

SECOND REVISED, ENLARGED EDITION

**Agricultural Co-operatives in Japan:
The Dynamics of Their Development**

Dedicated
To
The Cause of Preserving our Environment

Agricultural Cooperatives in Japan The Dynamics of Their Development

SECOND REVISED, ENLARGED EDITION

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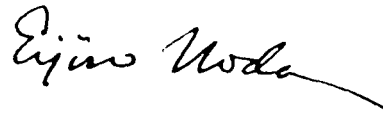
Foreword

It was over a hundred years ago that Japan embarked upon a unique mission of transforming itself into a modern dynamic society which could confidently compete with the industrialised and powerful West. The Meiji Restoration of 1868, as it is called, indeed has proved to be a turning point in the history of Japan which revolutionarily changed the orientation of the society and thereby set in the process of rapid industrialization and economic development. The post-war period saw a yet new phase of this process of Japan emerging as one of the leading and most dynamic economies in the world, joining the select ranks of developed nations, hitherto confined only to the countries located in Europe or North America. Japan's modernisation and the dynamism of its economy and society have thus become subjects of immense curiosity and study for the people all over the world.

Cooperative movement in Japan has been an important element that helped greatly the process of modernisation of the agricultural sectors in the country. With a history of more than one hundred years, the Japanese agricultural cooperative movement over this long period has always most successfully responded to the demands of changing times and socio-economic conditions of the country. In the present-day Japan, when the agriculture sector has a vastly different and in a way subtle role to play in Japanese economy, the cooperatives are developing ways and means to impart a new dynamism to the agricultural and rural sector. The Japanese experience of agricultural cooperative movement and its story of continuity and change, I believe, should be of immense interest and great relevance to other countries, especially those as are moving in the path of modernisation and economic development.

It is indeed laudable that Mr.M.V.Madane, who has a long and close association with cooperative movements in Japan has brought out this valuable work dealing with various aspects of agricultural cooperative movement in Japan. Mr.Madane has a deep insight and understanding of the subject acquired through vast experience of interacting with individuals and agencies actively involved in the cooperative movement in Japan.

I hope that this book will most deservedly be read by as large number of people as possible who are interested in and keen to have a better understanding of the agricultural cooperative movement in Japan. I am sure that the Japanese experience in the field of agriculture cooperative movement is of relevance to other countries as well. I, therefore, consider this book a valuable contribution to cooperative movement and would therefore like to thank and congratulate Mr. Madane for his efforts.

A handwritten signature in black ink, reading "Ei-jiro Noda". The signature is written in a cursive style with a long horizontal stroke extending to the right.

February 16, 1990

EIJIRO NODA
Ambassador of Japan to India

Preface

The rapid economic progress made by Japan during post-war years has received worldwide acclaim. So is the case of Japanese agriculture and agricultural cooperatives. Despite the very small size of average holdings. Japanese farmers and their institutions have turned agriculture into an industry, thereby bringing to the farmers benefits of modern technology and improved marketing practices.

Although considerable information on the functioning of Japanese Agricultural Cooperatives is being disseminated through meetings and conferences, an overall view through a consolidated work was lacking. During my travels in several countries, friends and colleagues have been expressing the need for such a publication. An attempt has been made in this book to fill this gap.

Because of my long association with the Japanese Agricultural Cooperative Movement over the last three decades, I have had frequent access to sources of information on the functioning of agricultural cooperatives. I was also fortunate in knowing the views of many cooperative leaders and functionaries within the cooperative movement on various aspects of cooperative activity. Since taking over the responsibility of the ICA/JAPAN Management Training Project for Agricultural Cooperatives in Asia, my contacts with agricultural cooperatives became more intimate and through the cooperation I received from the Japanese cooperators, I was able to assess in some detail, the recent developments and problems faced by farmers and their cooperatives. To what extent I have succeeded in this book in bringing to the cooperators the essence of these developments and problems, is now left to be judged by readers themselves. The vast network of organisations and facilities and the multi-dimensional activities of agricultural cooperatives can be the subject of several volumes. Hence detailed treatment of any particular topic could not be attempted. The drawbacks, if any, in the presentation of this book solely belong to the author.

In collecting data and information for this book, I have received tremendous support and generous help from colleagues both in Japan and in the ICA Regional Office. To Mr. Shiro Futagami and his IDACA colleagues I owe a great deal for providing documents and information and in making useful comments. Also I am grateful to the ICA Regional Director, Mr. G. K. Sharma

and other colleagues in the ICA Regional Office for Asia and the Pacific for their encouragement and kind assistance in preparing the manuscript. The credit for typing the manuscript for preparing formats and for setting the book in its present form before printing goes to my Secretary, Mr.A.H. Ganesan and to Mr.P.Nair of the Human Resource Development Unit of the ICA ROAP. I would also like to express my sincere thanks to all those who encouraged me to write this book.

Finally I would like to express my gratitude and sincere thanks to His Excellency Mr.Eijio Noda, Ambassador of Japan in India for writing the Foreword to this book.

New Delhi
25 January, 1990

M.V.Madane

Preface to the Second Edition

The first edition of the book published in January 1990 was so well received by cooperators and cooperatives alike that within two years, most of the copies were sold out. Hence the need was felt, towards the end of 1991, for bringing out the second edition.

The agricultural scenario in Japan is changing so rapidly that constant changes in farming patterns and the consequent modifications in institutional structures have become a matter of routine. The internationalisation of agriculture and import liberalisation of several agricultural commodities, have thrown out of gear many of the farmers and their groups formed for dealing with different commodities. On the one hand, government is persuading the farmers to cut down rice production, in order to reduce the subsidy burden on the exchequer, on the other, stiff competition has to be faced by the farmers and their cooperatives in marketing the non-cereal products. The agricultural cooperatives and their federations are now preparing themselves to face up to these challenges and lead the cooperators through a smooth transition to the Twentyfirst Century. Difficult tasks lie ahead but the dynamic Agricultural Cooperative Movement is confident of overcoming the obstacles in order to maintain the momentum they have developed during the past few decades.

Bringing out the second edition this year assumes greater significance in view of the forthcoming 30th ICA Congress in Tokyo during October, 1992. Taking this opportunity, I have revised the book, updated the statistical tables and added material and information on several new aspects affecting agricultural cooperatives.

In revising the book, I have received very useful suggestions and assistance in collecting additional information from Mr. Shiro Futagami, Managing Director of the Institute for the Development of Agricultural Cooperation in Asia (IDACA) and his colleagues Mr. H. Terunuma and Mr. Y. Abe. And in bringing out the second edition, I have received abundance of goodwill and support from the ICA Executive Director, Mr. Bruce Thordarson; Regional Director, Mr. G. K. Sharma and all of my ICA colleagues, especially Mr. A. H. Ganesan and Mr. P. Nair for producing the revised manuscript. My grateful thanks to all of them.

I hope the cooperators all over the world and the delegates attending the Tokyo ICA Congress will find this book both informative and useful.

New Delhi
April, 1992

M. V. Madane

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Acronyms

ACFA	Agricultural Credit Fund Association
ACIC	Agricultural Credit Insurance Association
AFFFC	Agriculture, Forestry and Fisheries Finance Corporation
CUAC	Central Union of Agricultural Cooperatives
CUC	Central Union of Cooperatives
GATT	General Agreement for Tariffs and Trade
ICA	International Cooperative Alliance
ICA ROAP	International Cooperative Alliance, Regional Office for Asia and the Pacific.
IDACA	Institute for the Development of Agricultural Cooperatives in Asia.
MAFF	Ministry of Agriculture, Forestry and Fisheries.
NORINCHUKIN	Central Cooperative Bank for Agriculture and Forestry
PCFAC	Prefectural Credit Federations of Agricultural Cooperatives.
RAPP	Regional Agricultural Promotion Plan
Y	Yen
ZENCHU	Central Union of Agricultural Cooperatives
ZENGYOREN	National Federation of Fisheries Cooperative Associations.
ZENHANREN	National Marketing Federation of Agricultural Cooperatives
ZENKOREN	National Purchasing Federation of Agricultural Cooperatives.
ZEN-NOH	National Federation of Agricultural Cooperative Associations.

Agricultural Cooperatives in Japan

The Dynamics of Their Development

Introduction

The development of agricultural cooperatives in Japan has to be viewed in the context of her phenomenal growth since the Meiji Restoration in 1868, in all fields of economic development, industrialization and restructuring of the nation's policies and programmes. This growth could not have been possible during the isolationist policies of the Shogunate feudal lords who ruled Japan for nearly three centuries prior to the Meiji Restoration.

The Meiji Restoration re-established the Emperor's supremacy, unified the country under him and opened Japan's doors to the outside world. From this time onwards, a new era opened for the Japanese people of assimilating latest trends in science and technology from Western countries and adapting them to the local conditions through innovations and improvements. Except for the few years of the Second World War and thereafter, there was no going back on the major thrust towards her ascent as a dominant economic power in the world.

By 1953, Japan had regained her pre-war level of national product and consumption rates. The year 1955 saw the beginning of the period of rapid economic growth facilitated by the Five Year Plan for Economic Self-sufficiency. This was followed by the New Long-term Economic Plan of 1957. These plans aimed at securing an important position in international markets and full employment at home. To realize these aims, major changes were introduced in basic economic policies which emphasized growth in foreign trade and food self sufficiency.

For two decades from 1955, Japan surged forward, well ahead of several other industrialized nations and achieved major successes in the fields of mining, manufacturing, exports and supporting services. However, agriculture could not keep pace with this galloping growth rate. For example, while the production of mining and manufacturing industries increased by 22% per annum, the rate of increase in agricultural production was only 6.2%

per annum. The real wages of people working in mining and industries remained at a much higher level than the income of the full-time farmers and farm workers.

The oil crisis of 1973 brought about the first major upset in Japan's thrust towards economic supremacy. Several variable factors made their headway slowing down the process of development to some extent. Notable among these were the high cost of production, phenomenal rise in wages in the industrial sector, continuing rise in the value of the Japanese Yen and the appearance of some new nations as competitors in the international export market. However, during the decade that followed, Japan continued to maintain her leading position as a major economic power.

It is against this background that developments in the field of agriculture and agricultural cooperatives have to be studied and analysed. Although major agricultural developments took place after initiation of several policies and programmes, both by the government and the agricultural cooperative movement, they could not be viewed in isolation. The impact of industrialization on the socio-economic conditions of the rural people in general and farming communities in particular has contributed to a great extent to the emergence of some of the most serious problems currently faced by the rural communities in Japan. An attempt has been made in this book to present to the readers, the dynamics of Japan's agricultural development and the pivotal role played by agricultural cooperatives in shaping up socio-economic lives of the farmers and their families and in narrowing down the gap between the wages of the salary earner and the full-time farmer.

Background and Characteristics of Agriculture

The Land

Known as the *Land of the Rising Sun*, Japan is located on the north-eastern periphery of the Asian continent. Nearly 4000 islands constitute its entire geographical area between 45°33' and 20°25' north latitude. However, the four major islands viz., Hokkaido, Honshu, Shikoku and Kyushu, which are located in a 3800 km arc, form the four main parts of the country. Honshu is the largest of the four islands stretching 1700 km from north to south and 250 km from the east to west. The total land area of Japan is 378,000 square kilometers out of which about 54,000 sq.km being 14.4 percent of the total, are available for cultivation or for other productive activities in the rural areas. Mountain ranges run along most of the interior portion of the country forming the backbone of the land areas sloping westward to the Japan Sea and eastward to the Pacific Ocean. Some of the volcanic mountains are still active. Most parts of Japan are prone to seismic disturbances resulting in earthquakes of varying intensities from time to time. According to the National Land Use Plan, in 1986, only 16.2 percent of the total land area was available for agriculture and 65.7 percent was covered by forests.

Population

The population growth rate during the recent years is getting stabilised. In 1985, the total population was 121,049,000 while the density of population per km was 324.7 persons. In 1989, the figures were 123,255,000 and 331 respectively. Towards the end of 1991, the population stood at 124,400,000.

Climate

Despite the long stretch of land area most parts of Japan have temperate zone climate. Only the northernmost parts and the southernmost parts witness extreme climatic conditions. While the northern island of Hokkaido has sub-zero temperatures in winter the southern Kyushu island can grow tropical fruits and vegetables during the same season.

Because of its location in the north-eastern part of the Monsoonic Zone, Japan has adequate rainfall most favorable to agriculture. However, typhoons during late summer and early autumn can and do often cause extensive damage to standing crops and forests. Her geographical characteristics give Japan four distinct seasons in a year viz., spring, summer, autumn and winter. Summer seasons are hot and humid and even in Hokkaido temperatures are above 30°C during peak summer months. Due to this favorable combination of high temperatures and abundant rainfall lands in almost all parts of Japan are suitable for rice cultivation. Also adequate level of sunshine and plentiful water supply make agricultural lands multi-commodity cropping farmlands.

Agriculture in Feudal Era

For more than two and a half centuries before the Meiji Restoration, during which period Japan was isolated from the rest of the world, the Edo feudal lords ruled supreme. From 1603 until the Meiji Restoration in 1868, division of land and agricultural production were dominated by the HAN system. Under this system all lands in Japan were distributed among the hundreds of feudal lords on the basis of the quantity of rice produced in their areas. Rice was the basis of the economy during the entire period. A unique system prevailed of measuring the rice production capacity of each HAN by the number of Kokus (hundred Kokus equal fifteen tons) produced on the lands owned by each feudal lord. The land capacity of the feudal lords varied from ten thousand Kokus to one million Kokus. Only the Shogun, being the head of the Tokugawa family, could possess vast lands which could produce seven million Kokus. Essentially, the HAN system was based on the principle of self-sufficiency. Rice growing communities with subsistence economy as the base were the main characteristics of rural Japan during this period. As the lands were owned by the feudal lords, the tenant cultivators received only a small portion of the total produce.

Farmland Expansion and Decline

At the beginning of the nineteenth century i.e. in 1800, the total land under cultivation stood at 3,000,000 ha. However, during the nineteenth century and the first half of the twentieth century, there was considerable expansion in land cultivation due to improved irrigation facilities through large scale projects and by conversion of forests and wastelands into arable lands. Even during the last quarter of the Edo feudal era, there has been over sixty percent increase in the size of farmland. In 1900, the total land under cultivation stood at 5,210,000 ha., and by 1960 it increased to 6,700,000 ha. Agricultural production, however, did not keep pace with this increase. It varied according to trends towards industrialization, the demand

"HAN" refers to a defined group formulated for administrative purposes.

and supply position and the policy changes during and after World War II. From 1960 onwards, the farmlands in Japan started diminishing in number and in 1990 the total area under cultivation was 5,243,000 ha., taking it back almost to the year 1900 level. Thus, the land expansion of over eighty years was done away with within a course of only twenty years.

The following table gives the total land area under cultivation from the year 1800 to 1990:

Table 1 : The Land Area Under Cultivation

<i>Year</i>	<i>Area (1000ha)</i>	<i>Source</i>
1800	3,000	NLA Estimates
1880	4,470	Finance Ministry
1903	5,266	Agri.Ministry
1920	6,084	-do-
1940	6,016	-do-
1960	6,122	-do-
1970	5,796	-do-
1980	5,461	-do-
1989	5,277	-do-
1990	5,243	-do-

Since 1965, there has been a marked decline in the area under paddy cultivation, partly due to gradual reduction in rice consumption and partly due to government efforts to curtail rice production. The size of average holding, however, is slightly on the increase. As Hokkaido region in the North has average holding far above the holding in the rest of the country, the figures are normally shown separately. The other noticeable trend is the decrease in the number of full-time farmers. This is due mainly to increased opportunities of employment for farm household members in the industrial sector and to some extent due to farm mechanisation. A combination of above factors and the internationalisation of agriculture have resulted in greater diversification of crops produced in Japan over the past three decades. The following tables illustrate these trends. Table No.2 shows changes in the cropping pattern while table 3 indicates the downward trend in the number of farm households in the context of the total population. Table No.4 demonstrates the declining number of full-time farmers while table No.5 analyses the average land holding cultivated in Hokkaido and other regions. Tables Nos.6, 7, 8 and 9, list the range of commodities (cereals,

non-cereals, livestock and livestock products) while table No.10 gives the average farm household family members, the agricultural and non-agricultural income, loans, savings and related indices. Table 11 shows the pattern of farm machinery ownership among farm households.

Table 2 : A Comparison of Productivity between Agriculture and other Industry

Base year 1985 at 100 level

Year	Agriculture			Industry		
	Labour Index	Prod. Index	Employ. Index	Labour Index	Prod. Index	Employ. Index
1960	25.8	69.4	269.4	24.4	16.1	65.9
1965	35.1	77.5	220.9	34.0	27.3	80.3
1970	47.8	87.3	182.7	59.8	56.8	95.0
1975	69.1	91.5	132.4	67.1	62.1	92.6
1980	79.2	90.3	114.0	89.1	83.9	94.2
1985	100.0	100.0	100.0	100.0	100.0	100.0
1989	104.7	96.2	91.9	118.4	120.6	101.9

Source: Statistics for Annual Report of Agriculture, 1991.

Rapid Industrial Growth and Agriculture

Agriculture and rural environment were the main recipients of the negative impact caused by rapid industrial growth. After recovering from the effects of World War II, Japan was a different nation altogether. From mid-fifties to mid-seventies, Japan was in a state of frenzy with development initiatives in all directions. With an annual GNP growth rate exceeding 10 percent, the economy expanded four-fold in a span of fifteen years from 1955 to 1970. Following are some of the important developments affecting agriculture in this period :

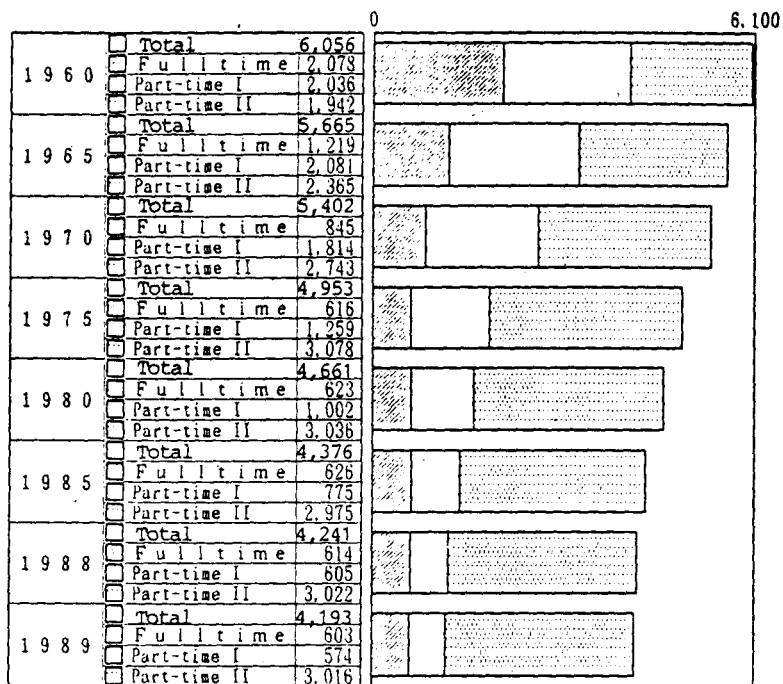
1. Agricultural lands were converted into non-agricultural areas for setting up industries and related facilities;
2. Agricultural lands were also converted for use as residential areas and for creating transport and other infra-structural facilities;
3. A total of 690,000 ha or eleven percent of the total farmlands were converted for non-agricultural purposes within merely a period of fifteen years;

Table 3 : Farm Households and Population*(Unit : 1,000)*

Year	Farm Households Population	Farm Household Farming A	Population engaged in B	Total Population C	A/C %	B/C %
1965	5,576	30,063	11,039	98,275	30.6	10.1
1970	5,342	26,280	9,826	103,720	25.3	7.9
1975	4,953	23,195	7,907	11,193	420.7	7.1
1980	4,614	21,366	6,973	117,009	18.3	6.0
1985	4,376	19,839	6,363	121,047	16.4	5.2
1990	3,835	19,296	5,653	123,611	14.0	4.6

Table 4: Number of Farm Households

(Unit: 1,000 households)



3) Position of Agriculture in National Economy

(in 1988)

Gross Domestic Product	288,395 billion yen
Share of Agriculture	2.0%
Total Export	264,917 million dollars
Share of Agri. Products	0.4%
Total Import	187,354 million dollars
Share of Agri. Products	12.3%
Total Working Population	60,036,000
Share of Farming Population	6.9%
National Budget for General Account	61,851.7 billion yen
Share of Agricultural Budget	4.4%

Table 5: Trend of Farmland holding by Size of Cultivated Land

Year	Under 0.5 ha.	0.5-1.0	1.0-1.5	1.5-2.0	2.0-3.0	Cultivated land per farm and household (hectare)	
						3.0 and over	0.92
Whole country except Hokkaido							
1970	2,030	1,619	874	407	244	63	0.92
1975	1,995	1,436	727	349	236	76	0.93
1980	1,922	1,304	652	328	240	95	0.95
1985	1,856	1,182	583	300	234	112	0.98
1987	1,728	1,181	592	306	248	124	0.99
1988	1,698	1,177	585	305	242	130	0.99
1989	1,675	1,162	582	300	239	135	1.00
Hokkaido							
	(-1.0ha)	(1.0-2.0)	(2.0-3.0)	(3.0-5.0)	(5.0-10.0)	(10.0-)	
1970	36	14	15	35	41	25	5.95
1975	27	11	11	26	33	26	8.01
1980	23	9	9	20	30	29	9.53
1985	20	8	8	16	26	31	10.84
1987	19	7	7	16	26	32	11.31
1988	18	13		15	26	33	11.57
1989	18	13		13	25	33	11.86

Source: Ministry of Agriculture, Forestry and Fisheries

Table 6: Production of Major Commodities

Supply of Cereals

Fiscal year	Area planted (1,000 ha.)	Production (1,000 t)	Yield per hectare (t)	Imports (1,000 t)	Supplies for domestic consumption (1,000 t)
Rice					
1970	2,923	12,689	4.34	15	11,948
1975	2,764	13,165	4.76	29	11,964
1980	2,377	9,751	4.10	27	11,209
1985	2,342	11,662	4.98	30	10,849
1987	2,146	10,627	4.95	39	10,647
1988	2,110	9,935	4.71	43	10,584
Wheat					
1970	229	474	2.07	4,621	5,207
1975	90	241	2.69	5,715	5,578
1980	191	583	3.05	5,564	6,054
1985	234	874	3.74	5,194	6,101
1987	271	864	3.19	5,133	6,069
1988	282	1,021	3.62	5,290	6,140
Barley					
1970	146	418	2.87	1,072	1,474
1975	61	174	2.86	2,117	2,147
1980	104	332	3.19	2,087	2,522
1985	103	340	3.32	2,071	2,417
1987	103	326	3.16	1,988	2,298
1988	105	370	3.51	2,120	2,411

Source: Ministry of Agriculture, Forestry and Fisheries

Table 7: Livestock

	1970	1975	1985	1988	1989
Milking cows	1,804	1,787	2,111	2,017	2,031
Beef cattle	1,789	1,857	2,587	2,650	2,651
Pigs	6,335	7,684	10,718	11,725	11,866
Horses	137	43	23	22	22
Sheep	21	12	24	29	30
Goats	161	111	51	41	37
Hens and chickens					
Layers	169,789	154,504	177,477	190,402	190,616
Broilers	53,742	87,659	150,215	154,969	153,852

Source: Ministry of Agriculture, Forestry and Fisheries

Table 8: Agricultural Production

(Unit: 1,000 tons)

Commodity	1970	1975	1980	1985	1987	1988
Potatoes	3,611	3,261	3,421	3,727	3,955	3,763
Soybeans, dried	126	126	174	228	287	277
Cucumbers	965	1,023	1,018	1,033	1,020	975
Tomatoes	793	1,024	1,014	802	833	775
Eggplants	722	668	619	599	604	563
Cabbages	1,433	1,423	1,545	1,589	1,622	1,572
Chinese cabbages	1,744	1,607	1,616	1,478	1,420	1,302
Spinaches	363	346	352	383	400	396
Welsh onions	614	555	539	553	564	522
Onions	973	1,032	1,152	1,326	1,294	1,250
Lettuces	165	258	381	459	494	495
Japanese radishes	2,778	2,545	2,690	2,544	2,530	2,456
Carrots	497	495	600	663	656	679
Taros	542	370	459	375	392	397
Mandarin oranges	2,552	3,665	2,892	2,491	2,518	1,998
Apples	1,021	898	960	910	998	1,042
Grapes	234	284	323	311	308	296
Japanese pears	445	461	485	461	468	446
Peaches	279	271	245	205	212	203
Persimmons	343	275	265	290	290	287
Tobaccos	150	166	141	116	104	86
Crude tea	91	105	102	96	96	90
Sugar beets	2,332	1,759	3,550	3,921	3,827	3,849

Source: Ministry of Agriculture, Forestry and Fisheries

Japan Tobacco Incorporation

Table 9: Production of Meat, Cow Milk and Eggs

(Unit: tons)

Commodity	1970	1975	1980	1985	1987
Meat					
Beef and veal	279,654	354,061	419,062	555,252	564,887
Pork	734,294	1,039,170	1,475,005	1,531,914	1,582,014
Horse	10,697	5,275	3,751	5,418	4,993
Sheep	154	26	41	143	212
Chicken... 1)	309,572	609,345	960,146	1,120,871	1,143,456
Fowl 1)	71,427	71,324	84,418	90,472	90,921
Cow milk	4,761,469	4,961,017	6,504,457	7,380,369	7,334,943
Eggs	1,733,669	1,787,845	2,001,582	2,152,356	2,375,845

1) Beginning 1975, figures are not comparable

Source: Ministry of Agriculture, Forestry and Fisheries

Table 10: Farm Household Economy Classified by Types of Management (Per Household)

(Unit: 1,000 yen)

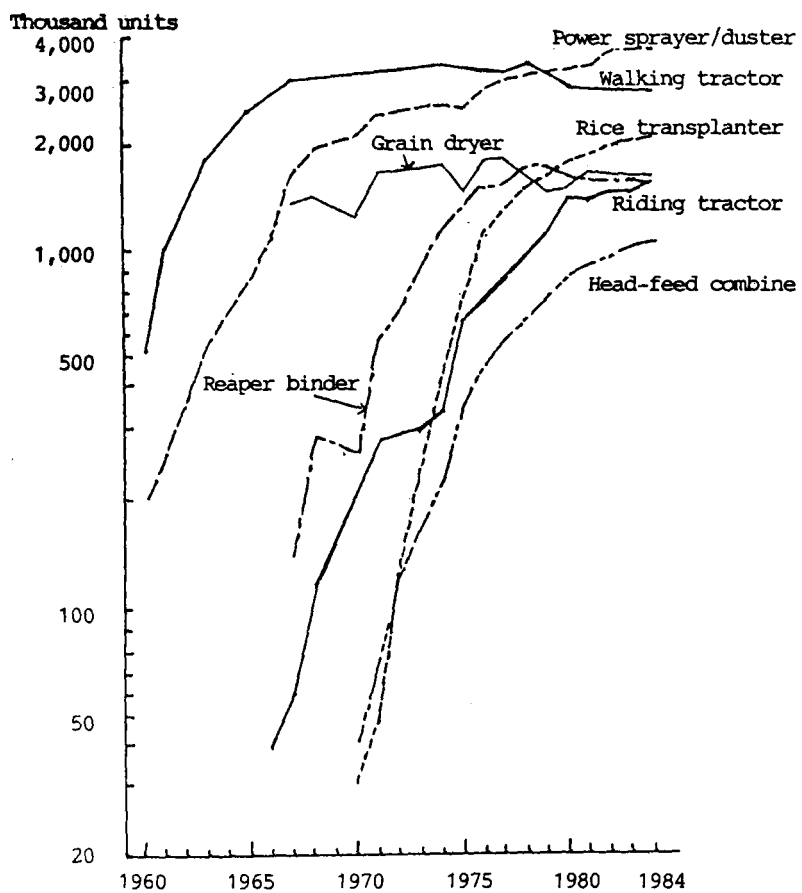
	Fiscal Year	Average	Full-time	Part-time I	Part-time II
Agricultural Income	1988	952.7	2,478.6	4,242.3	393.4
Non-agricultural Income	1988	4,822.2	407.5	1,996.8	5,999.7
Pension and Donations Received	1988	1,676.8	1,833.4	1,320.1	1,665.1
Total Farm Household Income	1987	7,451.7	4,416.7	7,165.9	8,058.2
Expenses for Farm Machinery	1988	176.0	301.2	469.9	128.7
Savings	1988	19,649.9	16,093.6	18,113.7	20,549.9
Loans	1988	2,063.0	3,135.3	4,889.7	1,636.6
No. of family members	1988		3.49	4.82	4.83

Source: Ministry of Agriculture, Forestry and Fisheries "Survey on Farm households"

Table 11: Agricultural Production in Japan

1) Mechanization of Farming

Number of Farm Machinery Units Owned by Farmers, 1960 to 1984



Source: MAFF

4. Large scale migration took place of young people to the three metropolitan cities viz. Tokyo, Osaka and Nagoya. During this period, forty percent of the rural people in the age-group of 15 to 19 years migrated to the large cities due to the employment opportunities created by the rapid industrial growth; and
5. Uncoordinated enforcement of laws made to prevent the conversion of farmland into non-agricultural areas. These laws were: (a) The Mountain Villages Development Act of 1965 and (b) The Agricultural Promotion Areas Act of 1969.

Agriculture at a Disadvantage

Due to the reasons explained above and also because of nation's compulsive urge for rapid industrial growth, agriculture could not keep pace with industries and services during the two decades of rapid economic growth. For example, taking 1960 as the base year, the index of production in 1975 in industry was at 395.3 level, but that of agriculture was just 131.9 level.

The rapid economic growth during the post-war period was motivated by several factors. The policy base for this was created through the enactment in 1950 of the Comprehensive National Land Development Act. Under this Act, comprehensive national development plans were expected to provide the framework for future development. It took the government 12 years to prepare the First Comprehensive National Development Plan which was approved by the Cabinet in October 1962. This plan was followed by two other plans for comprehensive development. The implementation of the plans was difficult as each prefecture also had its own plan for comprehensive development prepared with local initiatives. However, the national plans provided a broad framework and targets for the country as a whole. In addition to these plans, regional plans for comprehensive development also came into operation; some of these plans covering the entire country. The Specific Area Comprehensive Development Plans dealt with specific aspects of problems in a given area or subject. While the economic results of all these efforts were spectacular, the rapid economic growth brought in its wake the imbalances in the use of national resources in different sectors and created serious environmental problems.

