
- 19. 2850 tractors were available with cultivators in August 1968.
 7.4 percent cultivators or one farm-family out of every 14 families possess a tractor. To overcome labour shortage, improved agricultural implements of various types are increasingly used. In 1968-69, 1027 seed-cum-fertilizer drills were distributed. In addition, disc harrows, 400 tractor driven drills, groundnut digger, etc. are owned by farmers. 1/3 cultivators operating up to 4 hectares holding have their own tubewells. 3/5th of the cultivators out of 4.1 8 hectares holding have tubewells. 95% cultivators above 12 hectares holdings have their own tubewells.

- Wheat, maize, groundnut, cotton and sugarcane are the major crops of the district occupying 43%, 15%, 17%, 3% and 2% of the total cropped area respectively. With the emphasis laid on agronomic prac tices like suitable sowing time, recommended seed rate, fertilizer doses, seed treatment and timely supply of production inputs, provision of increased irrigation facilities, the average yield of wheat per hectare increased from 15.58 quintals in 1960 - 61 to 34.49 quintals in 1968-69. The results further show that while the rate of annual increase of wheat production in the first five years was 20%, it increased to about 37.9% during the next three years. The total area under wheat cultivation also increased from 80.5 thousand hectares in 1960-61 to 207.3 thousand hectares in 1968-69. Even before the introduction of high-yielding varieties programme in Ludhiana district in 1966-67, the total production of wheat had gone up from 169.1 lake metric tons to 338.2 tons i.e. hundred percent increase. This was due to increase in area by 70.4 percent in 1965-66 as against 1960-61 as also the average yield per hectare from 15-58 quintals in 1960-61 to 22.31 quintals. However, the outstanding results came with the introduction of HVP in 1966-67 when the total production doubled within a short period of 3 years i.e. 338.2 thousand metric tons=. to 722.5 thousand metric tons: showing a total increase of 113 per cent. This was again due to increase in the area by 51.1% and 54.6% on the average yield. The main contributory factor was the high yielding variety programme which started with a humble beginning of 70 hectares covering 100 farming families in 1955-56 covered 187,000 hectares in 1968-69 and 32,000 families and adoption of full package of practices as recommended in the IADP District. Maize is also an important food crop of this district covering an area of about 13 percent of the total cropped area. Major emphasis has been to replace the local maize with high yielding maize hybrids and composite varieties. Average yield of maize has increased by more than 100 percent during the last 8 years. The total production of maize increased by nearly four times which is a very spectacular improvement. Area under local maize is being steadily replaced by high-yielding varieties. These achievements in wheat and maize have been illustrated through charts in the Appendix.
- 21. The number of all types of cooperative societies in 1961 62 was 1672. With the transfer of the Industrial cooperative societies to a separate wing during Third Plan, the number was 1442 at the end of 1965-66. The number of societies in 1968-69 was 1594 including 135 women societies. The number of agricultural credit societies is 968 (as on 30.6.1968). There are also 608 other types of village cooperative societies. The other cooperative institutions operating in the district are one central cooperative bank with 11 branches, three primary land development banks, nine marketing societies with 465 fertilizer sales depots and five other types of cooperative societies. The total membership of all kinds of societies, rose from 134 thousand in 1961-62 to 274,000 in 1968-69. The membership of agricultural credit service societies was 151 thousand as against 104,000 in 1961-62.

- 22. The credit needs of the farmers are not through the agricultural service/credit societies. With the introduction of crop loan system since kharif 1967, significant changes have been brought about in the credit system. The crop loan system is production oriented ensuring utilisation of credit for production purposes. Emphasis is laid on high yielding varieties programme. The loan is strictly advanced on the basis of crops to be grown by the farmers. As against Rs 10.1 million and 2.5 million as short-term and medium-term loans respectively ending June 1961 the agricultural societies advanced Rs. 44.8 million and Rs. 2.7 million as short- and medium-term loans ending June 1968. The advances from the financing banks to the agricultural societies in 1968 -69 were Rs.83.8 million and Rs. 19.9 million on account of short-and medium -term loans respectively. The average amount of loan per member was Rs. 302 in 1967 68 as against 104 in 1961-62.
- With the introduction of crop loan system, the entire ferti-23. lizer work has been taken over by the cooperatives. This was earlier given by the Agriculture Department through taccavi loans. Over a million tons of nitrogenous, 421 thousand tons phosphetic and 34,000 tons pottasic fertilizers were supplied to farmers during 1960-61. The value of short-term credit in the form of chemical fertilizers was Rs. 9.5 million during kharif 1968 and Rs. 35.5 million during rabi 1968 -69 as against Rs. 6.4 million during kharif 1967 and Rs. 18.7 million during rabi 1967-68. The value of total sales of chemical fertilizers during 1968 -69 (ending March 1969) including cash sales was Rs. 58.3 million. Incidentally the consumption of fertilizers for cultivated area increased from 8 kilograms per acre in 1960/61 to 189 kilograms in 1968-69. The farmers have been conscious of the use of balanced fertilizers for their crops. Improved seeds distributed during 1968-69 were 11,331 quintals as against 4939 quintals in 1960 -61

