

REPORT

Survey of Agricultural Cooperative Marketing
Projects in South-East Asia

PART I

(Australia, India, Indonesia)



INTERNATIONAL COOPERATIVE ALLIANCE

Regional Office & Education Centre for South-East Asia

43 Friends Colony, New Delhi-14, India

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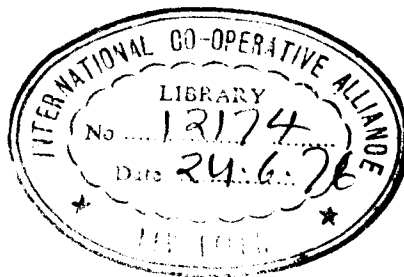
SURVEY REPORT

R E P O R T

SURVEY OF AGRICULTURAL COOPERATIVE MARKETING
PROJECTS IN SOUTH-EAST ASIA

PART I

(Australia, India, Indonesia)



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

(For Private Circulation Only)

R E P O R T

ON

THE SURVEY OF AGRICULTURAL COOPERATIVE MARKETING PROJECTS IN
SOUTH-EAST ASIA

PART - I

(Australia, India and Indonesia)

I N T E R N A T I O N A L C O O P E R A T I V E A L L I A N C E
REGIONAL OFFICE & EDUCATION CENTRE FOR SOUTH-EAST ASIA
43, Friends Colony
New Delhi-14
I N D I A

9.10/A

February 14, 1971

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

My dear Palita,

Re: Survey of Agricultural Co-operative Marketing
Projects in South-East Asia.

Kindly refer to your letter No.9.10/A dated 6th November, 1970 appointing me as the Leader of the ICA Study Team for the survey of Agricultural Cooperative Marketing Projects in India and Indonesia and also the Leader of the Cooperative Trade Promotion Team for visiting Australia. On the basis of the terms and conditions set forth earlier and in accordance with the decisions taken at the last meetings of the Agricultural Sub-Committee and the Advisory Council held in the Republic of Korea during May 1970, the Study Team has concluded the Survey in respect of cooperative marketing projects in India and Indonesia. The Team also visited Australia for exploring possibilities of trade between that country and Japan. I have great pleasure in enclosing herewith the Report of the Study Team of the Survey for the above three countries.

2. Although, originally it was expected that the Survey will be conducted on the basis of the projects already submitted by member-movements to the ICA, it was not possible for us to follow this procedure owing to the lack of adequate time available at our disposal for inviting such projects from the member-organisations. We have, however, tried to do our best in examining on the spot the projects suggested by the host organisations in the above countries. I sincerely hope that some of our recommendations would help initiate follow-up action aimed at further development of agricultural cooperative marketing in India and Indonesia and strengthening of the existing trade relationship between Australia and Japan.

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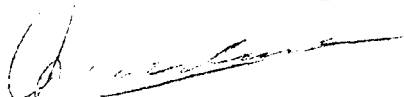
Mr P.E. Weeraman

February 14, 1971

3. During our visits to Australia, India and Indonesia the cooperative organisations extended their full cooperation to the members of the Study Team and provided all the necessary assistance for facilitating our work in those countries. I would like to place on record the sincere appreciation and grateful thanks of all members of the Study Team for the excellent arrangements made by the host organisations and for the warm hospitality received by us in these countries.

4. On behalf of the Team, I would like to express my grateful thanks to Dr.S.K. Saxena for his support to the Survey and to you personally for all you have done to facilitate the conduct of the survey. I would also like to express my grateful thanks to all the colleagues in the ICA for their kind help and assistance in the Study.

Yours sincerely,



M.V. Madane

Leader of the ICA Study Team
Survey of Agricultural Cooperative Marketing Projects
in South-East Asia

Encl: as above

REPORT ON THE
SURVEY OF AGRICULTURAL COOPERATIVE MARKETING PROJECTS IN S.E.ASIA

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SURVEY OF AGRICULTURAL COOPERATIVE MARKETING
PROJECTS IN SOUTH-EAST ASIA

INTRODUCTION

The International Cooperative Alliance (ICA)

1. The International Cooperative Alliance (ICA) was founded in London in 1895 as an association of national unions of cooperative societies, which seek to promote a non-profit system of production and trade, organised in the interests of the whole community and based upon voluntary and mutual self-help.
2. It comprises organisations in every continent, and its total affiliated membership through national organisations exceeds 255 million. The consumers' movement accounts for about half the membership; the other half consisting of agricultural, credit, workers' productive, artisanal and fishery societies.
3. Its purpose is to propagate cooperative principles and methods and to promote friendly and economic relations between cooperative organisations of all types, both nationally and internationally.
4. It promotes, through auxiliary trading, banking and insurance organisations, direct commercial and financial relations between cooperative enterprises in different countries so as to enable them to exert on the world market, as well as at home, an influence beneficial at once to consumers and primary producers.
5. It convenes international congresses, furthers the teaching and study of cooperation, issues publications and research data, and collaborates closely with the United Nations as well as with voluntary and non-governmental international bodies which pursue aims of importance to cooperation.

6. In the United Nations, its Economic and Social Council, as well as in some of the Specialised Agencies, it enjoys the right of participation in their meetings and work as an International Organisation with Consultative Status, Category I.

7. The Head Office of the ICA which is in London, coordinates activities of the Alliance all over the world directly in respect of Europe, North America, the Middle East and the Western parts of Africa. In respect of South-East Asia and East of Central Africa the ICA deals with the movements through its Regional Offices located at New Delhi, India and Moshi, Tanzania respectively.

8. The Regional Office for South-East Asia in New Delhi was started in 1960 and the office in Moshi in 1968.

9. The main tasks of the Regional Office and Education Centre at New Delhi are to develop the general activities of the Alliance in the Region, to act as a link between the ICA and its affiliated national movements, to represent the Alliance in its consultative relations with the regional establishment of the United Nations and other International organisations, to promote economic relations amongst member-movements, including trading across national boundaries, to help in the supply of technical assistance, to conduct educational activities for the movements in the Region and to bring out publications on the various aspects of cooperative development.

ICA and the Second UN Development Decade

10. The United Nations General Assembly through its Resolution 2459 (xxiii) of December 1968 recognised the important role of cooperative movement in the development of various fields of production and distribution, including agriculture, animal husbandary, fisheries, manufacturing, housing, credit institutions, education and health services and

also recognised that it was important to promote cooperative movements which can effectively contribute to the implementation of the goals of the Second United Nations Development Decade. It invited member-States to provide increasing assistance to cooperatives and requested the ILO and other Specialised Agencies and the ICA to render increased assistance aimed at resulting the objectives of the UN General Assembly Resolution¹.

11. The above resolution had also requested the United Nations Economic and Social Council (ECOSOC) to consider, in connection with the preparations for the Second United Nations Development Decade, the question of the role of cooperative movement in ECOSOC. Accordingly, the ECOSOC through its Resolution 1491 (xlvi) on "the role of cooperative movement in Economic and Social Development" also recognised that "cooperatives have an important role to play in the promotion of economic and social development, particularly by providing a suitable institutional frame work for facilitating the mobilisation of human, financial and other resources" and requested its Secretary General to collaborate closely with the UN Agencies as well as with the ICA and other non-governmental organisations in preparing and implementing an action programme in the field of cooperative development.²

12. The 24th Triennial Congress of the ICA held in Hamburg (West Germany) in September 1969 welcomed the UN General Assembly Resolution which had recognised the important role of the cooperative movement in meeting the social and economic problems of developing countries and expressed the willingness and readiness of the Alliance for the further development of cooperation with the U.N. and its specialised Agencies and other National and International organisations in the fields of common interest and had requested to the authorities of the Alliance to make special studies of cooperative

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1. Full text of the UN General Assembly Resolution is reproduced in Appendix "A"
 2. Full text of the ECOSOC Resolution is reproduced in appendix "B"

organisations with special reference to their role in accelerating the socio-economic development in different parts of the world and requested the Director of the Alliance to forward to the Secretary General of the United Nations, its Specialised Agencies, to the governments and to the ICA's member-organisations the results of these studies.³

A Cooperative Development Decade

13. In accordance with the mandate given by the Congress the Director of the ICA prepared an action programme for a cooperative development decade. According to which the first two years of the Decade (1971-72) would be known as the planning phase and the following eight years (1973-80) would be known as the operational phase and would be used for implementing the action programme. During the planning phase the ICA would be sponsoring a series of basic studies and drawing up an action programme based on the results of these studies.

14. It is expected that the Cooperative Development Decade would serve as a basis for coordinating these studies and ensuring the implementation of the recommendations resulting from them.

15. The overall objective of the Decade proposals, in relation to the Region of South-East Asia, would be to increasing productivity through strengthening and development of agricultural cooperatives in different countries of the Region.

16. The present survey is one of the studies undertaken by the Alliance to realise the objectives of the Cooperative Development Decade. The broad objectives of this study are to identify cooperatives at the initiative of the national movements in the countries of the Region as model examples of cooperative development with the ultimate aim of initiating measures for their intensive development so that these cooperatives would serve as demonstration centres and would have a

3. Full text of the Congress Resolution is reproduced in Appendix "C".

multiplying effect on cooperatives in other areas. It is also expected that the survey will help the movements concerned to obtain external assistance for the development of projects recommended by the Study Team.

17. The Agricultural Sub-Committee of the ICA for South-East Asia which originally sponsored this Survey, recommended that the Survey be conducted in the field of agricultural cooperative marketing with the ultimate object of further developing such marketing in countries of South-East Asia. The Sub-Committee recommended that the Survey be conducted by three study teams, two of which will study the projects proposed for the marketing of raw materials for animal feeding-stuffs and the third will survey the projects proposed for the marketing of other agricultural commodities. The survey concerning raw materials for animal feedingstuff will cover India, Pakistan, Philippines, Malaysia and Indonesia while the survey of other agricultural commodities will cover Ceylon, Iran and the Republic of Korea.

Costs of the Survey

18. The costs of the Survey are shared equally by the ICA and the Central Union of Agricultural Cooperatives of Japan.

P A R T ISURVEY OF AGRICULTURAL COOPERATIVE MARKETING
PROJECTS IN INDIA AND INDONESIAComposition of the Team

19. On the basis of the recommendations made by the Agricultural Sub-Committee for South-East Asia and on the basis of the endorsement of recommendations of this Sub-Committee by the Advisory Council of the ICA for South-East Asia, the Regional Director of the ICA, Regional Office and Education Centre for South-East Asia appointed the following study team for conducting the first part of the Survey concerning raw materials for animal feedingstuff :

- Leader : Mr H.V. Madane
Joint Director, TAT
ICA Regional Office, New Delhi
- Member : Mr. Kiyoshi Fujimoto
Manager/International Department
Central Union of Agricultural Cooperatives
of Japan.
- Member : Mr. Susumu Hibino
Staff/Feedstuff Department
National Purchasing Federation of
Agricultural Cooperatives, Japan.
- Member : Mr. Masaji Kakuta
Section Chief/Planning and Control Office
UNICOOPJAPAN, Tokyo, Japan. .
- Interpreter : Mr. Hiroshi Nishido
Staff/International Department
Central Union of Agricultural Cooperatives
of Japan.

Terms of Reference

20. The ultimate objective of the study was to identify areas for development of agricultural cooperative marketing in the South-East Asian Region. With a view, therefore, to identify problem areas for such development the Study Team will:

- a) Study, on a selective basis, the general economic conditions of the countries concerned with special reference to the development of agriculture,

- b) Examine the present role of cooperatives in these countries in the development of agriculture,
- c) Examine the present programmes of cooperatives for agricultural production and marketing,
- d) Study the facilities available in the countries in respect of agricultural finance, agricultural inputs, agricultural extension and transportation and communications,
- e) Study the organizational structure of the cooperatives involved in such work with special reference to their resources, personnel and management aspects,
- f) Identify problem areas which are potentially important and economically feasible for intensive development,
- g) Examine the feasibility of Cooperative Agricultural production and marketing projects submitted by cooperative organisations,
- h) Examine, wherever possible, the possibilities of developing trade relationship among cooperatives on an inter-regional basis and intra-regional basis and
- i) Recommend suitable follow-up action by national and international organisations in this field.

Scope and methodology of the Survey

21. In accordance with the mandate given by the ICA and with the terms of reference quoted above the Survey team visited India and Indonesia for identifying agricultural cooperative marketing projects in respect of raw materials for animal feedstuff. The Survey Team was also authorised by the ICA to visit Australia with a view to identify commodities which can be used as raw materials for animal feedstuff and which can be exported to other countries such as Japan.

22. It was originally planned that the ICA should write to the member-movements in the above countries requesting them to identify development areas and suggest projects for development of agricultural cooperative marketing in their countries. The Survey Team was then to examine these projects and then plan the visits accordingly. However, in view of the shortage of time at the disposal of the Survey Team such

a procedure could not be followed. The Survey Team therefore, requested the member movements in India and Indonesia to select a few projects which can be examined by the Survey Team during its visits to these countries. The member movement in Australia was also requested to identify commodities which can be discussed by the study team during its visit to Australia.

23. The Team visited Australia between 8th and 22nd November, 1970, India between 24th November and 8th December and Indonesia between 10th and 19th December, 1970.

Collaboration of Member-movements

24. During their visits to all the above three countries the members of the Survey Team received whole-hearted cooperation from national cooperative federations, their affiliates in the parts visited and from the government departments and agencies. Excellent arrangements were made for studying the cooperatives as well as for the stay of the members. The National Agricultural Cooperative Marketing Federation and its affiliates in India took care of all the local costs for the Survey while Dewan Koperasi Indonesia (D.K.I.) and its affiliates as well as the Cooperative Federation of Australia, its affiliates and other cooperative organisations extended their generous assistance by taking care of costs of several items such as local transport and extending to the team members their warm hospitality throughout the period of the Survey. Members of the Team would like to place on record their grateful thanks for all the assistance rendered to them by member movements in the above three countries and for the warm hospitality extended to them during the period of their visit. Without their collaboration it would not have been possible for the study team to conduct the survey in such a favourable atmosphere.

Visit of the Inter-Cooperative Trade Promotion Team

25. The Inter-Cooperative Trade Promotion Team sponsored by the ICA and consisting of four members visited four states in Australia. These states were: Queensland, New South Wales,

South Australia and West Australia. Only a few cooperative organisations which were dealing with commodities used as raw materials for feedstuff, were visited and as such it will not be possible nor appropriate for the Team to generalize their impressions for each State as a whole. What we have attempted to do in the following pages is to sum up our impressions of individual societies describing their structure and functions as well as discussing the prospects of developing trade with these organisations in respect of commodities of this nature.

A U S T R A L I A

Cooperatives in Australia

26. The Cooperative movement in Australia is more than a century old as the first cooperative was established in 1859 at Brisbane known as the Brisbane Cooperative Society and was registered under the Friendly Societies Act. This society aimed at promoting savings among members and providing them facilities for purchasing food at reasonable prices.

27. It is now known that about one-fifth of the adult population of Australia is associated with the cooperatives in one form or the other. The cooperatives are also a source of employment for a good number of people in the continent of Australia. There are about 470 farmer's cooperatives with a membership comprising 360,000 rural families. The total investments of these families in the above societies in the form of capital and loans come to about A\$123 million. The total cooperative assets in rural communities belonging to these families are about A\$ 407 million and according to the latest figures available the cooperatives in this primary industry have alone secured a total income for one year to the tune of A \$665 million. During the same year the cooperatives, because of their economic activities such as marketing, processing and procurement services were able to return to the members in million.

28. The farmers' cooperatives in Australia have undertaken various agricultural operations and have established Agro-industrial complexes covering dairy industry, pasture, sugar, tobacco, fruit, grains, livestock, fishing and have undertaken production of ginger, rice, cotton, fertilizer and artificial cattle breeding as also several other services required for the efficient farming.

29. A peculiar feature of the agricultural marketing operations in Australia is the establishment of commodity marketing boards for various products. For example, there are at present 19 Commodity Marketing Boards operating under the Primary Producers' Marketing and Organisations Acts in Queensland alone. Each commodity marketing board consists of a number of men elected by the growers of that particular commodity. Their term of office is usually for three years. The government appoints a representative on the board to watch the interests of the consumer. These boards can be dissolved at any time by the vote of growers who are members. From each commodity board, two representatives are elected to represent them on the Council of Agriculture. The Council of Agriculture is responsible under an Act of the government, for the development of rural industries and for stabilising prices of primary produce aimed at ensuring to the primary producer a fair return for his labour.

30. The cooperatives and the commodity marketing boards function in close collaboration with each other. Most of the export operations are handled by these commodity boards or by other organisations under their authority. There are, however, quite a few cooperative organisations in Australia which are in a position to undertake direct exports of certain agricultural products.

Cooperative Federation of Australia

31. The Cooperative Federation of Australia is the national organisation representing the interests of all cooperatives in that country. However, not all the cooperatives in Australia are represented in this organisation and as such

the Cooperative Federation of Australia is still financially a very weak organisation. The leadership at the national level working for the Cooperative Federation of Australia (CFA) is, however, hopeful that in the years to come the relationship between the primaries, the state level federations and the national organisation will be strengthened and an integrated infra-structure will emerge for the whole country.

32. At present three state cooperative federations namely the State Cooperative Federation of Queensland, the State Cooperative Federation of New South-Wales and the State Cooperative Federation of Western Australia are its members. In addition several cooperatives from South Australia and Victoria States are directly affiliated to the Cooperative Federation of Australia. The Cooperative Federation of Australia as well as the Federations in the States are engaged in educational and promotional activities for the cooperatives in their respective States.

33. Among the State Cooperative federations affiliated to the Cooperative Federation of Australia, the Cooperative Federation of Western Australia is the largest. This is due to the fact that the agricultural cooperatives in Western Australia have made tremendous progress and have extended their support to the activities undertaken by the State Cooperative Federation.

QUEENSLAND

34. In this State, the Team visited an agricultural area known as Toowoomba in South Queensland and the Queensland Grain-Growers Association. The office bearers present during the discussions with the team were the President, the Vice-President, and the General Secretary of the Association.

The Agricultural Situation in the Area

35. The area visited by the team in southern Queensland is around the town of Toowoomba. The total area has the circumference of 150 miles and produces mainly wheat as a major

crop. There are about 5000 - 6000 farms in the area with a total acreage under grains at about 2.6 millions. The main crops are wheat, barley, oats, milo and sugarcane.

Influence of the wheat quota system

36. Australia is a major wheat producer and the wheat growing industry is very much dependent on the export market. In view of the present excessive supply position of wheat in the international market, the Wheat Board in Australia has introduced the quota system to ensure that all wheat producers get an equitable share in the foreign markets. These quotas are fixed through the State Wheat Boards on the basis of past performance. In the Queensland also the quota to be delivered by each farmer has been fixed and beyond this the responsibility for marketing the produce is that of the farmer himself. In view of the limited scope of exporting the total quantity of wheat, the farmer is now diversifying his crops and is willing to introduce new crops which would give him better returns. The soil and climatic conditions in the area are favourable for growing a number of alternate crops. In addition, the prospects of increasing the acreage under crops other than wheat are much brighter owing to a large scale land development project known as Brigalow Development Scheme (it is leguminous arbor that increases nitrogen in the soil). It is estimated that about 15 million acres of Brigalow land is being cleaned for grain cultivation and beef production. The land development work is being done by the farmers themselves and the government is not expected to spend much money in future on land reclamation.