Government Projects for Farmland Improvement

While the period of rapid economic growth, especially in the mining and manufacturing fields, was mainly limited to the last three decades, the process of land improvement was in motion since almost the beginning of the twentieth century. The Government of Japan, local agencies and agricultural cooperatives have played a very important role in land improvement and in providing necessary infrastructure for advanced agricultural practices. The projects for land improvement have contributed a great deal in



High-Tech
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Better Services
Through
Greater Strength

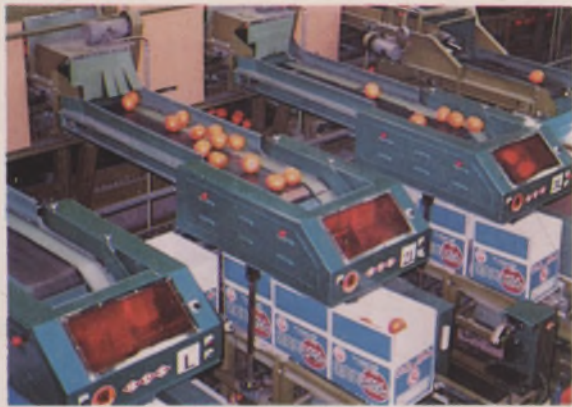


Diversification
& Enlargement of
Farming Scale





Suitable Products
for Appropriate
Markets



Farm Guidance



Quality Consumer
Products for
Members





Better Living -
Happier Rural
Communities





transforming subsistence farming in Japan into an agricultural industry through optimum use of land and water resources.

The first government initiative for farmland improvement came with the setting up of objectives for such improvement. This was followed by the Water Irrigation Association Act in 1909. After the Second World War, the Land Improvement Act was passed in 1949 which provided the legal framework for post-war efforts in raising food production and providing gainful employment to surplus labour. And during the later years the Act became the basis for several projects for farmland improvement. Most of these projects were on a cost sharing basis. Some of them were for the entire country while some others were initiated by prefectural governments. In addition, projects were also undertaken by Land Improvement Districts composed of 15 or more farmers in a district, local authorities like the municipalities, the agricultural cooperatives and the Farmland Development Corporation as well as the Water Resources Development Corporation.

These two Corporations looked after land reclamation and improvement and readjustment of dams and canal irrigation projects respectively.

Following are the major farmland improvement projects initiated by the Government and other agencies :

1. *Irrigation and Drainage Project*

This project undertakes construction and repair of dams, drainage canals, head works, drainage and pumping facilities.

2. *Land Development Project for Cultivation:*

This is a project to bring additional land under cultivation and to provide infrastructure like farm roads, irrigation and equipment to encourage cultivation of these lands.

3. *Reclamation Project:*

This project aims at bringing additional land under cultivation through drainage of sea water and underground water and constructing farm roads and canals.

4. *Farmland Consolidation Project:*

This type of project undertakes readjustment of scattered pieces of paddy fields by regrouping farmers' lands into compact plots and by providing irrigation, drainage and farm road facilities.

5. *Overall Adjustment Project for Upland Fields:*

Under this type of project, scattered plots of upland fields are exchanged among farmers and regrouped into compact plots for cultivation and irrigation. Also canals and roads facilities are provided to affected farms.

6. *Farm Road Construction Project:*

This project is for new farm road construction.

7. *Overall Readjustment Project for Farming Villages:*

This type of project aims at improving the environment and living conditions of farmers.

8. *Farmland Disaster Prevention Project:*

This project establishes flood control measures and drainage facilities.

9. *Maintenance Project:*

This type of project is created for maintaining the facilities already created.

Government Share and the Subsidy Ratios

Following two tables give the percentage of subsidy available to the four major categories of the projects and the yearly government contribution in proportion to the total costs of all the projects.

**Table 12 : Changes in the Costs of Farmland Improvement Projects
(National Expenditure & Project Costs)**

(100 million yen)

<i>Source</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>
National Treasury	1890	3595	8975	8997	8997	9000	8919	8789
Project Costs	3125	953	14958	14968	14946	15056	14926	15080

Source : Agricultural Structure Improvement Bureau, Ministry of Agriculture, Fisheries and Forestry (MAFF).

Table 13: Percentage of Subsidy available to Major categories

Project	Executing agency	Subsidy share	Minimum acreage for selection	Description
Irrigation & drainage	State	58%, 60%	Beneficiary	New construction & conservation work on canals & drainage pump up facilities
		3000 ha	acreage:	
	Prefecture Corporations	50% 45%	200 ha 20 ha	
Farmland development for cultivation.	State	74%, 75%	Acreage for United development reclamation:	of farmland grasslands, farm roads, irrigation & drainage facilities.
	400 ha			
	Prefecture Corporation	40%, 65% 40-50%	40 ha 10 ha	
Farmland Consolidation.	Prefecture	45%	Beneficiary	Land partition readjustment & small scale construction of irrigation canals & farm roads.
	Corporations	40-45%	200 ha	
		20 ha		
Overall readjustments of upland.	Prefecture	50%	Beneficiary	Overall readjustment of a partition including land readjustment, irrigation canals, farm roads: roads etc.
			acreage of	
			key activities.	
		Irrigation : 100 ha		
		Drainage : 100 ha		
		Farm roads: 100 ha		

Chapter Two

The Japanese Farmer

The nature and life style of the Japanese farmer are conditioned by several factors generated around the past hundred years. The present-day Japanese farmer is the product of a highly prudent and rigorous feudal discipline, the post-war years of poverty and the hard working schedules of the economic recovery period. The special measures initiated by the government as well as by the cooperatives to level up agricultural incomes with those of the non-agricultural occupations have also shaped the Japanese farmer differently from the farmers in other Asian countries.

The highly structured rural society under the Shogunate and other feudal lords before the Meiji Restoration had influenced a great deal the pattern of living among the farming communities. The sense of insecurity felt among the common people, resulted in their grouping together in closely knit and socially integrated habitations in hamlets which even now form the basis of rural society in Japan. Even within the hamlet, the households are grouped together to create a sense of security as well as a sense of belonging among the neighbourhood units and interest groups. Within the farm household too, the head of the family ruled supreme and remained so until the farm successor took over from him. The successor and his wife, who had earlier been treated as an additional member of the labour force, now took over the powers of the family head and all other members of the household had to be subservient to them both. The traditional household system is known as the IE system and the grouping together of six households (three in the row opposite and one on either side) is known as the KUMI or homogenous neighborhood. This pattern of living in the hamlets have given the Japanese farmer the foresight of securing his surroundings and also the propensity to save for the rainy day. Although these attitudes have somewhat diluted due to the present day socio-economic conditions, the Japanese farmer by and large remains a conservative in his approach towards farm ownership and the society surrounding him.

During the chaotic conditions following the Second World War, farmland became the best source of livelihood. People engaged in other occupations, including the soldiers, returned to their lands and the agricultural population had swelled beyond capacity. Extreme poverty forced

people to consume whatever edible vegetable or animal products they could lay their hands upon. A very touching story is told in Japan by many to describe the period of hunger and deprivations during the early thirties. The story relates to a young girl from a farm household who has been sent for work in another household to repay the family debt.

The demand for food was so great that it was most unlikely to be met from out of the existing farmland structure and the meagre resources available at that time. Three factors came to the rescue of the farmer during this period. Firstly, the Land Reforms initiated by the Occupation Forces which made most of the tenants the owner farmers; secondly, the introduction of the system of Agricultural Bill which enabled the farmer to obtain production credit, and thirdly the long-term development finance made available by the Agriculture, Forestry and Fisheries Finance Corporation (AFFFC).^{*} Because of these efforts the stage was set for the Japanese farmer, assisted by agricultural cooperatives, to enter a new era of planned agricultural growth which facilitated the transition of Japanese farming from subsistence level occupation to a commercially oriented enterprise.

The average land holding in Japan is about one hectare. Hence, the traditional farm households do not have enough means of providing for the whole family. Even during the early days, therefore, some members of the farm families did engage themselves in additional occupations like charcoal making, cottage industries for making straw-based products and casual jobs in industries located nearby.

As Japan gradually entered the phase of rapid industrial growth, the job opportunities in the non-farm sector increased manifold and the number of farmers and their family members taking up employment in these enterprises too rapidly increased. This was the beginning of the phenomenon of part-time farming which took over major section of the farming population within a few decades. The factors responsible for the rapid increase in the percentage of part-time farmers are: Firstly, the increased opportunities in non-farm sector due to high industrial growth; secondly, the increase in the surplus on-farm population due to mechanization of agriculture and thirdly, the increasing need felt by the farm households for additional income due to the high investments in farm machinery and farm-related industries.

Despite the ever-changing scenario of agricultural economy in Japan, the Japanese farmer has, by and large, improved his economic condition and the present levels of his income and savings are rather high. The levelling up with the income of non-farm workers is nearing realization. In the process of modernization which entailed heavy investments, some farmers have also experienced failures and consequent bankruptcies.

^{*} *Details on these schemes will be given in the Chapter relating to the History of Cooperative Movement in Japan*

While the economic prosperity of the farmer is evident all over the country, there is simultaneous erosion of social values and traditions associated with the rural society. The hamlets have several groups organized for various community activities like rice-planting, festivals and religious functions. However, mechanization has taken away the opportunities for several joint agricultural related activities. Also, the absence of most of the able-bodied persons from villages have reduced the percentage of people participating in social and religious activities with the result that traditional groups organized for these purposes have also gradually been reduced to dormancy or have disappeared.

Some of interesting aspects of this phenomenon called “**urbanization**” are that except for remote mountainous areas, there is not much difference between an urban locality and the cluster of farm households. Because of the land shortage in Japan this inter-mingling of urban and rural areas is evident all over. Rural communities have now to re-adjust to their own environment in order to accommodate the ways of the urban dweller. Also, as most of the able-bodied members of the farm household are working in non-farm sector, only the elderly grand parents and to some extent the young housewife constitute the main labour force on land. This pattern of farming is often referred to as **San-Chan Farming** meaning the farming by the three dear ones. Even this pattern is gradually changing. The housewives in farm households are increasingly taking up employment in nearby industries or shops and have little or no time for farming. Another related problem is the difficulty faced by the farm successors, whose number is constantly on the decline, in finding brides to marry them because very few young girls want to become wives in a farm household these days. The glittering world of big cities and the sophisticated jobs lure away most of the young girls to urban centres making it difficult even for the small number of farm successors to find their life partners.

While the migration of rural youth to urban centres continued unabated, the number of young people undertaking farming as a full-time occupation also decreased year by year. For example, for the entire farm households numbering 3.8 million in 1990, the average number of persons entering farming as a full-time occupation was as follows:

a. Fresh graduates undertaking farming	1800
b. Persons returning to agriculture after retirement or due to illness or death of parents	1900
c. Persons not belonging to farm households but deciding to take up farming occupation	100

The life style of the Japanese farmers and their family members has undergone a sea of change during the last four decades. But the farmer's basic attachment to his land has not changed despite his absence from the hamlet. He would rather lease out the land to a full-time farmer or let it lie idle than sell it and part with it forever. Also, there are hundreds of thousands of Sunday Farmers who cultivate their small piece of land on sundays and holidays with farm machines. This is true specially of rice growing farmers due to the highly mechanized methods of cultivation. In other words, the basically conservative farmer is constantly adjusting to the ever-changing environment and deftly meeting the challenges posed by the highly industrialized society around him.

Chapter Three

Early Cooperative Efforts

The discussion on early cooperative efforts could be divided in two parts : the first dealing with cooperatives during the nineteenth century after the Meiji Restoration and the second relating to the period from the beginning of the twentieth century to the starting of the Second World War.

Cooperation during 19th Century

The Meiji Restoration opened up a new era of knowledge, adventure and technological innovations to Japan. After centuries of isolation, the desire to make up for lost time urged the Government and existing institutions to establish contacts with the outside world and to learn from the experiences already accumulated in Europe since the Industrial Revolution. The stronghold of the feudal lords gave way to the Rule of Law under the Emperor and new economic and political systems began to emerge. The introduction of new industries necessitated heavy investments. Also, the constant warfare in Europe and in the Orient compelled Japan to maintain a strong defence force to safeguard her borders. All these efforts cost money and government and the gentry had to find funds to sustain their drive for modernization.

If we look at the taxation base for government and the landlords to raise needed resources during this period, we find that bulk of the funds came from the farmers majority of whom were tenant farmers. The feudal lords with political power had disappeared; however, the lands were still owned by the influential and rich gentry who thrived on the income derived from farms and usury. Over eighty percent of the work force in Japan during this period consisted of tenant farmers who cultivated lands or were engaged in forestry-related occupations which together contributed about 67% to country's GNP.

Introduction of the new systems and industries only increased the pressure on the farming community to pay more for developments of which they were not the beneficiaries. Also, technological innovations had not yet reached the traditionally managed agriculture. On top of this, village industries began to weaken as a result of the growth of large sized industrial enterprises. Poverty prevailed in most parts of rural Japan. The land tax revisions introduced from 1873 enabled government to receive steady

income, but the peasantry suffered. Another factor which contributed to the lowering of net income of the farmers was the abolition of non-convertible notes which were in circulation at that time. All these deflationary measures had resulted in lowering rice prices to a considerable extent.

As rural poverty persisted from year to year, government had to take some steps to preserve farming communities. Experiences in European countries to solve similar problems had attracted government attention and the Raiffeisen type of cooperatives appeared to be most suitable. Government staff arranged lectures to introduce these types of cooperatives among farmers and artisans. Societies of both limited and unlimited liability were organized. Some societies also emerged for providing technical and marketing guidance to producers of silk and cottage industry products.

Although these cooperatives came into being for the sake of the tenant farmers, their leadership remained with landlords and the wealthier classes. These people had the time and the resources for looking after such cooperatives. They also had the right contacts with the government and other agencies which could give them the needed support.

Four types of cooperatives were established during this period. The first were the credit cooperatives. As the farmers were gradually switching over from a subsistence economy to a market economy, they needed cash for buying inputs of various kinds. The cooperatives provided loans for this purpose. Hence savings and loaning were their main activities. The marketing cooperatives were engaged mostly in sericulture and tea. Silk and tea were the major export commodities in Japan during the latter part of the nineteenth century accounting for 60% of the total exports. The third category was the purchasing cooperatives which provided inputs to farmers for production activities. And the fourth category belonged to cooperatives mainly for artisans and for specific village industries and services.

According to a survey conducted by the government in 1898, a total of 451 cooperatives existed in Japan at this time out of which 351 cooperatives were active. There were about 190 credit cooperatives, 178 marketing cooperatives, 45 purchasing cooperatives and 38 production and service cooperatives. About 78% of these cooperatives were active. This survey convinced the government that the cooperatives were one of the best suited agencies to tackle problems of farming communities. Steps were therefore taken to initiate necessary legislation for regulating their establishment and business activities.

Cooperation during Early 20th Century

During the first three decades of the twentieth century, rural Japan had still the tradition-bound social structure dominated by landlords and a small percentage of owner farmers. As mentioned earlier, the leadership of agricultural cooperatives remained, by and large, with these groups while a

majority of cooperative members continued to sub-serve the interests of the well-to-do classes. The cooperative had, however, alleviated their members' suffering to some extent as they had access to institutional loans and a limited degree of cooperative support in their agricultural operations. The paternal management of the gentry continued.

At the beginning of the twentieth century, the winds of change for the liberation of tenants from landlords and money-lenders had reached Japan's shores. Class antagonism was increasing day by day and tenancy disputes were common. Many of the land-owners received their rent in kind and marketed the agricultural produce directly thereby weakening cooperative activities. The tenant farmers had begun to resent the domination of land owners in their economic activities as well as in cooperative functioning. The harmonious relationship between the two, which existed during the earlier century, was giving way to class consciousness among the rural communities. The leftist movement had begun to take root in rural Japan. However, government at that time was not in a position to challenge the power of landlords.

As mentioned earlier, the survey conducted in 1898 had convinced the government about the usefulness of cooperative as a suitable agency to solve problems of farming villages. In 1900 therefore the government enacted the first Cooperative Society Law to facilitate the formation of four types of cooperatives. These were : (1) credit cooperatives; (2) marketing cooperatives; (3) purchasing cooperatives; and (4) production cooperatives. The credit cooperatives were not allowed to engage in any other type of business as it was feared that the savings of members may be frittered away if their money was invested in other business.

Most of the cooperatives during those days were established for areas which were compact and natural villages as habitat of traditional rural communities. By 1905, 1,676 cooperatives with a membership of 69,000 had already been formed. Within the next five years this number grew at a much faster rate and in 1910 the number of cooperatives had reached 7,308 and membership had grown upto 534,000. By an amendment to the Law, the government also removed the restriction on credit cooperatives for undertaking other business activities; thus paving the way for future growth of multipurpose cooperatives.

Credit business continued to dominate cooperative activity during this period. As paid-up capital and savings together fell short of the total credit demand by members, the cooperatives had to borrow from other sources. Part of this gap was filled by borrowing from Agriculture and Industry Banks under a scheme approved by government allowing cooperatives to obtain unsecured loans. The cooperative did not possess enough capacity to borrow from other sources. In such circumstances, the influential presidents or directors of these cooperatives often obtained loans

against their own surety and offered them to cooperatives at low interest. In this respect, the paternalistic management by the landlords and rich farmers proved to be useful to the needy cooperative members.

Apart from facilitating the formation of cooperatives by enacting the new Law, the government had exempted them from taxes and given the facility of obtaining unsecured loans as stated above. Besides this, the government arranged lectures for cooperative members to diffuse information on cooperative principles and ideology. The Great Japan Central Union of Cooperatives also did liaison and publicity work among the cooperatives.

A major change took place with the second amendment to the Law in 1909. This facilitated the formation of federations at local levels. Also, the then existing Great Japan Central Union of Cooperatives was dissolved and the Central Union of Cooperatives (CUC) was established in its place. From this time on the CUC played an important role in cooperative development in Japan. By the end of the first decade the government policy towards cooperatives was also becoming more positive than before. Also, local federations were established in many prefectures (provinces).

Several important developments took place during the second decade. In 1910, the CUC concluded an agreement with the Hypothec Bank to provide loans to cooperatives. Although the rate of interest was only 7.5%, the quantity of loans was inadequate to meet member needs. In 1911, the Bank was allowed to provide unsecured loans and in 1912, the facility of repayment in installments was added. However, the total credit demand could not be met through this source. The local credit federations also could not provide much credit. This in spite of the fact that total cooperative membership compared to the total farming population was too small. Following table gives the percentage of funds received by cooperatives from the Hypothec Bank during the first three years of the second decade.

Table 14 : Loans by Hypothec Bank

<i>Borrower % of loan</i>	<i>1911</i>	<i>1912</i>	<i>1913</i>
Individual Farmer	34.3	33.1	31.4
Industries	38.9	35.2	32.8
Public Bodies	16.0	15.3	13.8
Arable Land Adj.Assn.	7.9	8.9	9.2
Cooperatives	1.2	2.0	2.3

Source : A History of Cooperative Societies in Japan. Vol.I

Deposits Exceed Loans

Two important events took place in 1917. For the first time, the amount of deposits of cooperatives exceeded the total loan amounts given to members. This helped a great deal in establishing their independence from lending institutions. The second important development was the enactment of the Agricultural Warehouse Law under which the government prepared a ten year plan for expansion of agricultural warehouses. It also approved a 20% subsidy to cooperatives to construct such warehouses.

During this period, especially after the outbreak of World War I, cooperative membership began to grow rapidly and in 1918, it had reached to 28.2% of the total farming population. With the growing membership, the need was felt to enlarge the area of operation of agricultural cooperatives so as to make them economically viable. This slowed down the number of cooperatives increasing every year. By 1920, over one-third (36.9%) of farmers were already in the cooperatives. At this time there were 13,442 cooperatives with a membership of 2,290,000. This fact could not be overlooked and government began to look at cooperatives as an important sector of the economy and as an instrument for realizing some of its development objectives.

The rapid growth of cooperatives created increasing demand for credit and other services, but neither the local credit federations nor the banking institutions were able to meet these demands. As stated earlier, marketing was still controlled by the influential landlords and merchants. Many landlords received the rents in kind and sold the produce themselves thus rendering to some extent the marketing activities of agricultural cooperatives less effective. The need was strongly felt at this stage for national level organizations which could provide the necessary services and protect the interests of farmer members.

After several representations to Government, the cooperative movement persuaded it to revise Cooperative Societies Law to facilitate formation of national level organizations. Following this, the National Purchasing Federation of Cooperatives was established in 1923 and the Central Cooperative Bank in 1924. As considerable resources were needed for the Bank to meet cooperative demands, government came forward and contributed about fifty percent of the Bank's share capital. With the formation of these two institutions, the cooperatives were able to secure strong support to their economic activities.

A new development during this period beginning from 1926 created added difficulties for cooperatives all over the country. There was a serious financial crisis in the banking circles and quite a few banks went bankrupt. Many of these banking institutions had trading activities with some of the cooperatives and the crisis affected these cooperatives to a great extent.

But cooperatives were not alone at this time; their federations, led by the Central Union, were keenly watching the developments. They took up the issue of cooperative losses with the government. The government was persuaded to provide emergency relief measures as well as finance to affected cooperatives. This helped a great deal and no cooperative was allowed to go out of business because of the financial crisis. However, the crisis was far from over. By 1930, the number of cooperatives had reached to 14,517 with a membership of 4,743,000. By 1930 also some of the cooperatives had invested in government securities.

The world-wide crisis, following the Great Depression of early thirties, affected Japan in no small measure. As commodity prices began to collapse, several trading companies had to close their business. The worst affected were farm commodity prices of which had reached the bottom level. The farmers were unable to repay their debts which had begun to accumulate. Rural poverty was beginning to raise its ugly head all over again. Government had to take note of this situation to save farming villages. The first government initiative came in 1932 with the establishment of Economic Rehabilitation Department in the Ministry of Agriculture and Forestry. The rehabilitation scheme of this Department aimed at economic reconstruction of the farming villages with their own effort. This self-help effort was supported by small amounts of government subsidy. However the losses were so huge that a meagre assistance programme like this could not help solve this problem. In 1933, therefore, the government passed the Rural Debt Liquidation Society Law and provided a grant of six hundred million Yen to farming villages to pay off their debts. In most areas the existing cooperatives were entrusted with the task of debt liquidation and there was no need to form a separate liquidation society for that purpose. Under this Law, compensation was also provided to local government for the losses suffered by them due to indebtedness of the farming villages. This also helped the cooperatives to consolidate their business activities with the members. While paying the low-interest loans to members for debt liquidation, the cooperatives obtained a promise from their members to sell their produce through the cooperative as well buy the farm inputs from it. Another important development during this period was the establishment, in 1931, of the National Marketing Federation of Cooperatives.

Cooperative Five-Year Development Plan (1933-37)

The serious crisis faced by the cooperatives during this period made them think of the need for a long-term development strategy for cooperative development and for safeguards to prevent similar situations in future. The Central Union took the initiative for organising a National Convention in 1932 which drew up a Five Year Cooperative Development Plan (1933-37). The Convention gave the following three policy directives for expansion of cooperative activities:

1. Cooperatives should be formed in every municipality. In other words the planners did not want to see any municipality without a cooperative;
2. All farmers should be enrolled as cooperative members. The planners did not want to see any farmer who is not in a cooperative; and
3. All cooperatives should be converted into multipurpose cooperatives handling credit, marketing, purchasing and utility services.

The targets set under the Plan are given in the following table. It is interesting to note that the Plan also envisaged the increase in the circulation of *le-no-Hikari* magazine, published for the farm household members.

Table 15 : Five Year Coop. Development Plan (1933-37)

	1933	1937	% of increase
No. of Cooperatives	14,424	16,540	144.2
Membership (1,000)	5,071	7,704	153.5
No. of coops. doing 4 types of business	3,486	15,744	394.2
Savings (Million Yen)	1,276	2,127	166.7
Loans (million Yen)	1,149	1,907	165.9
Marketing of rice(1000 bales)*	9,258	18,339	198.7
Fertilizer supply(1000 tons)	845	1,920	227.2
Warehouse (1000 Koku)**	6,456	9,979	154.7
<i>le-no-Hikari</i> circulation (number)	329	1,000	303.9

* 60 Kg unit for rice marketing

** Koku is cubic capacity measurement of 150 Kg

Some of the important achievements of the Plan were:

1. In 1933, villages with no cooperative were 1894 (out of a total of 11601 villages), amounting to about 15% of the total. By 1937, this came down to 3.7%.
2. Cooperative membership rose from 62.4% to 78.5%. In 1933 it was over 5 million.
3. The percentage of multipurpose cooperatives rose from 31.3% to 71.4%.
4. Cooperatives with warehouses increased from 20.8% to 33.5%.
5. Government initiative in stabilizing rice and raw silk prices helped in developing the marketing of these commodities through cooperative channel.
6. Savings by members continued to grow at a fast rate.
7. The number of cooperatives was 14,512 whereas there were only 12,000 municipalities in Japan. This means in some municipalities there were more than one cooperative.

The Plan achievements were not cent percent in some respect but they

more than fulfilled the expectations of the planners. This was due mainly to the education and planning efforts made through the Central Union and the federations affiliated to it. By 1940, the number of cooperatives had risen to 15,101 and the membership stood at 7,740,000.

Anti-Cooperative Trends

The countrywide cooperative growth and the consolidation of its business activities during the thirties, especially because of the five year plan efforts, attracted wide attention both in government circles and among industries and other business enterprises. The positive aspects of this development were that the cooperatives had become a force to be reckoned with and the cooperative movement had gained considerable confidence in its own ability to serve the members and protect their interests.

The negative or rather unfavorable aspects were that the private trading firms, backed by chambers of commerce and industry had started vilification campaign against cooperatives arguing that the privileges and concessions given to cooperatives were adversely affecting their own business. In 1933, they organized the National League for Protection of Commercial Rights⁶ and demanded that the government should abolish the privileges given to cooperatives and stop giving them protection and financial assistance. These anti-cooperative campaigns had attained considerable strength during the pre-war years.

The government had also become increasingly aware of the cooperative strength and its potential for future. While on the one hand the government was becoming anxious of cooperative strength and its independence in economic activities, on the other it was viewing the cooperative as a convenient instrument for achieving its own goals of controlling the economy. This became more obvious as autocratic tendencies and leadership with fascist leanings began to get upper hand in the country's politics. Towards the latter part of the thirties war clouds had gathered all over Europe and in the Far East and the Japanese Government had begun to impose its decisions on the cooperative movement. With the break-out of World War II, the government reorganized the entire economic and political structures within the country to sub-serve the war-time economy. The existing cooperatives were reorganized into Agricultural Associations referred to in Japanese language as *Nogyokai*. The membership of these organizations was made compulsory for all the farmers. The cooperative character of the earlier organizations underwent complete transformation during this period.

Whatever the problems of wartime Japan, the fact remains that the developments of the thirties had consolidated cooperative strength to such an extent that the strong position established during this period served as a useful base for cooperative development in the post-war years.

Post-War Cooperative Development

Land Reform

There was total chaos in Japan following her defeat in World War II. The first priority was food for the hungry population and the government had to concentrate on this aspect alone for the time being. However, it had neither the resources nor the infrastructure to organize productive activities on the farmlands. Everything depended upon the people who had lands at their disposal. The agricultural population was getting crowded with the returning soldiers and the idle labour force from war related industries.

The U.S. Occupation Forces, headed by General McArthur, had been searching for the reasons which drew Japan into the Second World War and had come to the conclusion that the feudal lords who dominated the government during the pre-war days were behind the fascist tendencies which had overtaken the country at that time. The abolition of the feudal system through Land Reform seemed to be the answer to the problem.

At the beginning of World War II, only 31.1% of the farmers were owners of the land they cultivated. 42.1% belonged to the category of tenant owners and the remaining 26.8% were just tenants. The Land Reform, carried out with the help of Occupation Forces between 1947 and 1949, completely abolished the tenant system and all farmers, except a small percent of marginal cases, were given the status of independent owner farmers. The Land Reform also abolished the loans given by the land owners during the pre-war period. As tenant farmers had no money to pay for the land, the government purchased about two million HA of farmland and pastures from four million farmland owners and sold them to landless farmers with facilities and concessions for easy payment. Since then the owner farmers have been the backbone of agriculture and agricultural cooperatives in post-war Japan.

Agricultural Cooperatives During Reconstruction Period

The Land Reform gave the landless the titles to the land, but they did not have the means to organize production. An agency was needed to help farmers consolidate the gains of Land Reform. This led to the enactment of the Agricultural Cooperative Society Law in 1947. The principle of

organizing cooperatives on the basis of occupation of members' was also accepted at this time and during following years separate laws were passed for consumers cooperatives, fisheries cooperatives, forest owners cooperatives, small and medium enterprises cooperatives and credit cooperatives. By the end of 1948, nearly fourteen thousand agricultural cooperatives were established in different parts of the country. The basic characteristics of agricultural cooperatives were defined as follows:

1. These cooperatives were freely and independently organized by the farmers for their own development;
2. The main objectives of the cooperatives were to organize production and to raise the socio-economic standards of their members; and
3. Where necessary and applicable, the cooperatives were to provide needed services to the non-agricultural population resident in the area of their operation. This objective created the category of non-voting associate members.

Early Difficulties

Although fourteen thousand cooperatives were established within a year or so, the environment surrounding them was far from congenial for efficient functioning. The main difficulties faced by them during the reconstruction period were:

1. Large quantities of bank notes were in circulation which in turn created high rate of inflation. When the government initiated drastic measures to control inflation, many enterprises went bankrupt. The constant changes in government policies for controlling post-war situation had brought in great instability to the economy and to the financial institutions.
2. The assets inherited by cooperatives from the war-time Agricultural Associations (Nogyokai) were more of a liability than advantage because most of the money was blocked in inventories of goods which could not be sold. New products were coming into the market and there was no demand for obsolete goods. In addition, credits given earlier by the associations had remained static.
3. There were too many cooperatives, but the resources were limited.
4. While on the one hand most of the board members were inexperienced; on the other the employees were indifferent due to the post-war chaos among ranks and file. Hence, the management was inefficient. The loyalty of members was also at a low level.
5. Because of the conditions stated above more than 600 cooperatives could not repay members savings.
6. The financial condition of the Marketing and Supply Federations also deteriorated along with that of the primary cooperatives.