MINOR IRRIGATION

- 24. Private minor irrigation works particularly tubewells/pumpsets etc. which account for 85 percent of the total 73 percent of the irrigated area in the district have helped a lot in the drive for food production. In recent years, cooperative institutions like land development banks, Agricultural Refinance Corporation and Central cooperative banks have given liberal help for the vital programme. Farmers have also contributed from their own sources. During 1968-69, cooperative institutions gave a total amount of 8.86 million rupees. In 1968-69 in addition to the usual banking facilities, Agricultural Refinance Corporation gave 1.9 million rupees for a special scheme in 100 villages on an area basis.
- 25. The cooperative marketing societies marketed commodities worth about Rs. 141 million during 1968-69 as against Rs. 1.7 million in 1960/61. The processing of agricultural produce has started only since last year. 117 quintals worth about Rs.7000 were processed during 1968-69. In the beginning of IADP, there were 44 owned godowns and 219 hired godowns as against 150 owned and 672 hired godowns in 1968.

- 26. With level of agricultural development of the said order achieved in the district, a stage has now come when the staff pattern sanctioned for the district needed suitable changes. At present, the basic qualification for the subject matter specialists is B.Sc (Agriculture) but all the subject-matter specialists at headquarters are M. Sc and the one in Agronomy is Ph. D. At present all of them are in Class II in the scale of Rs. 350-950. To get better qualified persons with minimum qualification of M.S.c it would be better to have them in Class I.
- There is need for at least three crop specialists for wheat, maize and groundnut. It may, however, be difficult for the State Government to sanction three more specialists in addition to the ones already available. As an alternative the posts of one specialist in agronomy and one in seed development may be surrendered and three crop specialists be instead provided. This would, in effect, mean addition of one more subject-matter specialist. There is also the need for a better qualified person for farm management.
- 28. The Deputy Registrar, Coop Societies, Ludhiana, has two assistant registrars to help him. In view of the intensive work required to be done, one more Assistant Registrar with supporting staff was needed so that one Assistant Registrar may be availed for each of the three sub-divisions in the district. The volume of work also justified three more inspectors to assist the three Assistant Registrars.
- 29. The project officer has not much to do with the minor ir rigation works as this is looked after by the district agriculture engineer (boring) who works directly under the Director of Agriculture and the Agricultural Production Commissioner. All borings are done by the private contractors and no work is done by the depart ment. The report of the Expert Committee, "Modernising Indian Agriculture" has recommended that all the staff at the district level including minor irrigation should be put under the charge of the project officer in IADP districts to effect better coordination. As private minor irrigation is looked after at the headquarters by the Director of Agriculture or the Agricultural Production Commissioner there should be difficulty in placing the district agriculture engineering under the project officer.
- 30. The coordination at the district level with all the development departments is effected by the Deputy Commissioner who is the chairman of the district coordination committee. All district officers and block development officers etc. are the members of the Committee. However, there is need for further strengthening the hands of the project officer by giving him ex-officio status in the allied development departments as already done in the case of the project officer, Aligarh. This would also be in conformity with the recommendations of the Conference of the Key Personnel of IADP.