Pattern of farming

37. The agricultural lands of the area are classified into dry and irrigated lands. As irrigation of the area is dependent on the availability of underground water, there is a limited scope of increasing the acreage under irrigation at a very fast rate. It is estimated that during the next few years not more than 10,000 acres of new land will be brought

under irrigation. In view, therefore, of the vast lands being brought under cultivation as a result of the development schemes and in view also of the fact that irrigated lands are not likely to increase to a very great extent, it is evident that large tracts of dry land will in future be available for grain cultivation.

38. As has already been mentioned, the restricted wheat quotas are to some extent responsible for the farmer switching over to other crops but the main reason for this is the fact that new areas are being brought under cultivation and the farmer has to cultivate grains other than wheat in these areas. The most favourable crop is considered to be milo. During the discussions with the office-bearers of the Association and during the field visits it was evident that milo is the major commodity which can be identified as the potential exportable commodity from this area. Our discussions, therefore, during the visit, centered around milo production and exports.

39. Milo is a summer crop grown during November to March (Australian Summer) and is being produced since many years and is consumed mainly in the domestic market for poultry and pig feeds along with wheat and barley. The lands under milo cannot be used for wheat cultivation as wheat is not easily grown as a back crop of milo because of inadequate rainfall in the area (26 inches) and the consequential shortage of moisture after the milo harvest.

40. The total grains produced in the area amount to 2.6 million tons. 400,000 acres are sown under milo which include 42,000 acres of irrigated lands. This was the position in 1969. The production of milo is expected to reach 400,000 tons within a few years if the rainfall continues to be favourable and the prices are attractive.

41. Average size of holding in this area is between 500 to 600 acres. In most southern parts of Queensland some farmers own between 2,000 to 6,000 acres of land. The yield per acre

under wheat is 0.5 ton and under milo 0.5 to 0.75 ton on dry land. Wheat is not normally grown on irrigated land. In case of milo on irrigated lands 2.5 tons is the average production for per acre. We were informed that for milo production 3.3 times urea is given to irrigation land as compared with dry land culture.

The Queensland Graingrowers Association

42. The Association was established in 1948 with the objective of serving its farmer members (mainly wheat growers) through supply of information, organizing legislative activities, extension services, insurance services and collective bargaining aimed to protect its members. The area of operation of the Association is in the southern part of Queensland. The number of farmer members at present is 4,800 out of a total of 5,000 to 6,000 farmers in the area. The land covered by the area of operation of the Association is around 300,000 acres of dry land and 20,000 acres of irrigated land. During 1969 about 1,300 farmers out of the total grew milo in the area.

43. The total operational area of the Association is divided into 10 divisions. Each of the divisions has the right to elect representatives according to the size of membership. These representatives compose the Board of Directors of the Association. Membership of the Association is open to anyone holding 20 acres of grain or seed growing field and the membership fee is assessed on the basis of the total area under cultivation with an entrance fee of \$10.

44. Although the original objectives of the Association were marketing of wheat and oilseeds, it has recently started exporting milo to overseas markets. This is being done through entering into contracts with farmer members for producing a certain quantity of grain for export. Generally speaking, grain marketing in Australia is done by the Marketing Boards (including in the State of Queensland). However, the Queensland Wheat Board is operating only in the central part of the State

using Gladston as the shipping port. The Association, therefore, has been given the liberty of undertaking the Board's functions in the southern part of the State. The Association is exporting the grain through the port of Brisbane.

45. The Association does not own any warehouse or silo facilities. However, it has access to almost all the warehousing and other facilities of the Wheat Board, because officers of the Association are also representatives on the Board management. There is also an identical membership of the Association and that of the Wheat Board because most of the farmers are members of both the organisations.

Problems and Conclusions:

46. The size of individual member's holding in this part of Australia is very large and most of the agricultural operations are handled by family members of the farmers through mechanized farming. Cultivation is done on compact blocks of land, each measuring around 44 acres.

47. There is no doubt that an additional area will be brought under grain cultivation owing to the new development schemes and also to some extent owing to the restricted quotas fixed by the Wheat Board for export. There is some possibility that other summer crops such as linseed, millet, peanut, sunflower and penican will be grown by these farmers as the climate is temperate and semi-tropical. However, despite above factors and despite the fact that lack of rain may affect production, the net result is likely to be an increase in the area under milo cultivation. Also the local demand for milo consumption may increase to some extent as more farmers may use this for cattle feed. However, such a demand is not likely to be very substantial compared to the expected large volume of total production.

48. The farmers in this area are rather independent in the sense that they will not hesitate to switch over to another crop if it is found that such a crop will give them immediate benefits in terms of new markets and better prices. Also Queensland being traditionally a wheat growing area, it qualifies to deliver a larger quantity of wheat to the Wheat Board. This may have some effect in restricting the areas under milo, although it can be offset by the additional acreage under the other crops. The second and one of the most important aspects of the agricultural operations in this area is that the Association has not yet integrated its functions with those of the farmers. Although the Association is 23 years old it has not yet started any services to provide farmers with agricultural inputs and other farming requisites. Most of the supplies are done through the private dealers. Some members of the Team however felt that the Association was established mainly for exporting grains, and it was necessary for it to undertake supply of agricultural inputs.

49. During our discussions with the office-bearers, the question of entering into a long-term contract with a cooperative importing organisation in Japan was discussed and it was felt that it may perhaps be difficult for the Association to enter into long-term contract in view of the fluctuating price situation and in view of the fact that the farmers may opt for another crop. It is also likely that the members may prefer to sell the grain in the domestic markets through private dealers if they feel that the prices there would be more advantageous. The office-bearers of the Association, however, are confident that given a favourable price and a secured quantity for export it will be possible for the Association to ensure a smooth export operation. We were also assured that the Association does not face any problems concerning the use of warehouse and port facilities in view of the identity of membership between the Association and the Board.

Recommendation

50. The area covered by the Queensland Graingrowers Association has a great potential in becoming one of the most important grain exporting zones in the country. It will, therefore, be in the interest of both the cooperative organisations in Australia and in the countries which desire a trade relationship with that country to further examine, in greater details, the possibility of developing trade in milo and other grains which can be used as raw materials for animal feedstuff. As the agricultural cooperatives in Japan are keenly interested in the import of milo, it is recommended that the Japanese Cooperative Organisations further examine these prospects with the Queensland Graingrowers Association as and when both parties are in a position to do so.

Poultry Farmers Cooperative Society Ltd. - "RED COMB"

51. The Team visited at Brisbane a society known as the Poultry Farmers Cooperative Society Limited which supplies products known under the brand RED COMB. Discussions were held by the Team with the General Manager of the Society which was established in 1921 with the area of operation as Southern Queensland. The objective of the Society is to process and market formula of feeds and also supply fertilizers to farmer members. The present membership consists of 20,000 persons out of which only 6,000 are primary producers. We were informed that about 2,500 farmer members are livestock producers.

52. Although the Society was originally organised with the sole aim of assisting livestock farmers of the area, it could not fulfill its obligations towards the farmers owing to its location in a big city like Brisbane. This is explained by the fact that only 6,000 out of a total of 20,000 members are farmers. All the other members are consumers because up to the year 1960 the Society not only catered to the needs of the primary producers by supplying feeds and by processing and marketing the stocks bred by them, but also sold consumer goods through its cooperative shops. Unfortunately, however,

the Society could not keep up with the competition of consumer trade in the urban areas and ran into serious management difficulties encountering serious losses. It had, therefore, to cut down its consumer activities and at present it is concentrating on the supply of formula feeds to the member producers.

Services and facilities

53. The society has a total production capacity of 40,000 tons of formula feeds through its three processing plants located at Brisbane, Pittsworth and Rockhampton. In addition to this, the Society also owns a plant located between Brisbane and Toowoomba but does not operate it on its own. This plant is at present leased out to a private processor known as Atkinson Produce Company. The products from this plant are mainly used by the other feed processing plants of the Society. The Atkinson Produce Company processes alphalpa and markets it under the same brand, namely RED COMB. In other words, the private processor caters to the needs of the Cooperative Society in respect of the agreed quantity and later markets the rest of the product on its own. The Society also owned in the past a livestock processing plant which it had to sell to a private integrater known as Inghums. At present the offices of the Society, which are located in the central parts of the city of Brisbane, do not allow it to function efficiently for servicing the members who are mostly farmers. It has therefore decided to sell the city premises and establish the offices and facilities 20 miles outside of the city of Brisbane. It is also planning to start a pushbutton feed processing plant in the near future.

Rapid Growth of Broiler Industry

54. We were informed during the discussions that the broiler industry in Australia is growing at a very rapid pace, and this rate of growth is expected to continue in future also.

The present consumption is 600% more than that of 1960 and during the last 6 years the consumption has come up by 300%. The total consumption in Australia last year (i.e. 1969) was 230 million chicks which comes to 22 pounds per capita consumption. The city of Sydney consumes 400,000 chicks a week. Egg consumption, however, has been steady over a period of years. Beef consumption during the last ten years has increased by 33% and pork and meat by 17%. It is expected that pork consumption will be increasing at a more rapid pace than other meats. The price of chicks is gradually going down because of comparatively less costs in handling the increased volume of business.

Private Integrator INGHUMS

55. 80% of the feeds mixed by the Society's plants are sold to feed the chicks and the remaining 20% go to middle and large size livestock. Of the poultry feeds, 14,000 tons are formulated for broiler chicks and 18,000 for layer chicks. The average unit of managing the chicks by a farmer is between 20,000 and 30,000 chicks. One person is in a position to handle upto 30,000 birds. The farmer at present gets 9¢ for raising a chick as commission from the private integrator Inghums (previously this rate was 11.5¢ per chick). The Society does not function independently in respect of supplying feeds and marketing the reared chicks by the members. It is a three-way process among the Society, the farmers and the private integrator. The Society provides the feeds according to the specifications given by Inghums and supplies it direct to the producers within a radius of 100 miles of Brisbane. The feed supplied by the Society is delivered in bulk tankers at the gate of the farmer who stores the feeds in bins which are hired out to him by the Society. The chicks are delivered directly to the Inghums by the producers and Inghums then processes and markets the finished products. It processes 400,000 chicks a week and commands 60% of the meat market. The private

integrator, therefore, has a commanding position over the entire operations.

Problems and Conclusions

56. Although the Society has a long history, it has not been able to make much progress in view of its recent reorganisation which resulted in the stoppage of consumer stores. It has yet to make up the deficit incurred during the early years.

57. The capacity of feed processing plants of the Society is limited which make it difficult for the Society to run the plants continuously at break-even points. Secondly, except for the supply of feeds to broiler and poultry industry, the demand for the supply of formula feeds for other cattle is not likely to increase very substantially in view of the fact that there is less reliance on formula of feeds in Australia. This may be one of the reasons why a large scale development of the feed industry has not taken place so far in the country. The feed prices are also not necessarily determined by the price structure in the market as we were informed that the feed prices have often changed without affecting the prices of chicks in the market. As the Society has to operate under the overall integrated structure controlled by Inghams, it cannot have an independent policy which can in a way influence the market. This also poses a question whether the Society would be in a position to retain its essential cooperative character in view of its dependence on Inghams. In addition to this, the fact remains that a majority of the members of the Society, who decide its policy, are still consumers and it is likely that the Society may not be able to fulfil its obligations towards the member producers. We were, however, informed that the non-farming members have no interest in the society at present as the Society no longer caters to the needs of the consumers. The Society will, therefore, endeavour to concentrate on the services to be given to the producers in future.

58. The Society has a long experience in processing formula feeds and it may be in a position to undertake foreign trade responsibilities if discussions in more details are conducted with the organization regarding the possibility of such trade. During the visit to the organization, the discussions centered around the production and processing of alphanpha which can be exported to countries such as Japan for use as raw material for feedstuff. We were not, however, able to establish facts concerning the production of alphanpha and the possibility of its being made available to an external buyer in the form of cubes or pellets.

59. The area in southern Queensland is endowed with favourable soil conditions (fertile black soil) and has limited rains but a good potential for developing irrigation in the temperate zones. There is also the fact that the inland freight for reaching the nearest port, namely Brisbane, will be much cheaper compared to several other ports in the rest of Australia.

Recommendation

60. Our discussions with the above organization has lead us to believe that if certain conditions are fulfilled by the above organisation, it should be possible for cooperatives in Japan to enter into a contract at a later stage for importing processed alphanpha. The General Manager of the Society has promised to collect detailed information concerning the present production of alphanpha and the possibility of increasing the acreage under this crop. It is suggested that detailed discussions on trade possibilities should be initiated with this organisation as soon as it is ready with the above information.

NEW SOUTH WALES

61. A visit was organised for us by the Cooperative Federation of New South Wales to an area around Quirindi which lies about 180 miles north of Sydney and about 145 miles west of New Castle.

62. The organisations visited by the Team were: The Australian Coarse Graingrowers Association Limited and the Quirindi Irrigation Farmers Cooperative Limited. Both these organisations function in close cooperation with each other although the Association is of a very recent origin.

The Australian Coarse Graingrowers Association Limited

63. The Association was established during February 1970 with the object of exporting grains other than wheat (in Australia grains other than wheat are termed as coarse grains). At present the Association is functioning around the Quirindi area, although it plans to extend its area of operation not only to all parts of New South Wales but also to the whole of Australia. The Quirindi Irrigation Farmers' Cooperative took a leading role in the establishment of the Association. This Cooperative took the initiative in organising a meeting of farmers which coupled with a subsequent meeting held at Canberra resulted in the organisation of the Association on 25th February 1970.

64. All the 930 members of the Association are growing coarse grains on irrigated lands. As the Association is formed mainly to handle coarse grains, it does not admit as members dry land farmers producing wheat and other crops. About 180,000 acres are sown under grain in the area of the Association.

Quirindi Irrigation Farmers Cooperative Limited

65. This Cooperative was established by 138 farmers with irrigation lands growing maize and/or milo in the area. Out of an average of 2,000 acres owned by each member, 300 acres are under irrigation for cultivating grains. At present, the members of this Cooperative plays an important role in the activities of the Association.

66. During the visit to the two organisations and to some of the farms of the members, the Team had the opportunity of holding discussions with the President of the Association, the President of the Quirindi Cooperative and a number of Directors of the two - institutions. Presidents of both the organisations are themselves very active and progressive farmers. The turnover of the Society for 1968 and 1969 was A \$430,221.00 and A \$646,805.00 respectively. The quantity of milo sold during these two years was 6,964 tons and 7,035 tons respectively. While during 1968 the members cultivated 698,785 acres of irrigated land and 440 of dry land, during 1969 these figures were 8714,571 and 1385 in that order. These figures show the rapid rate at which the land under irrigation is increasing from year to year.

67. New South Wales farmers are also affected by the wheat quota system. Also the traditional wheat growing areas such as Queensland are getting a better share of the total quantity. In the Quirindi and other areas of N.S.Wales, new lands are being brought under cultivation on a very large scale and the prospects of increasing the acreage are much brighter. The Farmers in the area, therefore, are paying greater attention to alternative crops such as maize and milo. With irrigated lands the production target for maize and milo for 1970 was 150 bushels and 4 tons respectively. The other cash crops such as linseed and soya-beans are not very popular in the area.

Rainfall and Irrigation prospects.

68. Quirindi area has a rainfall of 28 inches a year and wheat is grown on dry land with an average yield of 50 bushels per acre. Development of irrigation facility was taken up in the area as early as 1955; however more intensive efforts are being taken since only a few years and it is expected that a target of 100,000 of irrigated land will be reached in the near future. Except for the Riverina area, irrigation depends upon underground water which can be pumped up from 150 to 200 feet below surface (from water layers

between 20 and 30 feet). Most of the irrigated lands are - recently reclaimed and lands already under cultivation are not being brought under irrigation on a very large scale. The method of irrigation adopted in the area is to lift water through pumps which are installed at vantage points. The cost of the pumping set is rather high, but the investments are made by individual farmers who have access to electric supply. A pump set, which can water 200 acres of land, costs about 8000 Australian Dollars and another with a capacity of 500 acres will cost 25000 Dollars.

Grain handling

69. The Association is making every effort to persuade the State of New South Wales to construct more silos for coarse grains as lack of these facilities can be one of the serious handicaps that can be encountered in handling larger quantities of grains. It is also trying to persuade the State Government to establish a new board, which can raise finance, construct facilities and deal in respect of all matters concerning coarse grains. In this effort, it is seeking the collaboration of other producers' organisations such as Farmers' and Wool Processors' Association and the Grazers Association.

70. The farmers in the area are owning most of the machinery, equipment as well as facilities for storage, etc., and quite a few own electric drying machines, which help reduce the moisture in the grain from 18% to 13%.

Collaboration with A.F.L. Mitsui

71. For some time the Association had appointed AFL-Mitsui as its agent to handle issuance of delivery order, collection and payment to growers. This company was formed some years ago with an objective of finding export market for Australian grains. It establishes facilities for storage and drying, and undertakes research and extension work for the production

of maize and milo. We were informed that AFL-Mitsui has since withdrawn from the contract as the Association insists on handling the export operations by itself.

Alphalpa

72. Alphalpa is produced in the area and is mostly consumed as green grass. There is also a processing plant in the area. On the dry lands, alphalpa can be cut 3 to 5 times a year because of the availability of water 4 to 5 feet below the surface. On irrigated lands these cuts can be upto seven times a year. Even on dry land the yield is upto 10 to 12 tons a year per acre.

Problems and Conclusions

73. The quairindi and the surrounding areas of New South Wales have a great potential for developing as a major grain exporting region in view of the fact that the newly reclaimed areas are being brought under grain cultivation. The farmers are already committed to the production of coarse grain and there are less chances of their switching over to other crops as in the case of Queensland. The area can also be developed as an important alphalpa producing area if sufficient incentives are provided to the producers in terms of better price and a secured market.

74. The leadership in the area is very much devoted to the cause of grain export and are having a vigorous policy to pursue the authorities to create facilities for export operations.

75. The distance to the two nearest ports is rather long and this may be an important factor in determining the final export price. The port of New Castle, which is the nearest, can be reached after paying a freight of 7 dollars while to the port of Sydney it will cost 9 dollars per ton. It is not known if adequate facilities for transporting large quantities of grain would be available on time in this area. We were informed that the daily working hours of the port workers are 5 hours and loading operations

can be time consuming and more expensive if the ships have to wait longer for loading.

76. The silos owned by the N.S. Wales Grain Elevator Board are meant mainly for storing wheat and it is uncertain if these would be available to the Association for handling coarse grains at the time required. However, as already explained, the leaders in the two organisations are endeavouring to see that such facilities would be available for exporting coarse grains from the area.