The Central Union and the National Federations then began consultations among themselves as also with the government in order to remedy the situation. They set up a Council for recommending measures to improve the situation at the national level. Similar councils were established at the prefectural level. Detailed studies and lengthy consultations followed between these councils and the government and it was agreed to set up guidelines and initiate measures for strengthening the management of agricultural cooperatives. The basic policy directive for this purpose was published as a government decree in 1950.

In 1951, the government passed the Law for Rehabilitation and Consolidation of the Agricultural, Forestry and Fishery Cooperatives. This Law was for the rehabilitation of primary cooperatives. Under this law, cooperatives had to obtain government approval to their plans for reconstruction. Cooperatives with approved plans were entitled to receive subsidies for increasing their capital and subsidy towards the interest on frozen fund of war time agricultural associations. The subsidies were given for seven years during which the cooperatives could raise their basic capital and also redeem the frozen fund by a decreasing rate in proportion to the advancement of their financial condition.

During the reconstruction period, serious efforts were made to ensure loyalty and support of the cooperative members. In this process, leaders and employees responsible for bad management were removed from their posts and more trustworthy persons were elected.

The business federations were also in serious financial difficulties because of the old inventories and frozen debts. The government had realized that without helping the federations the help already given to primary cooperatives would not be of much use. Hence, in 1953, the Law for Promoting Consolidation of the Agricultural, Forestry and Fishery Cooperative Federations was passed to facilitate assistance to the affected federations.

A unique scheme was followed to help the federations. The cooperative credit federations and the Central Cooperative Bank were encouraged to exempt the business federations from the payment of interest on loans given to them. In turn, the government provided to the credit federations and the Bank subsidy to the extent of fifty percent of the amount of interest exempted. It took for the federations about ten years to fully recover from the financial crisis. However, by 1960, they were fairly out of the woods and had already embarked on the path of rapid economic growth.

Food Self-sufficiency and After

By 1950, food shortages had disappeared. This was possible because of the joint efforts made by cooperatives and the government to help the farmers in several ways. The surplus labour force on land during the post-

war years also came in handy for improving food production. The pre-war 28% farm population had increased to 38% in 1950 (6 million farm households and 18 million people). The chaotic economic and financial conditions were also brought under control by stringent government measures, initiated in 1949, through the enforcement of a balanced finance and money-supply control system commonly known as the "**7 Economic Principles**".

Several other factors contributed to the development of agricultural cooperatives during the second half of the reconstruction period (1950-55). The increased demand for ammunition and for a variety of related products resulted in increased volume of country's external trade. By 1952, the recovery ratio to pre-war standard had risen to 90%. Two laws for the reconstruction of primary cooperatives and their federations were enacted during this period. The National Guidance Federation of Agricultural Cooperatives, established after World War II, was reorganized into the present Central Union of Agricultural Cooperatives which later played a pivotal role in reshaping the development strategies of the entire Agricultural Cooperative Movement.

By 1955, over 100% economic recovery had been achieved. The agricultural over population had disappeared and was absorbed into the growing industrial sector. The rate of growth in agricultural production touched a new high by this time. For example, rice production of 322 kg per 0.10 HA in 1950-55 had gone up to 377 kg. during the next five years. During the reconstruction period, the government played a very commendable role in helping the cooperative and the farmer members in various ways for achieving food self sufficiency and for invigorating the cooperatives at all levels.

New Strategy for Cooperative Development

The trials and tribulations of the past ten years (1945-55) had given the cooperative movement enough experience to plan ahead by avoiding the pitfalls faced so far and reorganize their business and development strategy in order to secure member loyalty and their active participation in cooperatives at all levels. Simultaneously, along with the development of financial and material resources equal emphasis was given by the cooperative federations to the development of human resources during this period. The new cooperative business policies and management strategies were based on the following guidelines:

1. Emphasis on responsibility of the board of directors for management of cooperatives;
2. Planned production and marketing;
3. Unconditional consignment in marketing;
4. Pooling Account System;
5. Advance order in purchasing;

6. Cash on delivery system at the primary cooperative; and
7. Recognition of close relation between business activities and guidance activities or recognition of real integrated approach for cooperative activities.

Cooperatives in the 'Rapid Economic Growth' Period

Japan witnessed phenomenal all round growth during the two decades following the reconstruction period (1955-75). The most intensive development took place during the sixties (1960-70). This was due to drastic structural changes in industrial and related fields. The emphasis had shifted from light industries to heavy and chemical industries most of which were export oriented. The average growth rate during the rapid growth period was 10.6% in contrast to growth rates of other developed countries; viz., U.S.A. 4%; France 4.7%; West Germany 6.2%; Italy 6%; and U.K. 2.4%. Wages had shot up due to high demand in the various industries and average annual increase during the intensive development period was 6.4%. The big jump in incomes created greater demand for consumer durables like TV, washing machines and electronics.

The main factors responsible for the rapid economic growth were : (1) Introduction of high technology imported from all over the world; (2) High investments by the nation's banking and financial institutions; (3) Induction of quality labour willing to adapt high technology; and (4) Concerted drive for quality products for the export markets. During the sixties, Japan's average increase in exports touched a record high of 17.8% while the average increase in world exports during the same period was only 8.1%. The policy framework for this development was provided by government's Plan for Economic Self-Sufficiency initiated in December 1955 followed by the New Long-term Economic Plan of 1957. Also, Japan returned to the international trade circle by joining GATT in October 1955. The government also launched in 1960, the scheme for doubling peoples average income.

Other factors which directly affected agricultural cooperatives and their members were the gradual change in people's food habits from rice and fish to more livestock products, eggs, fruits and vegetables. Although rice continued to be Japan's staple food, the percentage of rice and wheat production began to decrease year by year. Another factor was the growing pressure from other countries to import beef, fruits and dairy products. The cheap imports from abroad had an unnerving effect on the Japanese farmer.

The new developments all around posed serious challenges to cooperatives which still functioned with traditional agriculture as their base. They had to convert these challenges into opportunities by taking advantage of the rapid economic growth in the country. This led to the new cooperative policies such as "***New Village Construction***" and "***Suitable Products from Suitable Land***" resulting in diversification of traditional crops to fruits,

vegetables and livestock farming. The government provided the necessary legal framework for this by enacting the Agricultural Basic Act of 1961 followed by the Structural Improvement Act of 1963; Agricultural Promotion Areas Act of 1969; and Amendments in 1962 and in 1975 to the Land Act.^{*}

The Central Union of Agricultural Cooperatives (CUAC) had taken the initiative to launch the Integrated Business Planning Campaign of Agricultural Cooperatives (1955) followed by a Three Year Plan for Renovation and Expansion of Agricultural Cooperatives (1957). The nationwide integrated approach campaign launched was based on CUAC's Basic Plan for Agricultural Development and for Better Living. These efforts resulted in streamlining the business and guidance activities of most of the agricultural cooperatives.

In 1961, based on consultations with the CUAC, the government passed the Law of Amalgamation Assistance for Agricultural Cooperatives with provisions for giving subsidies to the concerned cooperatives at agreed rates. At this time there were too many small size cooperatives which did not have the competitive edge in the fast moving economic environment. This Law provided the necessary legal framework for gradually reducing the number of cooperatives. Although the Law expired in 1982, the process is continued to the present day.^{**} In 1967, the Eleventh National Congress of Agricultural Cooperatives adopted Basic Agricultural Development Scheme for organizing High Income Generating Agriculture. This was followed in 1970 by the Comprehensive Three Year Plan for Development of Agricultural Cooperatives (1970-73). The total effect of all these initiatives was the shaping up of a dynamic agricultural cooperative movement during the high economic growth period.

The Oil Crisis and After

The instability in world economy following the OPEC decision to boost oil prices had its serious repercussions in Japan due to the fact that bulk of the energy and fuel needed for Japan's ever-growing economy had to be imported. The '**Oil Shock**', the term used for describing the oil crisis in Japan, slowed the pace of industrial development and a new era of cautious growth period had begun.

The immediate effect on agricultural situation was the reduction in the number of job opportunities for part-time farmers. The other factors affecting the farmers were higher cost of production and the stagnation in prices of farm products. Also during this period several additional factors increased the already handicapped position of the Japanese farmer. These

^{*} Details of the various government projects and schemes for structural improvement of agriculture are given in the Chapter on Basic Characteristics of Agriculture in Japan.

^{**} Details on various aspects of amalgamation of cooperatives are given in the section dealing with the subject.

were: (1) The low demand for farm products; (2) The increasing quantities of cheaper farm products from abroad. Due to the constant appreciation of the Japanese Yen, the already less competitive domestic farm products were losing further their competitive edge day by day; (3) The situation created by rapid urbanisation and the inflow of non-farm dwellers made it difficult for farmers to introduce livestock and poultry farming as the new residents started complaining about the pollution around them.

The conditions described above made it difficult for the cooperatives to attain the various objectives set by the Agricultural Basic Act and by other policy decisions within the Cooperative Movement. It was soon realized that a qualitative improvement of the cooperatives would have to be emphasised if they were to be made capable of facing up the competition created by conditions following the oil crisis. The National Convention in 1976, advocated Real Reconstruction with Qualitative Improvement for the agricultural cooperatives. In October 1979, the 15th National Congress of Agricultural Cooperatives passed a resolution on "**Tasks of Japanese Agriculture in the 1980s and Agricultural Cooperative Response**". Also, in 1982, two policy decisions were taken by the 16th National Congress of Agricultural Cooperatives. These related to : (1) A Long-term Prospect of Japanese Agriculture and Agricultural Cooperatives' Proposed Strategy; and (2) Measures for Renovation and Consolidation of Agricultural Cooperative Management.

Regional Agriculture

With all the policy decisions mentioned above, the agricultural cooperatives are now shifting their emphasis from localized agriculture to regional agriculture; from small size farms to more economical size of farms; and from crops facing tough competition due to cheap imports to selective and new varieties of high quality products.

Agricultural Cooperatives - Structure and Organization

Structural Outline

The agricultural cooperatives in Japan are organized on a three-tier basis. At the village, town or city level, the multi-purpose cooperatives function as the primary units. However, at the prefectural level, they are federated into specialized federations according to the type of business carried out by them. At the national level also, the business federations are organized for a single type of activity such as credit, purchasing and marketing, mutual insurance, etc. Hence, while the multi-purpose cooperatives adopt a single-window approach for all kinds of services to members, the business federations deal with their affiliated cooperatives for a single type of activity. In addition to the multi-purpose cooperatives, there are single-purpose cooperatives engaged in activities like sericulture, dairy, village industries, livestock, land development, horticulture, etc. The single-purpose cooperatives too have their own federations at prefectural and national levels. Also, quite a few single-purpose cooperatives have been merged with multi-purpose cooperatives when the structural reorganization process was initiated under the amalgamation programme.

The Central Union of Agricultural Cooperatives (CUAC) is the apex organization representing the entire Agricultural Cooperative Movement at home and abroad. There are Prefectural Cooperative Unions in each of the fortyseven prefectures in Japan and almost all the federations and cooperatives in the concerned prefecture are members of these unions. All the prefectural unions and their regular members are members of the CUAC.

Very closely associated with the structure and functions of agricultural cooperatives are the fisheries and forest owners cooperatives in Japan. Both the fisheries and forestry cooperatives have their own network of national federations, prefectural federations, prefectural credit federations and mutual insurance federations. The closest link is maintained through the Central Cooperative Bank for Agriculture and Forestry which is a common financing agency for all the three sectors of the agriculture related Cooperative Movement. In this book, detailed discussion will relate mainly

to agricultural cooperative movement revolving around the multi-purpose cooperatives. However, brief information will be given later regarding the single purpose cooperatives, the fisheries cooperatives and the forest owners' cooperatives. The chart on page 41 demonstrates the structural linkages of various level organizations to each other within the agricultural Cooperative Movement.

Some of the national level cooperatives, though established with full participation of agricultural cooperatives at various levels, are not governed by the Agricultural Cooperative Law. These are, the Central Cooperative Bank, the National Association of (Prefectural) Credit Federation of Agricultural Cooperatives, the Ie-No-Hikari Publishing Association, UNICOOPJAPAN (coop. trading company for agricultural cooperatives) and such other specially created organizations.

Cooperative Coverage

The discussion on cooperative coverage within the agricultural movement will only be of academic interest. Broadly speaking whosoever needs the cooperative services is, except may be an odd case, already a member in the multi-purpose cooperative. The coverage was lower in the early part of the 20th Century, and by 1933, when the Five Year Plan was initiated, there were only 15% villages without a cooperative. 62.4% of farmers were already cooperative members. By the end of the Plan in 1937, this percentage had risen to 94.6 when almost no village (0.1%) was left which did not have a cooperative. Taking the larger areas of coverage, there were 15,000 cooperatives in 1940 whereas the number of municipalities was only 12,000. Perhaps, the vigorous campaign to enroll members (no villages without cooperatives and no farmers without being cooperative members) during the Plan period had its positive effect on membership increase. The Central Union of Agricultural Cooperatives (CUAC) is organized in accordance with special provisions of Agricultural Cooperative Law and all prefectural unions and their affiliated primary cooperatives are required to be members of the CUAC as per the provisions of this Law.

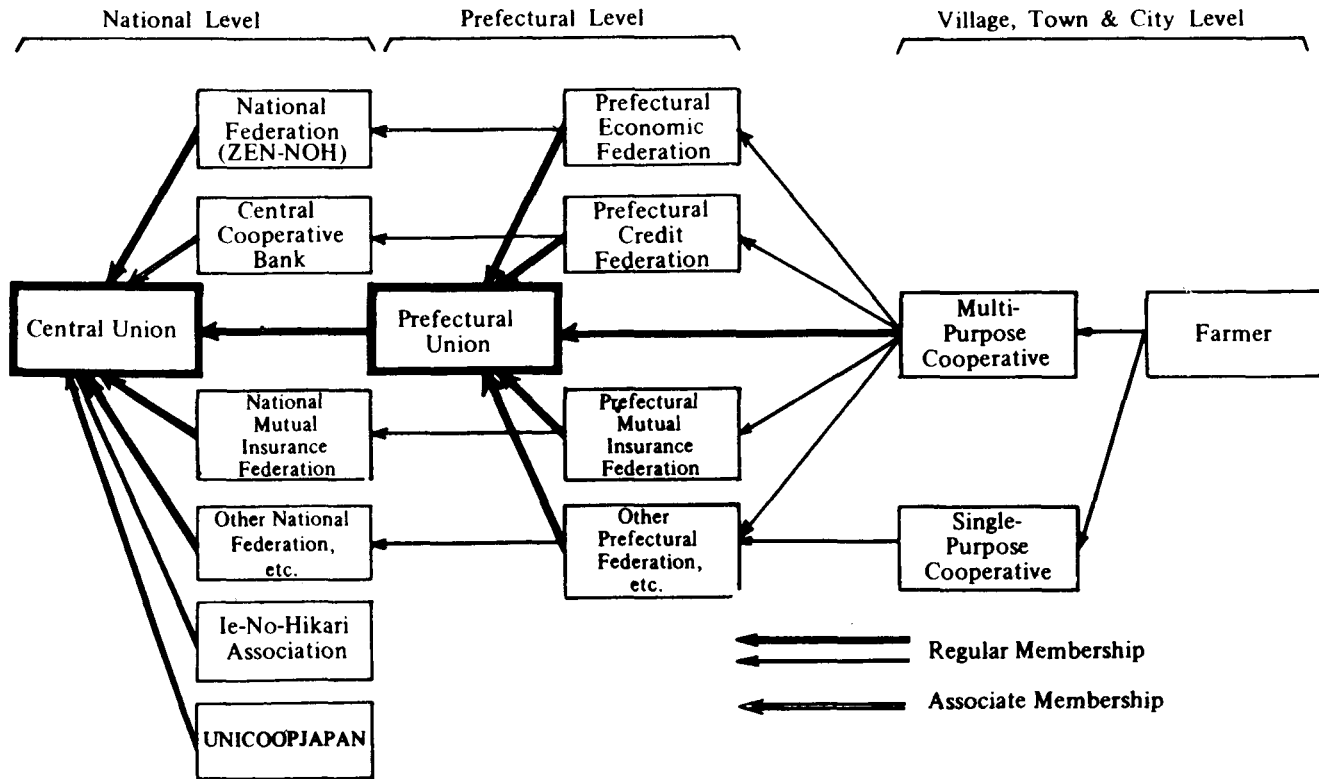
Farm Households and Agricultural Cooperatives

As already explained, the number of agricultural population and consequently the number of farm households have been constantly on the decline during the period of rapid economic growth and after. Only during the immediate post-war period, there was a sharp increase due to the return of soldiers to their farmlands and the fallout from the war related industries.

The Part-time Farmer Phenomenon

Simultaneously with the ever declining ratio of farm households and the agricultural population, the percentage of farm household members working

Chart 1: Structural Outline of Agricultural Cooperative Movement



on land has also decreased. Rapid mechanization of farming, the increasing opportunities of employment in industrial sector and the craving for more sophisticated jobs in non-agricultural sector have contributed to the increase in the number of part-time farmers who derive the bulk of their income from non-farm occupations. The following criteria have been used to classify farmers, part-time I farmers and part-time II farmers:

Farmer (full-time) : One who cultivates more than 1/10 HA or works on 16% of total the (full time) farm for more than 90 days.

Part-time I Farmer : One or more member(s) of a farm family is (are) 18% of total engaged in outside job but agricultural income of a family is more than non-agricultural income.

Part-time II Farmer : One or more member(s) of a family is(are) engaged in outside job but agricultural income is 66% of total less than non-agricultural income.

The Ministry of Agriculture, Forestry and Fisheries (MAFF) of the Government of Japan has very recently decided to change these definitions to classify the above categories of farmers. The new definitions were used for the "1990 World Census of Agriculture". The new definitions classify the farmers as follows:

Self-supply Farmers

Those who either (1) have cultivated land under management of at least 0.10 HA but less than 0.30 HA (0.25 to 0.75 acres) or (2) have cultivated land under management of less than 0.10 HA and whose value of annual sales of agricultural products is at least Yen 150,000, but less than Yen 500,000.

Commercial Farmers

Those who own or earn more than the above will be treated as commercial farmers.

Composition of Farm Household

The migration to the cities and the increasing number of farm household members taking up jobs in the non-farm sector have depleted the farm household population to the extent that only the aged and the housewife remain as the active members working on the farm. The other residents, although staying on the farm, are commuting to their work at other places. In addition to this, a few retired persons, originally belonging to a farm family, return to their lands every year. This is referred to as the 'U Turn' phenomenon.

Besides the depleting agricultural population, lesser number of agricultural graduates, who had their training in agricultural colleges return to take jobs related to agriculture and agricultural cooperatives. In other words, very few young people are attracted to agriculture and related occupations thereby aggravating further the man-power problem on the farmlands.

Agricultural Cooperatives

As stated earlier there are two types of agricultural cooperatives at the primary level; the multi-purpose cooperative and the single-purpose cooperative. Following table gives the total number of cooperatives in these two categories:

Table 16 : Number of Agricultural Cooperatives

	1960-61	1970-71	1980-81	1990-91
Multi-purpose	12,050	6,049	4,528	3,574
Single-purpose	16,846	10,541	5,191	4,025

Source : Ministry of Agriculture, Forestry and Fisheries (MAFF)

Unions and Federations

To serve the above primary cooperatives, there are a number of unions and federations engaged in specific activities for catering to different needs of their member societies. The following table gives the number of these organizations in different categories :

Table 17 : Number of Unions and Federations (As of March 1991)

<i>Type of organisation</i>	<i>Secondary/prefectural</i>	<i>National</i>
Unions	47	1
<i>Federations</i>		
Credit	47	CCB
Economic	49	1
Insurance	48	1
Welfare	40	1
Sericulture	109	2
Livestock	76	3
Dairy	63	2
Poultry	6	2
Horticulture	68	5
Rural Industries	32	-
Settlers'	9	1
Emigration	24	1
Agri.Broadcasting	11	-
Misc.others	63	3
Total (Federations)	645	22

(Source: MAFF)

Multi-purpose Cooperatives

The concept of a multi-purpose cooperative is traced back to the subsistence farming traditions of Japan in which the rural communities lived together by mutually assisting each other through need based production of primary commodities and exchange of the surplus with others. The basic principle behind this concept is the urge to fulfill all local needs through local effort and establish a mutuality of interest within the community. During the pre-war period, the then industrial cooperatives were encouraged, under a programme launched in 1932, to simultaneously undertake four functions, viz., credit, marketing, purchasing and utilization in order to (a) encourage joint participation by members in different activities and rationalize the integration of credit and other services through linkages to make them economical for the benefit of farmer members; (b) consolidate farmers' resources at one level for economical and more comprehensive services; and (c) arrange joint utilization of facilities which individual members could not afford due to heavy investments.

In a multi-purpose cooperative, although its modern day business is based on market oriented economic considerations and has continuous inter-action with socio-economic and government agencies outside its area of operation, the basic objective is to serve the community members in different ways so that they do not have to look to other agencies for meeting most of their needs.

The first Cooperative Society Law of 1900 did not allow credit cooperatives to undertake any other business for fear of endangering the savings and other funds held by the cooperative in trust. However, within a few years (1906) the government had to amend the law to permit the credit cooperatives to do other business. Earlier, in the absence of such provisions, the members borrowing from the cooperative had to buy their requirements from other sources thereby losing the advantage of cheap credit obtained from the cooperative.

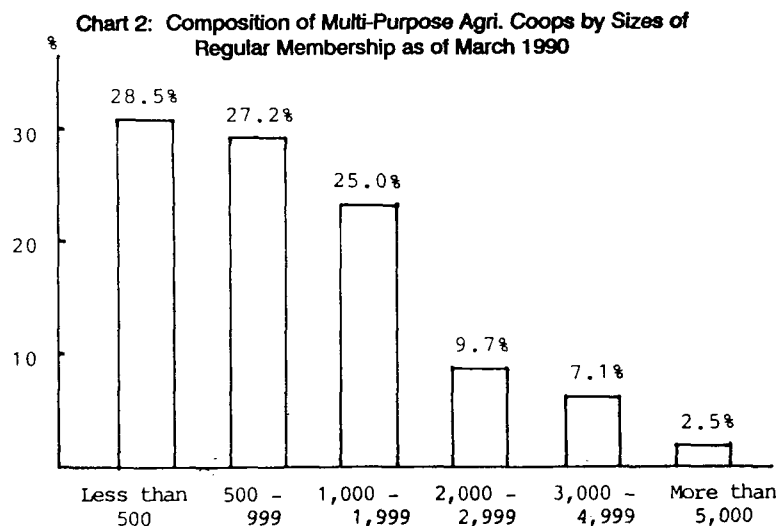
The multipurpose cooperative concept, incorporated in the Agricultural Cooperative Law enacted in November 1947, is the strongest in Japan followed by the Republic of Korea. This is in sharp contrast to the single commodity or single activity cooperatives in USA, Europe, Australia, New Zealand and some parts of India. The model has proved to be very effective in Japan and has so far ensured almost hundred percent coverage of farmers eligible for cooperative membership. Farming in Japan is characterized by small holdings, intensive cultivation and diversified cropping pattern and combination of paddy fields with upland crops. This necessitates the existence of a single organization which can service the farmer member in several ways. And as the volume of each member's business for different commodity or service is small, it would be uneconomical for having separate cooperatives for various activities. The following table

gives the number of multi-purpose cooperatives during the last three decades:

Table 18 : Multipurpose Cooperatives during last three Decades

<i>Fiscal Year:</i>	1960	1970	1980	1990	1991
No. of Coops:	12,050	6,049	4,528	3,574	2,299

The number of multi-purpose cooperatives during the post-war period had gone beyond the 30,000 mark. It was soon realized that most of these cooperatives were not able to muster enough strength to serve their members and hundreds of them could not even repay member deposits. The process of revitalization and consolidation was started in 1951 with the passing of the Act of Reconstruction and Readjustment of Agricultural, Fishery and Forestry Cooperatives. By 1960, the number had dropped down to less than half viz., 12,058. This was the position just before the enactment of the Law of Amalgamation Assistance in 1961 under which planned reorganization of the existing cooperatives was facilitated resulting in the drastic reduction in their number during the sixties and bringing down the total to 6,049 in 1970. The reduction in the seventies was also significant. However, 1980 onwards the reduction process slowed down to a considerable extent. Although there has been considerable increase in the average size of cooperatives, majority of them still have less than one thousand members as illustrated in the following chart. The average membership in 1990 was 2300.



With the growth in their size and the volume of business, the cooperatives have attained a commanding position in terms of resources, facilities and diversification of activities. The multi-purpose cooperatives provide to their members all the services needed by them and their families such as all inputs for production, guidance at all levels for increasing productivity, assistance for planning socio-economic activities of the members and their families and organization of better living activities for enriching the living conditions of farm families and for improving their environment. The following table gives information pertaining to membership, elected officials, employees, share capital, volume of business, unappropriated surplus and the number of consumers stores operated by a multi-purpose cooperative::

Table 19 : Data on Multi-purpose Coop. as at the end March 1990

<i>Particulars</i>	<i>Total No.</i>	<i>No. per Society</i>
<i>Membership</i>		
Regular Members	5,549,626	1,493.8
Associate Members	2,929,482	988.1
Total	8,479,108	2,481.9
<i>Elected Officials</i>		
Directors	56,084	15.1
(Out of which full-time)	5,215	1.4
Auditors	15,351	4.1
Total	71,435	19.2
<i>Employees</i>		
General Managers	2,983	0.8
Farm Advisers	19,267	5.2
Better Living Advisers	3,678	0.8
Other Employees	271,472	73.0
Total	297,400	79.8
Share Capital (Yen : 1,000)	1,092,355,572	293,881.0
<i>Volume of Business (Yen : 1 million)</i>		
Marketing	6,220,653	1,674
Supply	4,923,088	1,324
Balance of loan	12,751,306	3,431
Balance of saving	48,286,019	12,991
Long-term Insurance	25,641,957	NA
Unappropriated Surplus (Yen 1,000)	298,004,463	80,173
Number of Coop.Stores	7,862	2.2

Source : MAFF

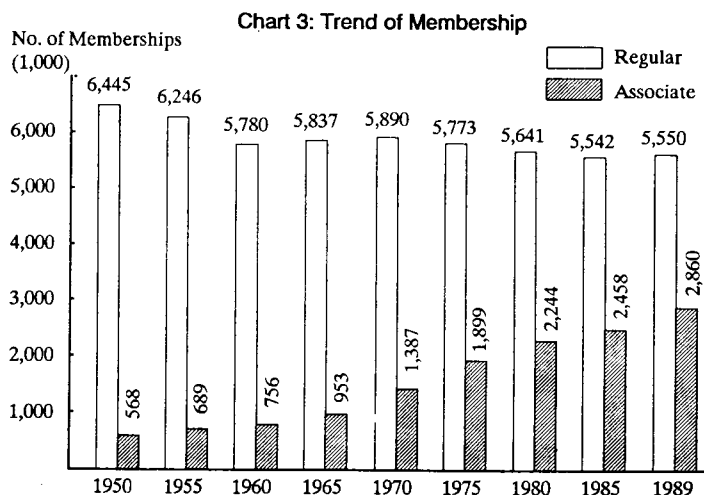
Membership

Membership of a multi-purpose cooperative is open to farmers and other category of people belonging to rural communities in accordance with the definitions laid down in the rules. Two categories of members are admitted on the basis of following classification:

- Regular Members : Farmers who cultivate more than 0.10 HA of land or work more than 90 days a year on a farm.
and
Farming Associations organized in the area of operation of the cooperative.
- Associate Members : Non-farming residents in the area who wish to utilize the facilities of an agricultural coop.
and
Organizations formed by farmers and non-farmers

Changes in Membership Pattern

The reduction in the number of multi-purpose cooperatives did not affect their membership position in any significant manner. Only during the fifties when the uneconomic cooperatives were going out of existence, some reduction in the regular membership was witnessed. By 1960, the number got stabilized and it has been steady ever since with only small variations from year to year. There has been, however, a gradual increase in the number of associate members since the fifties due to the rapid urbanization of rural areas and the mixing up of the agricultural population with the residents in the countryside who work in the non-farm sector. The following chart shows the trend in membership over the last few decades:



Apart from the steep rise in the number of associate members and the increasing percentage of part-time farmers, the composition of active membership has also undergone a change due to the shifting of younger work force to non-agricultural sector and the aging of the farm population. As stated earlier, the continuous migration to the cities and to industrial areas, has taken away from the farm most of the younger generation and only the aged farmer, his wife and may be the younger daughter-in-law are left to look after the land and other related activities. Some farmers, who had earlier gone to urban centres for employment are also, as stated earlier, returning to the farm after their retirement causing some sort of a '*U Turn*' phenomenon in agriculture. However, their number is rather small. The problem of assuring a farm successor is rather difficult and no easy way could be found to solve it. Thus, there is a three-dimensional erosion of the agricultural work force, viz., (a) the migration to urban centres; (b) the aging of the agricultural population; and (c) the gradual decline in the number of qualified personnel taking up farming or related jobs.

Deep Attachment to Land

The migration to cities and the other factors stated above do not, however, result in the reduction of regular members. Although about 85% of the farmers are now part-time farmers and less than 20% of farm household income is now derived from agricultural sources, most of the Japanese farmers do not want to sell their lands even if they do not actually cultivate them. They want to retain the lands as a reserve source of income to which they could always return in case of emergency. This had happened during the post-war period and following the oil crisis when the industrial boom had begun to slide down. Many of these members are sort of Sunday Farmers. With the rapid mechanization of farming, they are able to cultivate the rice field during week-ends. This is the easiest way to cultivate the farm for additional income. Most of the rice cultivated in this manner is delivered to government under the rice purchase scheme. While some farmers lease out their lands to others for cultivation, many others leave them idle. This practice not only reduces agricultural production, but also causes environmental problems such as spreading of weeds in the neighboring fields. Thus, the cooperatives have now to face the hard task of keeping their members' interest on the farmland.