- At the state level, the staff are trained for two days in 31. each season at the Agricultural University in the workshop of agriculture officers along with other officers of the State and the neighbouring states, district agricultural officers, deputy directors of agriculture and subject - matter specialists etc. Subject matter speci alists at the district level, district agricultural officers, block development officers and ADOs (agriculture and cooperatives) receive training for two days before each season. This is also done at the university mainly for technical and administrative purposes. At the block level, BDOs, AEOs, (agriculture and cooperatives) village level workers, cooperative inspectors again receive two days training before each season. The project officer, subject-matter specialists, DAOs, Deputy Registrar, Cooperative societies gave training. The project officer visits each training camp and simultaneously two blocks are covered.
- The village level training is organised for the farmers. There are 150 village level workers and 150 training camps are held every season. 40 to 50 farmers attend each camp. Circulars regarding food production campaigns are distributed and the training is given by the BDOs, AEOs (Agrl. & Coops.) and one subject matter specialist. The project officer makes round of such training camps himself and so does the Deputy Registrar. The farmers also go round and see the demonstrations. 15 to 20 cinema shows are organised in all the blocks. The progressive farmers visit the university on their own. The training given at these training camps was found effective and satisfactory.
- The cooperative staff, however, does not receive as much intensive training as was required for the cooperative sector which is involved in a very large measure in agricultural production. Almost all of them have not undergone anycourse other than the basic course. There is need to depute them to suitable orientation and higher level training course. New institutions like the Agricultural Refinance Corporation and the Land Development Banks are playing a vital role and it is necessary to understand their working at the state, district and village level. The training camps organised for the project staff should, therefore, be for four days so that intensive orientation may be given in recent developments in the field of cooperation. There was room for operational research in cooperative subjects on the same pattern as is done in the case of agriculture by the Indian Council of Agricultural Research and Indian Agricultural Research Institute and agricultural universities. Advantage could be taken of the VL Mehta National Institute of Cooperative Management at Poona and the Cooperative Training College, Patiala, in this direction.

ALIGARH PROJECT

34. Aligarh is one of those districts which were selected for implementation of the "IADP" in 1961-62. It is in Uttar Pradesh. The district has an area of 502,000 hectares divided into 12 blocks

and 1775 villages. There are about 422 thousand families with a population of 2.1 million out of which 154 thousand are farm families. The entire district is covered by a little over 550 primary agricultural credit societies. About 120 thousand farm families are within the fold of cooperatives. In addition, there are 45 cooperative irrigation societies, 23 cooperative farming societies, 7 cooperative marketing and processing societies, 7 branches of the cooperative land development bank and a central cooperative bank. The Central Cooperative bank is the main federal financial institution in the district for short and medium term agricultural credit. The branches of the land development bank provide the long-term loans.

- 35. The area under cultivation is of the order of 388,000 hectares. Of this, 102,000 acres are under irrigation. 25% of the farm holdings were below 1 hectare, 23% between 1 and 2 hectares; 29% medium between 2 and 4 hectares and the remaining 23% are of more than 4 hectares. Large sized holdings accounted for 55% of the cultivated area, medium sized 29% small 12% and very small holdings accounted for 4% of the cultivated area.
- 36. The major crops grown in the district are:
 - 1. wheat in rabi season accounting for 168,000 hectares;
 - 2. maize in kharif season accounting for 114,000 hectares;
 - 3. bajra in kharif, accounting for another 83,000 acres. Peas, barley, sugarcane, potatoes etc. are also grown to some extent. Since the introduction of the programme, there has been some increase in area under the two major food crops maize and wheat.
- 37. The progress in agriculture during the period of the IADP programme is given in the following data:

| | | 1961-62 | 1967–68 |
|----|---|---------|---------|
| 1. | Total gross cropped area lakh hectares | 4.19 | 6,00 |
| 2. | net irrigated area, lakh hectares | 2.12 | 2.42 |
| 3• | multiple cropping pattern lakh hectares | 1.42 | 2.11 |
| 4. | production of foodgrains, lakh tonnes | 3•57 | 5.61 |
| 5• | improved seeds distributed | 855 | 14,990 |

6. Chemical fertilizers distributed, tons:

| | a. Nitrogenous | 1,588 | 25,395 |
|----|--------------------------------------|------------|-----------------------|
| | b. Phosphatic | 343 | 11,594 |
| | c. Potassic | - | 1,616 |
| 7. | No of pumpsets | 28 | 2,265 |
| 8. | No of tubewells: a. State b. private | 375 n•a | 470 5 , 059 |
| 9. | Tractors in the district | n.a | 74 |

There has been considerable improvement in respect of increase in irrigation potential, in use of chemical fertilizers and in utilisation of improved agricultural implements.