77. The Association and the Guirindi cooperative are interested in developing long-term contracts for exporting grains and in joining hands with prospective buyers for possible joint ventures.

Recommendation

78. The climate being a favourable one from the point of view of a long-term trade relationship with the organisations in the area, further discussions in detail should be taken up with the leaders of the two institutions for developing trade in respect of coarse grains and for exploring possibilities of joint ventures in the production and processing of alphalpha with the ultimate objective of exporting the finished product to agricultural cooperatives in Japan.

The Producers' Cooperative Distributing Society Ltd, Sydney

79. The Society was visited by the Team with a view to discussing the possibility of trade in respect of commodities such as milk powder, meat meal, etc. The discussions were held with the Export Manager of the Organisation.

80. The Society is one of the oldest cooperative organisations in New South Wales. The first organisation, which was later amalgamated with the present organisation, was established as early as 1900. The membership of the organisation at present is 14,000 which includes several

cooperative dairies as well as primary producers. It employs 1,600 members of the staff. The area of operation extends beyond New South Wales into the neighbouring states of Victoria, Queensland and Tasmania.

Activities

80. The main activities of the organisation are the production, marketing and export of milk products. It covers 65% to 70% of the market in butter and skim milk in New South Wales, and 64% of drinking milk in the city of Sydney. It also acts as a collecting agent on behalf of the Peanut Board and is responsible for 80% of the free marketing of peanut in the State. It has recently bought up a stock feed company which was formerly known as Buchman and Co.

81. The Society processes dairy products and sells them under the brand "Allowrie". This name was chosen as the trade name because it was the name of the area where the pioneers of the Society produced the goods and marketed them on a cooperative basis. In case of cheese the Society also produces a number of different brands which are in demand in the market. This is done with the view to ensure a greater share of the market by their products and also to cater to the demands of the consumers who may have developed a preference for certain brands of cheese.

82. The Society is supplying most of the products to the domestic market as the domestic market price is also rather favourable. There is a price equalization policy for butter and cheese in Australia determined by the Milk Board which also undertakes quality control. The price of butter, for example, in the domestic market was 35 c/u whereas at the export market it was only 30 c/u. The margin of 5 c/u given in the domestic market is remitted by the producers to the Milk Board. In view of the favourable conditions in the domestic market, export surplus in respect of the products handled by the organisation is not very substantial.

In view of the recently acquired stock feed plant, the Company also supplies stock feeds to the local market for feeding the pig and poultry industry.

83. The Society has, however, considerable experience in exporting a variety of products such as skim milk, honey, fruits and onions. Out of a total of 160,000 tons of powdered skim milk, 10% is exported through the Society.

Problems and Conclusions

84. Although the Society has considerable experience in foreign trade it is not in a position to ensure an export surplus of items which could be of interest to the buyers of raw materials for feedstuffs. It is catering mainly to the domestic market in which it has a commanding position in respect of several products.

85. The Society is not in a position to enter into any long-term contract in respect of commodities such as skim milk because it is not in a position to know whether exportable surplus of this item would be available at a given time. It is also not in a position to export meat-meals although Japan is interested in this commodity

Recommendation

86. The Society is an independent cooperative organisation functioning for the benefit of the producers as well as consumers. It has a good reputation in the domestic and foreign markets and is a good contact for future trade in respect of certain items in Australia. The prospective buyers of some of the commodities handled by the organisation would be benefited if a continuous contact is maintained with this organisation. Cooperatives in Japan are already in touch with this organisation for occasional imports of skim milk.

SOUTH AUSTRALIAMurray River Wholesale Cooperative Limited, Adelaide

87. The above organisation was visited by the Team and the discussions were held with its General Manager and the Secretary. This wholesale cooperative society is a federal body established in 1921 by cooperatives in the area around Murray River for marketing fruits and vegetables. The area of operation of the organisation is mainly in South Australia and in the southern part of Victoria. The membership of the Organisation is restricted to primary cooperative societies and no individual members can be admitted directly. Presently, 85 such cooperative organizations are its members. The category of members admitted into the society is classified into two types. The A class members are entitled to subscribe as many shares as they prefer to buy and also to a right to vote at the general body meeting. These members operate in the state of South Australia. The B class members do not have the right to vote and are only allowed to take benefits of the society's services in the field of general merchandise. The B class members operate in the southern part of Victoria.

A good cooperative

88. The society is a unique type of cooperative federal organization functioning for the services to be provided to the member organizations. It does not do any business on its own but handles operations entrusted to it by member organizations. The commission charged by the society for the services rendered is strictly on the basis of actual costs and the surplus is returned to the members as patronage dividend. In other words, the society does not accumulate any surplus or reserves. It, however, calls for contributions from the member organizations, with the maturity term of 10 years, as and when the organization is in need of additional capital.

89. The present activities of the society center around marketing of dried and canned fruits in the local markets in addition to handling of fresh fruits, lobsters and wine. It has also recently undertaken exports of dried and fresh fruits. Its Supply Service Section handles fertilizer, chemicals, general merchandise and fuels. Part of the farm chemicals and other inputs are imported.

90. The business turnover of the Supply Section of the Society amounts to 6,466,844 dollars, of which 1 million dollars come from the distribution of fertilizer, 0.75 million dollars from packing materials, 1 million dollars from fuel, and two million dollars from general merchandise and wires. The domestic market business turnover amounts to \$2,001,310. The emphasis of the operation of the society is on the domestic market. The organisation has two fruit processing factories.

Pattern of Agriculture

91. The introduction of the wheat quota delivery system has affected the agricultural production in the State. The most important alternative crop introduced by the farmers at present is rapeseed. Although the production of this crop was about 3,000 tons during 1970, a considerable expansion is foreseen in the near future. In addition to this, sunflower and sunflower are being introduced. Except for some area in the northern part of the State, the climate is not favourable for the production of maize and milo. It is a Mediterranean type of climate with dry summers and wet winters. The area is, therefore, suitable for production of citrus fruits and alphalpa. Alphalpa is grown at present on 500,000 acres of land in the State as it has a large sheep population. We were informed that of the 180 million heads of sheep in the whole of Australia, South Australia keeps about 20 million heads. In this area, if underground water is available at 8" to 10" below surface, alphalpa can be grown on the dry land also. This variety of alphalpa can mainly be grown in the area where the rainfall is limited.

92. The wool farmers are also at present facing the problem of a gradual decline of the price of wool and may switch over to cattle breeding for beef. We were informed that during the last 25 years, the price of wool has come down from \$2.00 per pound to 30¢ per pound at present. Although the floor price system has been introduced by the government there has not been much improvement in the price structure. The Wool Board of Australia does not do any business on its own but ensures quality production by the farmers.

93. Although the main cereals produced at present are wheat and barley, it is likely that oat production will increase in the near future. The wheat growers are paid an initial instalment of a few months after the delivery of wheat to the Wheat Board's warehouse. The rest of the payment is made in several instalments within a period of two years.

South Australia Seedgrowers' Cooperative Limited

94. This organization is also located in Adelaide and the meeting with the Manager of the society was organised by the General Manager of the Murray River Wholesale Society.

95. The discussions with the Manager of the Seedgrowers' Cooperative revealed that this society, which is a member of the Murray River Wholesale Cooperative, was established by seedgrowers of pasture grass and vegetable oil. Some members of this organisation are already producing alphalpa in the north-east and south-east of Adelaide. All of these areas are within 300 miles of Adelaide and have the possibility of being developed as irrigated lands having an annual rainfall of 22 - 25 inches. The soil in the area can also be improved to produce the required seeds. We were informed that the distance to the port from the production areas will not present much of a problem because of

the fact that the commodity can be transported in bulk by lorries with a capacity of 20 tons each at \$8 a ton. This rate can be brought down to \$6 under a special contract. The port of Adelaide has a berth of 31 feet and the ships of 10,000 to 12,000 ton capacity can be docked at this port. In addition there is an outer port known as Victor Harbor where ships upto 30,000 tons can be docked. There is also Portland Harbour where much bigger ships can be handled. The shipping facility, therefore, should not present any problem in respect of alphantha trade as the transport of alphantha does not need large-size ships.

Problems and Conclusions

96. The management and business operations of the Murray River Wholesale Cooperative is strictly based on cooperative principles and the main emphasis in the activities is placed on services to members. However, at present, the society does not have any commodities which can be imported as raw materials for feedstuff. It is likely that its member organization, namely the South Australia Seedgrowers' Cooperative, may later develop production of alphantha which can then be imported by cooperatives in Japan or other countries through the Murray River Wholesale which has a very long experience in dealing with various marketing operations including exports and imports and will be a very sound contact for future trade relationship.

97. The South Australia Seedgrowers' Cooperative has promised to make a survey concerning the possibility of its members growing alphantha for the Japanese market. If there is a good potentiality in the area for the production of alphantha, the possibility of trade with the organisation could be discussed. The Wholesale Society is also interested in exporting fresh fruits such as mandarine oranges, navel oranges, valonica oranges, and grapefruits and also onions to Japanese markets during the off-season period in Japan.

Recommendation

98. It is suggested that as soon as information on alphalpa production is collected by the Seedgrowers' Cooperative, contact should be made with the General Manager of the Murray River Wholesale for exploring future trade possibilities in this commodity.

Southern Farmers' Cooperative Limited, Adelaide

99. The Manager and the Chief Technical Adviser of the organisation arranged the visit for the Team to areas about 90 miles south-east of Adelaide which grows alphalpa on a large scale. During the visit the Team was also able to discuss the structure and functioning of the above organisation. A visit was also organised to a private alphalpa processing company known as Dehy Fodders Pty., Ltd. situated on the banks of Lake Albert in the area.

100. The Southern Farmers' Cooperative was established more than 80 years ago and the area of operation at present is not only in South Australia but also in the neighbouring states of Victoria and New South Wales. The extension of its operations to the neighboring states took place some 20 years ago. The society has 25,000 members and is the second biggest primary cooperative society in the whole of Australia (the biggest being Wesfarmer in Western Australia). It owns 60 establishments in different parts of those three states, which includes 20 branches. The total number of employees is 1,400.

Business Activities

101. The main operations of the society relate to livestock industry, wool, milk and milk products like butter and cheese. It has milk processing plants and supplies about 60% of the fresh milk to the city of Adelaide. It has also many supply services to members including general merchandise, agricultural equipment, chemicals and domestic furniture. Before the establishment

of the Wheat Board in the State, this organisation was also collecting wheat from its members. It exports members' products to overseas markets.

102. The society has reorganized itself during September 1970 and has since started floating its stocks in the open market in an attempt to secure adequate finance and also to create confidence among the public. In doing so, the society has surrendered the tax concessions which a cooperative society is normally entitled to enjoy in the State. The majority of the members of the society are, however, still original farmers and patronage dividend is distributed to them as before. It also pays 8% interest on the share capital. It also maintains services of techniques to provide the veterinary and extension guidance to member farmers. It does not seem to function entirely as a joint stock company, as the services to members is still its primary objective.

Problems and Conclusions

103.. The Southern Farmers' Cooperative, although a primary organisation, has developed itself into a very strong service organisation capable of handling a number of activities of great advantage to the farmer producers.

104. The alphalpa grown by farmers in the area visited by the Team is processed by a private processor. In view of the lack of organizational relationship with the plant, the society may not be in the position to ensure export surplus of processed alphalpa. We were also informed that the plant is not working to its full capacity and has been operating at a loss for the last few years. There is no immediate prospect of trade in respect of any commodity which can be used as raw material for feedstuff through this organisation.

WESTERN AUSTRALIA

105. The visits in Western Australia were coordinated by the secretary of the Cooperative Federation of Western Australia in Perth. The programme included visits to Westralian Farmers Cooperative Limited in Perth, Grain Pool of Western Australia in Perth, Cooperative Bulk Handling, Ltd. in Perth and its facilities in Fremantle and to the processing unit of Wesfeed.

Westralian Farmers Cooperative Limited

106. The discussions in the organization were held with the Marketing Manager, the Export Manager and the Country Marketing Manager. The Westralian Farmers known as Wesfarmers, which was established in 1914, is the biggest cooperative organization in the whole of Australia. Its area of operation is Western Australia and it has 137,500 farmer members. The number of employees is 2,500. The services rendered by the society to members include marketing of wool and livestock, marketing of grains, fruits and milk, marketing of cotton, skins and hides, supply of agricultural inputs and general merchandise including fertilizers, feedstuff, farm chemicals, daily consumer goods, liquid petroleum gas, technical and extension services, loans and insurance facilities, tourist services, agency service for land dealings and boat chartering and transport services.

Grain Pool of Western Australia

107. The discussions in the organization were held with the General Manager and his Personal Assistant.

108. The society was established in 1932 with the area of operation as Western Australia. It markets oats and barley on behalf of government and also handles shipping on behalf of the Wheat Board and such other agencies.

109. Information given during the discussion related to the production of raw materials which are at present being used to produce stock feeds in the processing plants by the

subsidiary of Wesfarmers known as Wesfeed. These include grains like barley, linseed, rapeseed and different meals. It is possible to grow alphantha on sandy soils and the organization has an intention to establish a processing plant if the acreage under alphantha in the north coastal plain 70 to 100 miles north of Perth and 10 to 70 miles along western coast) is increased. However, at present, very small pockets of area in the north are actually under alphantha production.

110. Oats are grown in the South-Western parts in which good port facilities are available. Oats have been introduced into this area after wheat quota restrictions. Wesfeed have recently produced a mixed seed using off grade barley as the main component. The Grain Pool is interested in exporting this compound seed to Japan.

Cooperative Bulk Handling Limited, Perth

111. The discussions were held with the General Manager of the Organisation and its facilities at Fremantle Harbor were visited by the Team.

112. This organisation was established in 1933 as a joint venture by the Grain Pool and the Wesfarmers. However, at present, it operates as a subsidiary of the Graingrowers of Western Australia. The main activities of the society are operating of silos and warehouses. It handles bulk warehousing of wheat, whereas storing of wheat in bags is done by Wesfarmers. The society owns warehouses at 299 places and 5 terminal elevators at Geraldton, Fremantle, Bunbury, Albany and Esperance ports. The biggest and the latest terminal facilities are at Fremantle which is the outer port of Perth. The capacity of this facility allows for 4 million bushels with loading at the rate of 1,200 tons per hour and unloading at 1,600 tons per hour.

Problems and Conclusions

113. Of the total agricultural area Western Australia has only 1% of irrigated lands. This is mainly in the area around Ord River in the north. The State is mainly a wheat producing area with oats coming up as an alternative crop due to quota restriction of wheat.

114. The area around Perth is climatically similar to South Australia.

North of Perth 70-100 miles

115. The soil conditions and the availability of the underground water are also the same. The alphantha producing area located between 10 - 70 miles of west coast can be developed as a large potential source of supplying alphantha. At present, sun-cured hay is produced but the present crude protein content of 15% - 16% indicates that its quality is rather poor.

116. South-western part of the State is not suitable for milo production. However, linseed is produced and some quantity was shipped to Japan during 1969 through Mitsubishi. A small quantity of rapeseed is also produced. The State produces 2 million bushels of oats and the estimated export surplus is about 1,500,000. Most of the exports of oats are directed towards West Germany. The following table gives the figures relating to production of major grains in the State.

	<u>Wheat</u>	<u>Oats</u>	<u>Barley</u>
Acreage 1969/70	6.9 million	1.2 million	0.9 million
1968/69	7.3	1.1	0.6
1967/68	6.7	1.41	0.49

Production in bushels

1969/70	67 million	16 million	12 million
1968/69	112.5	23	9.2
1967/68	107	24.4	6.26

	<u>Wheat</u>	<u>Oats</u>	<u>Barley</u>
Yield per acre in bushels			
1969/70	9.7 million	13.8 million	13.3 million
1968/69	15.4	21.0	16.7
1967/68	15.9	17.3	16.9

117. The Grain Pool of Western Australia, although at present dealing mainly with Western markets and through a Japanese Trading Co. is willing to enter into trade relationship with cooperatives in Japan. However, it will be difficult for it to enter into a long-term contract as continuity of supply may not be ensured. The above statistics show that production is highly susceptible to climatic changes especially in the inland area where the annual rains are only 14 - 16 inches, which is much lower than what is required even for cultivation of oats.

118. In case of good crops, Grade No.1 oats can be exported. However, when crops are poor, only Grade No.2 will be available. For exploring possibility of trade with Japan in this commodity, it must be kept in mind that Japan would have to compete with other buyers from Europe. Western Australia being located closer to Europe in comparison with Victoria State, the terms and conditions of trade with them may be difficult to agree with than in the case of other States in Australia.

Recommendations

119. The situation regarding production of alphas should be watched and if there is a possibility of opening up trade contacts, this should be discussed with cooperatives which are very strong and experienced in this State.

120. The Grain Pool should be used as an important contact for obtaining future supplies of oats.

TRADE PROSPECTS WITH AUSTRALIA

121. The agricultural industries of Australia and Japan are in a complementary position to each other because of their geographical locations (one in Southern Hemisphere and the other in the Northern Hemisphere). However, the pattern of farming is entirely different in the two countries as Australian farming is done on a large scale and with intense mechanisation. Trade possibilities exist between the two countries in respect of the following commodities :

a) Milo and Maize

Good possibilities of trade in respect of these two commodities. Large scale supplies are possible from Southern parts of Queensland and the existing as well as newly developing areas of New South Wales. As these areas have a great potential for increasing production of coarse grain, it is estimated that within a period of next 4 to 5 years these two areas can supply grain upto 1 million tons per year.

b) Alphaloha

Prospects of large scale production of this commodity exist in three States of Australia viz. New South Wales, South Australia and West Australia. Extensive cultivation of this grass, which has a bearing on the cost of production, is expected to develop in the newly irrigated areas of New South-Wales, the irrigation areas along Murrey River in South Australia and in the South-Western parts of West Australia.

c) Oats

There are good prospects of exporting oats from the South-western parts of Western Australia as well as from the existing supply sources in the State of Victoria.

INDIAThe national structure

122. The Cooperative Movement in India, which is more than 60 year old, is now covering almost all sectors of economic activities and has grown into a widespread, although not fully integrated, economic network with the total number of cooperatives exceeding 200,000.

123. Cooperatives in different fields, namely, marketing, processing, credit, have evolved their own federal structures at the state levels and some of them have national federations which are in turn integrated in the National Cooperative Union of India (NCUI). The NCUI is a federal organisation of apex cooperative institution in the country, both at the State and inter-State level. Organised in 1929 as an association of State Cooperative Unions, mainly for providing a forum for exchanging information and sharing of experiences in the field of cooperation through convening all-India cooperative conferences periodically, the Union has grown over the years into a full-fledged national organisation of cooperatives of all types with more than 100 institutional and 8 honorary members at present.

124. The objectives of the Union are: to promote and develop the Cooperative Movement in India; to educate, guide and assist the people in their effort to build and expand the Cooperative Sector, and to serve as an exponent of cooperative opinion.