Women Members

Until recent years, very few women had become cooperative members in the traditionally men dominated society. However, due to influx of menfolk to the cities and the increasing involvement of women in farming activities, women membership is being encouraged in most of the cooperatives. Also, it is now possible for more than one person of the same farm household to seek cooperative membership. This trend enables cooperatives to attract them to better living and other off-farm activities.

Interest Groups

Within the membership structure of a multi-purpose cooperative, the members themselves form several functional groups to look after different kinds of specialized functions. These are : (a) Commodity Groups for various crops, livestock products or horticultural products; (b) Hamlet Groups in the form of Farming Associations collectively formed by the farmers in a hamlet; (c) Youth and Women's Groups to look after the activities specially organized for youth and women; and (d) Functional Groups such as the Cooperative Stores Management Groups or Insurance Policy Holders' Groups.

Internal Structure

To meet the varying needs of their members as well as to handle all kinds of specialized activities, the multi-purpose cooperatives create several departments, sections and facilities within its organizational structure. Some of these departments, sections or facilities may slightly vary from cooperative to cooperative depending upon the character of local agriculture and the related needs. However, the general pattern of internal structure is illustrated in the diagram on the following page.

Full-time Presidents

The presidents of multipurpose cooperatives are elected officials. However, they function as chief executives of the organisation and work as full-time office holders. Unlike in most of other Asian countries, the Presidents receive salaries and other allowances for their services. Similar is the case of elected Executive Directors or Managing Directors who also receive salary and other allowances. The general managers and other staff are paid employees of the agricultural cooperatives.

Cooperative Employees

Traditionally life-long employment has been the pattern of service by staff among all white collar workers in Japan. Most of the business enterprises, including co-operatives, recruit fresh graduates during April each year. And from that time onwards, the employee stays on in the same organisation moving upward gradually until towards the end of the career he gets appointed to senior positions. During the total tenure of employment, the employee gets opportunity to train himself and is given due consideration for being loyal to the organisation.

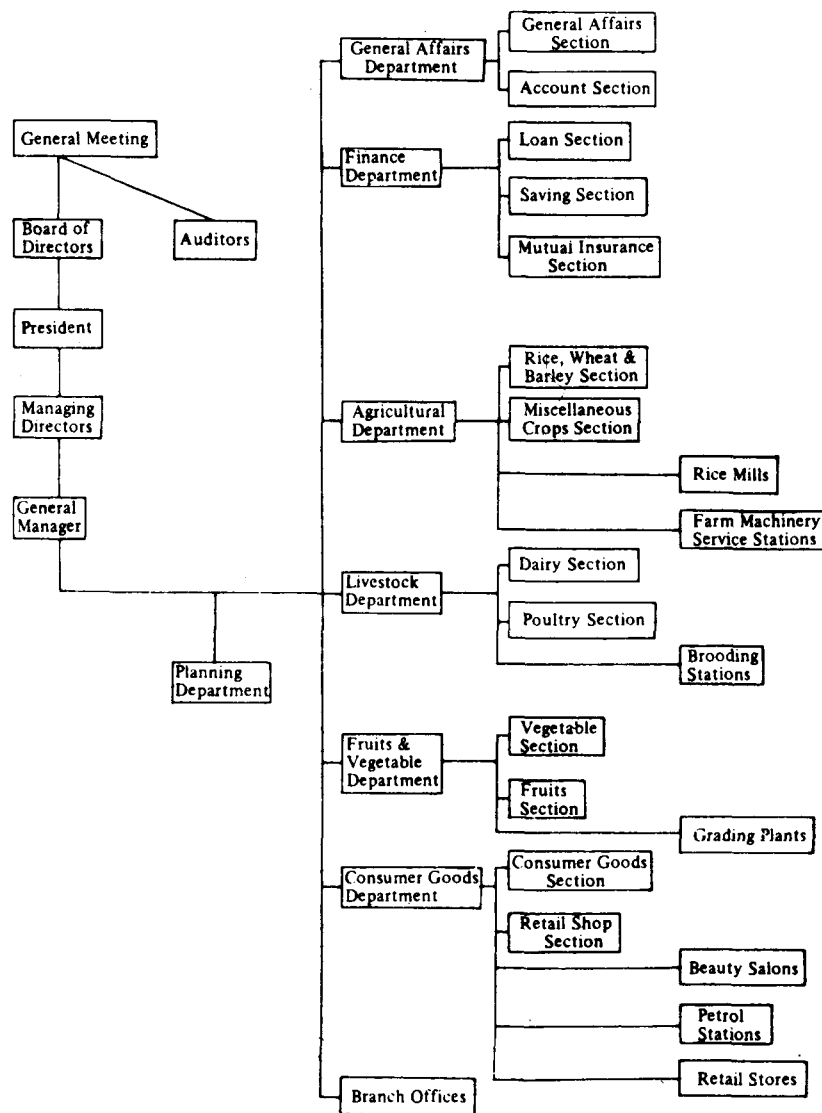
During recent years, this tradition is getting weaker with more and more young people, generally below 40 years of age, decide to quit jobs and seek better employment elsewhere. Although the percentage of such employees is still very low, the trend is continuing with greater numbers year by year.

In Japan, all establishments not only pay very good salaries to their staff but also provide with several other benefits such as health care, housing

loans and they also receive between six and ten months of additional salary in the form of bonus. Despite all these benefits, the young people seem to follow the trend of changing jobs, which is also very evident all over the world.

The total number of employees in agricultural co-operatives during 1990 was 290,000. The average age of employees in 1989 was 36 years (males 32.4 and females 32.9). The number of people who resigned during 1990 was 15,596.

Chart 4: General Pattern of Internal Structure of Multi-purpose Cooperative Society



Amalgamation

Why Amalgamation?

The era of rapid economic growth in Japan had its ramifications in almost all walks of life and no institution big or small could escape from the socio-economic upheaval generated by such growth during a span of two decades (1955-75). Agricultural cooperatives were no exception to this phenomenon. The challenges posed by the constant migration of agricultural labour to the industrialized urban sector and the fast urbanization of rural areas created unprecedented situation among rural institutions forcing them to reformulate their development strategies and re-model the structures to meet these challenges.

As Japan surged forward towards becoming an economic super-power, mergers of business enterprises and sophistication of industries became an urgent necessity in order to maintain the competitive edge in international market. Even government administrative units and public institutions had undergone a thorough process of restructuring to suit the requirements of a fast growing economy. This process of modernization of means of production and management resulted in general price rise leading to wage increases surpassing all national and international averages. As stated in the first two chapters, the enormous demand for skilled manpower in the industrial sector attracted most of the young and the middle-aged rural population creating a crisis in the agricultural sector. The manpower shortage forced the agricultural cooperatives to resort to modernization of agriculture and the streamlining of most of its means of production, storage, transport and distribution. The rapid urbanization of rural areas, created by the influx of industrial workers in the countryside for residential purposes forced the cooperatives to modify their approach to membership.

The most visible impact of these developments was the rapid increase in the income of farm households. The part-time farmer and other members of the household working in industries brought in additional income far beyond the limits of average income of a traditional farm household. The rapid increase in the savings forced the cooperatives to adjust to the increased inflow of money and the consequential streamlining of their credit and banking activities. The improved financial position of members enabled

them to invest in more sophisticated means of production. The cooperatives were asked to provide better facilities and services to modernize agriculture. This necessitated heavy investments and larger volume of working capital which most of the smaller cooperatives could ill-afford at that time. Also, the improved standard of living of farm households created a demand for better quality food products as well as consumer durables which the cooperatives were required to provide through modernization of their cooperative stores. Above all, the cooperatives had to revise their wage structure to keep the employees in the agricultural sector. The small cooperatives with limited resources could not afford to take such measures to narrow the gap between the industrial wages and cooperative salaries.

Policy and Legal Framework

The stage for amalgamating the smaller cooperatives into larger and viable units was set with the initiative taken by the Central Union of Agricultural Cooperatives (CUAC) in formulating policy guidelines for such amalgamation. The government supported this initiative by enacting the Amalgamation Aid Law in 1961 which streamlined the government assistance procedures already in operation under the then existing legislation (Law for Reconstruction and Readjustment of Agricultural, Forestry and Fishery Cooperative Societies of 1951 and the Special Measures Law for Readjustment of Agricultural Cooperative Societies of 1956). The new Law also enlarged the scope of assistance in several ways for the amalgamating cooperatives, their federations and to the local government authorities which provided them guidance and assistance.

Amalgamations were made possible on the basis of agreement by each of the amalgamating cooperatives by a resolution passed by a two-thirds majority of members at a meeting attended by more than half the total number of members. Each cooperative was required to appoint an Establishment Committee which along with other similar committees were responsible for drafting the articles of incorporation and for working as managing committees for the first year of operation of the newly amalgamated cooperative. Most of these provisions were incorporated in the new Law passed in 1961. The Law was followed by a Cabinet Order which incorporated procedures for the assistance and safeguards to ensure that the amalgamations were carried out strictly in a voluntary manner.

Government Assistance

The final authority to approve an amalgamation proposal is the Governor of the concerned Prefecture who accords such approval in consultation with the Prefectural Cooperative Union and senior cooperative leaders and after satisfactory evidence that the area of operation of the amalgamated cooperative is suitable from the point of view of local conditions and business viability and that the proposed business management plan is sound and has

a good chance of success. The financial assistance and subsidies provided by the Central Government are given through the Prefectural Governments within their budgetary limits and are limited to one-third of the expenditure involved in upgrading or creating the facilities or on the basis of a formula by which a fixed amount is multiplied by the number of amalgamated cooperatives.

At present, an amalgamated cooperative below 3,000 members is given Y100,000 and above 3,000 members is given Y200,000. Also an amount of Y50,000 is given for holding each amalgamation promotion meeting once for each amalgamation. The subsidies are given to cooperatives, the unions and federations and to the local governments for following purposes :

To Cooperatives

1. Facilities required for improvement of agricultural production, for mechanization of agriculture, for improvement of farm operations and for production management. (These are : seed-paddy germination centres, breeding stations, slaughter houses, livestock clinics, poultry hatcheries, nurseries of young silk worms, cattle breeding centres, agricultural machine service centres, pest and disease control instruments and tractors).
2. Facilities necessary for improvement of supply and marketing business such as those for storage, transport and grading. These are : packing sheds, fruit grading plants, freezing and drying facilities, milk collection centres, warehouses, milk testing instruments, trucks and motor tri-cycles).
3. Facilities for processing. (These are : rice, wheat and barley processing plants, factories for noodle manufacturing, bakeries, canning and bottling plants, breweries and fertilizer mixing plants).
4. Facilities necessary for innovating business operations. (These are : office buildings, calculating machines and other office equipment).

To Prefectural Unions for Advisory Services

The subsidy to Prefectural Unions of Agricultural Cooperatives is provided through Prefectural Governments for advisory services rendered to amalgamating cooperatives. The amounts are fixed on the basis of a formula or to the extent of fifty percent of the expenditure incurred by the Unions for advisory services.

To Prefectural Governments for Advisory Services

Even the Prefectural Governments are entitled to subsidies under this Law for advisory services rendered in formulating and executing the plans for amalgamation.

Management Guidance and Assistance

In addition to the assistance mentioned above, the Cabinet Order requested cooperative federations and unions, prefectural governments and local authorities to extend all possible assistance and guidance to the newly amalgamated cooperatives in overcoming their managerial and other difficulties during the formative years.

Role of the Central Union

As in many other cases, the Central Union of Agricultural Cooperatives (CUAC) has played a major role in policy formulation in respect of amalgamation both in the government and within the agricultural cooperative movement. In 1962, the CUAC appointed the General Research and Policy Committee to advise the President of the Central Union on "closer liaison among member organisations and smoother operation of cooperative business." The Committee which is presided by CUAC President, consists of six representatives of primary cooperatives, twelve representatives of prefectural unions and credit, economic and mutual insurance federations, and ten representatives of national federations. The first task given to the Committee was to formulate a policy related to amalgamation. The report of the Committee to the CUAC President consisted of recommendations relating to the amalgamation of primary cooperatives, restructuring of the federations and the general policy on organisational aspects.

Based on these recommendations, the CUAC issued policy guidelines on amalgamation emphasizing the need for strengthening farm management through consolidation of cooperative units in order to rationalize farming, by increasing the demand for farm and livestock products and in securing better outlets for marketable surplus. CUAC also stressed the need to ensure that the amalgamations were done only on voluntary basis and that while doing so the natural, social and economic conditions of the respective areas were taken into consideration. Both the multi-purpose and single-purpose cooperatives were included in the plans. However, single-purpose cooperatives were free to keep their identity if the nature and volume of commodities handled by them justified their doing so.

Emphasis on Closer Links with Members

The CUAC policy directive emphasised the need to maintain communication with members in determining the size of their cooperative and the pattern of membership. The homogeneity of commodities, the compactness in hill areas and the compactness of units in semi-urban areas was also emphasised.

Plan Implementation

The prefectural unions play a major role in implementing the plans for the amalgamation. Each prefectural union formulates detailed plans for

amalgamation within the policy framework prepared by the CUAC. Two committees are appointed by these unions for this purpose; the first is an advisory committee to advise on the formulation of plans and the second is for implementing these plans. The advisory committees have representatives from the government, the local bodies, prefectural federations, primary cooperatives, associations and women and youth groups. The implementation committee also consists of representatives of prefectural unions, business federations and women's and youth clubs.

The plans so prepared take into consideration the following aspects :

1. Formation of large cooperatives in compact farming areas;
2. More rational use of resources and personnel;
3. Modernization of farming and formation of commodity groups;
4. Improvement of marketing for better returns to members;
5. Farm supplies at reduced prices.
6. Mobilization of savings for better investments; and
7. Provision of other services through better management.

Approval by Cooperatives and Members

The plans prepared by the prefectural unions are then circulated among the regional committees for comments, some of which are incorporated in the plans. The plans are then discussed by all the involved cooperatives and their members for comments and suggestions which are later incorporated by the prefectural level advisory committees. The agreed plans are then approved in the cooperatives on the basis of a two-thirds majority at a meeting attended by more than fifty percent of the total members.

Governor's Approval

The final approval is accorded by the Governor of the Prefecture in consultation with the prefectural level cooperative unions and local leaders. The implementation is carried out with the help of implementation committee in the Union. In some cases, registration of all the cooperatives is cancelled and a new cooperative is registered. In other cases, one cooperative is allowed to retain its identity and others merge into such a cooperative. All the legal and contractual rights and obligations of the outgoing cooperatives are then taken over by the amalgamated cooperative and its members. The table on the following page shows the progress made so far in amalgamation of cooperatives.

Table 20 : Progress of Amalgamation of M.P. Cooperatives

Year	No. of cases of amalgamation	No. of participating coops	No. of M.P. coops.	Status of Law
1961/62	137	541	11,586	Aid Law was enacted
1962/63	210	912	10,813	on 1st April, 1961
1963/64	216	967	10,083	Validity of law was 5 years
1964/65	237	1,066	9,135	
1965/66	578	2,599	7,320	
1966/67	35	135	7,209	9th May 1966
1967/68	58	169	7,074	First Revision
1968/69	218	829	6,470	Extended for three years
1969/70	99	378	6,185	
1970/71	42	162	6,049	23 May 1970
1971/72	102	439	5,688	2nd revision
				Extended for 2 years
1972/73	101	393	5,488	22 March 72
1973/74	67	285	5,198	3rd revision
1974/75	119	434	4,942	Extended for 3 years.
1975/76	60	225	4,80	31st April 75
1976/77	25	65	4,763	4th revision
1977/78	56	160	4,657	Extended till 31.3.78
1978/79	31	101	4,583	
1979/80	18	54	4,546	
1980/81	35	85	4,528	5th revision estimated
1981/82	65	172	4,464	extended till 31.3.82
1984/85	17	49	4,303	
1985/86	52	242	4,265	
1986/87	24	75	4,205	6th revision
1987/88	38	126	4,072	Extended till 31.3.89
1988/89	62	250	3,898	
1989/90	92	306	3,688	7th revision
1990/91	60	187	3,574	Extended till 31.3.92

Source: *Agricultural Cooperative Movement in Japan, CUAC, 1987.*

Problems and Achievements

As it happens in all institutions, mergers create problems of leadership, financial disadvantages for some and dislocation of areawise affiliations and loyalties. Some of these problems are genuine and are mostly born out of uncertainty for future. The major problems faced were :

1. The fear among successful cooperatives that they would lose the advantage of economic stability by merging with weaker cooperatives;
2. The hesitation of the board members to abandon their top positions without knowing how they will fare in the new cooperative;
3. The fear among employees of losing their jobs due to restructuring and rationalisation of management; and
4. The hesitation among cooperative members that the new cooperative would not be considerate in judging their needs in accordance with local

traditions and sentiments; that the larger cooperatives would be bureaucratic; that they would lose day to day contact with the cooperative.

Most of these problems were overcome through negotiations and through agreements worked out among the amalgamating cooperatives. This ensured that the members and employees of well managed cooperatives were not deprived of their advantage and the poorly managed cooperatives were asked to pass on the disadvantages to their members in the proportionate manner.'

The progress of amalgamation so far has amply proved the fact that only a viable cooperative with adequate resources, larger membership base and extensive facilities can develop a competitive edge in the highly industrialized society and ensure proper services to its members. The number of 12,050 multi-purpose cooperatives at the end of March 1961 has on 1st September 1989, come down to 3,745. The process of amalgamation still continues. The validity of the Amalgamation Aid Law passed in 1961 was originally for five years. It was extended five times until it expired in March 1982. Again after a lapse of about two years, the Law was revised from 1st April 1986 to 31st March 1989. It was again extended on 1st April 1989 and will remain in force until March 1992. The Government therefore continues to support the amalgamation programme through tax concessions and other facilitating measures. In some prefectures, local governments do provide financial assistance.

The leadership in the Cooperative Movement is already looking towards the Twentyfirst Century with one thousand cooperatives as the base for taking the Agricultural Cooperative Movement to the next Century. Despite the remarkable progress achieved in enlarging the scale of management through amalgamation, there are still a number of small cooperatives which, according to the leadership in the Cooperative Movement, may not be able to face future challenges posed by the ever-changing agricultural situation on a global basis. In view of this, the CUAC has in December 1988 prepared a plan for taking Measures for Promotion of Amalgamation of Agricultural Cooperatives during the fiscal years 1989-92. The plan is prepared within the framework of the resolution of the Eighteenth National Congress of Agricultural Cooperatives which had adopted the "**Basic Strategy of Agricultural Cooperatives - Looking Toward the Twentyfirst Century**". Following are the main considerations for the new strategy for the vigorous drive in the amalgamation programme:

1. To strengthen agricultural cooperatives to face the new age agriculture through diversification and restructuring of rural communities, through building up the part-time farming system, by lowering cost of production and through highly efficient system of farm guidance;

* For more detailed information on amalgamation, refer to Amalgamation of Primary Cooperatives - The Japanese Experience by Lionel Gunawardana, ICA, ROAP, New Delhi

2. To enable the cooperatives to face the challenges posed by de-regulation of banking rules concerning deposits and rural banking so that they can survive in the highly competitive banking field;
3. To enable agricultural cooperatives to meet the diversified needs of modern farming community and to socially integrate them with cooperative activity; and
4. To promote rationalisation of cooperative business by reducing the disparities of scale and size among various cooperatives.

Chapter Seven

The Integrated Approach

Agricultural cooperatives in Japan deal with their members through a single organization namely the multi-purpose cooperative. The multi-purpose concept developed after the Second World War when the Agricultural Cooperative Law of 1947 facilitated the registration of such cooperative. In the pre-war days, the cooperatives handled credit, marketing, supply and utilization services. However, most of these activities were not integrated with the others mainly due to the absence of farm guidance work by the cooperatives. Because of this the cooperatives could not cover the total farming needs of their members.

The present day multi-purpose cooperatives function on the basis of a fully integrated framework of activities. These activities are planned on the basis of member needs identified through a process of planning at the grass-root level. The individual plan of each farm household for all kinds of farm and related activities is the base for planning at the higher levels. The consolidated plan becomes the basis for inter-related activities at all levels.

The integrated way of functioning envisages the socio-economic life of the farmer member in its totality. The expert guidance given for planning farm production and household budgeting and savings as well as better living activities is in relation to the demands of farm products upto international levels and the needs of the farm household members in the context of prevailing living standards. Hence, the income target of the farm household becomes the foundation on which the edifice of cooperative activity is built up. In other words, the farmer member and his needs become the focal points for cooperative activity in a multi-purpose cooperative.

Emphasis on Production and Better Living

The main activities of a multi-purpose cooperative are grouped in two major categories, viz., economic activities which contribute to the increased farm productivity and the better-living activities which help in securing for the farm household better quality goods and in leading a healthy and happy life in the rural community. The activities covered under these two categories are:

Economic Activities

1. Farm Guidance in the preparation of a farm management improvement plan for increased income through better productivity;

2. Identification of sources and securing of funds for production plan for the individual member;
3. Setting up of required facilities for plan implementation and securing the farm inputs;
4. Farm guidance for effective use of these facilities and farm inputs;
5. Facilities for grading, standardization of products, processing, packaging of farm produce;
6. Joint shipment and marketing on the basis of market intelligence from various markets; and
7. Collection of marketing proceeds and settlement of payments to members.

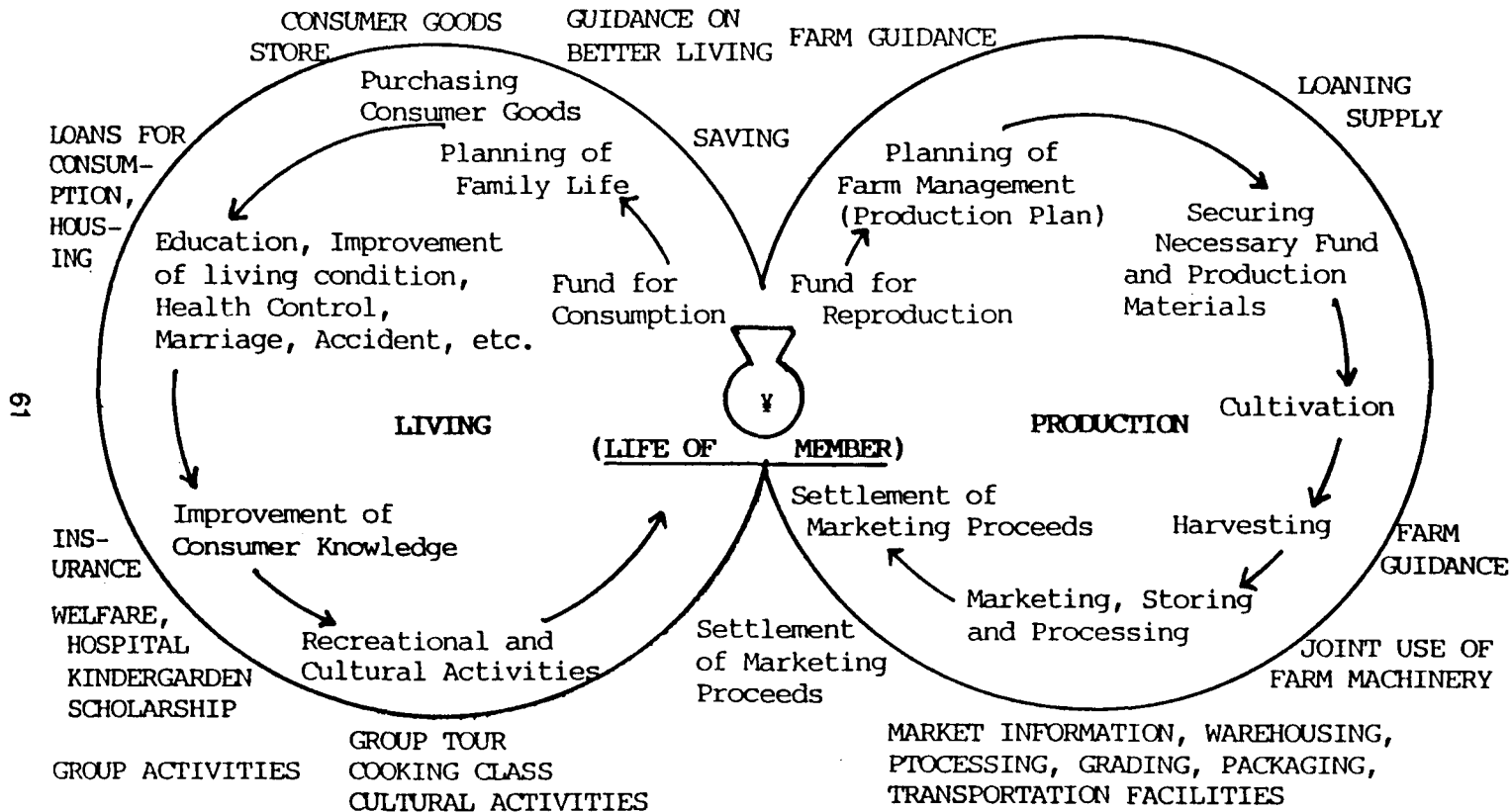
Better Living Activities

1. Guidance on preparation of short-term and long-term plans for better living;
2. Preparation of the household budget incorporating planned savings and expenditure for immediate needs and for long-term requirements;
3. Plans for supply of consumer goods for households and establishment of facilities for securing and processing/packaging these goods; and
4. Guidance for using consumer goods and facilities.

Role of Federations

The level of integration achieved in multi-purpose cooperative activities at present is the result of planned development efforts carried out in a synchronized manner at all levels of the agricultural cooperative ladder. While the basic planning and the actual implementation takes place at the grass-root level, the policy framework and the overall action plans are prepared at the national and the prefectural levels. For this purpose research, surveys and meetings are held on a continuing basis to formulate long-term plans and arrange necessary infra-structures, financial resources and marketing outlets for farmer members. Led by the CUAC, the national federations, the prefectural federations, the prefectural unions, and other organizations formed for specialized tasks undertake various services to cooperatives and their members for their integrated development. These activities are ably supported by Ie-No-Hikari Association and the Agricultural Press by spreading information, knowledge and techniques related to agricultural cooperative activity. The mutuality of interests among all the units within the agricultural cooperative movement ensures a coherent and smooth functioning of various organizations in an integrated manner at all levels. The chart on the following page gives the inter-relationships and the cycle of various services through multi-purpose cooperatives.

Chart 5: Activities of Multi-purpose Societies in Relation to the Life of Member Farmer



Agricultural Credit Services

Main Characteristics

Agricultural credit and banking services are the most important activities undertaken by multi-purpose cooperatives throughout Japan. They serve as the backbone of all other economic activities organised for members. Despite serious setbacks during pre-war and post-war periods when some of the cooperatives faced severe shortage of funds, the thrifty farmer and his cooperative, individually and collectively with other organizations, have built up a very strong financial base during the past four decades and have now reached the stage from which they could not only meet the total credit requirements of the cooperative sector, but also are able to finance agriculture-related industries outside the cooperative movement.

Another important aspect of credit activity is the timely intervention by the central bank of the country as well as by the Government to keep the balance in rural credit and provide assistance to stabilise cooperative business through direct and indirect support. Such assistance is given either through budget appropriations or through the Agriculture, Forestry and Fisheries Finance Corporation (AFFFC).

Within the Cooperative Movement itself, the three tier structure of cooperative credit institutions has ensured timely support at various levels for a smooth flow of funds from surplus areas to deficit areas and for transfer of surplus amounts from members' savings at primary level upto national and international levels.

A strong credit structure has been made possible because of the very favourable balance of saving deposits on behalf of the cooperative member far above his credit needs for production and other purposes. Also the credit channelled through multi-purpose cooperatives is specifically geared to the well-defined needs of cooperative members.

Credit Stability Through Agricultural Bill System

References have already been made in chapter four of the efforts made to stabilise credit structure through the Agricultural Bill System. But for the government intervention to provide the credit guarantee through linkages of credit and marketing of rice, the cooperatives could not have established such a strong base for the present day financially strong agricultural

cooperative movement. The Agricultural Bill System has played a pivotal role during the reconstruction period.

Role of Bank of Japan during Post-war Period

Soon after the war, chaotic conditions prevailed on the Japanese farmland. As already stated, returning soldiers and the surplus labour from war industries had created the problem of over population on land. In contrast, the farmers had hardly any resources for organizing production. The rice delivered to government fetched very low price in real terms because of the inflationary conditions; and the heavy tax burden (2% in 1945; 7% in 1946; 19% in 1948; and 15% in 1948-49) had made the matters worse. The newly organized cooperatives were in no position to help the farmer members at this stage. As most of the credit demands from members were seasonal, the cooperatives were faced with periodical shortages of operational funds. The Agricultural Bill System was introduced to help solve this problem.

The Agricultural Bill System was implemented through the three tier cooperative credit structure at the national, prefectural and primary levels. It was carried out with the help of Bank of Japan and the Agricultural Loss Compensation Fund created for the purpose.

1. A promissory note (called agricultural bill) was issued by the primary cooperative for the purpose of providing production loans to farm households. This promissory note was honoured by the Bank of Japan which guaranteed low interest rate loans on the approved bills. These bills were channeled through the Prefectural Credit Federations and the Central Cooperative Bank for Agriculture and Forestry (The Norinchukin Bank).
2. The amount of the promissory note was secured with the backing of the Agricultural Loss Compensation Fund as a mortgage. The redemption of the loan was linked with the account for joint marketing of rice to government through the cooperative channel.
3. The period of loans, therefore, was linked to the yearly agricultural cycle for about nine months.
4. The scope of the production loan was extended to the purchase of fertilizers, agro-chemicals, straw manufactured goods, material for green house and seeds. In essence, the Agricultural Bill System was mainly for meeting the short-term financial needs of cooperative members.

The Agricultural Bill System introduced into the cooperative movement the low interest short-term finance from outside by making the promissory note a competent discount cheque. This was the most timely help available to cooperative members. At the beginning of the scheme, about 20 to 30% of the finance was directed to the purchase of farm implements and the

remaining about 70% for the purchase of agricultural inputs. However, the percentage for implements later dropped to lower levels and by 1952, the ratio of loans for inputs had risen to over 90%. Similarly, during the early period, over 80% of the total funds were secured through the discounting of the promissory notes by the Bank of Japan. After 1952, however, the percentage was considerably reduced in proportion to the growth of owned resources of agricultural cooperatives and their federations.

The following table gives details of the amounts outstanding from agricultural bills discounted for different category of farm inputs between 1948 and 1955.