- 38. Wheat consititutes the major crop of the area. The average yield per hectare of wheat, in 1961-62, was of the order of 12 quintals which gradually rose to about 18 quintals by 1967 68. Maize, the next important crop also showed a similar increase from about 5 quintals in 1961-62 to about 10 quintals in 1966 67. In respect of high yielding varieties of crops the yield was far better. Even though in the demonstration plots, the yield per hectare of Mexican wheat was of the order of 25 to 30 quintals, the average increase per hectare was around 18 to 20 quintals.
- The membership of cooperatives increased from 97,000 in 1952 to 126,000 by 30th June 1968. During the same period the share capital collected by these societies from cultivator members increased from Rs. 3.6 million to about Rs.5.2 million and deposits from Rs. 0.7 million to Rs.1.8 million. Cooperatives were initially providing loans mainly in cash based on the assets of the members. In 1961 - 62 the societies distributed Rs. 12.9 million as shortterm loans to cultivators. Of this, Rs. 12.7 million were in the shape of cash. These were not entirely related to production programmes. In 1967, crop loan system was introduced in the district. Cooperative loans are now entirely related to production potential and repaying capacity. In 1967-68 the total quantum of short - term loans disbursed was of the order of Rs.6.8 million, of which Rs.3.2 million was in the shape of kind loans, mostly for fertilizers. One of the reasons for reduction in the quantum of credit supplied by cooperatives was the increase in default at the primary level. About 50% of the members were stated to be defaulters. The cooperatives were also giving medium -term loans, for periods not exceeding 5 years, for purchase of bullocks, bunding, purchase of pumpsets, setting up of persian wheels etc. In 1961 -62, the medium-term loans provided by the cooperatives for such purposes was of the order of Rs. 1.4 million. The land development bank has been increasing its business of long-term loans for minor irrigation purposes. In 1961-62 the long - term loans issued by the land development bank was negligible being of the order of Rs. 5,000. In October 1965, Government taccavi for long-term loans was withdrawn completely and the whole district came under land development bank's scheme for long-term loaning. Loaning by the bank became popular and total loan roseup to to Rs.8.5 million by 1967 - 68.

During 1969-70, the bank proposes to disburse 9.6 million. As a result, the cooperatives have gradually stopped their business in respect of medium-term loans for minor irrigation purposes, leaving the field to the land development bank.

- 40. Since 1964 65, government has also been providing taccavi loans to cultivators, who are non members, mainly for purchase of chemical fertilizers. In 1967-68, this was of the order of Rs. 0.5 million.
- The district is covered by seven cooperative marketing societies. Their membership increased from 38,000 in 1961-62 to about 47,000 in 1968, and the share capital collected by them increased from Rs. 0.4 million to Rs. 0.8 million during the same period. The value of agricultural produce handled by these societies increased from Rs. 5.8 million in 1961 62 to about Rs. 7.8 million by 1968-69. While very little processing activity was undertaken by cooperatives in the district in 1961-62, they processed agricultural produce worth Rs. 2.5 million in 1968-69. Efforts were also made to link credit with marketing. While in 1961-62, only 2% of the cooperative credit was recovered through the marketing cooperatives by 1967-68 it has gone up to 22%.
- It was initially envisaged that the village level workers would prepare farm plan for each cultivator, indicating therein the improved practices to be undertaken, the time such practices are to be undertaken, the value of inputs, the income from the farm and his credit needs. Such a farm plan was to be the basis for provision of agricultural credit by cooperatives. Later it was found that the then existing strenght of farm guidance workers at the field level, would not be sufficient to prepare a farm plan for each farmer. Farm plan as a credit document had, therefore, to be discarded and instead villagewise registers were prepared showing the requirements of the farmers. During the years 1966-68 input cards were given to the participants of high yielding varieties programme on the basis of which all inputs like seed, fertilizer and credit were supplied. This system too proved to be cumbersome and time consuming and with easy situation for fertilizers it was given up from kharif 1968. However villagewise lists are prepared by the village level workers showing the requirements of farmers for inputs for the high yield programme, one copy of the list goes to the Block Development Officer, another to the agricultural seed store and the third to the cooperative supervisor.
- The crop loan system introduced by the cooperatives later in 1967, enabled the member farmer, irrespective of the fact whether he has a farm plan or not, to obtain his credit needs, on the basis of a scale of finance, per acre, prescribed for each crop, in advance, every year. The farm plan, therefore, remained only as an extension tool. The number of farm plans prepared, however, increased from 9,000 in the district in 1961 62 to about 109,000 by 1966-67.

- About 300 to 400 farmers are under the charge of a village level worker. He has also to devote some time for small savings, family planning and such other programmes. As such he is not able to follow up effectively the farm plans. Once the farm plan is prepared, the cultivator has been making his own judgements and effecting revisions without prior consultation of the farm guidance worker who does not get enough time for a close follow up for all the participants.
- With the introduction of the programme, a project officer 45. was appointed to coordinate and implement the programme at the district level. He is assisted by an Assistant Project Officer, subject matter specialists in agronomy, plant protection, soil conservation, animal husbandry and cooperation. A soil testing laboratory, a seed testing laboratory, an implements workshop, a section for water use and management, an information unit, a research unit, an assessment and evaluation unit etc. with the necessary staff have been provided. Besides the project officer also acts as the district planning officer and in this capacity is able to have effective control and supervision over the Block develop ment officers and the block staff including village level workers. He has also been delegated the powers of regional officers in the departments of agriculture, cooperation and community development. This enables him to coordinate the work of most of the development departments at the district level. Coordination Committees with District Magistrate as chairman at district level and Agricultural Production Commissioner at the State level exist for coordination and implementation of the programme. In each Block the staff strength increased in the following manner:

| | 1960-61 | 1968 -69 |
|---------------------------------|---------|----------|
| l. Block Development Officer | 1 | 1 |
| 2. Extension Officer, Agrl. | 1 | i |
| 3. Extension Officer, Coopn. | 1 | - |
| 4. Veterinary Assistant Surgeon | 1 | 1 |
| 5. Village level workers | 10 | 25 to 30 |

The staff for distribution of agricultural inputs, plant protection, minor irrigation etc. have also increased two to three times in number. The total strength of village level workers has increased to 340. Whereas in the past a village level worker had to look after about 20 villages with about 600 to 700 farmers, now he has to work in about 8 to 10 villages with an average of 250 to 300 farmers. He should now be able to do his work properly but it is no doubt necessary to take away all other work not directly connected with agricultural production.

46. There are 69 supervisors working under the Central cooperative bank for supervision of primary agricultural credit societies. In addition, 59 supervisors are working as managers of the 59 largesized credit societies. The Central cooperative bank is in charge of supervision of primary agricultural credit societies. It has appointed an Executive Officer in charge of this work. The Extension Officers

are also expected to supervise the work of the supervisors. On an average a supervisor has to guide the working of 8 societies. In the past supervision work was attended by the State Cooperative Union. Only in the last two years that this work was entrusted to the Central Cooperative Bank. Some of the supervisors (45 in number). out of the total of 69 are the employees of the State Cooperative Union, working under the central cooperative bank. The bank also needs some intermediary staff above the supervisors and below the Executive Officer. They could be designated as inspectors. They should supervise the working of the supervisors and also the working of the large sized societies. There is a feeling that there is dual control over the work of supervisors. This needs to be removed for supervision to be made more effective. At present the supervisors are only guiding the societies in maintenance of accounts, preparation of credit limit statements, disbursement and recovery of loans etc. They are not trained for the purpose of providing farm guidance.

- 47. Seminars and conferences are also convened every year to discuss the problems and progress. Every year, before the cropping season, a cooperative field workers conference is convened to discuss the scale of finance for each crop. The representatives of the Cooperative banks, the cooperation and agricultural department at the district level also attend such a Conference. At such conferences, the problems are discussed and the field workers are kept in the know of the latest trends in policy. Every year, before each of the two cropping seasons, farmers training camps are also held in which they are apprised of the latest agricultural techniques. The training programmes were well attended by the farmers.
- 48. There were in all 5 peripatetic training units, in the district, for training of office bearers and members of cooperative societies. These units move from village to village and hold training camps separately for office bearers and members of cooperative societies. The field study revealed that such training was not conducted in some of the villages during the last two years. Consequently there is lack of understanding among farmer members and office bearers about the latest policies and procedures and even about the basic idea of working together for the common good. There is need for intensifying this training.

CONCLUSION

49. This paper attempts to introduce India and her efforts in providing extension services for agricultural development. In a vast country like India with large population and inadequacies all round as compared to the needs, the task of modernising agriculture is really gigantic. The results achieved through the national extension service movement, community development programme, intensive agricultural district programme, and high yielding varieties programme, among others, are remarkable in the high rate of increase in the total as well as average yield of food-grains and cash crops and in bringing about the green revolution in the country. In order to

have a better appreciation of the field situation, two districts where the intensive agricultural district programme has been operating for the last eight years have been studied and their achievements and experiences presented at some length.