125. In furtherance of these objectives, the Union undertakes the programme of cooperative member education, training of cooperative employees, research and evaluation of important cooperative problems, convening of National

Cooperative Congresses and Seminars, publication of literature and journals and the task of representing the Indian Cooperative Movement in the national and international spheres.

126. It will almost be impossible as well as inappropriate for the purpose of this report, if we attempt to describe the structure and functioning of the entire Movement in this country. We have only attempted to describe briefly the national marketing structure in the country and the functioning of the cooperative marketing organisations in the five States visited by the Team.

Outline of the Cooperative Marketing Structure

127. Cooperative Movement in India follows the pattern of a pyramid structure with the National Agricultural Cooperative Marketing Federation (NAFED) as the apex organisation at the national level. Almost in all the States, there are state cooperative marketing federations consisting of district cooperative marketing societies, taluka (a sub-district) cooperative marketing societies and the primary marketing as well as service societies. The level of development as well as the nature of business relationship differs from State to State as the type of activities undertaken by most of these organisations are broadly determined by the policies evolved by the governments in the respective States.

128. At the base of the structure are the village level agricultural cooperative service societies and credit societies numbering more than 170,000. These societies are affiliated, for the purpose of marketing operations, to the taluka level marketing societies which undertake sale of their agricultural produce as well as the provision of agricultural inputs, such as fertilizers, manures, seeds, implements and in some cases, consumer articles. Some of these societies at the taluka level

also act as warehouse keepers as well as agents of the government for the procurement of agricultural produce and for the supply of agricultural inputs. In some States these marketing societies work in collaboration with the Central Cooperative Banks in order to link up credit and marketing operations. At the end of 1967-68, there were 3,331 primary cooperative marketing societies out of which 2,791 were handling several commodities while 540 specialised in handling only one crop, such as cotton, fruits and vegetables, tobacco, etc. In several States, the taluka and other primary marketing societies conduct their operations through the district cooperative marketing societies as well as through the state level organisations wherever necessary. This coordination is more effective in case of procurement of agricultural produce and securing supplies of agricultural inputs.

129. The primary cooperative marketing societies, had a paid-up share capital of the value of Rs. 237,500,000 at the end of 1967-68. Although quite a large share of the capital comes from members, the largest portion is from the government. Out of the total number of societies, 2,448 had State participation in their equity capital. The State participation in the share capital is aimed at strengthening the financial position of these organisations and increasing their borrowing capacity.

130. In most of the States, the taluka level primary marketing societies are federated into district marketing societies which at present number more than 159. Most of these societies are engaged in the distribution of agricultural inputs, essential consumer goods, and to some extent, in the marketing of agricultural produce of their members.

131. There are 20 state cooperative marketing societies in the country handling a variety of agricultural produce while 3 state federations handle only specific commodities. Most of the state federations act on behalf of their affiliated societies for inter-State and export trade in agricultural commodities and for procurement of agricultural inputs and essential consumer articles. A few of the societies undertake processing and manufacturing activities and assist their affiliates in the construction of godowns and warehouses. In a number of States, the state cooperative marketing societies act as agents of the governments for procurement of agricultural produce. In short, the bulk of the operations of agricultural marketing societies is in the form of commission agency business.

132. The National Agricultural Cooperative Marketing Federation (NAFED), which is at the top of the cooperative marketing structure in the country, is at present engaged in coordinating inter-State activities and in providing advice, technical guidance to member affiliates. During recent years, it has increased its marketing and export activities at a very rapid pace. In addition to the normal commercial operations, NAFED undertakes market research, commercial intelligence activities for benefit of its members. It also undertakes imports of agricultural inputs and other articles needed by the farmer producers. Recently, it has initiated plans for the development of processing activities aimed at improving the marketability of the agricultural produce.

Business by Marketing Societies

133. The total business turnover of the agricultural marketing societies is more than Rs. 5,250 million, of which 78 per cent was covered by marketing societies in 4 States in the country. Of the total sales of agricultural

produce, 32 per cent was accounted for by foodgrains and a substantial portion of this was taken care of by 5 States where the governments have a positive policy of supporting marketing cooperatives by granting them authority for collecting foodgrains. Among cash crops, cotton was the main constituent registering a sale of Rs. 560 million. The value of fruits and vegetables marketed by cooperatives exceeded Rs. 105 million and oil seeds Rs. 100 million during 1967-68.

134. During recent years, there has been a steady growth of inter-State cooperative trade in the country. This is largely due to the efforts made by NAFED and the state cooperative federations. The value of inter-State cooperative trade increased from Rs. 10 million in 1962-63 to Rs. 612 million in 1967-68. The major commodities involved in inter-State trade were foodgrains, fruits and vegetables, jute, cotton and oil seeds. Following are some of the important factors which have contributed to the growth of inter-State cooperative trade:-

134.1 Creation of price fluctuation fund which encouraged the marketing/processing societies to make outright purchase of agricultural produce.

134.2 Establishment of promotional and assessment cells in the apex marketing societies which provided necessary marketing intelligence and expertise for commodities like pulses, paddy and oil seeds.

134.3 Opening of branches of societies in places outside the State as in the case of a federation. Apart from the apex marketing societies, the National Agricultural Cooperative Marketing Federation, through its branches at Bombay, Calcutta, Delhi, Madras, Cochin and Gauhati had also largely contributed to the increase in the inter-State trade.

135. The growth of cooperative marketing societies in India is also assisted by government policies which aimed at increasing agricultural production, increasing the volume of agricultural inputs and strengthening the link between the credit and the marketing structure in the country. These efforts are supplemented by government policies aimed at creating facilities such as warehouses, transport and processing.

The National Cooperative Development Corporation

136. On recognition of the importance of agriculture for the economy of the country the government placed the priority on agricultural development in its Third and Fourth Five Year Development Plans. As part of the efforts for agricultural development the government has initiated several measures to be implemented through the National Cooperative Development Corporation (NCDC). The Corporation has been established mainly to consolidate marketing and processing facilities of agricultural cooperatives. It is chaired by the Minister of Food, Agriculture, Community Development and Cooperation of the Government of India and all the concerned organisations, such as the National Cooperative Union of India, the National Agricultural Cooperative Marketing Federation and cooperative banking institutions are represented on the Board of the NCDC.

137. With a view to plan and promote programmes of production, processing, marketing, storage and foreign trade in agricultural produce by the cooperatives, the Corporation (i) provides funds to the State Governments for supplying loans and grants to cooperatives including grants to cover the cost of staff in charge of cooperative development projects, (ii) provides funds to the State Governments for supplying loans to cooperatives

that collect agricultural produce on behalf of the government and/or purchase designated agricultural produce, (iii) facilitates planning and implementation of programmes for supplying production requisites like seeds, fertilizer, farm chemicals and others conducive to expansion of agricultural production. The contribution being made by the Corporation to the development of agricultural cooperatives is stated in the following paragraphs and statements.

Assistance for cooperative development schemes

138. The Corporation continued to provide Central assistance in respect of the Centrally aided and Centrally sponsored plan schemes of cooperative development relating to cooperative agricultural credit, marketing, processing, supplies and storage as well as strengthening of the departmental staff of state cooperative departments. The Corporation also continued to provide financial assistance outside the state plan ceilings for schemes of cooperative development sponsored by it and also to national level cooperative institutions. During the year under report, a total sum of Rs. 7.66 crores was provided, as against Rs. 9.09 crores in the previous year, as loans and grants to the State Governments and national level cooperative federations for implementing various schemes of cooperative development as per details given below:-

Particulars	Loans	Subsidy (Rs. in lakhs)	Total
i) Centrally aided Plan schemes	293.819	149.563	443.382
ii) Centrally sponsored schemes	121.679	14.893	136.572
iii) Corporation sponsored schemes	171.955	3.554	175.509
iv) National level cooperative institutions	10.000 ^{\$}	0.644	10.644
TOTAL	597.453	168.654	766.107

(\$ - Share Capital Contribution)

The scheme-wise details of assistance provided are given in the following paragraphs:-

Centrally aided plan schemes

139. During the year under report, the Corporation sanctioned an amount of Rs. 443.382 lakhs to the State Governments for implementing the Centrally aided state plan schemes relating to cooperative agricultural credit, marketing, processing and storage as well as strengthening of departmental staff in the state cooperative departments. The scheme-wise break-up of the assistance is furnished below:-

Particulars	(Rs. in lakhs)		
	Loan	Subsidy	Total
1. Agricultural Credit	--	75.834	75.834
2. Marketing	68.537	13.277	81.814
3. Processing (other than sugar factories)	81.679	0.548	82.227
4. Sugar factories	99.289	--	99.289
5. Godowns	38.414	16.195	54.609
6. Cold Storages	5.900	2.962	8.862
7. Departmental Staff	--	40.747	40.747
Total:	293.819	149.563	443.382

Centrally sponsored schemes

140. During the year 1968-69, the Corporation sanctioned an amount of Rs. 136.572 lakhs towards financial assistance for four Centrally sponsored schemes three of which were continuing schemes and the fourth a special scheme for

godowns sponsored by the Union Department of Agriculture, as per details given below:-

Particulars	(Rs. in lakhs)		
	Loan	Subsidy	Total
1. Additional assistance to Eastern States and Rajasthan.	15.000	4.475	19.475
2. Additional share capital and subsidy to marketing societies for undertaking distribution of consumer articles in rural areas.	22.500	7.418	29.918
3. Export-oriented cooperative processing units etc.	74.802	--	74.802
4. Special development (Crash) programme for construction of godowns.	9.377	3.000	12.377
Total:	121.679	14.893	136.572

Corporation sponsored schemes

141. The Corporation has been sponsoring certain schemes of pilot or supplementary nature from its own funds to accelerate the pace of development of cooperative marketing, processing, supplies and storage. In these cases, assistance is provided to the State Governments to the full extent of the expenditure incurred by them, outside the normal state plan schemes. During the year under report, the Corporation provided assistance to the extent of Rs. 175.509 lakhs on schemes sponsored by it as per

details furnished below :-

Particulars	Loans	(Rs. in lakhs)	
		Subsidy	Total
1. Establishment of conventional type of rice mills	79.050	--	79.050
2. Establishment of promotional and assessment cells by national and state marketing federations	--	0.779	0.779
3. Establishment of formulation units for insecticides/pesticides by marketing societies	1.562	0.088	1.650
4. Organisation of seed producers' cooperative processing-cum-sale societies.	2.805	0.705	3.510
5. Setting up of units for fabrication of agricultural implements by marketing societies.	0.438	0.157	0.595
6. Establishment of additional cold storages	10.000	--	10.000
7. Establishment of granular fertilizer units by marketing societies.	72.500	--	72.500
8. Establishment of service/repair centres for tractors and custom service for agricultural machinery.	5.600	1.825	7.425
Total:	171.955	3.554	175.509

Assistance to national level cooperative institutions

142. The Corporation has been, from time to time, assisting national level cooperative institutions to a limited extent from its own funds. This assistance has been in the form of share capital contribution and grants towards cost of managerial staff, etc. During the year under report, the Corporation provided assistance to the extent of Rs. 10.644 lakhs to national level cooperative institutions as per details furnished below :-

	(Rs. in lakhs)		
	Share capital contribution	Subsidy	Total
1. Share capital contribution to National Agricultural Cooperative Marketing Federation.	5.000	--	5.000
2. Managerial subsidy to All India Spinning Mills Federation.	--	0.394	0.394
3. Share capital contribution to IFFCO.	5.000	--	5.000
4. Managerial subsidy to All India Central Land Development Banks' Cooperative Union Ltd.	--	0.250	0.250
Total:	10.000	0.644	10.644

Regulated Markets

143. A peculiar feature of the marketing structure in India is the existence of regulated markets all over the country established by governments under special legislation enacted in most of the States. Most of these Acts are known as Agricultural Produce Market Acts.

144. The principal aim in regulating agricultural produce market is to remove malpractices in the market and to ensure a fair deal to producers. In the unregulated markets, the usual modes of sale transactions are: (i) sales under cover (ii) auction system (iii) open bid or private agreement, and (iv) tender system. In order to eliminate these unfair practices, legislation generally envisages sale by open auction.

145. Legislation in different States has also provided for licensing of market functionaries. The Bombay Act lays down that the market committee may issue licences, in accordance with the rules, to traders, commission agents, brokers, weighmen, measurers, surveyors, warehousemen and other market functionaries. The Act specifies the commodities covered by the law and determines the areas in which the produce can be marketed.

146. As the market functionaries in the unregulated markets charge exorbitant rates of allowances (trade allowances), the legislation in different States specifies that no allowance, other than an allowance prescribed under the rules or bye-laws made under the Act, shall be made or received in a notified area by any person in any transaction in respect of the regulated crops.

147. Legislation in most of the States further make provisions for the settlement of disputes according to which all disputes between a buyer and a seller of

agricultural produce regarding the quality or weight of agricultural produce, the price or rate to be paid, the allowances or deductions for any cause should be referred to the market committee or the arbitrator appointed by it. The decision given by the committee or the arbitrator is treated as final. In some States, the market committee appoints a sub-committee and refers the disputes to it. Such sub-committee consists of one nominated member (Chairman of the sub-committee) and one representative each of agriculturists, traders and local authorities.

Progress and working of Regulated Markets

148 Of about 1,800 markets in the country, only 286 markets were regulated up to the beginning of the First Plan. During the First and the Second Plan periods, 184 and 260 additional markets were regulated respectively. Including 43 markets, which were regulated during the year 1961-62, the total number of regulated markets, as at the end of March 1962, stood at 773. Inclusive of about 109 sub-market yards in some States, viz. Gujarat, Maharashtra and Mysore, about 882 markets out of 1,800 were regulated upto 1965-66.

149. The progress in regard to regulation of markets has, however, been uneven as between different States. While there is a marked progress in Gujarat, Maharashtra, Punjab, in Hyderabad area of Andhra Pradesh, and to some extent in Madhya Pradesh and Madras, in Assam, Uttar Pradesh and West Bengal, they are yet to be introduced.

COOPERATIVE ORGANISATIONS VISITED BY THE TEAM

PUNJAB

Punjab State Cooperative Supply & Marketing Federation Limited, Chandigarh

150 The Federation has a membership of 105 marketing societies and the wholesale societies in 11 districts play an intermediate role. There are 4,000 village level agricultural cooperative service societies that handle credit and fertilizer.

151 The main activities of the Federation are as follows :

Rice and Wheat: The main function of the Federation is the marketing of rice and wheat. The Federation has been appointed as the rice collecting agent together with the Food Corporation of India and the State Agricultural Department. Two days during a week are allowed to each of the three agencies for collection of rice. The Federation collects rice from the cooperative marketing societies and enjoys 80 per cent share of the market. As regards wheat, the Federation accounts for 90 per cent share of the State wheat market. The State law provides that 75 per cent of the staple foodgrains should be earmarked for government purchase and 25 per cent of the harvest can be sold freely by the growers. However, the room for free marketing is limited as the State produces large quantity of wheat and rice. The Federation receives Rs. 4.50 per 100 kg: as commission for collection of rice and wheat.

152 The three agents together handle about 2.5 million tons of wheat while private traders handle only 4 per cent or 100,000 tons.

Fertilizers: The State Government gave monopoly rights for distribution of fertilizers to the Federation in 1960. The Federation's business in fertilizers is very well established with 4,000 selling points in the State through the village level agricultural cooperative service societies. Credit for the purchase of fertilizers is provided to the farmers through the village societies by the State Cooperative bank. The fertilizer price is unified in the State. The Federation runs 200 demonstration farms and 8 soil testing laboratories staffed with 40 agricultural graduates, who propagate techniques of fertilizer application. Fertilizer consumption in the State has recorded significant increase since 1960. It reached 886,000 tons in 1968-69 as compared to only 39,000 tons in 1961-62.

Farm Chemicals: With its experience in fertilizer distribution, the Federation started in 1967, handling of farm chemicals, when farm chemical business was transferred from the State Agricultural Department to the Cooperative Department in April 1967. The Federation was appointed as the sole agent for the distribution of farm chemicals in the State. Its turnover in farm chemicals jumped from a mere 787,000 tons in 1966-67 to 4,144,000 tons in 1968-69.

Agro-industrial Activities: The Federation is engaged in agro-industrial activities by running a groundnut solvent extraction mill at Khanna, rice mills at various places and a vegetable dehydrating and canning plant. It has plans for establishing fertilizer plants, irrigation pipe manufacturing plant, winery and brewery for developing its processing and marketing activities. Some of the plans have already been submitted to the State Government for issue of the necessary licences. Once these are obtained, it will

apply to the National Cooperative Development Corporation and the State Cooperative Bank for the necessary finance for the projects.

The Khanna Cooperative Solvent Oil Mill Ltd., Khanna

153. The Mill has been established by 35 cooperative marketing societies in and around Khanna. No farmer is a member of the mill directly.

154. The mill began operation on November 30, 1967 and at present the operations include decortication, oil mill and solvent extraction. The mill is equipped with a groundnut-shell separator with a daily capacity of 100 tons, two expeller units with a total capacity of 50 tons per day and a solvent extraction plant with a capacity of 60 tons per day. In addition, the plant has two machines for de-oiling the rice bran with a total capacity of 50 tons per day.

155. The mill suffered losses in the beginning but later the State Federation came to its help and since 1968-69 the mill began to make profits. The mill has a processing expert deputed by the Federation and the Chairmanship of the mill at present is held by the Chairman of the Federation.

156. Collection of groundnut is done during October to January. Though the member cooperative marketing societies are covering 200,000 acres of land in the groundnut producing area, the mill can collect only 10,000 tons through them and the rest goes to private traders. With this quantity of raw material, the operational rate of the mill remains low. In order to overcome this problem, the

mill buys expeller cake of groundnut from private mills to the extent of 10,000 tons.

157. Rice-bran is collected from the 16 rice mills operated by the member cooperative marketing societies. There is no difficulty in disposing off the rice-bran oil in the country as there is a good market, and the mill is receiving orders from all over the world for de-oiled rice-bran.

The following is the marketing performance of the mill during 1967-68 to 1969-70 :

	1967-68 M/T	1968-69 M/T	1969-70 M/T
Groundnut oil	688	1,288	1,018
Expeller cake	207	210	--
Groundnut extraction oil	364	971	685
Groundnut extraction meal	5,293	15,790	10,174
Rice-bran oil	--	224	306
De-oiled rice- bran cake	--	1,280	1,693

158. Groundnut extraction meal is sold to U.K., West Germany, U.S.S.R., and Hungary. Eighty per cent of the meal produced in the mill is for export.

159. The mill has also erected a vanaspati manufacturing plant for hydrogenating groundnut oil for cooking.

The Jangrurra Cooperative Agricultural Service Society Ltd.,

160. The Society was established in 1951 as a credit society and in 1966 it was reorganised into a service society. The membership of the Society consists of 938 including 104 non-agriculturists. The area of operation of the society extends to 14 villages within a radius of 3 to 5 miles from the premises of the Society.