Table 21 : Outstandings of agricultural bills discounted by kinds of farm inputs of the Central Coop Bank for Agriculture & Forestry

	Fertilizers	Farm implements	Agricul. chemicals	Straw products	Temperature keeping mats for green house	Seeds	Total
1948	1,723(67.0)	842(32.8)	5(0.2)	-	-	-	2,750(100)
1949	9,281(62.1)	4,001(26.8)	471(3.1)	880(2.6)	292(2.0)	-	14,925(100)
1950	11,477(79.5)	1,721(11.9)	336(2.3)	378(2.6)	141(1.0)	381(1.0)	14,435(100)
1951	16,433(88.1)	1,234(6.6)	287(1.5)	409(1.0)	188(2.2)	111(0.6)	18,712(100)
1952	23,163(91.8)	1,223(4.8)	202(0.8)	343(1.4)	194(0.8)	112(0.4)	25,237(100)
1953	24,223(91.0)	1,549(5.8)	236(0.9)	289(1.1)	201(0.8)	107(0.4)	26,616(100)
1954	25,864(90.6)	1,660(5.8)	316(1.1)	265(1.0)	284(1.0)	150(0.5)	28,538(100)
1955	16,829(96.7)	155(0.9)	52(0.3)	33(0.2)	173(1.0)	158(0.9)	17,399(100)

Source: The performance of financing of agriculture and forestry

Because of the introduction of the Agricultural Bill System, agricultural cooperatives could get, during the initial period, over eighty percent of the production loans through the Bank of Japan. This assistance gave the cooperative leadership at various levels the opportunity to regroup their activities after the War, instil confidence among members in cooperative activity and develop their own resources thereby gradually reducing the percentage of funds provided by the Bank of Japan. From 1952 onwards the proportion of external funds began to decline. Also, the Agricultural Bill loans, which reached the highest level in 1954, began thereafter to decline giving way to owned funds within the agricultural cooperative movement. The following table gives both the rising trends in Agricultural Bill loans at different levels and their decline after 1954.

Table 22: Outstanding of loans of Agricultural Bill by respective cooperative organisations.

(Unit: One million yen)

Year	Primary Society			Prefef. Credit			CCB		
	1(A)	2(B)	(B)/(A)	(A)	(B)	(B)/(A)	(A)	(B)	(B)/(A)
1950	41,507	14,155	34.1	37,972	14,584	38.5	36,486	14,434	39.5
1951	55,128	19,408	35.2	49,712	19,188	38.4	51,833	18,717	36.1
1952	79,814	27,090	33.9	67,675	25,729	38.0	72,719	25,237	34.8
1953	109,023	30,095	27.7	76,165	27,921	36.6	81,335	26,616	32.7
1954	171,024	32,277	18.8	118,056	29,523	25.0	98,144	28,538	29.1
1955	181,570	20,028	11.0	107,645	13,383	12.4	93,998	10,246	10.9
1956	192,691	17,824	9.3	97,463	9,805	10.1	140,378	6,615	4.7
1957	-	17,484	-	-	9,743	-	-	6,789	-

Source : *The performance of financing of agriculture and forestry*

1: Total loan extended

2: Of which agricultural bill loan

Increased Income Through Marketing Linkage

One of the very important factors contributing to the rapid increase in the farm household income was the linkage of production loans to the marketing of rice to Government under a price guarantee scheme. During the years following the War, the most important need of the country was the production of adequate quantities of food and this objective was achieved through several Government incentives including the assurance of buying the produce of farmers.

The price guaranteed under the marketing scheme was much higher than the post-war period price paid by the government. It was also far above the prevailing marketing price and hence an element of subsidy by the government was involved in the total scheme. This led to the increase in the savings of farm households thereby reducing farmer members' dependence on the Agricultural Bill System loans. This also further led to the increased percentage of savings to the total loan amounts borrowed by members and to the consequent increase in the volume of owned funds by agricultural co-operatives.

The following table shows the rising trend during the early fifties, in the share of deposits in the total volume of owned resources of multi-purpose agricultural cooperatives.

**Table 23 : Fund Procurement of Agricultural Cooperatives
(end of fiscal year).**

(Unit : one million Yen)

Year	Self-owned	Deposit	Loan	Total
1951	13,489(6.4)	170,344(81.2)	25,905(12.4)	209,738(100)
1952	16,720(6.3)	215,001(81.1)	33,256(12.6)	264,977(100)
1953	21,069(5.8)	273,974(75.6)	67,478(18.6)	365,521(100)
1954	27,149(6.7)	293,588(72.9)	81,525(20.4)	402,261(100)

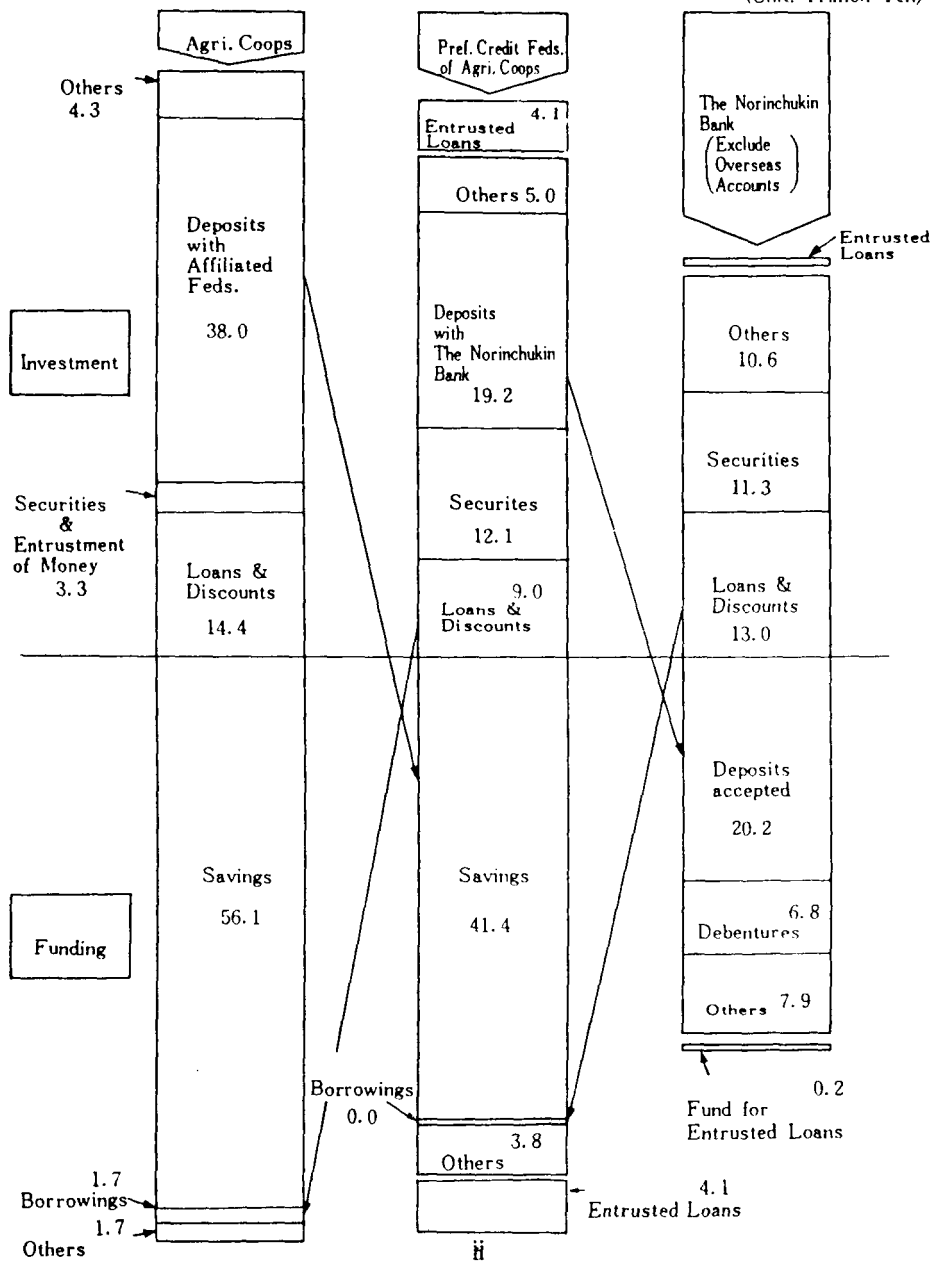
Three-tier Credit Structure

The credit and banking activities within the agricultural cooperative movement are carried out by the primary agricultural cooperatives functioning normally at the municipal level, the prefectural credit federations of agricultural cooperatives (PCFAC) at the prefectural level and by the Norinchukin Bank at the national level. The Norinchukin Bank is not actually a federation of credit cooperatives but a statutory body established under the Law. However, it functions as the apex organization of all cooperative institutions for agriculture, forestry and fisheries in the country. All the Credit needs of the farm households are channelled through the multi-purpose cooperatives even if the sources of their funding are from outside the cooperative credit structure. Apart from receiving deposits and loaning to members, the primary cooperatives also function as domestic exchange (clearing house) centres for their members as well as non-members. The PCFACs also function as clearing houses for domestic money transactions. In addition to accepting deposits and lending to primary cooperatives, they provide funds to other prefectural credit federations as and when necessary. The Norinchukin Bank also functions as a clearing house for the entire country. In addition to normal lending and deposit receiving activities for the prefectural federations and primaries, the Bank provides funds for the national federations and industries related to agriculture, forestry and fisheries.

The chart on the following page shows the funding and investment of agricultural cooperatives at the three levels.

Chart 6: Funding and Investment of Agri. Coops
Credit Institutions of Three Levels (As of March 31, 1991)

(Unit: Trillion Yen)



Rate of Interest on Agricultural Bill Loans

The rate of interest charged by the Bank of Japan during the initial years of the Agricultural Bill System was as low as 6.9%. However, as the cooperatives consolidated their financial positions, the demand for these loans declined simultaneously. Hence after 1951, the rate of interest was increased to 9.1% per annum.

Various Forms of Agricultural Credit

There are several ways in which credit for various purposes is provided to the Japanese farmer. The relevant channel for credit disbursement is determined in the context of defined need of the farm household. The main forms of agricultural credit are :

1. Credit channelled through the cooperative credit and banking institutions at various levels;
2. Loans given by the Agriculture, Forestry and Fisheries Finance Corporation(AFFFC);
3. Government finances provided from out of the National and Local Government budget appropriations; and
4. Assistance through Supplementary Financial Systems such as Disaster Compensation Scheme for Farmers, Agricultural and Fishery Cooperative Deposit Insurance, and Mutual Aid Scheme for Agricultural Cooperative Credit Organizations.

The percentages of loans taken by cooperative member from various sources are: Agricultural Cooperatives-45.5%; Government-20.4%; Banks-20.7% and Others-13.5%.

Primary Cooperatives

Primary cooperatives besides being the centres for all economic activities also function as banking institutions for their respective areas.

Resource Mobilization

As mentioned in chapter two, the agricultural cooperatives broke even in respect of deposits and loans as early as 1917 during the pre-war period. From that time onwards, the member deposits grew larger than the volume of loan amounts until the Second World War during which the entire cooperative structure was drastically altered. During the post-war years and thereafter following factors contributed to the steady rise in cooperative deposits.

1. Tax concessions given to farmers in the programme to boost food production;
2. Purchase of rice by the government at higher rates than the government fixed selling rates through subsidies in order to level up farmer's income with that of the industrial worker;
3. Direct and indirect benefits received through the development projects initiated after the land reforms;
4. Income received from the sale of land for non-agricultural purposes during the years of rapid economic growth in Japan; (For example, the income from land sales in 1962 was 10.6%; it rose to 42.3% in 1972 and gradually declined to 19.5% in 1975); and
5. The steady increase in the percentage of non-agricultural income by farm households.

The following table gives the comparative figures of income from agricultural and non-agricultural sources over a period of years:

Table 24 : Comparative figures of agricultural and non-agricultural income.

Year	Agricultural income	Non-agricultural income
1960	55.0%	45.0%
1970	36.5%	63.5%
1975	33.6%	66.4%
1980	21.1%	78.9%
1985	19.4%	80.6%
1989	17.9%	82.1%

*Note : The trend in % reduction of agricultural income continues.
Source: MAFF*

The steady growth in farm household income has not only helped farm families to improve their living standards but also has helped them to save substantially in cooperatives and other institutions. The major competitors to agricultural cooperatives in this respect are the post offices and commercial banks. Out of the total savings from farm household members, the multi-purpose cooperatives receive 51.5% whereas the post offices attract 13.9% of the savings. The remaining 34.6% go to commercial banks.

Ever-changing Deposit Loan Ratio

The gradual increase in the amount of deposits by individual members has correspondingly reduced the percentage of loans taken by the member from his cooperative. For example the percentage of loans over deposits in 1975 stood at 52.4% but in 1985, it declined to 45.4%. In terms of the

actual amounts, the deposits in 1975 stood at Y15,232 billion while the loans amounted to Y7,982 billion. In 1985, the deposits were Y37,083 billion and the loans Y12,289 billion. The average rate of increase in deposits was 10.5% while the rate of increase in loans was only 6%.

Purposes of Loans

The multi-purpose cooperatives advance loans for a variety of purposes such as production loans, modernization loans, loans for living, housing, consumer product loans, housing for renting and others. Under each category, both short-term and long-term loans are provided. With the growing percentage of deposits by cooperative members, the demand for production loans and loans for agricultural purposes are declining whereas the loans for living and for non-agricultural purposes are increasing year by year. The table No.26 gives the comparative percentage of loans under various categories.

Table 25 : Percentage Distribution of Outstanding Loans from Agricultural Cooperatives by Purposes : selected years : 1961-1983

At the end of fiscal year

<i>Purpose and Term</i>	<i>Sept.</i>				
	<i>1961</i>	<i>1970</i>	<i>1975</i>	<i>1980</i>	<i>1983</i>
For Agriculture:					
Short term loans	18.0	14.9	7.1	6.1	5.5
Long term loans	35.1	32.1	19.4	21.4	22.2
Of which: Govt. programmed loans	8.8	21.1	13.7	16.1	16.3
Sub-total	53.1	47.0	26.5	27.5	27.7
For Living:					
Short-term loans	8.8	8.9	5.1	5.8	5.5
Long term loans	8.4	12.9	23.1	25.6	24.7
Of which: housing incl.apartments	7.2	10.8	20.0	21.0	20.4
Sub-Total	17.2	21.8	28.2	31.4	30.2
For non-agri.business:					
Short term	--	14.3	10.9	9.3	8.1
Long term	--	6.4	13.3	11.6	10.6
Sub-total	12.0	20.7	24.2	20.9	18.7
For other purposes:					
Debt liquidation	10.0	2.5	1.7	3.1	4.3
Public entities	-	-	7.5	7.0	7.4
Others	7.7	8.0	11.9	10.0	11.6
Grand Total	100.0	100.0	100.0	100.0	100.0

Source: Rural Finance Research Institute and the Norichukin Bank.

Note : A little less than 500 agricultural cooperatives were surveyed. Figures for 1961 refer to the whole country excluding Hokkaido.

Rates of Interest at M.P.Coops

The average rates of interest both for deposits accepted by multi-purpose cooperatives and loans given by them to members are fixed by respective cooperatives. They are rather low compared to rates of interest in other Asian countries. The interest rate for ordinary deposit is only 0.36% while the term deposit rates vary from 1.86% for three months to 3.74% for two years. The interest rates on development loans from government depend on each loan agreement. However, the average rates charged for loans from the Agricultural Modernization Fund for different purposes such as agricultural building, farm machinery, planting of fruit trees, for livestock is 4.6%. The average rate for long-term loans for living, housing, etc., vary between eight and ten percent.

Credit Guarantees

All loans from agricultural cooperatives are, as a rule, given on the basis of "personal credit". Often routine loans are given without any guaranty or collateral. However, a system of guarantees has been evolved in which loans are secured through the Agricultural Credit Guarantee and Insurance System. This system is operated through the Agricultural Credit Fund Association (ACFA) at the prefectural level and the Agricultural Credit Insurance Association (ACIA) at the national level. The ACFAs have been established jointly by the prefectural governments and other institutions including the agricultural cooperatives. Some element of subsidy is built into the system in which the central government pays a part of the contribution of the prefectural government for participation in ACFA. The lending agricultural cooperative or any other financial institution may seek the guarantee for a loan through the ACFA. The borrower receives the guarantee against payment of a small premium to ACFA. In case of arrears in repayment of a loan, the ACFA will repay the amount direct to the lending institution and prefer a claim on the borrower for indemnity. The rate of guarantee amount varies between 80 to 100% depending upon the type of loans taken. The ACFAs can insure their liabilities with the ACIA at the national level. The ACFAs and the ACIA have together assets worth over eighty billion Yen. In 1983, they handled 263,000 guarantee cases amounting to Y491 billion. On 31st March 1984, their outstanding underwritten liability guarantee amounted to Y1,770 billion involving 1,184 cases. As against these massive figures, the guarantee agencies had to settle only 6,800 cases involving payment of one billion Yen only. This means the ratio of default or arrears to the total amounts involved in guarantee insurance was very low.

Strong Links With Farmer-Members

As the Japanese farmer goes increasingly into diversified forms of activities and as his financial transactions take several forms, the relationship with several institutions are unavoidable. Apart from elaborate

planning, the farm households have to keep themselves in close contact with several types of institutions for obtaining necessary credits and services as well as for depositing their savings and for banking services. Table 26 gives average outstanding savings and borrowings per household.

Table 26 : Outstanding Savings and Borrowings per Farm Family surveyed by type of Financial Institution (as of March 31, 1991).

(Unit : Yen 1,000)

<i>Type</i>	<i>Value</i>	<i>% distribution</i>
SAVINGS		
<i>Deposits with:</i>		
Agricultural cooperatives	7,878.7	34.4
Postal savings	2,098.8	9.2
Banks, credit associations etc.	5,501.4	24.0
Sub-total	15,478.9	67.6
<i>Instalment for:</i>		
Mutual insurance handled by agricultural cooperatives.	2,574.5	11.3
Postal life insurance & annuities	1,299.3	5.7
Life insurance & others	2,762.2	12.0
Sub-total	6,636.0	29.0
Advancement	111.0	0.5
Securities	662.6	2.9
Account receivable	64.9	0.3
Total	22,878.5	100.0
BORROWINGS:		
<i>From</i>		
Agricultural cooperatives ⁹ ll	923.1	43.0
Government fund	380.8	17.7
<i>Other sources :</i>		
Banks, credit assns,	540.4	25.2
Postal & other insurance	21.7	1.0
Individuals	29.9	1.4
Other bodies	249.8	11.6
Sub-total	841.8	39.2
Account payable	149.3	7.0
Total	2,145.7	100.0

Source : Ministry of Agriculture, Forestry and Fisheries (MAFF)

Note : * Includes place of employment, mutual financing association, pawnshops, and moneylenders.

Although the varied sources of funding necessitates cooperative member's links with several financial institutions, his major financial transactions are with the multi-purpose cooperative. Table 27 gives the percentage shares of a farm household with different types of institutions.

Table 27 : Percentage Shares of "individuals" in outstanding deposits and loans, by type of financial institution as at the end of selected fiscal years 1970 to 1990.

		<i>Agricultural Coops</i>	<i>City banks</i>	<i>Regional banks</i>	<i>Mutual laons & saving banks</i>	<i>Creditasso- ciations</i>
Deposits:	1970	99.1	33.8	47.6	54.1	68.8
	1975	99.0	36.6	51.8	56.1	70.2
	1980	98.4	38.2	53.9	60.3	73.6
	1983	98.4	38.7	53.1	60.7	73.9
	1990	97.4	40.4	50.0	50.2	69.1
Loans:	1970	91.2	3.9	5.9	6.7	10.2
	1975	86.6	7.8	10.7	13.7	16.7
	1980	86.9	10.9	14.7	15.6	21.7
	1983	84.8	9.8	12.6	15.8	20.9
	1990	89.7	20.3	15.6	23.4	24.4

Source: Bank of Japan

Note : Loans from credit associations exclude loans to other financial institutions.

Multi-purpose Coops as Banks

All the multi-purpose cooperatives function as banks in their respective areas. This has reduced the dependence of farmer-members on other financial institutions for their banking services. Although they carry out normal banking functions, including clearing house activities, they possess certain distinct features not commonly found in general banking institutions. These are :

1. Multi-purpose Cooperatives provide credit largely to individuals;
2. Deposits and loans form larger percentage of the total business shares than other financial institutions;
3. A larger percentage of deposits are represented by time deposits and similarly larger percentage of loans are long-term loans; and
4. Because of marked seasonal variations, the scope of their general banking services is restricted to some extent.

The following five tables show the national average figures of multi-purpose cooperatives in respect of officials, employees, share capital, turnover, market analysis for major business indicators, regarding pattern of facilities, including profits and financial profile.

**Table 28: Major Figures per Multi-purpose
Agricultural Cooperative Society**

Mar. 1990

		persons	TOTAL
Membership	Regular members	1,493.0	
	Associate members	788.1	2,281.2
Elected officials	Directors (Board of)	15.1	
	Out of which full-time	1.4	
	Auditors	4.1	19.2
Employees	General Managers	0.8	
	Farm Advisors	5.2	
	Better-living Advisors	0.8	
	Other employees	73.0	79.8
Share Capital (¥1,000)		293,881	
Turn over	Marketing	1,674 million yen	
	Supply	1,324	"
	Balance of Loan advanced	3,431	"
	Balance of Saving received	12,991	"

**Table 29: Management Analysis of Multi-purpose Agri. Coops
(NATIONAL AVERAGE)**

	1981/82	1982/83	1984/85	1988/89
Admin. Costs against Gross Business Profit (%)	89.9	87.9	84.3	82.8
Personnel Exp. against Gross Business Profit	67.5	66.4	62.5	60.7
Labour Productivity (¥1,000) (Gross Business Profit divided by no. of officials and employees)	5,472	5,904	6,647	7,487
Wage Level (¥1,000) (Personnel Exp. divided by no. of officials and employees)	3,553	3,766	4,152	4,551
Societies with Profit (%)	98.6	98.6	99.1	98.8
Societies with Loss (%)	1.4	1.4	0.8	1.2

Table 30: Types of Facilities for Joint use owned by Multi-purpose Agri. Coops.

Facilities for production activities	Facilities for home-life improvement activities
Large size tractors	Meeting hall
Combines	Living Improvement Centre
Power sprayer	Consumer goods stores
Rice Centre	LPG service facilities
Country Elevator	Petrol stations
Grading Centre	Rice polishing facilities
Farm Machinery Workshop	Flour mill
Fertilizer mixing plant	Noodle processing plant
Joint nursing house	Simple food processing plant
Livestock breeding centre	Baking plant
Joint transportation facility	Joint cooking facilities
Warehouse	Wire broadcasting studio
Chicken processing centre	Barbershop/Beauty parlor
Meat processing centre	Resort facilities
	Sports facilities
	Library
	Wedding/Funeral facilities
	Mobile clinics, hospitals
	Rehabilitation centre

Table 31: Agricultural Cooperative Hospitals Owned & Operated by Pref. Welfare Feds of Agri. Coops. as of April 1989

Number of Agri. Coop Hospitals	116
Number of Clinics	53
Mobile Clinics	170
Number of Beds	36,785
Doctors (full-time)	2,600
Nurses	16,228

Table 32: Agricultural Cooperative Society for Fiscal Year 1989

Unit: ¥1,000

	Credit Dept.	Mutual-Insurance Dept.	Supply Dept.	Market'g Dept.	Ware-House Dept.	Processing Dept.	Other Depts.	Guidance Dept.	Admn. Dept.	Total	
Business Income (A)	1,078,909	186,431	1,566,276	1,516,604	13,754	83,079	72,790	14,029		4,531,872	
Direct Business Exp. (B)	653,194	24,031	1,349,805	1,467,086	3,560	56,847	57,329	30,122		3,641,974	
Business Gross Profit (C=A-B)	425,715	162,400	216,471	49,518	10,194	26,232	15,461	Δ 16,093		889,898	
Business Admn. Costs (D)	170,244	46,746	195,387	40,257	9,718	23,606	12,241	40,793	162,383	701,375	
Business Loss & Profit (E=A-B-D)	255,471	115,654	21,084	9,261	476	2,626	3,220	Δ 56,886	Δ 162,383	188,523	
Interests receivable (F)			3,247	3,105	41	126	419	183	771	7,892	
Interests payable (G)			442	888	597	1,363	498	235	1,064	5,057	
Interests on internal fund (H)	Δ 19,960	11,152	Δ 14,691	Δ 5,452	Δ 1,913	Δ 3,157	Δ 2,194	Δ 1,017	37,231		
Non-business profit (I)	35,697	1,204	3,488	2,243	57	559	996	437	17,636	62,317	
Non-business exp. (J)	30,850	185	2,335	1,912	23	3,560	550	308	7,500	47,223	
Admn. Costs to be allocated (K)	43,131	16,452	30,090	8,033	2,287	5,600	3,187	4,530	(115,310)		
Guidance Exp. to be allocated (L)	17,116	7,416	15,277	15,716	1,736	3,522	1,573	(62,357)			
Tentative Net Profit (M=E+F-G+H+I-J-K-L)	178,111	103,957	Δ 35,016	Δ 17,392	Δ 5,982	Δ 13,891	Δ 3,337	0	0	206,452	
Business Tax (N)	8,978	4,768	151	183	27	105	245	0	0	14,457	
Local Tax (O)	39,111	21,317	935	837	127	439	939	0	0	63,705	
Net Profit (P=M-N-O)	130,022	77,872	Δ 36,102	Δ 18,412	Δ 6,136	Δ 14,435	Δ 4,521	0	0	128,290	
										Special Profit (Q)	40,249
										Special Loss (R)	41,554
										Surplus Fund of Current Year (S=P+Q-R)	126,985

Other Banking Services

The agricultural cooperatives provide for their members a variety of other services in order to assist the individual members in settling their routine financial transactions. Some of these special services are as follows:

1. Bills payment from out of deposits of members free of charge. The claimants have to pay a nominal charge against the larger expenses they incur for collecting the bills;
2. Salaries received by farm household members are directly credited to members' accounts without their having to receive cash payments or cheques;
3. A General Account System facilitates the combination of savings account and the time deposit account for facilitating payment of overdraft amounts from the deposit account;
4. Special long-term loans for housing and education are given to meet their specific needs. A 'clover' type of loan is made available to give the member the freedom to use it for any type of expenditure; and
5. On-Line System: A computer network system links the prime computer in the head office of the bank to all the terminals installed in agricultural cooperatives and their branches. This facility enables account holders from any place to deposit and withdraw money from any place on production of the book or the identity card. Also, the cooperatives do not have to maintain any ledgers or books for this purpose. The central computer does all the calculations and feeds the information on demand at any terminal.

Prefectural Credit Federations (PCFAC)

A Prefectural Credit Federation of Agricultural Cooperatives (PCFAC) is formed in each of the 47 prefectures of Japan. Affiliated members of the PCFAC are the agricultural cooperatives, economic federations, other business federations and the mutual insurance federations in respective prefectures. The main activities of the credit federations are to accept deposits from its members, advance loans and process government funds for loaning and invest surplus funds in accordance with the Standard Financial Management Ordinance.

Deposits

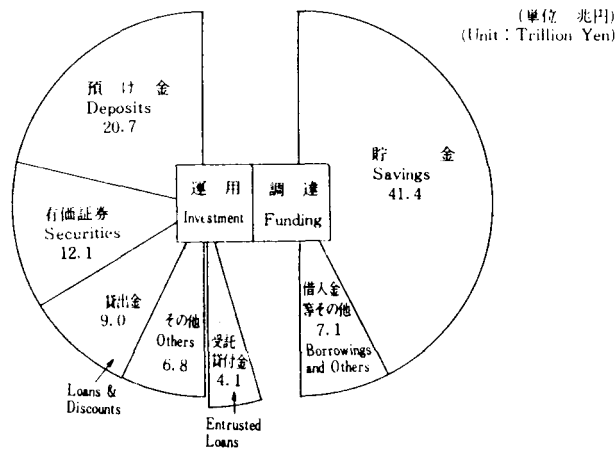
Term deposits from agricultural cooperatives constitute the bulk of PCFAC funding. These deposits constitute 90% of the total received by them. The remaining 10% come from the mutual insurance federations. They generally do not rely on loans for raising resources due to the

favourable financial positions of their affiliates. About half of the total surplus of credit federations is in the form of term deposits in the Norinchukin Bank and the rest are invested in other institutions.

Loans

A greater part of PCFAC funds are advanced as loans to affiliated agricultural cooperatives although the demand for such loans is declining year by year compared to the rising trend in deposit amounts from these cooperatives. Also, a large part of the funds are lent to mutual insurance federations, economic federations and other business federations. The loans to industries related to agriculture are also considered as loans to cooperative sector. There is also increasing trend to advance loans to activities related to cooperative societies; to public utilities, municipalities, public financial institutions and others. If and when an agricultural cooperative is unable to meet the loan demand of an individual member due to the large size of such loan, the credit federation can directly advance the loan to the individual member. Even loans to non-members are given within certain limits. The following graph gives the funding and investment of prefectural credit federations:

Chart 7: Funding & Investment of Pref. Credit Feds. of Agri. Coops. As of March 31, 1991



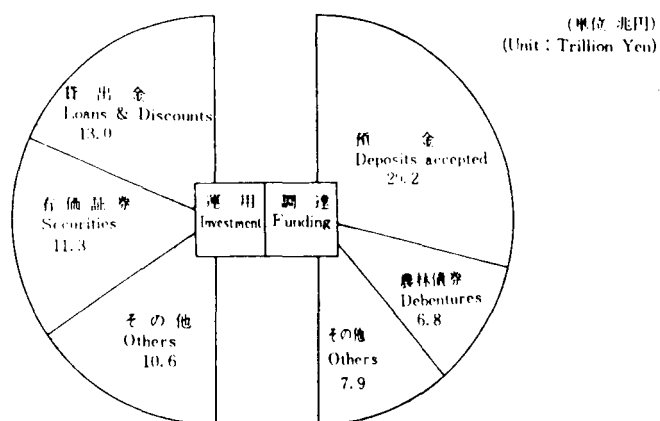
The Central Cooperative Bank for Agriculture and Forestry (Norinchukin Bank)

Originally, the Bank was established under a special act during the pre-war days. This was the Industrial Cooperative Central Bank of 1923. The Bank was established with fifty per cent government share capital, but in 1959 the bank had returned the entire government share contribution. The Bank was reorganized during the Second World War period as the Central Cooperative Bank for Agriculture and Forestry (Norinchukin Bank). A second revision took place in 1973 under which the constitution of the Bank was made more democratic and the scope of its business activities was expanded. At present the Bank is in fact the apex financial institution mainly for agricultural cooperatives and for agriculture related activities, for fishery cooperatives, forestry cooperatives and other related organizations such as the Land Reform Association, Agricultural Insurance Association and Salt Processing Association.