- 50. The study of the two districts brings out the following:
- The aggressive Punjab farmers keen to adopt new methods and techniques and their strong cooperatives besides the favourable soil and climatic conditions are the main factors for the outstanding results in agricultural production in Ludhiana district. Aligarh district has fared well despite the problems of water logging, drainage, saline soil and traditionally less progressive farmers.
- ii. Adoption of high yielding varieties and consumption of fertilizers in Ludhiana have increased at a much faster pace.
- The staffing pattern sanctioned in Ludhiana, though not so intensive as in Aligarh, has also become outmoded. Ludhiana needs better qualified and paid experienced extension staff from village to district level. It also highlights the need for a review of the pattern at a reasonable interval. Aligarh district would prefer to work with the existing pattern for some more years to add to the momentum already generated.
- iv. Farm management and water utilisation should be accorded higher priority in both districts.
- v. Institutions like cooperative societies at various levels have not been built up as successfully in Aligarh as in Ludhiana. Even in Ludhiana, the cooperatives should be enabled to provide extension services and dependence on government machinery be gradually reduced.
- vi. Indhiana has shown that mere increased agricultural production is not enough to raise the level of farmers' income, the storage, marketing, communication and processing arrangements must also be effectively made.
- vii. The training and orientation programmes are essential for all categories of functionaries in the government and the cooperative movement. These should be organised at regular intervals. The institutional training arrangements need also to be oriented to meet the merging problems. The agricultural and cooperative training institutions should be intimately involved in this programme and develop proper working relationship.
- Radio as a mass communication medium is playing a useful role in farmers' education. The number of farmers listening to radio programmes is multiplying at an amazing rate. Useful hints to them pertaining to weather conditions, crops, varieties, seeds, advance warning of diseases and their control, storage, grading and marketing should be broadcast.

- ix. Demonstrations of improved practices may be conducted on a more scientific and planned basis. Farmers should be liberally helped to study them and follow up action on their adoption by larger number of farmers be taken on more systematic lines.
- x. The problems of the farmer in regard to agricultural technology, farm management, economics of crops and marketing of produce, among others, need to be studied along with the farmers and their organisations by the Agricultural Universities and government departments and timely remedial measures suggested.
- xi. The problems of small but viable farmers deserve special attention and help.
- The Expert Committee's major conclusion that " the time has come to move from the limited focus on the IADP districts to an intensive agricultural modernisation programme geared to the potential of the farmers in all the districts for the country as a whole " finds full support from my recent study of the two IADP districts and my long experience of Uttar Pradesh. IADP districts have undoubtedly acted as "path finders" and "pace setters" and together with high-yielding variety programme throughout the country have ushered a breakthrough in agriculture, which has generated a huge demand for tractors, electric tubewells and pumping sets, mixed fertilizers, high yielding latest varieties of seed, plant protection measures including aerial spraying, production based credit from commercial banks and cooperative institutions, research and latest knowhow.

COMMITTEE-MEN AND MEMBER EDUCATION IN AGRICULTURAL CO-OPERATIVES

SOME EXAMPLES FROM TANZANIA

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1. <u>Introductions</u>

The Co-operative Movement in East Africa is dominated by Agricultural Co-operatives. These are mainly Primary Marketing Societies affiliated to secondary societies or unions.

In Tanzania there is an expressed policy to make the primary societies production-orientated, i.e. they should start their own small processing plants, take initiatives to co-operative farming and assist in the formation and development of Ujamaa Villages. Naturally, this involves the development of multi-purpose societies which is an expressed policy for co-operative development also in Kenya and Uganda.

2. Managerial Tradition:

Primary marketing societies are organised in a very simple way. All members come to the general meeting and general meetings are held several times a year. A committee is elected by the general meeting, normally for one year, and this committee takes a rather active part in the day-to-day management of the society i.e. that the secretary/manager, or recorder has a fairly limited sphere of action left to him. During the crop season it is usual that committee-men are on service in the society on a daily rota system to ensure that the rights of the members are observed.

The limitations of this organisation system are obvious, at least when used in multi-purpose or secondary societies.

Another limitation concerns the election of the committee for one year. In case the general meeting decides to sack the committee, there will be no knowledge or tradition to guide the newly elected one. Work is, therefore, going on to change the bye-laws to contain that committeemen are elected for a period of two or three years.

3. Membership Questions:

The rapid expansion of a number of agricultural co-operatives in East Africa around the middle of 1960's had many advantages but of course also disadvantages. It was not always possible to base the formation of societies upon proper education of the farmers who were going to form a society. The nature of the co-operative society, therefore, remained unclear in the minds of many farmers and to this lack of clarity was added the single channel marketing system for certain major crops according to which all farmers deliver their crops to co-operative societies and the price regulations are made by Marketing Boards.

4. Membership and Multi-Purpose Societies in East Africa:

The degree of illiteracy among the rural population varies from 70 to 85%.

Of course illiteracy is a great hindrance to development of agricultural co-operatives and the implications will be further discussed in this paper. The single-purpose marketing societies are simple enough in their character and operations to make it possible for intelligent farmers, who care to observe, to have a fairly clear picture of their co-operative society without being able to read and write. Illiterate farmers who are producing cash crops are certainly able to count, up to a point, and the limited size of the society makes it possible to remember the important facts. Often committee-men who are illiterate still give important contributions to their societies. It is, of course, necessary that at least a few of the committee-men are perfectly able to read, write and count and that they have a basic knowledge of the book-keeping system of the society.