Activities: The Society extends loans to its members under the crop loan system introduced in 1967. The maximum loan limit has been increased to Rs. 4,000 for agriculturists and Rs. 750 for non-agriculturist members. The major source of loanable funds is the cooperative bank at the district level. The rate of interest on borrowings from the bank is 6 per cent for short-term credit, 7 per cent for long-term credit and 8 per cent for non-agricultural credit. The Society charges interest at 9 per cent on loans to members. During 1969, the Society extended loans to the extent of Rs. 340,000. The target set for 1970 is Rs. 78,000 for loans in cash. The amount of loan to a member is determined on the basis of fertilizer requirement and the estimated area of cultivation.

161. All the fertilizer requirements of the farmer-members are met by the Society. Farmers get fertilizers either in direct cash payment or in the form of a loan. During 1969, the Society supplied on loan, fertilizers to the extent of Rs. 142,000 and the target set for 1970 is Rs. 93,000.

162. For the year 1970, the Society plans to provide loans for pumping sets amounting to Rs. 77,000.

163. The average size of holding per farm is 4 acres and the yield of wheat is 2 tons per acre. Fertilizer input per farm is Rs. 1,000 on an average, i.e. Rs. 250 per acre with two crops in a year.

164. This Society was visited by the Team members with a view to acquaint themselves with the working of a primary society in the State.

RAJASTHAN STATEIntroduction

165. Rajasthan State is an agricultural State with a vast tract of arid land in the western part. The farm holdings average five to six acres. The main farm crops are jowar, bajra, groundnut and sesame which are grown from June to September known as the Karif crop. On irrigated land, wheat, barley, gram and mustard seed are grown in the Rabi season starting in October.

166. The State is a major supplier of cattle in the country. The livestock population consists of 2 million heads of cattle and buffalo and 2 million heads of sheep and goats in addition to horses and camel.

167. The pig and poultry industry has made a remarkable progress during the past decade. The State Government has embarked on a programme of promoting production and consumption of mixed feed in view of the limited possibility of expansion of grazing land and for supplementing grazing by the intake of proteins, minerals and vitamins. Demand for mixed feed is estimated at 2,300 tons per day whereas the total production in the State is only 25 tons per day. Annual availability of raw material for feeding-stuff within the State is estimated at 12,000/cotton seed meal, 20,000 tons groundnut meal, 8000 tons linseed meal, 12,000 tons sesame meal, 6,000 tons wheat bran, 18,000 tons guar meal, etc.

168. A factor which has contributed to the rapid progress of agricultural production in the State is the propaganda for greater use of fertilizer and farm chemicals.

Rajasthan State Cooperative Marketing Federation Ltd., Jaipur

169. The federation has 133 primary marketing cooperative societies out of 144 in the State as its members. In addition, the Central Cooperative Bank, the Rajasthan State Cooperative Union, Rajasthan Sahakari Udyogik Sangh and the State Government are the constituent members of the Federation.

170. The paid-up share capital of the Federation is Rs.5,776,890 of which the State Government has contributed Rs. 5,630,000 and the members' contribution is only Rs.146,890.

171. The Board of Directors of the Federation number 9 out of which 3 are nominated by the Government. However, both the Chairman and the Vice-Chairman are representatives of the cooperative marketing societies.

Activities

172. The activities of the Federation are as under :

- a) Supply of fertilizers, farm chemicals, seeds, agricultural machinery, feedstuff and other farming requisites and consumer goods to farmers through member cooperatives;
- b) Purchase and marketing of agricultural produce jointly with the member marketing societies;
- c) Processing of agricultural produce, such as rice, and
- d) Operation of cold storage.

Fertilizers

173. The main business of the Federation is the supply of fertilizers to farmers through member societies. In March 1969, the monopoly rights for distribution of fertilizers in the State were taken away by the Government from the Federation. Now both the private traders and the cooperatives are engaged in the distribution of fertilizers. However, it is worthwhile noting that the Federation enjoys 80% share of the market.

Feedstuff

174. The Federation owns a cattle feed factory which has a capacity of five tons feed per day on the basis of 24 hours operation or 1,500 tons monthly. The plant is equipped with a Buhler pelleting machine. The factory plans to produce mixed feeds for poultry also.

Guar gum

175. The Federation is constructing a guar gum plant. The plant will have a capacity of 9,000 tons of guar out of the total production of 100,000 tons in the State.

Rice

176. The Federation has three rice mills and they process 50% of the free market paddy in the State. After purchasing paddy, the milled rice is sold in the open market. The Federation has set a target to increase its share of the market to 70% during 1971. Three other rice mills owned by the Federation are under construction.

Cold Storage

177. The Federation has two cold storage for preserving vegetables, such as tomato, cabbage, cauliflower, onions, etc.

Insecticides

178. Adjacent to the cattle feed factory is the insecticide (BHC only) mixing plant with a capacity of 14 tons per day also owned by the Federation.

Plans for processing

169. The Federation plans to construct four other plants for the manufacture of mixed feed in view of the potential demand for mixed feed in the State. It also plans to construct fruit canning factories, vegetable ghee plant, fertilizer mixing plants, cotton processing factory, oil mills and dal mills.

MAHARASHTRA STATEThe Maharashtra State Cooperative Marketing Federation Limited, Bombay

180. The Federation is composed of 25 district cooperative marketing societies and 531 cooperative marketing societies at taluka level (taluka is a sub-district). About ten taluka marketing societies in each district are federated into their district society. Under taluka societies are about 20,000 village agricultural service cooperative societies in the State.

181. The 31-member Board of Directors of the Federation consists of one representative from each of the 25 district marketing societies, one from the State Cooperative Bank, one representing district level cooperative banks, one from consumer cooperatives, and one representing the Government.

Activities of the Federation

182. The following are the main activities of the Federation:

1. Rice : The Federation is the only authorised agent of the Government for procurement of paddy. Rice milling is done by cooperative rice mills who collect brown rice and after milling deliver it to the Government on behalf of the Federation.
2. Jowar : Jowar (a kind of sorghum) is an important part of the staple food in the State. The Federation procures the entire marketable supplies of jowar on behalf of the government. The procurement work is undertaken through cooperatives at the village, taluka and district levels, who work as sub-agents of the Federation.
3. Seeds : The Federation has been appointed as the sole nominee of the government for purchase, storage and distribution of hybrid seeds for jowar, bajra and maize by approved farmers and certified by the Department of Agriculture of the Government of Maharashtra. The Federation purchases hybrid

seeds through lower-tier societies at the district and taluka levels. The seed is centrally stored at a number of places in every district from where it is despatched to retail distribution points for ultimate sale to the farmers, at prices determined by the government. The total seed distributed by the Federation during the year 1968-69 was worth Rs. 16 million.

183. The Federation also imports seed potatoes from Simla in Himachal Pradesh (India) and supplies it to potato growing members.

4. Cotton : Cotton is an important crop of the State as it accounts for about 30% of the total production in the country. With a view to assisting the farmers, the Federation has been endeavouring to develop marketing of cotton. Much headway could not be made due to trade restrictions imposed by the Government of India. With the removal of restrictions on ceiling of prices, the Federation has been expanding its activities in cotton. The turnover of the Federation in cotton has remained around Rs. 150 million per annum which accounts for about 10 per cent of the market share.

184. The Federation makes purchases of raw cotton at selected centres with a view to encouraging growers to pool their cotton and selling the same in the form of pressed bales. The cotton purchased by the Federation is ginned and pressed in cooperative ginning and pressing societies and fully pressed bales are sold to the mills. In addition to purchases on account, the Federation purchases on behalf of Government managed mills in the State. These mills indicate to the Federation the centres of purchase and the price-range within which the purchases are to be made.

185. In view of the importance of cotton in the State and for safeguarding the interests of growers, the Federation has appealed to the Government to authorise it to procure cotton-

seed and cotton-seed oil on a monopoly basis. We were informed that a Bill was before the State Assembly, which, if passed, will enable cooperatives to handle 60 percent of cotton ginning in the State. There are a number of cooperative cotton ginning and pressing cotton spinning and a few weaving mills in the State. Cotton-seed which is a by-product of the ginning process, is now sold to private traders. Since the Federation does not have a commanding position over cotton-seed, cooperatives are not in a position to export cotton-seed through their Federation at the moment.

186. It is also likely that cotton-seed extraction cake produced by mills having business relationship with cooperatives will be consumed by domestic cattle in larger quantities in future than at present.

187. Groundnut : Groundnut is grown mainly on dry land in the State with an average yield of 0.5 ton to 0.6 ton per acre. 82 groundnut-oil processing mills operating in the State get most of their raw material supplies from private traders. This results in such a wide fluctuation of groundnut price that the Government is at present helping the cooperative marketing societies to replace private traders in this business. At present, the Federation collects groundnut from the open market and not through the marketing societies.

188. Rice : As rice is in short-supply in the State, it is imported from other States of India including Andhra Pradesh, Punjab and Assam. Growers in the State sell paddy to the Federation after retaining a portion for own consumption. The Food Corporation of India does not operate in the State. The Federation sells milled rice through "Fair Price Shops" run by the Government or government authorised agents. The Federation gets a handling commission of Rs. 10 per ton of rice and the marketing societies Rs. 30 to 40/- per ton. The turnover of the Federation in respect of rice and jowar is

about Rs. 400 million per annum.

189. IR-8, which is a high-yielding variety of rice with a yield of 1 to 1.2^{ton} per acre, commands lower price due to its poorer taste. Rice is grown only once a year in this State. The average size of holdings is 10 to 15 acres per farm but in the rice-growing area along the western coast, the average is less than 5 acres.

190. Onions and Garlic : The Federation buys onions in Maharashtra and garlic from Andhra Pradesh and sells it in the Bombay market.

191. Fuel : The Federation supplies heavy oil to 25 cooperative sugar mills which process about one-third of sugarcane in the State. In addition, the Federation supplies kerosene oil to consumers.

192. Agricultural machinery : The Federation handles oil pumps and electric engines.

193. Fertilizers : The Federation owns a fertilizer granulating plant. It also handles fertilizers manufactured by the Fertilizer Corporation of India. Fertilizer distribution was under the direct control of the State Government and it was only recently that the control was lifted due to slackening of demand.

194. Export Trade : The Federation acts as agent of the National Agricultural Cooperative Marketing Federation for export of pulses to U.K. and U.S.A. It exports bananas to Iran and Iraq.

Request for assistance to the Japanese Movement

195. Feed Plant : The State produces about one-third of the sugar cane grown in the country. Though there is a federation of cooperative sugar mills in the State which looks after the interests of cooperative sugar mills, the Federation has a substantial interest in producing feedstuff mixing molasses,

a bye-product of sugar, with groundnut-oil cake, rice bran, etc. The Federation raised the matter with the team about possibilities for export of mixed feed to Japan. In this connection, the Federation envisages to construct a cattle feed plant with a capacity of 5 tons per hour on an 8-hour daily operation to produce 1,200 tons of feed per month. The Federation requested technical assistance in the construction and operation of the feed plant.

196. Agricultural Machinery : The Federation wishes to establish its own farm machinery and assembly plant of small-sized machinery in view of the accelerated trend of farm mechanization. The Federation requested the Team to provide them with technical assistance in the construction of such a plant. It may be mentioned that the Yanmar Farm Machinery Manufacturing Co.Ltd. of Japan has already entered into collaboration with a cooperative engineering society in Maharashtra State.

Shri Chhatrapati Cooperative Rice Mill Ltd., Khopoli

197. The mill is located at Khopoli (about two and a half hours drive south-east of Bombay). The society was established in 1959 and it started its rice milling activities in 1962.

198. The society has a membership of 241 including 16 cooperative societies. The share capital of the society is Rs. 48,225 of which Rs. 28,000 has been contributed by the State Government. The mill was established with the object of milling or polishing rice produced by member growers and collected through cooperative marketing societies in the area. The mill has a capacity of 750 kg. of rice per day. It operates for about 8-9 months in the year.

199. The turnover of the society during recent years shows a substantial increase in the business volume with 19,800 tons in 1968-69 to 21,543 tons in 1969-70. The mill charges a

milling rate of Rs.2 per 100 kg. in case of rice for marketing and Re. 1.30 per 100 kg. of rice for members' own consumption. It gets supply of paddy from seven collection centres established in the operation area. Three of them are owned by the mill and the others by taluka societies. Payment to the grower-members is made immediately after the paddy is delivered to the collection centre, which varies from Rs.72 to 58 according to the different grades of paddy. Maintenance of the centres and transport costs from the centres to the mill is its own responsibility. In this operation, the cost to the Government is Rs. 9.10 per 100 kg. and to the mill Rs. 4.90 per 100 kg. The mill purchases rice bran at Re. 0.90 per quintal instead of delivering it to the Government and sells the same to livestock farmers as feedstuff at Re. 1.25 per quintal.

200. The mill's collection area lies within eight miles from the mill, but this does not ensure the volume of paddy that would feed the mill for the full year. It is, therefore, trying to bring paddy from other areas.

201. The Team also visited the Indo-Japanese Rice Research Centre located in the vicinity of the mill.

The Poona District Cooperative Purchase and Sales Union, Poona

202. The Union was established in 1945. The Union imports rice, as the area is in short supply, from Andhra Pradesh through the State Federation, for supply to the consumers. It is also entrusted with the sale of jaggery not only by the growers of sugarcane in the area but also by farmers of Andhra Pradesh in the auction market, for which the Union gets a commission of 15% for the service.

203. 30 to 35 per cent of the agricultural land in the area is irrigated either by canal or by well. Canal irrigation covers 30,000 to 35,000 acres and well-irrigation about 100,000 acres. On irrigated land are grown such crops as sugarcane

cotton and jowar. In this area jowar ranks second in importance and production of maize and cotton is not very large. Sugarcane growers either sell to the three sugar mills in the area or when the price of sugarcane is low, deliver it to the Union for marketing in the form of jaggery. (Jaggery is crude sugar made by boiling the crushed cane juice and crystallizing the residue in the boiling pan.)

204. The Union supplies rice bran to the poultry feed industry. The demand for cattle feed in the area is not enough to warrant the commissioning of a feed plant. The Union requested the team to supply them with technical information about cattle feed.

The Groundnut Processors' Cooperative Society Ltd., Sangli

205. The society was established in 1960. Its solvent extraction plant started functioning in 1963.

The society has a membership of 119 members as under :

A class members	26 expeller mills
B class members	66 cooperative societies
C class members	18 farmers
D class members	1 State Government
E class members	8 nominal members

206. The society collects groundnut oil-cake expellers from 24 cooperative groundnut expellers operating in the southern part of the State covering an area of 220,000 acres. The oil-cake contains about 7 to 8 per cent oil and the society processes it in its solvent extraction plant. Oil is separated from the oil-cake by the extraction method and the resultant cake is known as the de-oiled cake or extraction oil meal. The plant has a capacity of processing 50 tons of expeller cake for a day, or 1,200 tons per month, or 15,000 tons per annum on the basis of three shifts of 8 hours each employing 10 workers per shift.

207. The technical details of the groundnut extraction meal are as under :

Crude protein	47-48%
Crude fibre	10-12%
Moisture	less than 10% (average 6%)
Crude fat	1.8 - 2.1%
Crude ash	5%

(It may be mentioned here that according to Japanese specifications for groundnut meal, the crude fibre content should be less than 10%.)

208. The nearest port is Goa which is 160 miles away and the railway freight is Rs. 20 per ton.

209. The annual production of groundnut in the area is 88,000 tons and the average yield is 400 kg. per acre. For information, it may be added that 100 tons of unhusked groundnut produces 45 tons of expeller cake. In terms of unhusked groundnut, the annual capacity of the extraction plant is 30,000 tons which is about one-third of the total groundnut production in the area.

210. Groundnut is grown once a year during June to October, which coincides with the rainy season. No chemical fertilizer is used in groundnut cultivation, but only compost manure is in common use.

The Kolhapur Agricultural Produce Market Committee, Kolhapur

211. The market was established in 1945 with a view to protecting farmers from exploitation by private traders. The market is managed by a Market Committee which is an independent body established under the Market Act.

212. The Board of Directors of the Market Committee consists of 15 representatives of whom 7 are cooperative representatives, 4 private traders, 3 government representatives and one representing the city.

213. The Kolhapur market is the biggest of all the 260 markets in the State. It is spread over an area of 125 acres and covers several talukas. The market has essential functional facilities like railway siding, warehouses, bank, etc. on the yard. There are 450 shops of licensed wholesalers of agricultural produce of which 50 are cooperatives. The market operates from eight to thirteen hours daily, while the Committee office is open from eleven to seventeen hours a day.

214. All the transactions in the market are done under a supervised auction system and anybody can participate in the bidding at the auctions. The main products auctioned in the market are groundnut and jaggery. Grading of produce is done by eligible graders before the auction starts. The market gets a commission of 15 to 25 paise per Rs.100 transaction from the farmers and this amounts to about Rs. 1 million per year.

MYSORE STATE

215. Mysore State lies just south of the State of Maharashtra. It does not have much irrigated area and its agriculture depends mainly on rainfall. Along the coastal line are grown rice and jowar while cash crops like groundnut and cotton are grown in the interior parts of the State.

The Mysore State Cooperative Marketing Federation Ltd., Bangalore

216. The Federation has 19 district level member marketing societies which are supported by 150 primary marketing societies. (There are in all 175 primary cooperative marketing societies). Both the district level and the primary cooperative marketing societies are the members of the State Federation. The major role in the cooperative structure is played by the village agricultural service cooperative societies which supply fertilizer and provide credit to the members.

217. The Board of Directors of the Federation consists of 19 representatives from taluka cooperative marketing societies, one each from consumer cooperative societies and processing units, one each from district level cooperative banks and the State Cooperative Bank, two each from the Registrar of Cooperative Societies and other government authorities concerned.

218. The State Federation is not a very strong body as in some other States in India. No monopoly rights have been given to the Federation by the Government except for fertilizer distribution which is the only important business with the State Federation. But in this business the role of the Federation is limited to conducting warehousing functions as the actual supply function is entrusted to its member societies.

219. The Federation handles limited quantities of levy rice.

It has yet to accumulate business strength in order to be able to enter the free market of rice in which there is great price fluctuation. The Federation in Mysore is not supported by the State Government in their rice handling business nor does it have enough surplus money to start handling of rice in the free market.

220. Taluka marketing societies in the State have 45 rice mills, 12 groundnut processing plants, 10 cotton seed plants established with the financial support of the National Cooperative Development Corporation. A plan has been prepared for construction of a cattle feed mixing and rice bran extraction plants. There is also a proposal for construction of a farm chemicals (pesticides and insecticides) mixing plant.

221. Cotton and Groundnut: There is government control on these items. The Federation is pushing the Government to consider adoption of a system, which is now under discussion in the Maharashtra State, under which cooperative societies will be appointed as the only authorized collectors of cotton. However, even without such a privilege, the cooperatives at present enjoy 25% share of the cotton market and have to some extent been able to influence market prices.

Relationship with taluka level marketing societies

222. The Federation has business relations with taluka societies only through fertilizer distribution. Taluka societies are doing almost all of their business independent of the State Federation. The Federation gives technical assistance to the taluka societies but not much of financial and other assistance.