Bank Resources

Deposits from the prefectural credit federations constitute the bulk of Bank's resources. In addition, the Bank issues debentures of two different kinds. One is a five year coupon debenture and the other a one year discount debenture. This enables the Bank to maintain its liquidity ratios for meeting the seasonal demands for agriculture and related activities of its affiliates. This also helps the Bank to tap resources from non- agricultural sector. Because of its wide-ranging activities, the Bank plays an important role in the country's financial market. The following graph gives the funding and investment position of Norinchukin Bank:

Chart 8: Funding & Investment of The Norinchukin Bank
As of March 31, 1991



Lending Operations

Because of the comparatively sound position of its affiliates, the volume of loaning operations of the Bank has been on the decline during the last two decades. However, recently the demand has picked up again due to the introduction of several new projects for modernization of agriculture such as structural reforms of agriculture, modernization of farming, creation of new facilities, financial needs of the newly reorganized agricultural communities, funding of the marketing of rice in the open market, and financing of projects in mountainous regions, fishing villages and special agricultural needs of such areas. Hence, new investment opportunities have provided fresh outlets to the Bank for utilizing its surplus resources. Despite these outlets, the Bank has sizable amounts of surplus funds which it lends to industries related to agriculture, forestry and fishery and invests in government securities and bonds as well as certain non- agricultural industries on a selective basis. This has to be done in order to ensure the fruitful utilization of surplus funds for the benefit of its affiliates.

Agricultural Credit Through Government Agencies

Government of Japan views agriculture as one of the most vulnerable sectors affected by factors on which the farmers have little control. It has therefore initiated several programmes to assist the farmer and agricultural cooperatives in obtaining soft loans for various purposes. The justification for such a policy stems from the fact that farming in Japan is essentially a small scale operation. Also, agriculture is subject to vagaries of nature. The credit needs of the farmers are rather small and they usually need long-term development credit; however, such credit is not given by the commercial banks. In addition to this, the farmers need low interest loans for development purposes. Government of Japan has made a significant contribution in promoting various schemes which have helped steady and sound growth of agricultural cooperatives. Despite the gradual rising standard of living among farm households, the government continues to assist farm development through several programmes. The assistance is taken to its logical conclusion through price guarantee schemes and subsidies in marketing the farm produce. Considerable assistance is channelled for agro-processing units in the cooperative sector to accelerate the process of adding value to farm products. The information related to government assistance in this chapter concerns mainly to government sponsored loans and interest subsidies.

Major Forms of Government Credit

The loans and interest subsidies are channelled either through government created institutions or through cooperatives and private sector credit institutions. These credits are given in the following four ways :

1. Agricultural loans given through the Agriculture, Forestry and Fisheries

Finance Corporation(AFFFC); The AFFFC was established by the Government in 1953.

2. Interest-free loans given by the national government and the prefectural governments.
3. Loans for modernization of agriculture and disaster relief loans; and
4. Specially designed package loans as well as loans given to meet specific development needs of a particular area.

In addition to these channels, many prefectural governments have initiated their own programmes for such loans. The following tables give outline of government programme loans and interest subsidy ratios:

Table 33: Outline of Government Programmed Loans

	AFFFC Loans	Agriculture Modernization loans	Agriculture Improvement loans	Natural Disaster Relief loans
Source of Fund	Government	Agri Coops	Government	Agri.Cooperatives
Loan Agency	AFFFC	Agri.Coops	Prefectural Govt	Agri.cooperatives
Term	Long	Medium,Long	Medium, Short	Medium, Short
Interest	Low	Low	Free	Low
Purpose	Maintenance & Promotion of Agri.production	Modernization of Agri.machinery & facilities	Adoption of New Technologies	Relief to farmers for damages by natural disaster

Source: Shiro Futagami 'Facts on Organisation and Activities of Agricultural Co-operatives', Japan.

Table 34 : Terms of Major Loans (As of February 2, 1989)

Kinds of Loans		Interest Rate (per annum)	Max. Loan period (Terms of Deferment)
Land Improvement	Subsidized	4.5-5.0%	25 (10) years
	Un-subsidized	3.5-4.2%	
Farmland Purchase		3.5-4.2%	25 (10) years
Compr. Farm Improvement		4.2%	25(10) years
Structural Improvement Promotion	Subsidized	5.0%	25 (10) years
	Unsubsidized	3.5-4.2%	
Owner-Farmer Maintenance		4.2%	20 (3) years
Joint-use Facilities		4.7-5.65%	25 (3) years
Specific Facilities	Disaster	4.2-4.85%	15 (3) years
	Restoration	3.0-4.85%	
Wholesale Market Modernization		5.0-5.85%	10 (2) years
Dairy Plant Facilities		5.65%	12 (3) years

Shiro Futagami, "Facts on Organisation and Activities of Agricultural Co-operatives in Japan".

Interest Subsidy

In case of direct government finance, the interest-rate is mostly subsidized. The government also gives interest subsidy to AFFFC to sustain the losses incurred from low interest loans to farmers. For loans channelled through other financial institutions and cooperatives, a part of the interest is subsidized.

The table No 35 on page 83 gives details on various forms of government loans and their interest components.

Coverage of Risks due to Losses and Defaults

Besides the elaborate schemes of loans and subsidies to help develop agriculture, the Government has introduced insurance schemes to compensate the farmer for losses arising out of crop failures due to various reasons and also losses due to failure of contract with various organizations in respect of deposits. One of the schemes also extends to cases of writing off bad debts from the mutual aid loans given to agricultural cooperatives by the prefectural credit federations. Following are the three major schemes covering various risks :

Disaster Compensation Scheme for Farmers

The Agriculture Disaster Compensation Law was passed in 1947. The two earlier laws incorporated in this Law were the Livestock Insurance Scheme started in 1929 and the Agricultural Insurance Law enacted in 1939. The scheme is compulsory to all the farmers who cultivate more than the minimum standard piece of land prescribed by the prefectural governor. The standard so prescribed is one third of a HA for paddy and four-tenth of a HA for wheat and barley.

Premium Rates (National Average)

Paddy field Rice : Yen 3,911 out of which the farmer pays Yen 1,600 (41%) and the rest viz., Yen 2,311 (59%) is contributed by the State.

Upland Rice : Yen 18,620 out of which the farmer pays Yen 5,992 (32%) and the remaining Yen 12,628 (68%) is paid by the State.

Wheat and Barley : Yen 13,750 out of which the farmer pays Yen 4,515 (33%) and rest viz. Yen 9,235 (67%) is contributed by the State.

Organization : City, town and village - Agricultural Mutual Aid Insurance Association.

Table 35: Gist of Major Government Agricultural Loan Programs

<i>Program</i>	<i>Source of Funding</i>	<i>Main Objects</i>	<i>Annual interest rates (%)</i>	<i>Repayment Period (Grace period (Years))</i>	<i>Ceiling of Loans to individuals (₹ million)</i>
AFFC** Loans	Government	Farming needs for which private sector financial institutions find difficulty in lending (eg., land improvement such as land consolidation and farm road construction)	3.5-7.85	15-25 (3-10)	1-23
Agricultural improvement Loans	Government	Introduction of new technologies and fostering of farm successors	Interest-free	3-7 (1)	5.5
Agricultural Modernisation Loans	Private sector	Funds required to modernise farming (e.g., facilities, farm machinery, livestock, etc.)	Not more than 5.0-6.0	5-20 (2-7)	6
Natural disaster Relief Loans	Private sector	Damage caused by natural disaster	3.0-6.05	3-7	2-6
Area-specific agriculture restructuring Loans	Both Government & private sector	Various needs of farmers and their groups in executing government agricultural policy	3.5-6.0***	5-25	2-10
Package Loans	Both Government & private sector	Farmers who aspire to become economically viable in farming	...	Not more than 25 (10)	23

Note : * Unless specifically sanctioned.

** Agriculture, Forestry and Fisheries Finance Corporation.

*** Except for working capital.

Prefecture - Federation of Agricultural Mutual Aid Insurance Associations.

National - Agricultural Mutual Aid Re-insurance Special Account of the Central Government.

Contract : In case of insurance per farming lot, insurance money is paid when the damage to the insured farming lot exceeds 30% of standard yield. In case of total farming lots, insurance money is paid when the damage to the insured farming lots exceeds 20% of standard yield (paddy rice).

Basis for payment: Unit insurance money (accepted yield 70% of standard yield) - actual yield. In case of paddy rice it is 80%.

Note : The standard rates are reviewed every three years by the Ministry of Agriculture, Forestry and Fisheries (MAFF) on the basis of actual damage suffered during a number of specified years. The standard rates fixed by the individual mutual aid insurance association must not be lower than the rates fixed by MAFF.

Agriculture and Fishery Cooperative Deposit Insurance

The purpose of the scheme is to provide safeguards for depositors' money kept with the cooperatives. The scheme is operated through the Agricultural and Fishery Cooperative Deposit Insurance Corporation established by the government in 1973 under the Law for Agricultural and Fishery Cooperative Deposit Insurance. According to this Law a tripartite insurance contract is made among the Corporation, the agricultural and fishery cooperatives which handle the contract and the depositor-members.

The capital base of the Corporation is established with contributions from the Government (75 million); Bank of Japan (75 million); The Central Cooperative Bank for Agriculture, and Forestry (Norinchukin) (75 million); Prefectural Credit Federations of Agricultural Cooperatives (67.5 million); and the Prefectural Credit Federations of Fishery Cooperatives (7.5 million). In 1978, the total capital of the Corporation was Y300 million.

In case of incidents such as the suspension by a cooperative of repayment of deposits, dissolution of a cooperative, bankruptcy of a cooperative, etc., the Corporation will pay the insurance money direct to the depositors. Maximum amount of insurance money to be paid to each depositor is limited to three million yen.

Premia

Every participating cooperative is required to pay to the Corporation an amount equivalent to 0.006% of the total amount of deposits held by it on 31st of March every year.

Mutual Aid Scheme for Agricultural Coop. Credit Organizations

This is a country-wide scheme set up by agricultural cooperatives as early as 1964. Under the scheme mutual aid deposits are organized for raising resources; then in case of need, mutual aid loans are provided. Mutual aid reserves are kept to write off bad debts and guarantees are provided through the Norinchukin Bank.

Mutual Aid Deposit

Each agricultural cooperative deposits 10% of the total deposits it holds on 31st of March every year in the prefectural credit federation. The prefectural credit federation in turn deposits 10% of its deposits in the Norinchukin Bank in the same manner. The accumulated money constitutes the Mutual Aid Deposit.

Mutual Aid Loan

In case an agricultural cooperative is unable to meet the depositors' demand for withdrawal of deposits, the prefectural credit federation makes an emergency loan to the cooperative to enable it to honour the demand for deposit withdrawal. This loan is repayable in one year. The concerned cooperative is then asked to prepare a reconstruction plan and if the plan is approved by the credit federation and the Norinchukin Bank, the emergency loan is converted into a rehabilitation loan repayable within five years. The maximum amount of these loans is either 40% of the total deposits held by the cooperative or four times its mutual aid deposit.

Mutual Aid Reserves

This part of the scheme is to build up reserves to wipe off bad debts arising out of the mutual aid loans. Under the scheme, each prefectural credit federation will deposit a sum equivalent to 0.01% of the balance of deposits held by its member cooperatives on 31st March of previous year. In the same way the amounts deposited with the Norinchukin Bank will be deposited by it with the National Reserve Fund.

When an agricultural cooperative takes a mutual aid loan from the prefectural credit federation, the Norinchukin Bank will guarantee the repayment subject to a maximum of 70% of the principal amount and the interest thereon.

Problems and Challenges in Agricultural Credit

- I. It is widely accepted in Japan that the agricultural credit cooperatives, led by the Norinchukin Bank, play a very important role in the national economy and to a great extent they influence the trends in the financial market. As of March 31, 1984 the combined funds of all cooperative financial institutions at the three levels amounted to no less than Yen 50

trillion. However, with the ever-increasing aggressive business policy pursued by commercial banks, the cooperatives are facing a severe competition in keeping their share in the savings and loaning business. This problem is likely to be more acute in view of the financial deregulation proposed to be introduced by the government by removing the restrictions on interest rates to be paid on deposits. Not all the cooperatives could compete effectively in this respect against the giant banking institutions;

2. With the growing percentage of non-agricultural income within the farm households, the salary earning members are not hesitating to use the commercial banks which are nearest to their place of working. This is gradually reducing the percentage of surplus from farm households flowing towards the cooperative;
3. With the introduction of new projects in Japanese agriculture, the investment needs of the farmers have increased. The cooperatives are not able to finance such development projects as they are unable to provide long-term finance needed for such development and modernization. The deposit amounts accepted by the cooperatives are mostly for shorter duration;
4. As the government intends gradually to reduce subsidies in rice marketing and other areas, the cooperatives will have to step in and support their members in balancing their economies through credit and marketing programmes;
5. The Norinchukin Bank faces severe competition in the financial market in issuing debentures to raise long-term funds for investment within the cooperative movement; and
6. Since the introduction of computers, very severe competition has started among financial institutions to introduce innovative services. It is not easy for the cooperatives to keep pace with such fast moving technological innovations which commercial banks are able to do with the help of vast resources at their disposal.
7. The government has recently deregulated the banking industry's lending and borrowing rates. The co-operatives are now facing very strong competition from major financing institutions in respect of mobilisation of deposits and in promoting profitable investments for surplus funds on behalf of the farmer members of agricultural cooperatives.

Chapter Nine

Cooperative Purchasing (Supply), Marketing and Insurance

Purchasing (supply) and marketing together constitute the major economic activities of multi-purpose cooperatives in Japan. During the first few decades of post-war cooperative activities, marketing was lagging far behind the credit and purchasing business. Because of the risk element involved in it, the cooperatives had kept marketing as a low priority activity with the result that bulk of the agricultural produce reached the market without cooperative intervention. Another factor responsible for this apathy was the government subsidized rice marketing scheme in Japan. As rice was the main agricultural commodity and as it was easily marketed at a favourable price through government intervention, the incentive for entering a competitive market for other produce did not exist. There was, however, considerable cooperative marketing activity in different parts of the country. But compared to the total volume of purchasing (supply) activity, it was at a low percentage level.

Organizational Structure

Until 1972, two separate organizations functioned in Japan for purchasing (supply) and marketing activities within the agricultural cooperative movement. While this specialization existed at the national level, the marketing and purchasing activities at the prefectural and primary level were handled by a single organization, viz., the multi-purpose cooperatives at the primary level and the prefectural economic federations for agricultural cooperatives at the prefectural level. At the national level the National Purchasing Federation of Agricultural Cooperatives (ZENKOREN) had made rapid strides in expanding purchasing business in the country and abroad, the National Marketing Federation of Agricultural Cooperatives (ZENHANREN) had remained behind in the task of covering a sizable share of the market.

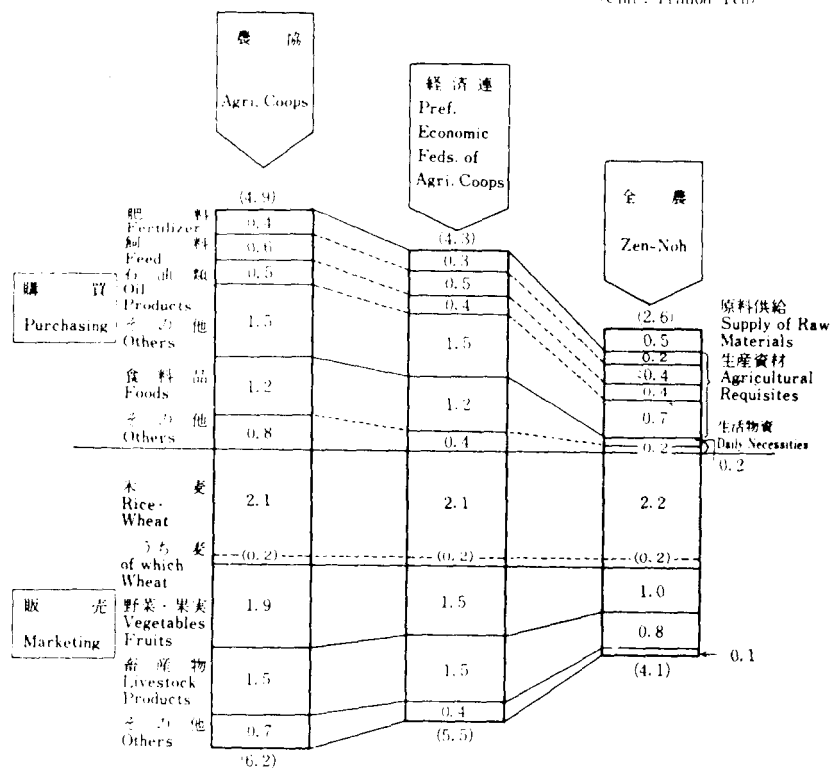
The two national level organizations were later merged into one and on March 30, 1972 a new organization called the National Federation of Agricultural Cooperative Associations (ZEN-NOH) was established under the Agricultural Cooperative Society Law. The merger facilitated the combining of resources and manpower of the two previous cooperatives to face the highly competitive market in Japan for ensuring adequate and more

importantly timely supply of agricultural inputs and daily necessities and for the efficient marketing of agricultural produce to the best advantage of the cooperative members. The following graph shows the total marketing and purchasing business of agricultural cooperatives during 1990:

Chart 9: Outline of Marketing and Purchasing Business of Agri Coops of Three Levels

—平成1事業年度 Business Year, 1989—

(Unit: Trillion Yen)



ZEN-NOH

In 1985, ZEN-NOH had a total membership of 4,108 agricultural cooperatives. These included 4,042 primary level agricultural cooperatives, 48 prefectural economic federations of agricultural cooperatives, 15 specialized federations of agricultural cooperatives and 3 national federations of agricultural cooperatives. For example, the paid-up capital of ZEN-NOH in October 1984 amounted to Y20.3 billion (US\$ 84.8 million). The business turnover in fiscal 1985 was Y7.47 trillion (US\$31.1 billion). It has established over 160 specialized companies and organizations for specialized functions in Japan as well as in other countries. The number of employees exceeds 4,000.

During recent years, ZEN-NOH has emerged as one of world's largest importers of raw materials for animal feedstuff and the country's major distributor of farm products and consumer necessities. For this purpose ZEN-NOH owns large scale facilities in the country and abroad including a mine, grain elevators, vessels and related infra-structure.

Large Establishment

In order to organise and service various activities in the country and abroad, ZEN-NOH maintains a huge establishment composed of administrative offices, technical divisions and infra-structural facilities. Besides the President, two Executive Vice-Presidents, and six Managing Directors, it has three major divisions, viz., Rice and Wheat Division, Horticulture Division and Livestock Division. The activities are divided into various departments, viz., Auditors' Secretariat, Directors' Secretariat, General Planning Department, General Affairs Department, Personnel Department, Accounting Department, Systems and Data Processing Department, Agricultural Research and Planning Department, Agricultural Technical Center, Farm Produce Marketing Promotion Department for Mass Consuming Areas, Rice and Wheat Department, Semi-controlled Rice Department, Horticulture Department, Horticulture Marketing Department, Farm Produce Department, Livestock General Control Department, Feed Department, Livestock Materials Department, Livestock Products Marketing Department, Dairy Department, Fertilizer and Pesticide Department, Facilities and Materials Department, Agricultural Machineries Department, Vehicles and Fuel Department, Consumer Goods Department. The graph on the following page shows the total volume of ZEN-NOH's business during 1989 and 1990.

Purchasing (Supply)

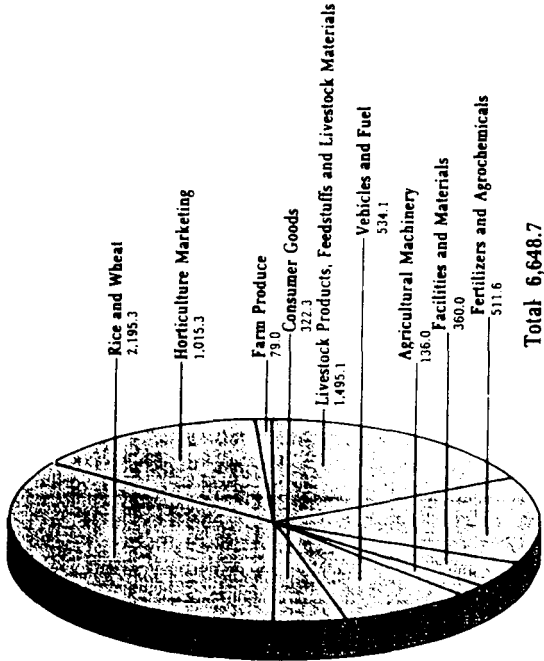
The main purpose of organizing the supply of agricultural inputs and consumer necessities to farm households is to ensure timely delivery of production inputs and securing of quality household items at reasonable

Chart 10: Business Performance

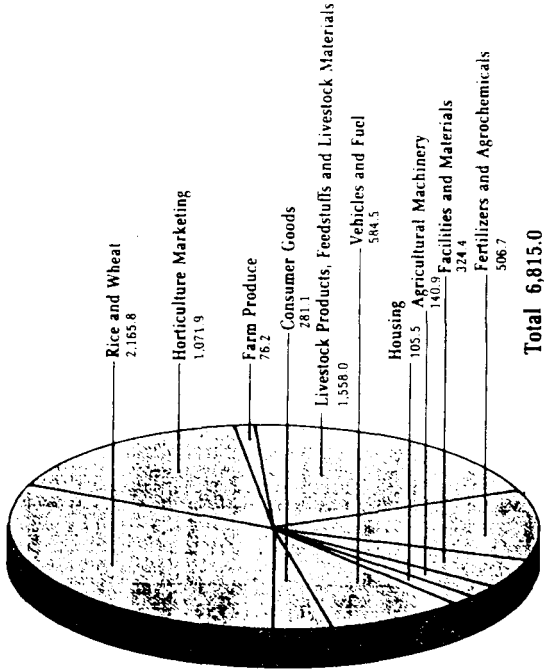
Turnover by Category

Years Ended June 30, 1989 and 1990
(Billions of Yen)

1989



1990



prices. To ensure this, the cooperatives at all levels assess in advance the entire needs of farmer members and their families and prepare a time-bound programme of purchasing and delivery for the entire country. The basic formula for the entire planning is based on two major systems viz; advance orders and account pooling system.

Enlargement of Demand

Agricultural cooperatives have developed an elaborate system of advance planning to ensure timely supply of all inputs to their members. They facilitate the creation of additional demand for supplies through the cooperative network by giving detailed information on all products and by demonstrating the advantages of products secured through the cooperative network. In other words, they make available to the members the information which can help farm households to take their own decision. The ever changing pattern of demand from members greatly influences the inventory priorities. Also, due to the reduction in the use of chemical fertilizers and agro-chemicals, new activities such as gas stations are on the increase.

Advance Orders

The advance orders are collected on the basis of production plans and household budgets prepared by farm households on the basis of guidance and information supplied by staff members working for the cooperative. These orders are pooled at various levels according to the availability of products at each level. For example, perishable products and some processed foods may be available at the primary cooperative level. Some of the farm inputs and household goods may be available from manufacturers at the prefectural level and the rest may have to be ordered through the national federation which has manufacturing and bulk delivery contracts with various companies. This process of advance ordering facilitates the timely negotiations with manufacturers for securing favourable price reductions and preparation of delivery schedules.

Account Pooling System

The countrywide arrangements for delivering inputs and household items required a pricing system which is both rational and fair to the end-user. For this purpose, the ZEN-NOH, in cooperation with agricultural cooperatives at all levels, has developed the account pooling system through which a common pricing policy is followed for identical products even though the buying in prices in different regions may vary according to the source of its supply. While doing so the cooperatives have to ensure that on the whole the members are not required to pay more than what they would have paid if the prices had varied from region to region and from cooperative to cooperative.

ZEN-NOH's Role in Purchasing

Zen-Noh maintains a large inventory of items required by farm households both for production and for consumption. Following are the major category of items either bulk-purchased or manufactured by ZEN-NOH and supplied to agricultural cooperatives at all levels.

	<i>ZEN-NOH's Share</i>
1. Chemical and organic fertilizers	: 71.6%
2. Agro-chemicals	: 51.0%
3. Animal Feedstuff	: 35.0%
4. Agricultural Machinery	: 23.0%
5. Automobiles for Rural Areas	: 12.5%
6. Petroleum Distributed in Rural Areas	: 56.6%
7. Liquid Petroleum Gas for Rural Areas	: 35.9%
8. Cartons for packaging farm produce	: 60.4%
9. Vinyl Sheets for Greenhouses	: 18.7%
10. Consumer Goods	: 4.0%

Sources of Supply

The estimated requirements of farm households are classified and grouped into various categories for onward transmission to the concerned suppliers or manufacturers. Following are the main sources of supply for the above listed items :

1. *Suppliers and Manufacturers:*

On the basis of negotiated contracts, ZEN-NOH orders the supplies from reputed suppliers by prescribing the quality and specifications as needed by farm households. If ready supplies are not available, they are manufactured on the basis of agreed specifications. Through this process, ZEN-NOH secures a sizable reduction in the prices of items supplied.

2. *Raw Material Supply to Manufacturers:*

In several cases, ZEN-NOH supplies imported or locally available raw materials to the manufacturers in order to obtain quality and safe products for cooperative members. This process also ensures very reasonable pricing structure for the goods purchased because only the processing or manufacturing costs need to be paid to the manufacturers.

3. *ZEN-NOH Managed Units:*

In certain cases, ZEN-NOH invests in companies for employing surplus cooperative funds and for ensuring steady supplies of inventory items.

In such a situation, ZEN-NOH directly participates in their management so that it is possible to represent the opinion of primary cooperatives in the decision-making process.

Imports from Overseas

Japan does not have most of the raw materials needed for producing chemical fertilizers, agro-chemicals, animal feedstuff and petroleum products as well as L.P.Gas. She has, therefore, become world's largest importer of such raw materials. The costs of most of these materials depend on fluctuations in international market situations and on vagaries of nature. For example, petroleum product supplies are dependent on cartel manoeuvring and pricing; the raw materials for feed viz., maize, sorghum, lucerne grass, tapioca, molasses and fish products depend upon agricultural and fishery production in different countries. In order to ensure stability in the supply of raw materials, ZEN-NOH has embarked upon a programme, through various agreements and subsidiaries, for maintaining a steady supply position in respect of almost all raw materials. This policy entails long-term planning, huge investments, protracted negotiations with governments and suppliers and building up an infra-structure to maintain a steady and timely flow of imported items so that the processing and manufacturing units in the country are not starved of the raw materials for their time-bound production activities.

Overseas Activities and Subsidiaries

The international activities were started during the early sixties by ZEN-NOH's predecessor organizations, viz., the ZENKOREN and ZENHANREN. At present these activities have blossomed in several directions. Following are the major overseas activities:

1. Direct Imports:

Direct trade relations are maintained by ZEN-NOH and its subsidiaries for securing supplies of needed materials. This is done by direct negotiations with cooperative trading organizations as well as private companies. In certain cases, ZEN-NOH or its subsidiary UNICOOPJAPAN enters into long-term contracts with cooperatives or other companies for supplies and if necessary technical or financial assistance programme is built into such an agreement. For example, during the Sixties, ZEN-NOH and the Agricultural Cooperative Federation of Thailand had a long-term trade and aid agreement under which technical assistance was provided for the production of maize in Thailand and a targeted quantity of maize was agreed to be exported to Japan. The agreement also facilitated the setting-up of a Chemical Company as a joint venture for the manufacture of agricultural chemicals for the use of maize growing farmers in Thailand. ZEN-NOH has now trade relations with over 30 countries.

2. Subsidiaries:

Scores of subsidiary companies have been established by ZEN-NOH in Japan and overseas for various purposes. These are:

MAJOR AFFILIATED COMPANIES

Name of Company	Business	Paid-in Capital*
UNICOOPJAPAN	International trading of fertilizers, feedgrains and feed ingredients, and other agricultural materials	962
A CO-OP LINE Co., Ltd.	Transporting and warehousing	825
ZEN-NOH UNICO AMERICA CORP.	International trading of feedgrains and ingredients, and fertilizer materials as well as other pertinent operations	\$4,200,000
ZEN-NOH Kanzai K. K.	Residential renting and management, handling of insurance, and on-site work	233
ZEN-NOH Information Service, Ltd.	Computerized calculation and paper work on consignment	100
Tokyo Ishikawa Kyodo Foodgrains Co., Ltd.	Pound-polishing and sales of rice	600
ZEN-NOH Tokyo Flower Distribution Center, Ltd.	Sales of fresh flowers and floricultural materials	50
ZEN-NOH Silo Co., Ltd.	Receiving and storage of feedgrains and feed ingredients	1,300
Scientific Feed Laboratory, Ltd.	Manufacture of feed additives, formula feed, pharmaceuticals for livestock	100
ZEN-NOH GRAIN CORP.	Buying, selling, and outshipping of feedgrains and soy beans and operation of export elevator	\$1,749,000
ZEN-NOH Chicken Foods Co., Ltd.	Processing and sales of broilers	400
ZEN-NOH Berth Corp.	Receiving, storage, and delivery of fertilizer materials	800
ZEN-NOH Fuel Terminal Corp.	Storage and delivery of petroleum and LP gas	2,000
Kumiai Rubber Products Co., Ltd.	Manufacture and sales of footwear and rainwear for farming	100
ZEN-NOH Wholesale Co., Ltd.	Processing and sales of milk, fruit juice and dessert dishes	1,924
ZEN-NOH Foods Co., Ltd.	Processing, preparation, and sales of agricultural products as well as lunch catering and home delivery of meals	700
Higashi Nihon Kumiai Feed Mill Co., Ltd.	Manufacture of formula feed	800
Tokai Kumiai Feed Mill Co., Ltd.	Manufacture of formula feed	1,000
Kinki Kumiai Feed Mill Co., Ltd.	Manufacture of formula feed	400
Minami Nihon Kumiai Feed Mill Co., Ltd.	Manufacture of formula feed	1,000
ZEN-NOH Architects & Engineers Inc.	Architectural design and management	136
ZEN-NOH Hi-pack Co., Ltd.	Filling of beverages and sales of filling machinery and packaging materials	422
Kyodo Leasing Co., Ltd.	Leasing of equipment and facilities	500
Co-op Food Products Co., Ltd.	Processing of agricultural products	250
Co-op Chemical Co., Ltd.	Production and sales of fertilizers	2,800
Kumiai Chemical Industry Co., Ltd.	Production and sales of agrochemicals	4,534,270
Nokyo Tourist Corp.	Tourism and travel business	700
Federal Meat Academy	Training related to sales of meat	3,145

* Millions of yen unless otherwise denominated (as of June 30, 1990)

Supply of Consumer Goods

With the gradual increasing in living standards of Japanese farmers, there is a growing demand for a variety of consumer items which were not in vogue during the early post-war years. ZEN-NOH, in collaboration with prefectural federations and primary cooperatives supply almost all items of daily necessities through the following two channels:

1. *"A COOP" Stores* : These super stores are being promoted by ZEN-NOH in cooperation with the prefectural economic federations and multi-purpose cooperatives to distribute quality products at reasonable prices. There are over 2,000 such stores in Japan to-day. Some of these stores are located in the newly urbanized areas thus providing the services to a larger clientele. Simultaneously, the consumer stores operated by the consumer cooperative societies are also operating in these areas thus creating a competitive trading situation between the two cooperative sectors. In addition to this, the private retailing giants have inducted large doses of capital in these areas by investing in some of their modern and sophisticated super stores. These stores sell food, clothing, consumer durables, electrical appliances and such other things. In order to facilitate distribution of the inventory items to all the stores, ZEN-NOH and the prefectural economic federations operate central warehouses which maintain large inventories and arrange distribution of the items to "A Coop" stores.