The development of agricultural co-operatives into more complex societies with several departments will create a great demand of understanding amongst the members and consequently involve a challenge, not only to member education, but also to adult education of the rural population as such.

From the point of view of co-operative policy the problem will be to decide when the members of single-purpose societies have reached such a standard of general education that they are ready to benefit from the advantages of a multi-purpose society. There is probably no clear cut solution to this problem but it seems natural to propose pilot schemes of multi-purpose societies where an intensified training of committee-men and members takes place in order to gain experience for a more comprehensive change into multi-purpose societies.

5. The Problem of Illiteracy:

For adults to take the pain of learning to read and write it is certainly essential to have a very good motivation. During the past years there have been attempts by UNESCO to organise work-orientated functional literacy campaigns. It is known that these attempts have not been very successful. One may venture the explanation that these literacy projects have tried to cover all aspects of rural life. To find teachers, teaching aids and to produce some simple literature for a variety of purposes may not be possible. Examples from West Africa are known where the literacy work is concentrated on the members of co-operative societies and this may limit the field and allow for the necessary concentration of teacher training and production of teaching aids.

The second Ad Hoc Consultation on Agricultural Co-operatives and other Farmers' Associations in Africa, held in Nairobi, June 1969, observed that it would not be possible for the co-operatives themselves, their apex organisations or even the co-operative departments to launch literacy campaigns among the co-operative members but urged co-operative authorities to join hands with community development and other institutions leading literacy programmes in an attempt to introduce co-operative teaching and co-operative literature in these literacy projects.

The UNESCO work-orientated literacy project in the Lake Victoria Regions of Tanzania has, to some extent, used this approach of co-ordination with co-operative education. The Co-operative Education Centre in Moshi has produced the first in a series of three books called "Jifunze Ushirika" (Learn Co-operation), which is aimed as a first reader for those who have attended literacy classes.

6. A Member Education Campaign in Tanzania:

The Presidential Inquiry Committee into Co-operatives and Marketing Boards which was working in 1966 strongly recommended that co-operative education among the farmers be extended.

So far attempts had been made in Tanzania to find out if it was possible to use the system of <u>one-day courses</u>, which have been successfully tried in Uganda, to launch a broad campaign for member education. It was considered, however, that in order to succeed with one-day courses, there should be a very strong system of local co-operative education built up by the marketing unions and this was not the case in 1966.

From the beginning of 1967, radio programmes were prepared by the Co-operative Education Centre (CEC) to be broadcast twice a week over the year. CEC worked out a short discussion manual to each of these radio-programmes and consequently during 1967 produced 51 programmes and 51 discussion manuals covering all major subjects and problems of agricultural co-operatives. The language used was Swahili, which is well understood all over Tanzania.

Considerable efforts were made to organise the listeners. The members of a primary society were asked to come to the society at the time of the broadcast and in case the area of operation of a society was very large, several listening stations were established. The time for the broadcast was set as to enable the farmers to listen after the work in the fields, and to leave at least one and a half hours before darkness as members would normally hesitate to walk for some distance in the darkness.

The co-operative societies were discouraged to buy radios but instead committee-men or members of the staff were asked to bring a portable radio for the listening.

After the broadcast the listening group was divided into discussion-groups of ten or fifteen persons in each. If communications worked well, discussion manuals were made available for the listening groups. These short manuals were now read out paragraph by paragraph in the discussion-groups and finally answers were given to the two questions read in the broadcast and also printed in the discussion manual.

Answers to the questions in the discussion manual were sent to CEC, Moshi, for comments. Over the year CEC received over 4,000 answers which were returned with comments and discussion manuals for future programmes to be used by the groups. The normal edition for the discussion manuals, which were either stencilled or printed on newsprint, was 17,000 copies but occasionally reprints were made and thus a total edition of 35,000 copies was reached.

7. Co-operative Education Secretaries:

This member education campaign in 1967 was possible as there had been, since 1965, a plan to organise local co-operative education. All marketing unions were asked to appoint a Co-operative Education Secretary (CES). The large unions were to employ a full-time CES and smaller unions were recommended to give this task to an inspector, a treasurer or another of the senior staff of the union and to organise the work of the CES so as to give him either some hours every day for this task or to change the organisation of the union to enable him to travel to the affiliated primary societies during the off-season.

In addition it was recommended that a Sub-Committee for Co-operative Education be elected to work with the CES. The CES and the Sub-Committee were to draw a Co-operative Education Plan and to calculate a budget for this Plan to be considered by the General Manager, the Committee and the Annual General Meeting.