The Dharwar District Cooperative Oilseeds Processing Society Ltd., Gadag

223. The society was established in 1959. The Board of Directors consists of 13 representatives of which 9 members

represent the State Government. The share capital of the society is Rs. 2,884,000 of which Rs. 2,400,000 is held by the Government.

Activities

224. The mill does expelling and extraction of oilseeds like groundnut, cotton seed, kardi (sufflower), linseed, etc. The plant is equipped with a delinter machine for cotton seed and does up to the first process of refining. The oil is sold to private traders. The society has invested money on construction of the expelling plant, extraction plant and delinter plant. It is currently suffering from lack of operational funds. For such a large-scale investment, the society borrowed funds from the State Cooperative Bank amounting to Rs. 1.5 million. (Since this money has not been repaid yet, 9 official representatives are on the Board of Directors). The society is applying for finance of Rs.2.3 million to the Industrial Finance Corporation, which will provide it with the much needed operational funds for the plant.

225. Due to lack of financial resources, the plant is not operating on behalf of its members; instead it is collecting raw materials (de-oiled cake) from 20 private expeller plants active in the area and extracting oil on commission basis. Both oil and meal so produced are delivered back to the expeller plants. In this area 55,000 tons of cotton seed is available annually. Cooperatives have about 18 cotton ginning mills which process 18,000 tons of cotton in a year (which is about one-third of the cotton produced in the area).

226. Products made through processing of cotton seed are:

Oil	17% - sold to private dealers after semi-refining
Meal	46% - exported (indirectly)

Husk	23%	- used as raw material for cattle feed
Linter	7%	- sold to textile mills
Loss	7%	

Capacity of the Plant

227. The groundnut expeller plant does about 30 tons of dehusked kernel per day. 30 tons of groundnut produces about 18 tons of oil cake. The solvent extraction plant is capable of processing 60 to 70 tons of oil-cake per day. The gap in the capacity of the expeller plant and the extraction plant, which is between 42 to 52 tons a day is met through the supply of deoiled cake from other sources. Two more expeller plants of that size will balance out the gap.

Request for assistance

228. A request was made by the General Manager of the society for financial assistance to the tune of Rs.500,000 in order to consolidate the existing and the new oil refining plants now under construction. (The rate of interest on loan in the area is 9% p.a.)

GUJARAT STATE

229.. Agriculture in Gujarat is advanced and 39% of the land under cultivation is covered by cash crops such as groundnut, cotton and tobacco. Gujarat is the second largest cotton producing State in India having 4,300,000 acres under this crop and covering 25% of the entire production in the country. It is also the largest groundnut producing State in the country accounting for just a little less than one third of the total production. It is estimated to produce 1,730,000 tons out of the total national production of 6,280,000 tons of groundnut in 1970-71.

Gujarat State Cooperative Marketing Federation Ltd.,
Ahmedabad.

The arrival of the Team in Ahmedabad was delayed due to dislocation of air services and the Team could meet only the Vice-Chairman and the Marketing Manager of the Federation. Unfortunately, therefore, not could be discussed nor could the Team see the cotton seed plant.

230. The Federation was established in 1960 and present membership is 472 consisting of village societies except those with a share capital of less than Rs.25,000, and other societies including cotton seed ginning and expeller mills at taluka, district and district union level, and some milk unions. The Federation has a capital of Rs.2,474,600 of which the Government has contributed Rs.1,080,000.

231. The Board of Directors of the organisation consist of 18 district representatives and a representative each of the State Cooperative Bank, District Cooperative Bank and Land Development Bank. There are two directors representing the State Government. The Chairman of the Board is also the President of the famous Kaira District Cooperative Milk Producers' Union (AMUL Dairy), and a member of the Board of NAFED.

The activities of the Federation are as follows :

232. Fertilizer distribution : The main business of the Federation is the distribution of fertilizers. The Federation markets the fertilizers produced by the Gujarat State Fertilizer Co., which was established in July 1967. The turnover in this business amounts to Rs.200 million. The distribution channel is through district marketing societies, taluka societies and village service societies.
233. Farm chemicals and machinery: The Federation established a farm chemical mixing plant, which is already in production this year, and a farm machinery assembling plant is likely to start production by the end of this year.
234. Supply of seeds: Hybrid seed of bajra produced in the State is handled by the Federation on a monopoly basis. The Federation gets the seeds from contract growers and distributes it through taluka societies.
- Cotton handling, processing and delivery to textile mills in Bombay and surrounding areas:
- 235 The Federation is connected with 150 cotton ginning or processing cooperative societies at taluka level, and five cooperative cotton unions. The processed cotton is delivered to textile mills around Bombay and surrounding areas.
236. Oil Engines The Federation supplies oil engine pumping sets for irrigation purposes.
237. Warehousing: It owns about four godowns with a total storage capacity of 5,000 tons for storing fertilizers, oil engines, etc
238. Rice and other food grains: The Federation buys rice on its own in order to maintain price stability in the market. In the State, the Food Corporation of India is also active in rice handling. Since the State used to be in short supply for rice, the Federation handled only levy rice (compulsory delivery of a quota by producer);

but in future cooperative societies at taluka, district and State levels will have to enter the free market if the expected abundant production in the season threatens the market price.

239. There are 20 cooperative groundnut oil mills of which one does extraction also, while 800 private mills including 200 big ones operate in the State. The cooperative mills are exporting 1,500 tons of groundnut oil to the U.K. and other markets through NAFED. Unlike cotton, private traders are stronger in groundnut business than cooperatives. The cooperatives do not have unions of groundnut mills as in the case of the cotton industry. The cooperative mills sell their products only in the State while marketing to other states in India is controlled by private operators.

Gujarat State Cooperative Cotton Seed Industry Ltd.

240. The mill used to operate on 20-ton daily capacity but is now under reconstruction and will resume operation in March 1971 with 100-ton daily capacity. (Delinter machiner is made in the USA and extractor is imported from Belgium). The old plant processed only cotton seed while the new one will process groundnut also. The volume of cotton seed and groundnut to be processed in a year is expected to be 20,000 tons and 5,000 tons respectively.

PROBLEMS AND CONCLUSIONSState of Punjab

241. Punjab is one of the most advanced states in India in terms of agricultural development. The farmers are more progressive and use agricultural machineries, fertilisers and improved seeds on a very wide scale. Most of the lands are well consolidated and suitable for large scale operations. It is considered as one of the most prosperous states in the country.

242. The Punjab State Cooperative Marketing Federation has a large turnover covering business activities of a variety of nature. The bulk of the operations cover the handling of fertilizers, farm chemicals and staple food grains, on behalf of the Government of the State. The Federation has a very small business turnover in open marketing of agricultural products.

243. The Government of the State of Punjab has contributed very substantially to the share capital of the organisation which in turn has necessitated the appointment of directors on the Board of the Federation. Currently, the Chairman of the Federation is also the Registrar of Cooperative Societies of the State as the government has the authority to nominate the chairman if the State contribution to the equity capital exceeds Rs. 2 million. These factors automatically restrict the independence of the Federation and also make it necessary for the organisation to compromise on some of the basic

cooperative principles.

244. During the discussions with the management of the Federation, we were informed that it is planning to undertake a number of new projects and the proposals for such projects have already been submitted to the Government. Most of these projects, are however dependent on Government investments and on the policy of the Central Government concerning assistance to such projects. Some of these projects relate to the construction of rice mills, fertilizers plants, irrigation pipe manufacturing plant, dehydration plant and plants for manufacturing wines and liquors. It is expected that the National Cooperative Development Corporation will extend its assistance to some of these projects. The Federation has also put up a proposal to the State Cooperative Bank for coordinating the credit and marketing activities in the State.

Minor Role of the Member Organisations

245. The day-to-day operations of the Federation as well as its future planning are geared mainly to synchronize with the policies of the Governments in the State and at the Centre. There is not much planning by the Federation in consultation with its member affiliates. It is, however, hoped that some of the future projects of the organization would be implemented in collaboration and with the financial support of the member organizations. In the absence of a definite policy by the Federation for gradual democratization of the society it may not be possible for it later to be independent of government assistance and supervision.

The Production of Groundnut Deoiled Cake

246. Khanna Cooperative Solvent Extraction Plant in Ludhiana district is at present manufacturing deoiled cake and also a few other products such as deoiled bran, and 80% of these products are exported to markets in Eastern and

Western Europe. This mill is a federal organization with primary cooperatives as its members. The mill is not in a position to secure adequate raw materials nor does it have organized sources for securing cakes for processing at the mill. This inevitably leads to a low rate of plant operation which is at present at about 60%.

247. One of the unique practices of the mill was to store the entire groundnut in the open as no sheds or warehouses were constructed for the purpose. This unhusked groundnut, which is collected during October and November, is dried to reduce the moisture and then fed into the plant. Although we were informed that the area does not get rains before July every year, it was likely that even a little rain can spoil the stored groundnut and because of lack of fresh air for the lower layers of the commodity, there was a possibility of developing fungus on up to 18% of the unhusked groundnut. We were also informed that this was a common practice in India for storing unhusked groundnut. Several groundnut meal importers including Japan are already concerned with the problem of the Aflatoxin introduced from toxic fungus (cancerogenic substance), and if the possibilities of importing the deoiled cake into Japan from this plant is to be explored, better storage conditions will have to be introduced by the organization.

Prospects for Trade and Aid

248. The State of Punjab does not have any grain for export although maize is produced in large quantities and quite a substantial portion of which is in surplus. However, in view of the ban by the Central Government on export of grains, including maize, no possibilities of maize export exist in the near future. There are, however, possibilities of exporting mixed feeds (grains mixed with some other commodities) which are not banned by the Government for export.

249. The deoiled cake is already being exported in large quantities from the groundnut solvent extraction plant in the State. As this organization already has a long experience in export marketing, it should be possible for Japan and other importers to consider this as one of the sources for supplying groundnut deoiled cakes from India.

The cooperatives in the State are financially strong and receive continuous support of the Government in their activities. The team did not come across any area which needs external assistance for its development.

STATE OF RAJASTHAN

251. Rajasthan is a comparatively backward state in India and agriculturally still far behind the other states. A rather big part of the State is a desert area and nothing much can be grown there except in areas which are gradually being brought under irrigation. Some recent examples of dry lands being developed as prosperous agricultural area have encouraged the State Government to undertake several new economic development plans as a part of the Fourth 5-Year Plan of India. This Plan includes the development of arid zones spread in the western part of the State as a key to her future agricultural progress. The plan also includes intensive development of its livestock industry which is a traditionally important industry in the State.

252. In the context of general development programmes, the Rajasthan State, Cooperative Marketing Federation has also undertaken a number of measures for strengthening the cooperative structure in the State. These measures include the introduction of large scale marketing of agricultural produce and increased investments in processing and other relevant fields. The organization already has warehouse and cold storage facilities and has recently constructed a feed

plant. It has also 6 rice mills and a guar gum plant is now under construction. Although the society is supplying fertilizers and other agricultural inputs, fertilizer is no more the monopoly of the organization.

253. The Federation still depends very heavily on Government financial support and is facing the problem of maintaining efficient management for the various activities as well as for its new enterprises. However, the leadership in the organization is very progressive and given the necessary encouragement and support, it would be possible for these leaders to successfully complete their present development programmes. The Federation has already demonstrated its bold attitude and independent planning by initiating a number of projects such as feed plant, rice mills, cold storage, etc. It is willing to undertake further development projects without much of government assistance.

Prospects of Trade and Aid

254. There is no possibility of any export surplus from the State in the field of ~~foodgrains~~ except for some mixed feeds which may be produced by the feed plant of the organization.

255. There is a good possibility of growing crops to be used as feedstuff raw material on a commercial scale and for supplying it to overseas markets when the semi-arid area of the State is developed as a irrigated large scale farming. For instance, alphanha is already grown in the State in some areas and the Federation is very keen to secure external assistance for organizing production and processing of the commodity with the view to exporting it to Japan. The team was requested by the Chairman of the Federation to consider the possibility of securing such an assistance for this purpose.

256. Another commodity in which trade can be developed in the near future is degummed meal of guar beans, which contains 40% of crude protein. The present difficulty in exporting the commodity is that the meal has grassy smell which will have to be taken out if the trade in respect of this item is to be developed. However, the cost of removing the smell will make the commodity more difficult to market on a competitive basis.

Rajasthan State is a very suitable area for providing assistance aimed at developing cooperatives which can ultimately undertake effective marketing operations. As the State Cooperative Federation is just initiating several measures to strengthen cooperative activities in the State, proper support and guidance at this stage will enable it to steer its course in the proper direction.

258. The Team was also requested by the Chairman to send him detailed information regarding the possibility of establishing an assembly plant for small agricultural machinery in the State.

STATE OF MAHARASHTRA

259. The State of Maharashtra is also one of the most progressive states in the country in terms of agricultural development. It produces a variety of crops such as paddy, milo, bajra and jowar (a kind of sorghum) and cash crops such as groundnut, sugarcane and cotton on a large scale. The State is one of the major producers of groundnut in India and has a cooperative solvent extraction plant in Sangli which is already producing deoiled cake for export.

260. The Maharashtra State Cooperative Marketing Federation is handling monopoly procurement on rice and several other cereals in the State on behalf of the Government. Due to

this monopoly business, the annual turnover of the Federation now exceeds Rs. 400 million. The Federation delivers polished rice to the Government after processing it in the mills owned by the cooperatives in the various parts of the State. It has a very close relationship with the Government and plays an important role in respect of procurement and processing of food grains. Although the Federation draws a substantial support from the Government, all its directors are elected by the district cooperative marketing societies in the State.

Prospects for Trade and ...

261. The well organized solvent extraction plant at Sangli is in a sound position to undertake export of deoiled cake according to the specifications required by the Japanese cooperative movement and other importers. The plant at Sangli specialises in extraction process alone and has organized a number of cooperative expeller plants which serve as feeding centres of groundnut cake to the solvent extraction plant, unlike the Khanna plant which is doing both expelling and extracting.

262. The trade in respect of deoiled groundnut meal which is already channelled through the National Cooperative Agricultural Marketing Federation can be continued in future also. Another commodity which could be later exported from the State may be the cotton seed oil meal. The State Federation is at present pressing the State Government for authorizing its cooperative marketing societies in Talukas (sub-districts) to collect the cotton in their areas. If this scheme materializes the State Federation would be in a position to process cotton seed and export the deoiled meal.

263. Rice bran is produced by cooperative rice mills in the State. There is a possibility of exporting rice bran to Japan

if the present methods of rice processing are modernized with a view to prevent the husk being mixed with the brown rice. This may need, in most cases, replacement of the present machinery in the rice mills.

264. The State Cooperative Federation as well as the Poona District Cooperative Marketing Federation requested the Team for supplying technical assistance in establishing cattle feed plants. However, the State Federation has already established a cattle feed plant on its own and it is likely to go into production in the near future. The Federation and its affiliates would need training facilities for their employees engaged in the operation of the cattle feed plants.

265. The State Federation and its affiliate in Poona district are also interested in construction of agricultural machinery plants in the State. It was explained to the Team that it is more expensive for the farmers to maintain a pair of bullocks than to buy a small tractor because the bullocks have to be maintained by the farmer throughout the year for agricultural operations limited to a few months. It will be useful to develop discussions on this point in future.

STATE OF MYSORE

266. The State of Mysore does not have much irrigation land, although the soil in some parts of the State is rich and crops can be grown in most of the areas on dry lands, which depend for irrigation on rain. The crops grown in the State are rice, sugar-cane, Jowar (a kind of sorghum), cotton, groundnut, gram, mustard and tobacco.

267. The State is comparatively less developed and so the cooperative organizations are also much weaker than those in the neighbouring state of Maharashtra. The State Cooperative Marketing Federation is financially weak. Most of the operations of the State Federation are undertaken as a result of the policy of the Government which has entrusted to it a

limited number of marketing activities. Some taluka Cooperative Marketing Organisations are effective in providing services and agricultural inputs to the farmer members. However, their coverage of the total agricultural operations is rather limited and private traders are very active in the area. The Team, however, did not have a chance to observe the activities of the State Federation or its affiliates as the visit in the State was organized only to the solvent extraction plant at Gadag.

268 The solvent extraction plant run by the Dharwar Cooperative Oil-seeds Processing Society at Gadag is well equipped and has all the necessary facilities for undertaking efficient production of solvent extraction meal. However, the society is at present very much under the control of the Government in view of the fact that the Government has contributed in a very substantial measure to its equity capital. Another aspect of the working of this plant was the lack of coordination between the activities of the oil seeds producer and the extraction plant. There was also a gap in the capacity of the expeller plant and the extraction plant. We were informed that in order to run the extraction plant continuously it needs at least three expeller plants to supply the adequate quantity of expeller cake. In view of this, the extraction plant has to purchase deoiled meal from other sources. Due to the lack of proper connection with the producers of the groundnut and cotton seeds, the Society at present was not processing the products of farmer members of the cooperatives but was undertaking contract processing on behalf of other suppliers.

269 The Society at present needs financial assistance to the tune of Rs. 500,000 in order to erect two more expeller plants and an oil refining plant. The Team was requested to consider securing such an assistance for the organization from Japan.

270. We were informed that National Cooperative Agricultural Marketing Federation is collaborating with this plant in order to ensure its efficient operations. It is suggested that discussions on the manner of overcoming the present difficulties of the Society be taken up with the National Cooperative Agricultural Marketing Federation with a view to ensure a steady supply of solvent extraction meal which could be made available for export.

STATE OF GUJARAT

271. The State of Gujarat is a comparatively advanced state in terms of agriculture and agro-industries. The State is the major producer of cotton and groundnut and has a network of cooperative cotton processing societies. Although the cooperatives have a large volume of cotton business, the private traders in the area are still dominant. In the case of groundnut, the position is much weaker. The Gujarat State Cooperative Marketing Federation has taken initiative in consolidating the position of its affiliates which are engaged in marketing of cotton and groundnut. It plans to erect facilities for processing groundnut and cotton seeds in order to free the cooperatives of their dependence on private processors. We were informed that a solvent extraction plant is already being erected by the Federation in the State. However, the Team did not have an opportunity to visit this plant.

272. The Cooperative Federation has a close relationship with the government of the State, and is also receiving a liberal financial support from the National Cooperative Development Corporation. The State Federation, however, does not wait for the initiative to come from the Government but undertakes planning on its own for marketing development in the State. Due to this vigorous effort of the Federation, the cooperative marketing structure in the State is better integrated than those in several other States of the country.

Prospects of Trade

273. The deoiled meal produced from the newly established solvent extraction plant of the Federation will be one of the most important items available for export from this State. The State Federation has a long experience in marketing operations and the supply of cotton seed.

274. The State Cooperative Marketing Federation should be treated as one of the important sources for exploring possibilities of future trade in cotton seed meal and at a later stage possibly groundnut meal.