2. *Non-store Sales* :

Besides the sales in "A Coop" Stores, there are large number of items sold to members in several other ways in the following manner:

- a) Pooling of orders for daily necessities such as groceries and getting advantage of the bulk order. The cooperatives collect these orders with the help of women's associations or other groups formed within the cooperative and distribute them also through the same channel.
- b. Non-store sales of consumer durables such as T.V. sets, refrigerators, washing machines, furniture, clothing and similar items. These orders are taken individually delivered to the respective households.
- c. Joint purchasing of perishable foods. The cooperatives are trying to rationalise the food distribution system through collective orders of weekly requirements of foods and other perishable items on the basis of planned menus for various kinds of meals. The farm households seem to have responded positively to these efforts and have started planning their daily meals accordingly. The HAN groups established by women's associations play an important part in collecting orders and distributing the items to farm households.

Role of Prefectural Economic Federations

The Economic Federations of Agricultural Cooperatives in each prefecture play an important part both in assessing the demand for agricultural inputs and consumer goods in their respective areas, but also in distributing these supplies through the primary cooperatives. Besides the inventories supplied through ZEN-NOH, the prefectural federations have direct contact with manufacturers in their respective areas. This helps in increasing the varieties of products supplied and also in meeting some of the special needs of each region. These federations are also closer to the primary cooperatives and because of their familiarity with the region and closer understanding of the agricultural situation as well as the living habits of the people, they are able to play a more constructive role in the purchasing activities.

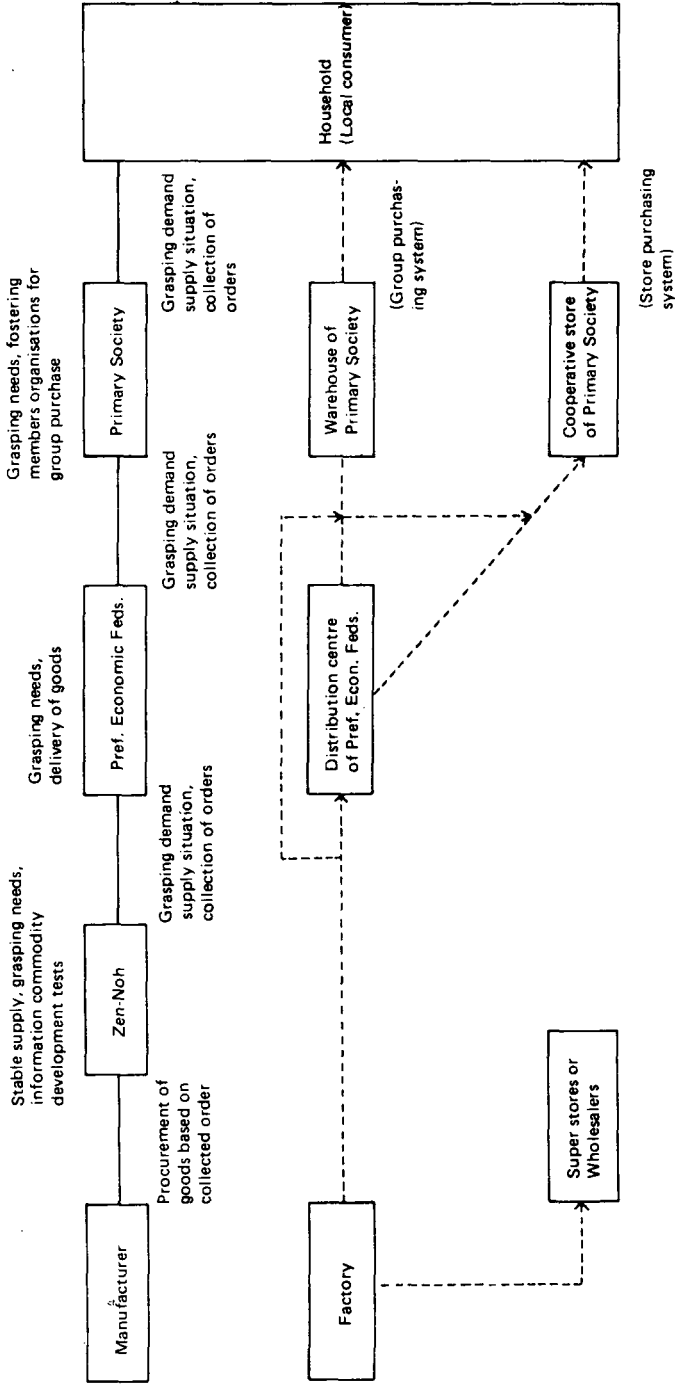
Role of Primary Cooperatives

The primary agricultural cooperatives, which are closest to the members and which have been formed to meet their well defined needs play the most important role in the field of purchasing, as well as supply of inputs and consumer goods. The actual planning for agricultural production activities of individual farmers takes place at the primary cooperative level through the guidance activities conducted through agricultural cooperatives. The cooperatives, therefore, have a difficult task of timely identifying the production needs of each farm household and assessing their requirements of daily necessities. While, the national federation (ZEN-NOH), secures all the needed supplies, and the prefectural federations coordinate the process of purchasing and supplying, the primary cooperatives have the onerous task of converting the individual assessments into a collective order keeping in mind both the productivity angle as well as not forgetting the changing consumer needs in accordance with the ever-growing living standards in rural Japan. The chart on the following page gives an idea of the respective roles played by the organizations linked through a three-tier network:

Share of Cooperatives at the Three Levels

The primary cooperatives have the largest share in the distribution of production inputs and consumer necessities because most of these items are channelled through them. Also, because of the close association of farmer-members in the production planning process and in preparing family budgets, the farm households prefer to obtain their supplies through their own cooperatives. The prefectural economic federations come next with little lower percentages because some of the supplies come direct to the primaries. Similar is the case with ZEN-NOH which supplies large inventories nationwide on a selective basis. However, these get supplemented on a regional basis. Hence, the overall national percentage of ZEN-NOH is lower than the prefectural federations and primary cooperatives.

Chart 11: Division of Functions between Primary Society and Federations



The following table gives the year 1988 position of respective percentage shares of the three-tiered organizations :

Table 36 : Share of Principal Items by Different Tiers of Agricultural Cooperative Organisations (1988).

<i>Item</i>	<i>Primary Agrl Coops. %</i>	<i>Prefectural Feds. %</i>	<i>ZEN-NOH %</i>
Compound feedstuff	39.9	35.1	35.0
Fertilizer	92.5	82.5	71.6
Agri Chemicals	70.0	56.0	51.0
Corrugated carton paper	78.5	69.4	60.4
Corrugated craft paper	30.0	78.0	71.6
Temperature keeping materials(vinyl)	66.0	28.0	18.7
“ (polythelene)	66.0	29.7	19.5
Agri machines	51.4	38.8	23.0
Automobiles	24.0	17.0	12.5
Petroleum	63.7	58.0	56.6
LasPG	47.4	42.2	35.9
Consumer goods purchase business	16.2	11.6	4.0

Range of Commodities Handled

The basic concept in planning supplies to farm households is to meet the total requirements of members and their families so that they are able to increase productivity for better income and spend more wisely for better living. The range of commodities selected for purchasing are therefore wide enough to cover a broad spectrum of commodities needed by the farm households. Table No. 38 gives information on various commodities handled by cooperatives and the volume of business in these commodities at the primary, prefectural and national levels.

Marketing of Agricultural Produce

Agricultural cooperative marketing in Japan is done through a wide network of agencies involving primary cooperatives, prefectural economic federations, ZEN-NOH and government. The purpose is to market farm produce and agricultural products to the best advantage of the growers, viz., member farmers. The system of marketing is based on the following methods and guidelines :

**Table 37 : Purchasing Turnover of Agricultural Cooperatives
(1989 & 1990)**

(Yen million)

Items	Primary Agril. Cooperatives.	Prefectural Economic Fede- rations of Agril. Coops.	National Federation (ZEN-NOH)
Fertilizer	381,219	337,037	290,611
Agri. Chemicals	297,666	206,277	216,132
Green house matls.	107,482	74,650	-
Packing materials	140,974	141,773	150,170
Farm machinery	340,989	232,058	140,926
Feedstuff	552,353	491,352	791,024
Automobiles	301,618	244,589	154,152
Petroleum	519,305	436,927	383,396
Other prod.matls.	350,792	562,338	236,351
LP G	179,393	74,116	46,962
Rice	204,593	566,286	-
Other foods	969,125	604,086	164,338
Clothing	69,905	69,305	56,260
Durable necessities	128,475	118,365	53,378
Daily necessities	217,325	118,260	60,529
Other con. goods	161,873	31,238	-
Total	4,923,087	4,308,658	2,744,209

Unconditional Consignment

The multi-purpose cooperatives in Japan have finally settled down to the practice of marketing the members' produce on the consignment basis. The outright purchase system and the marketing at the risk of the cooperatives and their federations was done away with. However, several checks and balances have been built into the system, including involvement of government through various price stabilization schemes to avoid losses to the members. Under this system, members deliver the produce to the cooperatives without any price guarantees. However, the cooperatives have developed an elaborate system of market information through the market intelligence network linked upto national level. Over the years, the cooperatives have been able to win the trust and confidence of their members about their ability to sell the produce to the best advantage of their members and hence the percentage of cooperative marketing share of agricultural produce has gradually risen during the last two decades.

Commission Charged at Various Levels

The commissions charged by cooperatives at various levels differ from commodity to commodity. The commission includes transport charges. For example, the commission for broilers charged for all cooperatives is 6.9% whereas the commission for eggs comes only to 1.9%. On an average about four percent is the cost for marketing and transportation through the cooperatives. However, the other costs charged on the produce include packing, commission in the wholesale market, the wholesaler's margin and the retailers margin. The average return to the producers would be around 62.4% at the 1963-68 price index.

Pooling Account System

A unique system of pooling the prices and paying the average price for identical quality and range of products has been evolved within the agricultural cooperative movement in order to minimise the losses due to frequent price fluctuations in the market. Hence, the farmer member is assured of a stable price identical to the price received by another member at a given time and for the identical product. The system is operated through the national network accounting method through which the prices received in different parts of the country for similar products are pooled together and a rational price index is worked out for payment to all the members. This system entails very strict quality control and thorough grading of the produce to be marketed so that the member is not made to suffer on any count.

Planned Shipments

The basic concept behind every successful marketing activity is the effective synchronization of demand and supply position of marketable commodities. The old practice of finding a market on an adhoc basis for the marketable surpluses is now giving way to the practice of planned shipments of produce to specific markets on the basis of assessed demands in the respective markets. In addition to this, introduction of new products by creating a demand is also practiced in order to promote diversification of agriculture.

Planned Production

It is not possible to organise planned shipment unless the primary cooperatives have control over the production of certain quantities of specified products of acceptable standards. This means planned shipments must be based on planned production done through groups organised with the help of cooperative members.

Contract Farming

In order to have a direct control on the quantities to be marketed to pre-determined markets, it is necessary to organise contract farming through

commodity groups or farming complexes so that the demands in the markets could be met at a time when prices and other conditions are most favourable to the producer. Member-farmers' organizations and farm guidance play a very important part in this process.

Marketing Channels

The main marketing channels for cooperative farm products are:

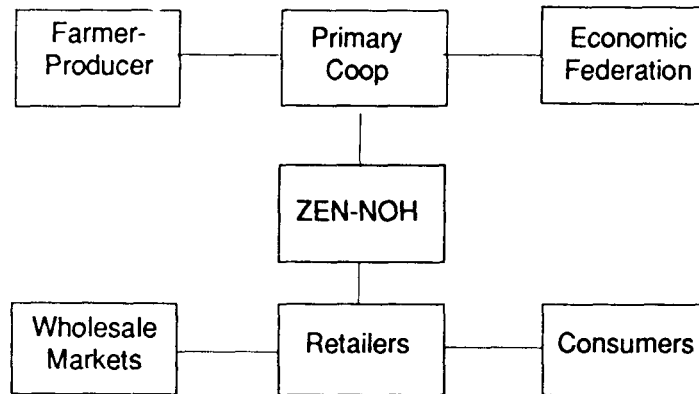
1. Sale through the national network operated by the national federation and the prefectural economic federations in various markets including ZEN-NOH's Wholesale Market at Ota near Tokyo;
2. Sale through the local market;
3. Direct sales by the primaries to bulk consumers such as factories and hospitals;
4. Sale in the Perishable Commodities Distribution Centres of ZEN-NOH;
5. Sale through the "A Coop" stores;
6. Sale to farm households through the pooling order system for perishables; and
7. Direct sales by primary agricultural cooperatives to consumer cooperatives in the respective areas.

ZEN-NOH's Role in Marketing

Being the apex organization for all economic activities of the agricultural cooperatives, ZEN-NOH plays the central and a very important role in marketing agricultural produce and in operating the information services linked upto the farmer level on the one hand and upto the wholesaler, retailer and the consumer level on the other. The various commodities handled by ZEN-NOH encompass almost the entire range of agricultural products, but rice dominates as the major commodity because of its unique position as a partially controlled commodity. Following are the percentage shares of ZEN-NOH in respect of marketing of various commodities:

	(1988/89)
Government Controlled Rice	95.7%
Semi-controlled Rice	95.0%
Beef	26.0%
Pork	17.4%
Eggs	29.9%
Chicken	17.3%
Milk	13.2%
Fruits	20.2%
Vegetables	31.2%

The marketing network in general, with ZEN-NOH in the center, is linked as follows:



(Including ZEN-NOH's wholesale market)

ZEN-NOH's Wholesale Market

ZEN-NOH opened its fruits and vegetable market in 1959 in Tokyo's Central Wholesale Market at Kanda in order to influence and stabilize prices through its intervention and also to link the producers with the consumers. Since that time, this is known as ZEN-NOH's market. In 1988, the total value of products handled through this market amounted to Y28 billion.

On May 16, 1989, the Tokyo Central Market was formally opened at Ota near Tokyo and along with it ZEN-NOH's market was also shifted to Ota with better facilities covering wider area for its operations. The entire area of the Tokyo Wholesale Market at Ota is 38.6 hectares capable of handling 300 tons of fruits and vegetables per day. It also has a 90 square meter area low temperature wholesale market to meet the increasing demand for distribution of perishables at low temperatures.

ZEN-NOH's own market area in the new market covers 4,900 square meters which is twice as big as the earlier market space at Kanda. Of this, 1,000 square meters area is for low-temperature products. It also has a low-temperature warehouse. Both these facilities have increased ZEN-NOH's capacity to keep the perishables fresh for sustained marketing activities. The market provides easy access to large-sized vehicles. ZEN-NOH's market also has exhibition and sale of the most modern equipment for computerised distribution system of products in the warehouses. This equipment reduces labour costs which leads to reduction of the overall costs for distribution.

In general ZEN-NOH provides a major link between the producers and the consumers by organising demand forecasting, by coordinating with its

affiliates planned production and shipment activities and by establishing direct relationship with wholesalers, bulk consumers, retailers and export markets. In respect of certain commodities like milk, it coordinates supplies to processing industries.

Role of Prefectural Economic Federations

Equally important is the role of Prefectural Economic Federations. These federations at the prefectural level have their marketing outlets and processing units. They do what ZEN-NOH does at the national level. As a coordinating link between ZEN-NOH and the primary cooperatives, the prefectural federations play a very crucial role in adjusting demand and supply function in order to determine the shipment of specific products to pre-determined markets. The daily market intelligence reports received through ZEN-NOH are combined with the regional market reports by the prefectural federations and a time schedule for shipments to terminal markets, regional markets, to processors, bulk consumers and to consumer cooperatives is worked out. These federations along with the credit federations also play an important part in respect of payments to be made to individual members' accounts for the marketing done on their behalf.

Role of Primary Cooperatives

The centre of activity in the entire marketing network is the primary agricultural cooperative society. The burden of organising commodity groups, farming complexes, grading centres, collection centres, packaging, transportation and shipment to designated markets rests with these cooperatives. Behind these post-harvest activities lies the meticulous planning both at the cooperative level as well as at the farm household level. This is supported by an elaborate work in farm guidance to determine the production plan and the commodities to be grown. This also entails organising members into various interest groups so that production and marketing is organised in a more homogenous manner.

Another important factor worthy of note in respect of activities at the primary level is restructuring of farming activities for diversification of crops from rice to commercial crops and enlarging the scale of farming to make the individual units viable. This aspect has assumed added importance in view of the ever decreasing number of full-time farmers and the competition faced in marketing farm products especially in the context of increasing imports of such products into Japan.

Commodity-wise Marketing

Almost all the major farm products in Japan are marketed on the basis of elaborate methods and accounting procedures involving cooperatives at all the three levels. And in respect of most of these commodities, the government have introduced price stabilization measures to ensure fair

Table 38: Outline of Distribution and Price Policy.

	Conditions for Distributors		Price stabilisation without intervention to wholesale market	Price support by government and public corporations
	Consumption area	Production area		
Eggs			Agricultural coop. organisations and commercial sectors partially subsidized the Egg Price Fund	Stock adjustment by liquid Egg Public Corporation Partial subsidy to org. for voluntary adjustment
Fruit and Vegetables (Fruit juice)	Higher priority on local consignees of shipment to the wholesaler in consumption area		Partial subsidy to vegetable fund ----- Partial subsidy to processing fruit fund	Partial subsidy to abandonment of products at production area by organisations ----- Partial subsidy to stock adjustment by organisations
Meat	Same as above	*Slightly higher priority on subsidizing for meat centres than other agri. organisations		Unlimited purchase from designated wholesale markets and local production centres at the lowest price within stable price zone
Broilers			Partial subsidy to broiler Fund	
Fresh Milk		Unified fresh milk producers organisation designated by prefecture	Payment for the price difference to the guaranteed price of raw milk	Dairy products are purchased from manufacturers and organisations at the price determined by the stability index price
Wheat		Almost same as above		Unlimited purchase at a certain price ----- Limited purchase at a certain price
Rice, cereals and grains	Depends on the result of competition between commercial and coop. dual distribution registrations	Depends on the result of competition between commercial and coop. dual distribution registrations		

returns to the producers. The regulations and formulae for government assistance or subsidies in respect of each commodity differ in accordance with the relative importance of such a commodity from the points of view of the producers as well as the consumers. Attempt has been made in this book to draw the essence of the marketing systems in respect of major commodities. Table 38 on the previous page gives the general outline of distribution and price policies in respect of major commodities handled by the cooperatives.

Rice

Rice has been the most dominant commodity in Japan's agriculture and despite the sizable reduction in its consumption, it continues to be so to the present day. The origin of government's rice price policy can be traced back to the war days when in 1942, the Food Control Law was passed with the following three policy directives:

1. All the foods should be directly administered by the government, including the import and export of farm products;
2. A Dual Price System was adopted under which the government was to purchase the produce at a reasonably high price and sell it to the consumers at a reasonably low price; and
3. Approval and registration was made compulsory of the distributors involved for collection of the produce from the farmers as well as in the distribution and sale to the consumers.

Basis for Price Fixation

Although the Government's War period strategy was to ensure supply of food to the nation, the motivation during the post-war days was aimed at reducing the income gap between the urban wage earner and the farmer. The formula for determining the purchase price from year to year is worked out in July every year with a view to ensure the reproduction of rice, keeping in view expenses needed for production, the market price and the general economic environment. The working hours of a farm family are multiplied by the wage per hour of the wage earner in urban areas. (The base figure of a wage earner in a manufacturing unit having five employees is taken for such calculation). Added to this are the expenses needed for production calculated on the basis of land price or rent and the interest on money invested. The size of farm management for the purpose of this calculation is fixed at 1.5 HA.

Selling Price of Rice

The selling price of rice, if it were to be fixed on the basis of production cost and also on the basis of expenses incurred by government for purchasing it from the farmers, would be far beyond the average market prices anywhere. For example, without considering the quality, if we were

to compare the price of Thailand rice in the Rotterdam market with the producers' price in Japan, the Japanese rice would be ten times higher. Obviously, therefore, the Japanese Government could not sell rice to the consumers on the basis of its purchase price. The government decides the consumer selling price to ensure that the consumer's household economy be stabilized, keeping in view the household expenses, prices of commodities and the general economic situation. Based on this formula, the price of controlled rice and semi-controlled rice is decided by the government every autumn. The system of announcing the price in advance is known as *The Limited Quantity of Advance Order*. Under this scheme advance payments to farmers are made against targeted quantities.

Government Subsidy in Rice Marketing

The government's rice policy entails considerable amount of subsidy built into the system. ZEN-NOH, prefectural federations and the primary cooperatives are the dealers designated by MAFF for the collection and distribution of government controlled and semi-controlled rice. For this purpose, the cooperatives at all levels own and operate extensive facilities such as grain elevators, warehouses, and related facilities. The purchase and sale operations are on the following lines:

The total government subsidy cost =

The actual price paid to the producer

-plus-

government's administrative expenses
(personnel, warehousing, inspection, transport
office costs, etc.).

-less-

Government's selling price to the consumers
minus the expense incurred by the seller.

The price difference per ton in 1985 was Y67,717. The same year, government bought 4,328,000 tons of rice. Hence, the total expenditure from the exchequer was Y203,079,000,000. Even in the case of semi-controlled rice, which is sold directly in the open market and price of which is determined by negotiation or by market situation, the government provides incentive money in order to encourage the production of better quality rice which finds buyers in the open market. Such incentive money in 1988 amounted to Y24,000 per ton for A grade and Y17,330 per ton for B grade.

Rice Consumption on the Decline

Rice is the most sensitive agricultural commodity in Japan. Since ancient times, it has been the staple food of the nation. The government,

therefore, has resisted all attempts from other countries to export rice to Japan except import of small quantities of rice into Okinawa mainly for processing because of its links with America since the post-war US Occupation. Due to some pressures at the GATT forum, the government may have to give in to some extent, but large scale import of rice into Japan is unlikely in the years to come. However, due to the introduction of a variety of meats and wheat products, the percentage of rice consumption is smaller year by year. For example, the per capita consumption of rice in 1962 was 118 kg; whereas it has come down to 73.4 kg in 1986. The food habits of the people have undergone a sea of change and hence, the demand for rice has fallen to a considerable extent. Consequently rice production between 1970 and 1985 has come down from 12,185,000 MT to 10,882,000 MT.

Efforts to Reduce Government Subsidy

In its efforts to reduce the burden of subsidy, the government is encouraging diversification of crops and providing subsidies to farmers to switch over to other crops by way of grants and low interest funds. However, there is a limit below which the production of rice is difficult to be curtailed due to the policy of maintaining self-sufficiency in rice. Simultaneous efforts are also being made to encourage more consumption of rice but this is not going to make much difference in the present situation. The government will have, therefore, to continue giving assistance for switching to other crops or to mixed farming through the introduction of livestock breeding, poultry, etc. The government expenditure on rice subsidy is as follows:

	<i>Yen per MT</i>
Government Purchase price	275,000
+ Government Admn. Expenses	83,100
Total Government cost	358,100
Less: Government Sales Price	303,383
Buying and selling price difference treated as government subsidy	54,717

Simultaneously with its efforts to encourage diversification of crops in order to reduce the quantity of government purchased rice, it is encouraging production of high quality rice which can be marketed without government intervention. Because of this encouragement, the percentage of high quality rice is increasing thereby resulting in the proportionate reduction of purchase of low quality rice by the government. For example, in fiscal 1987, the total quantity of rice distributed was 6,930,000 of which 3,790,000 (more than 50%) was semi-controlled and the rest viz., 3,110,000 was directly purchased by the government. Semi-controlled rice is sold through ZEN-NOH through bidding system (on the basis of offers received from wholesalers). In addition to this, the government has recently started reducing the

purchase price of rice. In 1987, the price was reduced by ¥5,957 per ton. There was also small reduction in the incentive money paid for producing higher quality rice. All these efforts are aimed at reducing the involvement of government in rice marketing. Charts 12, 13 and 14 on the following pages give the structure and operational linkages of *Government Controlled Rice Business System and Business System of Semi-controlled Rice*.

Wheat

Wheat marketing has totally a different characteristics than rice in Japan. First of all Japan is not a predominantly wheat producing country and the small quantity of wheat produced is of a low standard. This along with the barley produced domestically go mainly to breweries, feed mills and bakers. Because of the changing food habits of the people, the government does try to encourage wheat production; however, the self sufficiency ratio in wheat is only 14%. The rest of the wheat is imported. Also, due to low profitability in production, the farmers are not keen to cultivate wheat. The proportion of domestically produced wheat and barley to the imported ones is given in the following table:

	<i>Cultivated Area</i>	<i>Production</i>	<i>Imports</i>
Wheat	246,000 Ha.	876,000 tons	5,194,000 tons
Barley	107,000 Ha.	344,000 tons	2,071,000 tons
Total	353,000 Ha	1,220,000 tons	7,265,000 tons

Wheat Purchases by Government

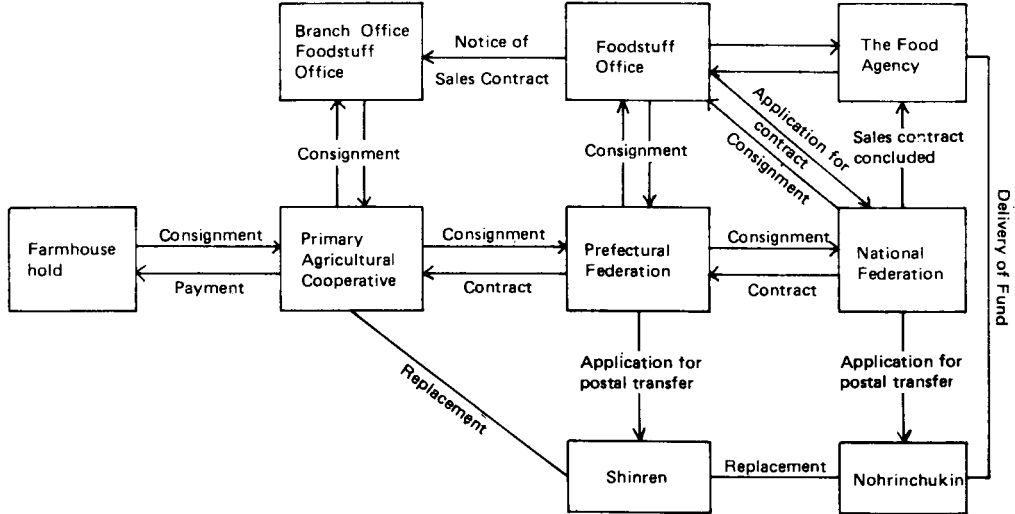
According to the Food Control Law, government has to purchase all the wheat offered for sale by the producers. The producers, however, on their part, have the freedom to market it freely. But because of its low quality, most of the wheat is sold to government. In 1986, the government purchased 771,000 tons of wheat and 132,000 tons of barley. The formula followed so far for wheat and barley purchase was based on government price paid in 1950-51. While fixing the price for later years, the government had taken into consideration, the yearly price increase ratio of agricultural inputs and consumer goods purchased by farm households and decided upon the new price. From 1987 onwards, however, the Food Control Law has been revised and from 1989 the prices for wheat and barley are being fixed on the basis of production costs and the demand and supply situation of these commodities in the market. While calculating the production costs, the costs incurred by farm households which produce large quantity of wheat will be taken into consideration.