It was thus considered that it would not be possible for a central institution to enter into direct contact with the almost 2,000 primary marketing societies but that the union should be responsible for assisting their affiliates in the organisation of Staff, Committee-men and Member Education.

This Plan was supported by the Co-operative Union of Tanganyika Limited (CUT) and the Co-operative Commissioner. It became the task of the Co-operative Education Centre to organise the education, training and instruction of the CES as well as, later, to have courses for members of the Education Sub-Committees of the unions.

For the moment there are 31 marketing unions in Tanzania and 29 have Co-operative Education Secretaries but the biggest union - the Nyanza Co-operative Union - which has some 600 affiliated primary societies - is split into 19 zones and this union has, one Co-operative Education Secretary with 19 Zonal Education Secretaries. It is, therefore, correct to say that approximately 50 Co-operative Education Secretaries are working in the Rural Co-operatives of Tanzania.

Plans were also made for co-operative education in other societies such as Savings and Credit Societies, Consumer Co-operative Societies, etc.

From 1967 two Co-operative Wings were started in Tanzania, a year after another four Co-operative Wings, and the plan is now to increase the number of Co-operative Wings to 11. A Co-operative Wing consists of an expatriate and a Tanzanian Study-Organiser equipped with a four-wheel drive car, 16mm projector, tape-recorder, etc. Normally a Co-operative Wing works in two Regions and it covers the area of several marketing unions. Their first and foremost task is to support and strengthen the Local Co-operative Education organised by the unions and thus to assist the Co-operative Education Secretaries. When the Co-operative Education Plan has been decided upon by the unions, the actual work is usually done by the Co-operative Wings and the Co-operative Education Secretaries together, i.e. they travel in the Wings' cars to visit all societies, to meet the committees and the staff, to organise one-day courses, radio listening-groups and study-groups. All this work is co-ordinated by CEC in Moshi.

This organisational structure for Local Co-operative Education is now also accepted in Kenya and Uganda. It should, however, be observed that the Co-operative Wings in Uganda are stationery institutions, normally affiliated to farm training centres.

8. Permanent Study-Groups:

Having made these attempts with radio education in 1967, and having established a system for Local Co-operative Education, the Co-operative Movement of Tanzania considered that it should be possible to induce the societies to form Permanent Study-Groups. These groups would normally consist of the manager/secretary, a few committee-men and a few interested members. They would meet at least during the off-season. A correspondence course - Basic Economy - of eight study letters was produced in 1968, as well as radio programmes to support the studies of the correspondence course and plans are now being finalised for new courses along the same lines.

9. Special Studies for the Committee-men:

To interest the committee-men in Local Co-operative Education and the organisation of radio listening-groups as well as the formation of permanent study-groups, week-long courses were organised by CEC from 1965 to 1967 reaching all Chairmen and Vice-Chairmen of primary societies. One important purpose of this course was also to expand the system for staff education, which was also introduced i.e. the managers/secretaries were encouraged to study a ten-letter correspondence course as a prerequisite for entry to the Co-operative College courses.

With the formation of the Co-operative Wings, it was possible to continue the committee-men courses and to tie the course programme very closely to local problems. In 1968, CEC produced a correspondence course in four study letters - The Work of the Committee - and all committees were urged to study this course in groups. Again radio programmes supported the group work and these radio programmes were repeated twice, the second time with entirely new programmes as a result of the experiences of the group work.

The intention of the study programmes for the committee-men is, of course, to improve the management of the societies by achieving better relations between the committee, the staff and the members. Besides this it is also intended that the Committee-men should become teachers. They should inform the members and increase the understanding for the expansion of the primary societies as explained above.

10. Conclusions:

The conclusions to be drawn at this stage from committee-men and member education in agricultural co-operatives in Tanzania may be that it is possible to reach the entire Co-operative Movement if proper organisational work has been done and it has been considered that unless the secondary societies assume responsibility for Local Co-operative Education, this will not be possible. Furthermore, available techniques must be used and co-ordinated. The radio reaches all over the nation but a radio is, to a large extent, a source of entertainment so that the organisation of the listeners becomes a crucial point. The plan for Local Co-operative Education has met with great understanding in the marketing unions and societies. The enormous difficulties to carry out Local Co-operative Education must, however, be appreciated and it is, therefore, necessary for some time, probably four or six years, to support the organisation with mobile units, Co-operative Wings.

The conclusion from this work may also be that it is important to co-ordinate, not only Staff, Committee-men and Member Education, but also the efforts at central and local level and for this reason it has, in Tanzania, been considered necessary to work out a Co-operative Education Plan for a period of five years i.e. 1969 to 1974.