Some aspects of agricultural cooperatives
in India

275. The agricultural cooperatives have undergone reorganisation several times during the ~~post-war~~ period. The recent reorganisation was in 1965 aimed at developing agriculture through the strengthening of agricultural cooperatives in the country. Since then the Government of India and the State governments have intensified their efforts in providing subsidies and other finance to agricultural cooperatives as a result of the realisation on the part of the government, of the important role the cooperatives are to play in the development of agriculture. The marketing cooperative societies have received special attention of the government and have been receiving subsidies, grants, loans for their various activities. These organisations also receive financial assistance and share capital contributions through the State governments in their respective states.

276. The emphasis in the development of agricultural cooperatives is placed on the following activities :

- a) Strengthening the link between marketing and credit societies.
- b) Financial and other support for consolidating and marketing activities.
- c) Development assistance by NCDC in marketing and processing field through the State governments.

277. With a view to sustain the intensive development efforts the cooperatives in the country will have to concentrate on not only quantitywise expansion but quality-wise development. The cooperative infra-structure required for such development effort will have to be developed through special measures aimed at strengthening the managerial aspects of the working of cooperative societies.

275. The Cooperative legislation is the jurisdiction of State governments and through this legislation general policies and programmes for cooperative developments are formulated in each state. Consequently, there are variations in the movements in the different states in the country and the range of cooperative activities in some states is largely determined by the extent to which the government of that state extends monopoly rights or entrust commission business to the cooperative marketing organisations. There is, however, an overall support by the Central and State governments to cooperative activities in all parts of the country.

279. Owing to the lack of management development policies within the cooperative movement, often senior executives of marketing cooperatives have to be secured from Government cadres. In some cases, Managers are appointed by the government because of the share capital contribution made by the government in the society. It is quite likely that with the intensification of implementing governmental policies through cooperatives the influence of the government in cooperative management may increase in years to come.

280. Along with the activities undertaken on behalf of the government the cooperatives should develop part of their energies to the marketing operations that can be undertaken on behalf of the members of cooperative societies. In other words, the marketing operations should have their own policies, framed in consultation with the member organisations and farmer members, aimed at developing independent marketing activities with a view to cover larger share of marketing activities related to agricultural produce. The marketing societies will also have to devote special attention to the development of their financial strength through contributions from their members.

281. There are many good examples of healthy cooperative marketing activities in the country and several State level federations are making a positive effort in the above direction. In most of the other states, however, the tendency is to look towards the government for direction and support. In many states the bulk of the marketing activity undertaken by the societies is in the field of distribution of agricultural inputs and procurement of foodgrains and other commodities entrusted to them by the governments.

282. A number of marketing cooperative societies at various levels at present, undertake projects for the processing of agricultural commodities. It is quite likely that in the absence of proper planning of the processing activity the link between the producer, the processor and the buyer may not be properly established with the result that the processing plants may have to work under their normal capacities. For any successful processing activity the cooperatives ought to ensure a continuity of supply of raw material from their members and the existence of efficient and effective marketing outlet. This should also be accompanied by a definite management policy for running the plants efficiently and as viable units.

283. The member participation in the activities of cooperative marketing societies should be a matter of special concern to these organisations in future. Special measures need to be introduced for providing educational facilities and extension services to the member farmers aimed at increasing their participation in the activities of marketing societies.

TRADE AND AID PROSPECTS

Recommendations

13. During the discussions with the authorities of National Agricultural Cooperative Marketing Federation (NAFED) and those of the various State federations visited by the Team several possibilities concerning trade in respect of raw material for feedstuff were discussed. A few projects aimed at manufacturing raw materials and mixed feeds were also discussed. The members of the Team feel that following are the some of the possible areas in which trade and aid activities could be developed in India.

Groundnut Meal

14. We were informed that there were five extraction meal plants in the country located at Khanna, Sangli, Gadag, Mandia and Latur. The average capacity of each of the above plants was 1500 tons per month although the actual average production was around 1,000 tons per month. The production of all the plants would then be around 5,000 tons per month or 60,000 tons per year. We were informed that NAFED can supply 30,000 tons of groundnut meal to Japan every year.

Cottonseed meal

15. The cooperative processing plants in Gujarat produces about 800 tons meal per month out of which 500 tons may be available for export. The Gadag plant in Mysore State also produces about the same quantity of cottonseed meal. It appears, therefore, that NAFED would have a capacity of providing 1,000 tons of cottonseed meal per month or 12,000 tons in one year.

Rice and Wheat Brans

16. The present quality of brans produced in the processing mill visited by the Team is not upto the standard

required by importers in Japan. If after reorganisation of the present processing activity, it is possible to ensure that the hull does not get mixed up with the brans, it is possible to import brans from rice and wheat into Japan. We were, however, informed by NAFED that quality brans in Uttar Pradesh (UP) and Punjab are available and can be exported to Japan at the level of required specifications.

Mixed feeds

17. At present there is a duty of Rs.125/- per ton on the export of groundnut meal. This is done by adding Rs.125/- to the price of domestic market at the time of export. However, we were informed that there was no such duty on the mixed feeds if they are exported from the country. If, therefore, groundnut is mixed in the mixed feeds for exporting to Japan and if such mixed feed is within the specified range of restrictions according to the import regulations in Japan, it may be possible for Japanese cooperatives to import such mixed feeds in future. Such mixed feeds can be according to different formulas such as 80% groundnut meal, 10% cottonseed meal and 10% brans. This will enable the exporting organisations to secure a gain of Rs.100/- per ton (resulting from the absence of duty on mixed feeds containing 80% groundnut meal). However, an additional cost of Rs.60/- per ton will have to be incurred for mixing the feed resulting in Rs.40/- as the net gain per ton. If such mixed feeds are developed for export, this will also encourage the development of feedstuff industry in the country.

Assistance From Japan

18. It is learnt from reliable sources that assistance from the Government of Japan to some of the agricultural cooperative projects is possible. At present not many such projects are recommended by the Government of India although assistance from Japan to such projects is available.

19. During the discussions with NAFED and the State cooperative federations several suggestions were made for establishing feed plants in the country. Suggestions were also made for securing assistance in the construction and management of agricultural machinery in Rajasthan and Maharashtra States. Assistance was also requested for the Solvent Extraction Meal Plant at Gadag. The Team, therefore, felt that following are the three areas in which assistance is required by the Indian agricultural cooperatives concerned with production of raw material for feedstuff.

- i) Cattle Feed Plants and Mixed Feed Plants.
- ii) Agricultural Machinery Assembling and Manufacturing Plants.
- iii) Training of Technical Personnel in the operation of these plants.

20. With a view to enable the Indian agricultural cooperatives to secure assistance for the above projects from the Government of Japan the following procedure is recommended:

- a) NAFED in consultation with its member affiliates in the various States should formulate projects and discuss the projects with the Government of India with the ultimate objective of sending these projects to the Government of Japan for securing the necessary assistance.
- b) One of the pre-requisites for the Government of Japan to consider assistance for these projects would be ^{that} a follow-up action is ^{possible} as a result of this project in collaboration with the agricultural cooperative movement in Japan.
- c) These projects should later result in developing economic relationship including trade contacts between the Indian agricultural cooperatives and the cooperatives in Japan.

INDONESIAThe Country and her Agriculture

1. Indonesia is a country consisting of 13,677 islands that stretch over from across the Malayan Peninsula in the west and border the Philippines to the east. Towards its south-eastern direction lies the continent of Australia. The economy of Indonesia has since 1955 suffered from spiral inflation which registered 650% in 1966 though recently it has been brought under control by government action as reflected by 85% increase in consumer price index in 1963. The nature of problems facing the Indonesian economy is characterized by another fact that of the estimated total population of 113 million more than seventy million live in the island of Java which occupies only 9% of the landed area of the country while Karimanthan, which is the largest island, is inhabited by only four million people. The economy of the country is predominantly agricultural as reflected in the fact that this sector contributes 60 to 70% to the gross national income and 70% to her export earnings while providing employment opportunity for 70% of the working population. Indonesia is producing important export crops such as rubber, copra, palm oil, coffee and pepper on estate farms but she has not been able to catch up with the demand of her rapidly increasing population for staple food grains and has had to import rice to the tune of one million tons a year. In view of the urgency of increasing food supplies, the new **Five Year Development Plan** (1969-1973) gives top priority for the development of agricultural production. Under the Plan, attaining self-sufficiency in basic food is considered important not only from the point of view of satisfying this fundamental need of the population and saving foreign exchange but also from the view point of earning additional foreign exchange and providing the peasants with better returns. The Five Year Plan envisages doing away with rice import by the end of the Plan period. Also expansion of maize production in East and

Central Java and in southern Suraweji has been planned with the ultimate objective of exporting the grain to foreign markets.

Outline of the Cooperative Structure

2. The cooperatives in the country are at present regulated by the Law on the basic Regulations for Cooperatives in Indonesia (The Law No.12,1967). Based on this Law the cooperatives are guided and supervised by the Directorate General of Cooperatives of the Ministry of Transmigration and Cooperatives. The government, for the present, is promoting cooperatives mainly through educational activities. Under this legal framework cooperatives are operating in various sectors and lines such as paddy, rubber, copra, tobacco, coffee, cloves, sugar palm, fishery, batik and other textiles, handicraft, consumers and for employees in civil service, army, police, etc. Cooperatives in each of the above fields have organised their own national body and at present 15 such national federations constitute the Indonesian Cooperative Council known as Dewan Koperasi Indonesia (D.K.I.) which represents all the cooperatives in the country.

3. In the agricultural field there are some 15,000 primary cooperatives, 179 central cooperatives (county level) 17 provincial federations and a national federation known as INKOPERTA. They are handling rice (paddy) maize and second crops produced by peasants and some of them operate rice mills. Although the cooperative structure is basically well integrated, in content it is very weak and lacks strength and vitality. The collapse of the national economy twice during recent years has left a permanent mark on the cooperatives as the backbone of the cooperatives viz., cooperative banks, had to wind up their business during the economic crises that overtook the country.

A New Approach to Development

4. The position of Indonesian farmers can be well imagined by the fact that population density on the island of Java is 537 per square kilometer. 40% of agricultural producers are peasants while 45% are landless farmers. They are not only lacking in funds for farming but also for their living. It is, therefore, natural that despite their intention of becoming financially independent, they are driven to the private merchants who are very active in the rural areas.

As already mentioned a series of measures for increasing agricultural production and thereby improving the economic condition of the peasants are being initiated by the government of Indonesia. As a part of this overall strategy of increasing production the government of Indonesia launched a development project in East Java province known as the Maize Project East Java aimed at increasing maize production in the State. This Province had already been producing one third of the total production of this cash crop on the island.

5. The Ministry of Agriculture is mainly responsible for the project and has appointed the agricultural extension service in the Province of East Java as the main promoting body for the Project. With a view to implementing the project successfully the government of the country secured assistance from the Japanese Government in the form of the services of a team of five Japanese experts and a grant of \$80,000 for three consecutive years (starting in 1968) through the Overseas Technical Cooperation Agency (OTCA). This assistance was provided within the framework of Colombo Plan assistance programmes.

Outline of the Maize Project East Java

6. Objectives
- a) Increasing the production of maize through increased use of fertilizers, better seeds and improved cultivation techniques.

- b) Improve the quality of maize so as to bring it to the level suitable for exports.
- c) To improve and rationalise the channel of distribution (marketing) with a view to reduce costs in this process.
- d) To increase supply capacity for export to promote export of this commodity.

Areas selected

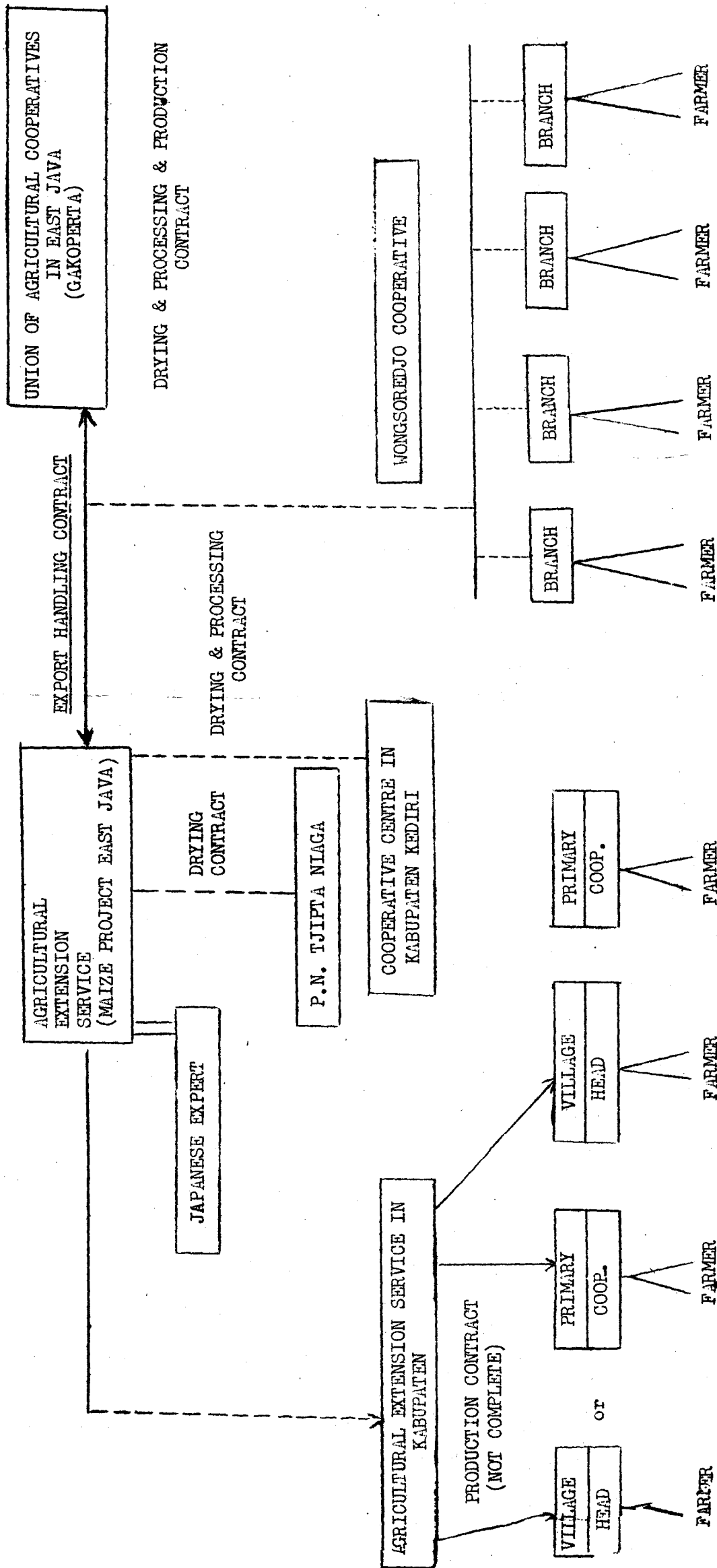
7. The project areas have been selected in the prefectures of Kediri, Malang, Lumadjang and Banjuwangi on the basis of the following criteria;

- a) Non-irrigated dryland areas,
- b) The area already has in its surroundings 5,000 ha of dryland under maize production and has potentiality to be developed as a major maize growing area.
- c) Cooperative societies have potentiality of assisting the project exist in the area.
- d) The area is located within 100 kilometer distance from a port and is provided with good conditions for land transportation so that crops can be exported.

The Project Administration

8. The Agricultural Extension Service of the Province maintains a team of experts and with the collaboration of the provincial agricultural cooperative union constitutes the main promoting body of the project. The cooperative societies in the project areas operate as the forefront promoters under the guidance of the prefectural cooperative federation. The structural outline of the Project is given in chart -A.

ACTIVITY & ORGANISATION OF MAIZE (EAST JAWA) IN THE PAST TWO YEARS



9. Operational Procedure

(a) Contract through cooperatives

The Project enters into contract with maize growers in the project areas who are willing to undertake contract production. The Project is assisted by the cooperative societies in its operations in order to facilitate dealing with a number of joining growers. The contract binds the Project to offer 200 kg. of urea per hectare to the grower out of the secured stock from OTCA and 25 kg of improved seed on credit. In return it binds the grower to deliver 525 kg of maize to the Project as repayment in kind. Based on this mutual obligation a crop sharing system has been evolved.

(b) Crop Sharing

- i. Maize grower's share: The experience showed that when fertilizer is applied yield per hectare increases from 800-1,000 kg (which was the five years' average of rainy season harvest) to nearly 2,500 kg. The grower's share has been determined at the level of the past year's average yield.
- ii. The Project's share: The share of the project consists of two sections. The first section is 525 kg/ha as repayment in kind against the fertilizer and seed credit. The second section is equivalent to the amount calculated on the basis of the formula : $\text{Gross yield} - (\text{Grower's share} + \text{the first project section}) \times 0.1$. However, in view of a rather poor recovery during the initial period, the second section of the project share has been abolished.
- iii. Koperta (Cooperative's) share: This was determined at 200 kg which the cooperative society will export and plough back the proceeds to the growers in the form of fertilizer, blowers and other such related facilities and services.

As is seen from the following chart, cooperatives were able to collect only a part of their portion during the first year. The target in the second year, therefore, was reduced to 150 kg.

	<u>Gross yield</u>	<u>Grower's share</u>	<u>Project's share</u>	<u>Koperta share</u>
Malan	2.5 t	1.0 t	0.6 t	0.9 t
Kediri	2.5 t	1.0 t	0.6 t	0.9 t
Lumadjang	2.0 t	0.8 t	0.48 t	0.72 t
Banjuwangi	2.5 t	1.0 t	0.6 t	0.9 t

Achievement:

10. The project was initiated in an attempt to liberalize peasants from the yoke of rural usurer-merchants through increasing maize yield and the total productivity and strengthening agricultural cooperatives by giving them a role in the project. It was intended that cooperatives should collect maize share of the project and their own share in the beginning. Ultimately they were to market the bulk of the growers' share in view of improving self-sufficiency in rice supply in the country and the consequential export surplus of maize. Maize was until recently a staple food and is still being consumed by the people in the Province. However, the gradual increase in consumption of rice is expected to reduce maize consumption in the Province. However, due to lack of godowns and other relevant facilities coupled with adverse climate the recovery has not been satisfactory so far.

Project Achievements of the First Two Years

Result of the first year:

	No. of growers	Average planted acreage	Scheduled total acreage	Planted acreage	Total Production estimated.	Project collection	Koperta collection	Quantity uncollected
Kediri	686	0.292 h	200 h	200 h	490 t	117 t	83 t	90 t
Malang	195	0.831 h	200 h	162 h	83 t	16 t	5 t	0
Lumadjang	139	0.712 h	100 h	100 h	170 t	39 t	0 t	51 t
Banjuwangi	145	1.517 h	220 h	200 h	440 t	121 t	99 t	0
Total	1,165	0.585 h	700 h	682 h	1,183 t	293	187t	141 t

Result of the second year:

	No. of growers	Average planted acreage	Scheduled total acreage	Planted acreage	Total production estimated	Project collection	Koperta collection	Project recovery ratio
Kediri	3,347	0.51 h	2,500 h	1,700 h	2,200 t	585 t	0 t	70%
Malang	786	0.50 h	500 h	395 h	786 t	143 t	0	78%
Banjuwangi	1,965	1.27 h	2,500 h	1,800 h	2,125 t	600 t	0	54%
Total	4,593	0.75 h	5,500 h	3,895 h	6,311 t	1,328 t	0	

Of the maize collected by the project or cooperatives 260 tons was shipped to Japan and 220 tons exported to other markets in the first year while 1,100 tons was shipped to Japan in the second year.

PROJECT AREAS VISITED BY THE TEAM

11. The Maize Project in the Kediri Prefecture (District) Siman Village Agricultural Cooperative Society

(a) Agricultural Background of the Area.

Around the project area spreads some 48,500 hectares of paddy field and 77,600 hectares of dryland. Maize is grown on both the dryland (in an area of about 23,500 hectares) and on paddy field as a backcrop

to rice. Paddy field production is based on crop rotation with combination of rice and maize or some other cash crops while in some parts two cropping of rice itself is common. Dryland is devoted to either two maize cropping or for maize and other cash crop rotation. But when cassava or sugar cane is grown on dryland, crop rotation is not possible for a period ranging from 12 to 18 months.

(b) Outline of the Agricultural Cooperative Society:

The society operates in the area called the first Kediri Project Area under the guidance of the Prefectural Cooperative Federation. This one was reorganized in 1968 when the decision was made to implement the maize project in this area. It has 539 member farmers who own a total of 90 hectares of paddy field and 300 hectares of dryland. On its reorganization the society requested the members to contribute 1,000 Rupiahs each as compulsory initial savings. (In Indonesia the cooperatives do not use the term share capital, which can be used only by private companies.) The current savings today stand at 29,000 Rupiahs and has 110,475 Rupiahs of deposit by members. The society owns its office building (which is not a common feature among cooperatives in the country), a storehouse and a drying site with the total value of 15,000 Rupiahs in addition to essential equipments like platform scales for weighing and a hand-operated chemical sprayer. Moreover, the society is planning to buy additional site to build storage facilities which will be good in size to store more maize produced on land now being brought increasingly under the project.

12. The society is acting as an intermediary between the Project and the maize growers by concluding contract with them on behalf of the project and supplying credit, fertilizer as well as technical advice on its application to the growers on the one hand while collecting the project share of the maize on the other. The society has more

than fulfilled its role in the project. Besides registering 100% recovery for fertilizer credit provided by the Project it was able to collect additional 70 tons as its own share to be marketed independently by the society. The society used the proceeds from this additional collection for procuring fertilizer from the fertilizer corporation, for buying up a warehouse from a merchant and for clearing previous debts of the members. Moreover, it has an independent plan for supplying additional fertilizer and with expanding maize growing area which suggests that it is taking positive steps towards sound development.

The Maize Project in Banjuwanci Prefecture

13. Wongsoredjo Agricultural Cooperative Society

(a) Agricultural Background: The prefecture used to be a renowned banana producing area during the Pre-War days. But after the War, the produce was plagued by pest to such an extent that its export had to be abandoned. Today, agricultural production covers rice on 100,000 hectares, maize on 37,000 hectares and cassava on 10,000 hectare area. Here the system of crop rotation adopted on paddy fields is multi-cropping of rice or a combination of rice and soybean while on dryland maize is grown in rotation with either water melon, cotton or peas. The unit holding of paddy area averages 0.513 hectare. Rice can be harvested five times in two years with annual yield ranging from three to six tons per hectare.

(b) Outline of the Agricultural Cooperative Society: There are 41 agricultural cooperative societies in this prefecture out of which 32 are involved in rice production project and run rice hullers loaned to them by the government. The Agricultural Cooperative Society in Wongsoredjo was established in 1964 and is entrusted with a central role in its maize producing area. It is today one of the most active societies in the Prefecture. It has 1,300 members in eight villages 95% of whom are maize growers. This area had been growing maize even before the maize project was introduced. The cooperative society successfully testified to the benefits of joining the project through demonstration of fertilizer-applied plots set up for this purpose. This is shown by the increasing acreage brought under the project during the past years viz., 1968 (200 h.) 1969 (2500 h) and 1970 target (4000 h). Despite this encouraging trend the project in the area is not without problems. Though the cooperative society is playing an important role in the project through supplying fertilizer and technical guidance to the farmers to help them increase maize output on the one hand and collect

credit repayment maize for the project on the other, it has not been able to earn any income for itself through this activity. All the services of the office-bearers and staff of the cooperatives have been rendered free to the society. As a means of helping the cooperative to accumulate funds out of this operation the Project is proposing to set aside 25 kg of maize recovered to it as repayment against loans in kinds. The society on their side is proposing to charge drying and processing commission of one Rupiah per kilogram of maize to the growers so as to supplement its income.

14. The maize growers themselves are faced with several difficulties although the project has helped them in increasing the yield from 0.8-1.0 ton to 2.5 tons per hectare as

Project share	0.5 ton
Grower's share	0.8 - 1.0 Ton
Local market	1.0 - 1.2 ton
Total	2.5 tons

However, bulk of what is disposed of in the local market is in fact sold by the growers to merchants. If only the cooperative society had enough funds for collection of maize it could benefit the grower far greater. Before the start of sowing season the growers, whether they like it or not, have to borrow from the merchants. For borrowing 500 Rupiahs he has to repay 100 kg of maize. Taken that the market price stands at 12 Rupiahs per kilogram 100 kg of maize sells for 1200 Rupiahs. This means that a grower can get only 42% of the real price. In the meanwhile, the cooperative society is proposing to members to grow milo during the 2nd season (due to limited rainfall 2nd crop of maize inevitably becomes unstable in this area). It is expected that milo production will help the farmer to secure better income than before because, in the absence of a local market, the milo will have to be exported.

The Maize Project in Malang Prefecture

15. Denkol Agricultural Cooperative Society

(a) Outline of the project in the Prefecture:

The maize project in the Malang prefecture has been making steady progress. The area covered by the project has expanded year after year viz., 1968 168 h, 1969 393.7 h, 1970 1,252 h.

In this prefecture, 23 agricultural cooperative societies in five areas are involved in the project. Their breakdown is given below :

	No. of cooperatives	Project acreage :
The first area	6	427.5 h
The second area	2	100 h
The third area	6	220 h
The fourth area	2	115 h
The fifth area	6	350 h

What is heartening in the case of this prefecture is that cooperatives have been registering much better credit recovery than others. For example, it stood at 77.9% in the second year.

(b) The Denkol Agricultural Cooperative Society:

The society is operating in the first area. It concluded contract with 49 member growers who brought 22 hectares under the project in 1968. Encouraged by the yield increase to two and half or even upto three tons per hectare, 125 members with 89 hectares joined the project in 1969. In the third year, 169 growers with 109 hectares are registered under the project. Based on this good results the society has launched an independent maize project of its own from the second year. This independent project is promoted through supply of fertilizer procured by the society from the sources other than the Project. The society took a wise and bold decision of collecting not only the

project maize but also additional 500 kg in the form of compulsory savings from the members and this later constituted a fund for its independent project.

16. Encouraged by this past experience the society has formulated a very forward-looking programme of taking the entire Project area by 1974/75, into its own independent project as seen from the target figures given below :

	Project Area	Independent Project Area
1968/69	22 h	0
1969/70	85 h	20 h
1970/71	109 h	50 h
1971/72	150 h	75 h
1972/73	200 h	100 h
1973/74	150 h	150 h
1974/75	0	30 h

Problems and Conclusions

17. The maize project in the East Java province has now entered a crucial stage of its development. It has now become much clearer that the improvement of the maize growers' socio-economic position can only be realized by enhancing their bargaining position through their cooperatives. This means that the marketing operations of cooperatives in the project area needs to be strengthened in future.

18. This was the central goal in which direction all the efforts of the project have been made from the beginning but which could not be realised so far. The project was however effective in attracting an increasing number of maize growers to use fertilizer and in some areas in strengthening their conviction in the role of cooperatives as the only organisation capable of solving their problems.

19. However, problems faced by the cooperatives in the past and at present as well as ones which may lie in the way of future progress must be properly tackled. This is more important in view of the fact that this new attempt of the project has not met with much success so far in giving economic independence to the peasants. The most important reasons for this lack of progress are the following :

(a) Lack of funds with the project - the cooperatives.

Because of extremely limited financial resources the project - cooperatives do not have operational funds for maize collection, not to mention loanable fund for peasants' farming and daily living, while the merchants are always ready to give credit to peasants to help them celebrate a new year and to start a new farming season (both periods coincide in the country) in exchange of the coming season's harvest at a rate which is of great disadvantage to the borrower.

The project itself, though helped farmers in increasing their maize yield, could not meet all the financial requirements of the peasants and therefore could not recover its credit while the cooperatives failed to collect even a lesser part of the increased yield.

(b) Lack of Marketing Facilities with the project - the cooperatives.

The project -the cooperatives could have been in a much more advantageous marketing position and hence of collection if only godowns (necessary for proper storage over a certain period of time), blowers (necessary for reducing moisture contained in maize), lorries (for lack of which the transportation of the maize collected by the project had to be entrusted to private traders at a high cost) and other relevant facilities had been directly in their own hands.

(c) Lack in Human Factor

The project being a new experiment for both the government and the cooperatives (most of them had been in a nominal existence or remained dormant until the project was initiated), persons involved in the work lack technical, managerial and organizational skills in all the related aspects of project implementation. But what is of greater concern is the implication of the fact that the majority of the cooperatives involved could not even recover the cost of project operation because they could not get commission income for handling even the project share of maize from the peasants. Work of the cooperative personnel has been done without remuneration by their members. Cooperatives are looked upon as Agencies for solving all their problems without much initiative and effort on their own part. Where in the history of the cooperative movement in the world "the poor" improved their lots, through cooperatives be they consumers, agricultural producers or the industry workers and regardless of whether or not the government support and/or external assistance was available. This success was possible even if Members had

made only a meagre contribution to the cause of cooperative activity. The absence of the cooperative spirit or the desire to gain economic independence from the merchants (which is a reward obtained only by those who struggle with themselves) was partly responsible for the unsatisfactory result of the project.

Trade Prospect

20. As mentioned there are a number of agricultural commodities which are exported to foreign markets from Indonesia. Maize is a newly emerging exportable produce because its local human consumption is being gradually replaced by increasing rice production. Therefore, the success of the project is the clue to increasing maize export through the agricultural cooperatives. In this sense the project is a stepping stone for testing the possibility of increasing inter-cooperative trade between Indonesia and Japan not only in maize but also in cassava, coconut, capock, soybean and groundnut.

RECOMMENDATIONSGeneral

21. Under the present conditions in Indonesia where the Government controls inflation, the rate is still at 2% per month and where the monthly rate of interest of the national bank varies between 4 to 7 percent per month, the present pattern of operating the project would perhaps be the best way of continuing the efforts in intensifying maize production activities and in exporting the surplus grain to Japan. Till the inflation is brought under control, barter approach seems to be the best way of ensuring the continuity of Project operation. Through this barter system the farmers could be given imported fertilizer and other agricultural input in kind in exchange for the maize.

22. Intensive development efforts for strengthening the cooperatives will be necessary in order to sustain the Project activity on sound economic footing. Most of the present difficulties have arisen because of the weak financial structural position of the cooperatives in the Project area. The cooperatives will need technical guidance in developing their economic activities.

23. It is now evident that only a demonstration method would not be of much use unless it is accompanied by a suitable follow-up action in other areas. If the pilot Project has to have a multiplier effect, arrangements must be made to provide agricultural input, extension service and other guidance to the farmers elsewhere, if the results of the pilot farm are to be ensured everywhere.

To the Government

24. The Government of Indonesia assists cooperatives to develop their financial strength and managerial abilities. Some of the special measures which the Government could initiate in strengthening the cooperatives are :

- (a) to provide subsidies or grants for securing facilities, such as storage, drying equipment, transport vehicles, silos, etc., in order to maintain efficient operations in the Project areas. In other words, the Government should ensure that the cooperatives are in a position to undertake all the activities on their own from the stage of production to that of marketing;
- (b) the possibility of rationalising the system of export duty on maize could be examined by the Government so as to ensure export of grain on a competitive basis;
- (c) to secure facilities for training of leaders with special reference to the managerial aspects of the working of a cooperative society.

To Cooperatives

25. With a view to ensure their economic growth on sound footing, it may be necessary for cooperatives in Indonesia to seek external assistance, through the government of the country, in the following fields :

- (a) For creating facilities for storage, drying transport, silo, etc., for the successful production and marketing operations in the Project.
- (b) Obtaining facilities for training of persons engaged in export marketing, agricultural extension and in cooperative management.
- (c) Providing guidance in creating facilities for education of members of agricultural cooperatives including obtaining educational equipment for the purpose.
- (d) Obtaining the services of a full-time expert to assist in the reorganisation of the cooperatives and in strengthening their relationship with members.

RESOLUTION ADOPTED BY THE UNITED NATIONS GENERAL ASSEMBLY
(2459-XXIII) of 20th December 1969.

Taking into consideration the necessity of mobilising all means aimed at economic and social development of individual countries and, in particular, developing countries,

RECOGNISING the important role of the cooperative movement in the development of various fields of production and distribution, including agriculture, animal husbandry, fisheries, manufacturing, housing, credit institutions, education and health services,

RECOGNISING that the promotion of the cooperative movement in accordance with local needs could contribute to the implementation of the goals of the second United Nations Development Decade,

RECOGNISING also that a lack of skilled and experienced personnel is at present one of the most important obstacles to the development of the cooperative movement in developing countries,

1. REQUESTS the Economic and Social Council to consider, in connection with the preparations for the second United Nations Development Decade, the question of the role of the cooperative movement in economic and social development;
2. INVITES member states that have traditions and experience in that regard to provide increasing help, including staff teaching, to developing countries which request it in the field of cooperative movement.
3. REQUESTS the International Labour Organisation, other specialised agencies concerned and the International Cooperative Alliance to render increased assistance within their possibilities in the realisation of the objectives of the present resolution.

RESOLUTION ADOPTED BY THE ECONOMIC AND SOCIAL COUNCIL
1413 (XLVI). The Role of the Cooperative
Movement in Economic and Social Development.

The Economic and Social Council,

Recalling General Assembly resolution 2459 (XXIII) of 20th December 1968 concerning the role of the cooperative movement in economic and social development,

Bearing in mind the importance of the role of the cooperative movement for the promotion of economic growth of social progress, particularly by facilitating the mobilisation of human, financial and other resources,

1. Decides to take full account of the potential role of the cooperative movement in the preparatory work for the Second United Nations Development Decade, and to make an assessment of the contribution which can be made by this movement in the achievement of the goals and objectives of the Decade, with a view to ensuring that this contribution will be duly reflected in the international development strategy;
2. Requests the International Labour Organisation, the Food and Agriculture Organisation of the United Nations, the United Nations Industrial Development Organisation and other interested organisations and bodies in the United Nations system to assist Governments, at their request, in the development and strengthening of the cooperative movement and to include in their reports to the Council their activities in this field.
3. Invites Member States which have experience and knowledge in the field of cooperatives to give appropriate assistance to the developing countries, at their request, in developing the potential which the cooperative movement can offer for economic and social development;

4. Recommends the Governments concerned, particularly the Governments of developing countries, to intensify their efforts to develop the cooperative movement and to make full use, within the framework of their own priorities, of the resources of the United Nations Development Programme for assistance in this field;

5. Requests the Secretary-General to prepare, in cooperation with the interested organisations and bodies in the United Nations system and the International Cooperative Alliance, a report which would assist in putting into effect the provisions of paragraph 1 above, taking into account the timetable which has been approved for the formulation of the international development strategy for the Second United Nations Development Decade.

1601st plenary meeting
6 June 1969.

APPENDIX "C"

RESOLUTION adopted by the 24th CONGRESS of the I.C.A.,
held in HAMBURG, Germany in 1969

THE 24TH CONGRESS OF THE INTERNATIONAL COOPERATIVE ALLIANCE

HIGHLY APPRECIATES the efforts made by the United Nations Organisation and its Specialised Agencies aiming at the promotion of the socio-economic development of the developing countries;

WELCOMES the Resolution of the 23rd Session of the United Nations General Assembly on the Role of the Cooperative Movement in the Economic and Social Development;

RECOGNISES that U.N. Resolution 2459/XXIII confirms the important role of the cooperative movement in the development of different countries, and especially in the realisation of the programme of the development of various fields of production - agricultural, artisanal and industrial - in the field of trade, services, medical care and education, as well as in the realisation of economic and social reforms, and especially land reform;

DRAWS attention to the fact that the cooperative form of ownership gives special possibilities to activate social initiative and to mobilise human and financial resources under social control for their effective use for the benefit of social progress and economic development, thus effectively bringing low-income persons into the main stream of development;

OBSERVES that creative technical assistance efforts have been developed directly between cooperatives in many countries represented in the 60 nation membership of the International Cooperative Alliance. These programmes have offered flexibility, economy and maximum participation among the member cooperatives;

DECLARES the willingness and readiness of the Alliance for the further development of cooperation with the United Nations Organisation, its Specialised Agencies and other national and international organisations in the fields of common interest;

CALLS UPON developing nations to make use of the F.A.O., I.L.O., I.C.A., I.P.A.F. joint programme of technical assistance, and urges more developed countries to cooperate actively with requests for assistance;

REQUESTS the Central Committee and Executive Committee of the Alliance, to encourage its members to prepare and forward to the joint programme, case studies of their cooperative organisations, which are developing activities in various geographical regions and in different socio-economic systems, to find how the cooperative movements can accelerate the socio-economic development of countries;

REQUESTS the Director of the Alliance to forward the results of these studies in the form of a report to the Secretary General of the United Nations Organisation, its Specialised Agencies and also to the governments of states where the I.C.A. member organisations are developing their activities;

CALLS UPON the Central and Executive Committees of the Alliance to elaborate long-term programmes of training, taking into consideration the most essential needs of cooperative organisations especially in the developing countries;

RECOMMENDS that the International Cooperative Alliance elaborate a programme of work with agricultural cooperatives with special emphasis on the role of agricultural cooperatives in the increase of agricultural production and in the fight against hunger;

URGES the Central and Executive Committees and member organisations of the Alliance to actively promote cooperative development as a counteracting force to monopolies in the developing countries and especially work for full implementation of the 1967 resolution of the Central Committee, adopted in Prague, concerning the struggle against monopolies;

APPEALS to the United Nations Organisation and its Specialised Agencies to ascribe a greater part of the funds at their disposal, to cooperative organisations for the realisation of joint projects of technical assistance and pre-investments in developing countries, taking advantage of the consultative assistance of the Alliance and its members;

REQUESTS the United Nations Organisation to appeal to its members to direct through the cooperative organisations in their countries a greater part of the technical assistance for states who are members of the United Nations Organisation.