Price Policy for Wheat

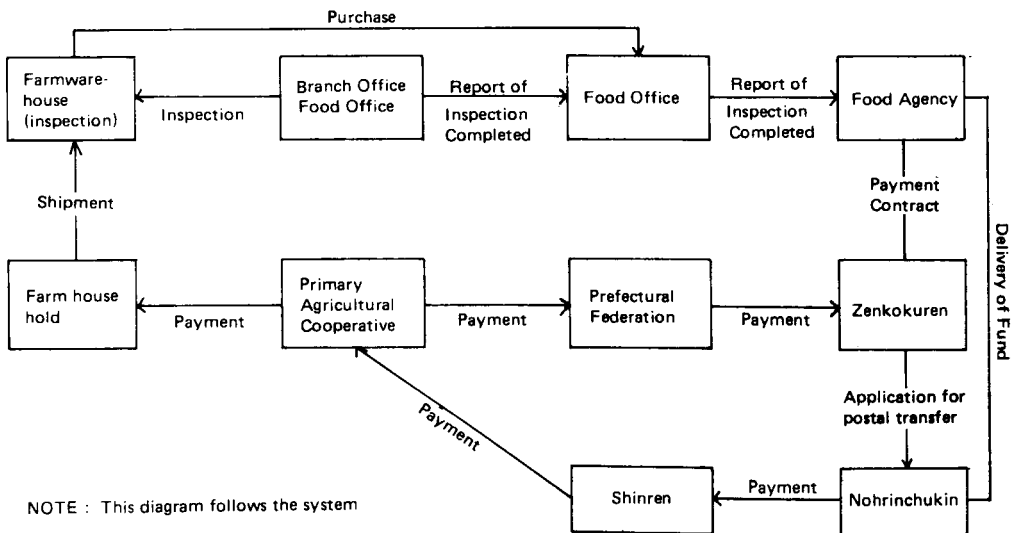
Because of its policy of rationalizing wage structures between the urban industrial worker and the farmer, the government purchasing price of

Chart 12: Government Controlled Rice Business System

ADVANCE DELIVERY AND ORDER AND
PAYMENT BY ROUGH ESTIMATE

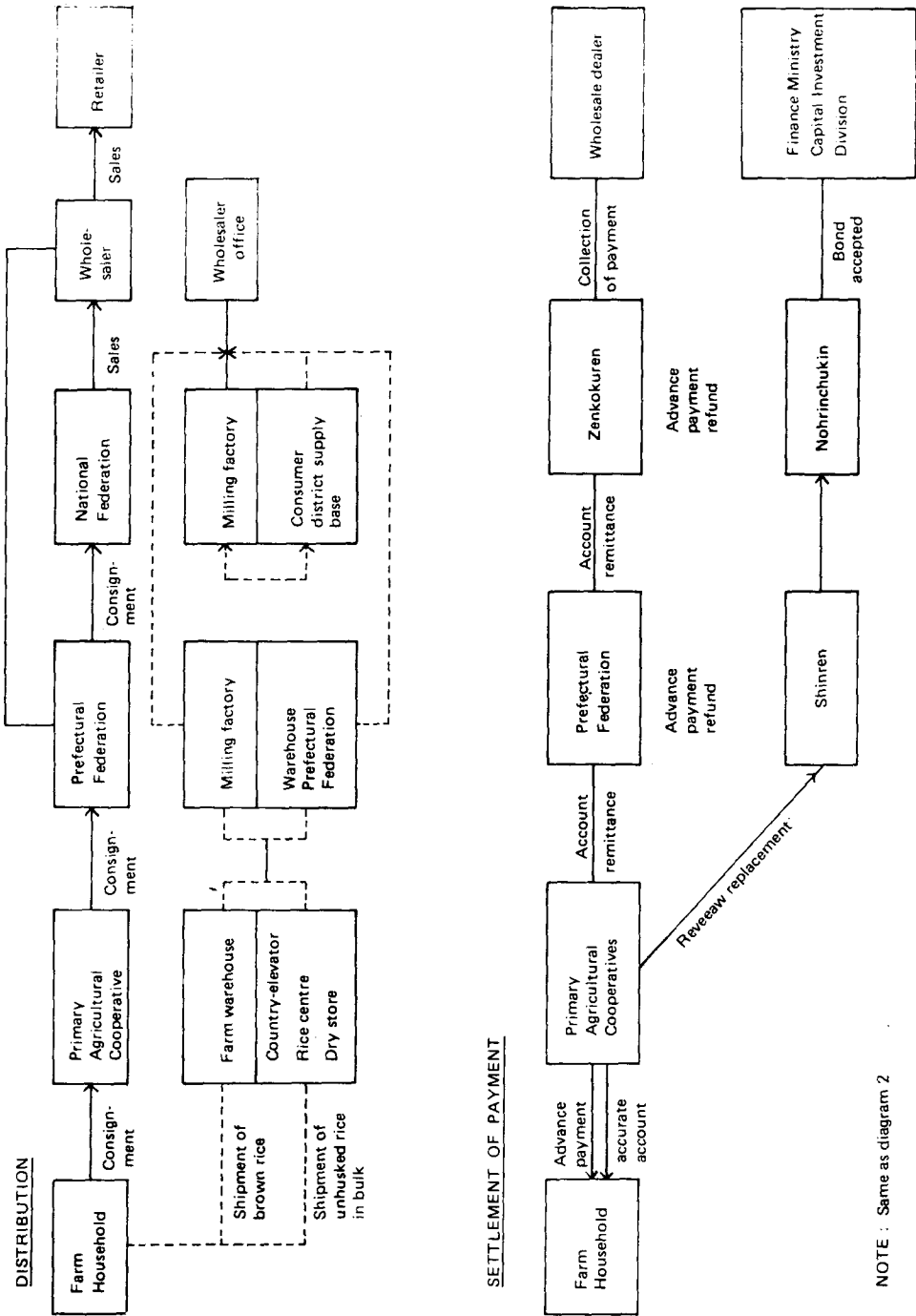


DELIVERY OF GOODS AND PAYMENT



NOTE : This diagram follows the system

Chart 13: Business System of Semi-controlled Rice



NOTE : Same as diagram 2

Chart 14: The Functions according to the different Organisations in Rice & Grain Business

Functions	Primary Agricultural Cooperatives	Prefectural Federation	Zen - Noh
1. Shipment	1) Shipment registration (plan for total use) 2) Formulation of the plan of shipment dates and the system of total shipment	Strengthening of the scheme of total shipment A consistent production plan Strengthening of cultivation on contract	Strengthening of the scheme of total shipment Understanding of the amount of shipment plan according to prefectures and brand
2. Inspection	Preparations for inspection Promotion of planned inspection	Adjustment of shipment and inspection plans	To draw up measures of improvement of inspection
3. Storage	Replacement of the warehouses of agriculture cooperatives (Inspection sites and storage sites)	Federation warehouse as the shipment base of the prefectures Or, Federation Warehouse (storage) as a production centre junction	To draw up measures for the replacement of the agricultural cooperatives warehouses To set up a supply base as a policy for expanding sales in the large consumer markets, and a policy for the management of consumer market
4. Transport		Drawing up a transport plan and a policy for smooth operation	Control of inter-prefectural transport Basic policy on a smooth transport
5. Marketing	Accumulation of amount to the prefectural federation according to commodity and the time of shipment	Accumulation of the amount to the Zen-Noh according to commodity and the time of shipment To take charge of planned marketing in prefectural and accumulation to the Zen-Noh	Early decision of planned marketing Adjustment of the amount of shipment Marketing contracts
6. Credit Finance			Measures for advance payment for warehousing, and measures for insuring the collection of sales money
7. Settlement of accounts	To the prefectural Federation of the items of shipment Settlement of rice payment	Documents of rice payment bills to be put in order of accumulation to the Zen-Noh	A speedy and accurate collection of the sales of rice
8. Mutual Aid (Insurance)			Mutual-Aid Scheme against disaster Country-elevator mutual aid scheme
9. Milling		Consolidation of milling facilities	Consolidating of milling facilities to cope with big consuming areas
10. Distribution (Supply)	To promote sales to the members	To secure retailers Adjustment of various terms and conditions	Promotion of the expansion of the food supply business
11. Advertisement and information	Supply information of the producing centres	Supply prefectural information	1) Promote P.R. of rice 2) Supply information on nationwide basis

domestically produced wheat is far above the price of imported wheat. The following tables gives an idea of the difference between the buying and selling prices of local and imported wheat:

	<i>Buying Price</i>	<i>Selling Price</i>
Domestic Wheat	173,750 yen/ton	64,767 yen/ton
Imported Wheat	34,468 yen/ton	80,522 yen/ton

As will be seen from the above figures, the government is subsidising wheat production by paying the difference in the buying and selling prices for the domestically produced wheat. On the other hand, it is importing wheat at a cheaper rate and selling it at higher rate thus earning a margin which helps it to earn enough for payment of the subsidy to farmers for the domestic wheat. While the government loses 153.8 billion yen for the subsidy for domestic wheat, it earns 157.2 billion yen from the marketing of imported wheat.

Fresh Milk

Dairy business is mostly handled by specialized or single-purpose cooperatives. The multi-purpose cooperatives are marginally involved in collection and processing of milk. In 1986/87, there were 565 dairy cooperatives in Japan. The dairy cooperatives have 54 secondary and prefectural federations which handle milk and milk products. In addition to this, several prefectural economic federations and ZEN-NOH too are involved in the milk marketing business at different levels. Most of the dairy cooperatives have their processing plants but milk by-products are produced in some selected organizations. The chart on the following pages gives the functional divisions of different level organizations in respect of milk and milk products.

Milk Marketing

Fresh milk used for drinking is not subject to government control, its marketing price is determined by direct negotiations between the producers' organizations and dairy companies. The 1988 production of milk was 7,358,000 tons out of which 4,342,000 tons was marketed for fresh consumption and 2,834,000 tons was used for processing and the remaining 182,000 tons was left for home consumption. Only 2,509 tons of processed milk products were imported into Japan during that year. The government does guarantee the price to be paid for milk sold for processing into dairy products. Fresh milk is not allowed to be imported into Japan, although at the GATT forum, Japan is under great pressure from other countries for liberalizing milk imports. The only milk products allowed to be imported are butter, skimmed milk and condensed milk.

Chart 15: Division of Functions of the Business System (mainly marketing)

Functions	Primary Agricultural Cooperatives	Perfectural Federations	Zen - Noh
1. Market research (on demand)	To study the demand of the market in the region and report to Economic Federation	To grasp the actual situation on demand and the consuming cities of the prefecture To grasp the trends of the dairy prices	To grasp the actual demands in the market throughout the nation and the prices of raw milk in the big consuming areas
2. Production planning Supply of feedercow and farm inputs (see under separate article) Self-supply of feed-stuff (pastures) grass land and supply of compound feed (see separate article) Production Mutual Aid	Promote membership to the agricultural mutual-aid scheme		
3. Standardization and standard		To give guidance on distribution transactions based on the national standards	To strive towards the improvement and repletion of the national standards
4. Collection	To organise and expand the joint shipment locations To promote fixed time shipments		
5. Handling	To set up bulk coolers	To instal milk factories on a joint perfectural basis for marketing in the medium and small-sized cities Instalment and expansion of cooler stations and bulk coolers for a smooth shipment of raw milk	To instal milk factories for marketing in the large consuming areas
6. Transport	Either by transportation system of the primary agricultural cooperatives or by sub contractors	Long distance transportation by means of large-sized trucks	Long distance transportation by means of milk containers
7. Marketing of fresh milk	Consignment of sales to the Economic federation (or to a specified group)	Marketing to the big local factories and dairy dealers within the prefectures. At the same time a reconsignment to the Zen-Noh is done	Marketing of to the dairy industry dealers in the large consuming areas
8. Credit Financing			Credit grants are given to as well as to secure stable demand supply

9. Settlement of payments			To secure the collection of sales cash
10. Advertisement			To promote expansion of the market by using uniform brand
11. Processing Marketing			To promote further development, production and marketing of the products through cooperation and unity with the manufacturers of systematic processing
12. Plan on the introduction of feeder cow for raising	To set up a plan for raising feeder cow on the basis of the Dairy Promotion Plan To set up facilities for raising and develop pastures	To select the area where feeder cow is to be introduced and operate pastures for raising	To provide a planned supply of milk cows from the producing centres
13. Design and construction of stock house and its attached facilities			
14. Disinfection plan (1) Grasp of demands (2) Supply of purchased goods (3) Storage (4) Settlement of accounts			
15. Guidance on rearing	Guidance on rearing is carried out by farm advisors, specialists and by artificial insemination specialists. This guidance include farm management	Guidance is carried out on regional basis by veterinarians in charge	Training sessions, practical development of techniques in dairy farm management studies on improvement of milk-cows etc. are being carried out.

Subsidy for Processed Milk

The amount of government subsidy per ton is the difference between the guaranteed price and the marketing price. The standard price is fixed on the basis of production costs in Hokkaido which is the main milk producing prefecture. While calculating the labour cost, the 1988 wage average (Y1,229 per hour) is taken into consideration. The guaranteed price in 1988 was Y79,830 per ton while the marketing price was Y66,510 per ton. The difference of Y13,320 was paid as subsidy in 1988 for 2,250,000 tons processed milk amounting to 30 billion yen. In addition to this, if the prices of processed products like butter and skimmed milk go down below a certain level, the Livestock Development Agency of the government buys up the stocks at a floor price. In this way, the government tries to ensure fair returns to producer members of dairy cooperatives. However, the quantity for compensation is determined from year to year. This explains why compensation given in 1988 was only for 2,250,000 tons although the total processed milk was 2,834,000 tons.

Meat Products (Beef and Pork)

Two factors have contributed to the steady growth of livestock farming by cooperative members. Firstly, the changing food habits of the people have resulted in greater demand for animal proteins and beef and pork constitute the major components of this source of protein. Secondly, the government's drive to encourage reduction in rice production year by year has given the cooperative farmer members the opportunity to go into livestock production, although the investments in this farming are rather high and the element of risk is greater. A large number of members of multi-purpose cooperatives have gone into livestock farming. Also many of these cooperatives have installed their own abattoirs and meat processing plants to add value to the livestock farmers' marketable products. Besides this, about 366 specialised livestock cooperatives are engaged in the livestock industry. The total quantity of beef produced in 1986 was 394,000 tons (portioned) and in case of pork, it was 1,090,000 tons (portioned).

Imports

Japan is under great pressure at present for liberalizing the import of beef and hard negotiations are currently in progress in GATT for complete removal of import restrictions. Bowing to the pressure, Japan has already liberalized to some extent beef imports. About 90% of the imports are through the Livestock Promotion Corporation and the remaining 10% imports are carried out through private importers on the basis of quota allocation. Japan also imports limited quantities of chicken, lamb and other meats. In 1986, Japan imported 188,000 tons of beef and 205,000 tons of pork. Most of the imported meats are used for processing. Japan has her

own domestic beef animals known as Waggu and its meat is preferred for preparing traditional dishes. Efforts are being made at present to popularise consumption of local variety of beef because sooner or later Japan may have to fully liberalize beef imports and if it so happens, the preference of the Japanese consumers will play an important role in determining the import quantity

Regulated Wholesale Markets

Since 1923, marketing of agricultural commodities is being regulated in Japan under the Central Wholesale Market Laws. The present law in force is the 1971 Wholesale Market Law and the Ordinance for Tokyo Central Wholesale Market.

The main objective of the Wholesale Market Law is to ensure smooth distribution of agricultural products (including fishery and livestock products) through fair trading practices, determination of adequate prices, rationalization of market expenses and maintenance of sanitary conditions.

There are three types of wholesale markets in different parts of the country, viz. Central Wholesale Markets (for cities with over 200,000 population); Local Wholesale Markets (for prefectural level or lower level cities) and Other Wholesale Markets (for local areas and privately or cooperatively managed). The first category needs the approval of Ministry of Agriculture, Forestry and Fisheries (MAFF) while the second category needs approval of the Prefectural Governor. The other markets are approved by local authorities.

ZEN-NOH operates as one of the four wholesale companies in the Ota (Tokyo) Central Wholesale Market. There are 260 wholesalers in the whole country, including ZEN-NOH. The main functions of the wholesale market are:

- i) Collection of commodities,
- ii) Distribution through auction,
- iii) Speedy and fair price formation based on demand and supply situation,
- iv) Settlement of accounts within 3-4 days, and
- v) Collection and supply of market information.

All functionaries in the market are personnel licensed by respective authorities. The main principles on which products are marketed are:

- i. unconditional consignment for selling,
- ii. all consignments must be received by the market,
- iii. sales through auction,
- iv. selling all commodities same day,

- v. prohibition of wholesale transactions of commodities not consigned to sell in the market,
- vi. binding condition for buyers. They must distribute to large retailers,
- vii. prohibition of receiving any margins other than authorised commission.

Commission charged for various commodities is as follows:

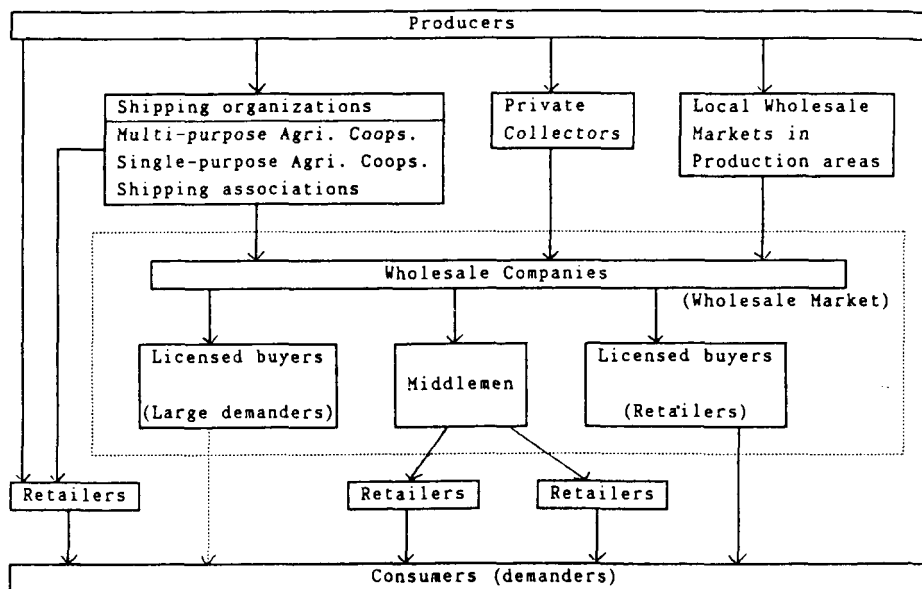
Vegetables - 8.5%, Fruits 7%, Pickles, 8%, fishery products 5.5%, meat 3.5%, processed meats/eggs 1.5%, miscellaneous products 5%.

Respective shares of cooperatives and others in wholesale markets:

Vegetables:	Agricultural cooperatives	60%
	Producers who sell direct	21%
	Merchants	12%
	Other wholesalers	4%
Fruits	Agricultural cooperatives	62%
	Producers who sell direct	10%
	Merchants	21%
	Other wholesalers	5%

The following flow chart illustrates the channel of distribution between the producers and consumers:

Chart 16: Distribution Channel of Fruit and Vegetables



Prices Guarantees

The prevailing regulations allow the Livestock Promotion Corporation to intervene in the market and buy meat products if prices fall below a certain level. However, the government prefers to give indirect support through interest subsidy on storage costs for regulating market arrivals. If the prices go higher than the upper limit, government imports to balance the market. The main aim is to keep prices at a medium level range. In case of price guarantee scheme, the guaranteed price is calculated by multiplying the producers' marketing price during specified period by indices of production costs during the same period. This is further multiplied by the co-efficient based on the prices of dressed carcass. These co-efficients are: beef (0.13) and pork (0.17).

Soy Bean

As in the case of wheat, the domestic production of soy bean is far below the total requirements in the country. Since 1961, import restrictions on soy bean were lifted so also its distribution. Following are some of the important aspects of soy bean marketing :

1. Domestic production of soy bean during 1986 was 245,000 tons while the imports were 4,817,000 tons.
2. The price of imported soy bean is lower than the domestically produced soy bean. The government therefore provides compensation to farmers in order to ensure continuation of domestic production.
3. The compensation amount is equivalent to the difference between the standard price and the domestic producers price.
4. The standard price so far was fixed on the basis of parity. However, as in the case of wheat, it is now based on costs of major soy bean producing farm households, the demand and supply situation and the prevailing price level. The producers' price is determined by deducting the distribution costs from the total marketing price.
5. The amount of compensation to producers is rather high. For example, in 1985, the standard price was set at Y286,833 per ton while the producer's actual income was only Y45,366. The difference, viz., Y241,467 per ton is the amount of compensation. The total amount of compensation that year was $Y241,467 \times 128,000 \text{ tons} = Y30,900,000$.
6. As the amount of compensation is rather high, the government is proposing to decrease the standard price and increase to some extent the marketing price.

Fruits and Vegetables

Next to rice, fruits and vegetables form a very important part of Japanese agriculture. The importance of cultivation and marketing of these

two groups of commodities is greater in view of the current trend in reduction of rice production and diversification to other crops. With the increase in percentage of area under cultivation of fruits and vegetables, the need for planned production is greater than ever. Also, the scale of farming is equally important to make the production viable. This has encouraged the formation of commodity groups to look after the interests of each commodity. Also, the farming complexes in selected areas facilitate the specialization in certain commodities giving positive results of the economies of scale.

As marketing of fruits and vegetables involves greater participation of cooperatives at all levels, a wide network of facilities and services upto the wholesale market of ZEN-NOH has been developed within the agricultural cooperative movement. The charts on the following pages gives the respective functions of primary, prefectural and national level cooperatives in respect of fruits and vegetable marketing.

Price Stabilization for Vegetables

Besides the assistance given for diversification of crops, the government has also introduced a scheme for stabilization of vegetable prices. This is based on the 1966 Law on the Maintaining of Stable Production and Supply of Vegetables. The vegetables entitled for protection under the Law are notified in consultation with agricultural cooperatives and the areas in which they are to be produced are also determined in advance. These vegetables include cabbage, cucumber, onions, tomatoes, spinach, lettuce, Irish potatoes and others.

Special Fund

The compensation in case of falling prices is provided out of a fund in which the national government contributes 60%, the prefectural government 20% and the cooperative members or their cooperatives contribute the remaining 20%. The contribution of members is generally in the form of deductions made from proceeds of vegetables when prices rise above the upper limits so that the same could be used for compensation when there is a downward trend in prices.

Basis of Compensation

The compensation is provided on the basis of a formula in which a minimum standard price is worked out on the basis of prevailing market prices in the past few years. The standard price is fixed at 50% of the average price. If prices fall below 90% of the standard price, then compensation is provided from the Fund to the producers upto 90% of the difference between the standard guaranteed price and the prevailing market price.

Eggs

Egg production and marketing in the agricultural cooperatives is also a highly organized activity on modern lines. Poultry farming is undertaken

Chart 17: Division of functions in each stage of the Distribution Method and Shipment of Fruit and Vegetables

Function Category	Primary Societies	Prefectural Federations	Zen - Noh
1. Market Research (demand survey)	Local demand (especially demand prospects of owner outlets) is surveyed and compiled at the Keizairen (Economic Federation)	Records of delivery, demand prospects for the next fiscal year etc. of major commodities commodity-wise are surveyed mainly at major wholesale markets of the prefecture and compiled at Zen-Noh	It surveys records of delivery and demand prospects for the next fiscal year of major commodities (commodity-wise) mainly at major wholesale markets of vast consumption areas provides the information in combination with the Keizairen survey results of demand trends
2. Production (1) Seeds, Seedlings (2) Cultivation Management	They are supplied according to production plans of the members, they are grown into seedlings and supplied Based on the supply of main production input material, cultivating of maintenance guidance is conducted	Based on the production plan of the agri-coop seeds (of possible commodities) are supplied Techniques concerning farm management guidance activities are studied and provided to primary societies	Based on the progress of development of high-quality seeds of each commodity in the public and private fields and the Keizairen opinion of compilation result of agri-coop production plan seeds of commodities which are judged capable of undergoing concrete supply demand control are handled Techniques on farm management and technical guidance activities of the Keizairen are studied and provided
3. Collection	Producers are organised and planned shipment is conducted		
4. Standardization & standard	Collected products are classified and packed according to previously arranged standards and class	Based on the nationwide grading and standardization, unification of standardization is promoted on a prefectural level	Based on the trend of demand etc, simplification and unification of standardizations is promoted
5. Transportation and Marketing	Shipment is conducted according to the distribution plan of Zen-Noh Keizairen (Depending on the situation, low quality products are restricted in sales, disposed at production centres, etc) NOTE: It goes back to category No. 3 collection	Together with Zen-Noh, an efficient distribution is promoted	Based on the national demand and supply trend as noted in category (plan for receipt of commodities in each major wholesale market) a direct distribution is promoted to prevent "U-turn" phenomenon
6. Stocking Storage	Based on guidance of Zen-Noh and Keizairen, commodities which have high storage capability and demand exists year-round are stored at the production centre (For commodities in which storage is possible to a certain extent are controlled)	same to the right column	Commodities which possess high storage capability and supplied year-round, storage at the production centre is promoted together with Keizairen

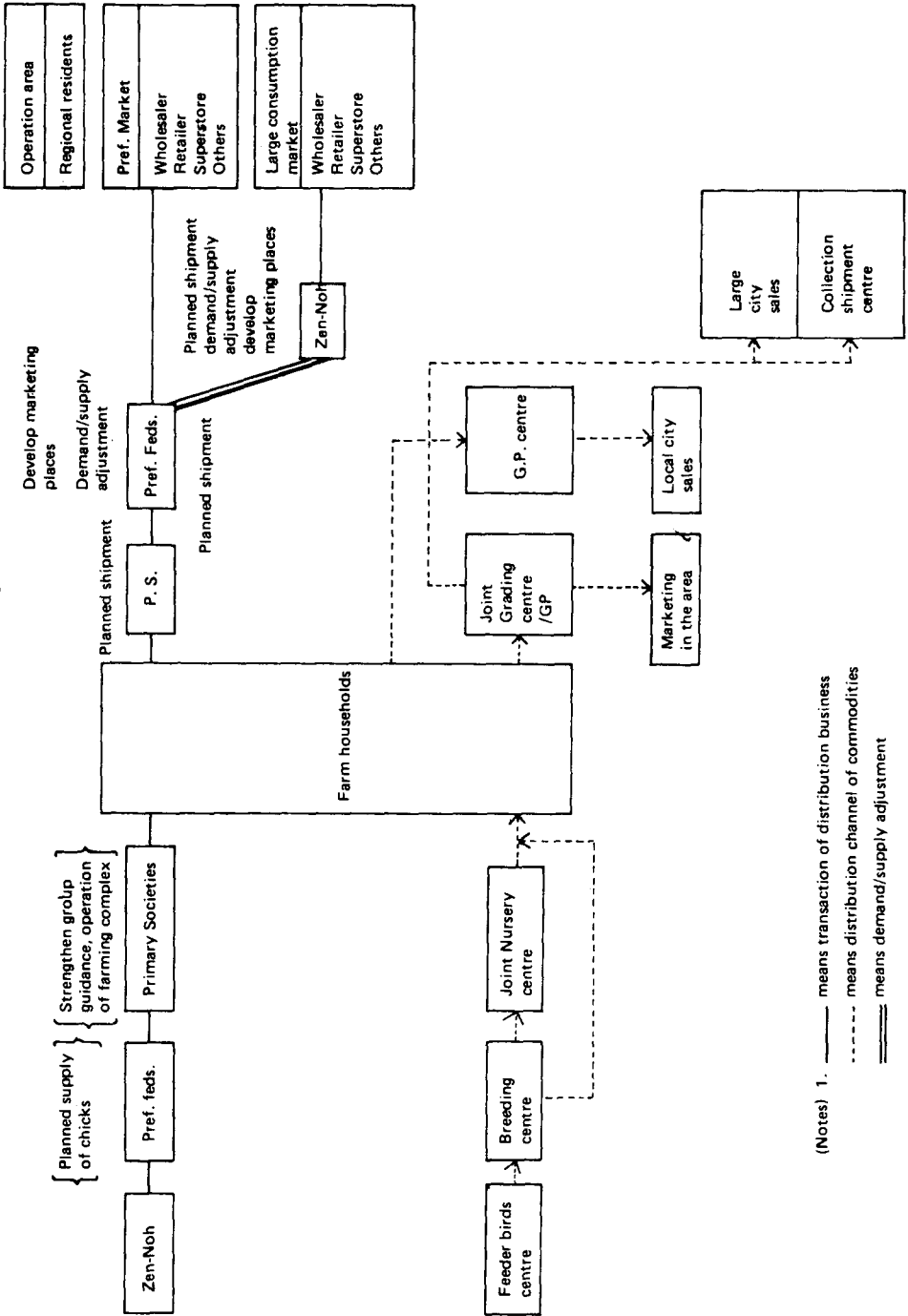
7. Advertisement		Same as the right column	Commodities which are graded and standardized are advertised for consumption according to the trend in demand with a unified brand name.
8. Credit distribution		Same as the right column	Improve credit distribution for the stabilised and obtain demand and buyers.
9. Settlement of account & uncollective money	Settle accounts of money acquired from sales	NOTE: Based on the division of functions in category No. 5, it is desired that it incorporate itself with the Zen-Noh function and with unification	Make sure collection of marketing account from buyers who contracted to receive the commodities

both by members of the multi-purpose cooperatives and the specialized poultry cooperatives whose number was 221 in 1986-87. Many of these cooperatives have their poultry processing units and the scale of poultry farming has increased from a few hundred birds to several hundred thousand birds. The farming complexes are facilitating large scale production. The system of joint marketing is followed in this commodity also. Great caution is observed in controlling shipments of eggs to the various markets and the necessary infra-structural facilities have been created to store the eggs in order to balance the demand and supply situation. The price compensation system is based on the same principle as vegetables and subsidy is paid out of a special fund created for the purpose. The chart on the next page gives the idea of the elaborate system of joint marketing in respect of eggs through agricultural cooperatives.

Sugar

Sugar is produced in Japan in the selected areas such as in Okinawa and Kagoshima prefectures and the raw material is sugar beet, sugarcane or pineapple. Sugar import is liberalized; a surcharge is levied on imported sugar. The cooperative members' involvement in production of sugar beet, sugarcane or pineapple in the respective areas is mainly in respect of production and processing. The products are purchased by the government corporation. The price to be paid is based on parity taking into consideration the gradual rise in price index.

Chart 18: Joint Marketing Business of Eggs



(Notes) 1. — means transaction of distribution business
 - - - - - means distribution channel of commodities
 = = = = = means demand/supply adjustment

Price Compensation

The subsidy for losses caused by the difference in standard price and the marketing price is drawn from the gains made by the government from the surcharge levied on imported sugar. The additional amount, if any, is paid from the government budget. Table below gives the 1986 position of purchase and sale prices by the corporation and the compensation paid to producers.

	<i>Purchase</i>	<i>Sales Price</i>	<i>Loss</i>
Sugar from sugar beet	Y234,860	Y142,888 to Y144,873	Y91,972 to Y89,987
Sugar from Pineapple (Okinawa)	Y271,000	Y96,002 to Y97,506	Y174,998 to Y173,494

A total of 101.9 billion yen was paid by the government to producers. Out of this, 80.6 billion came from the surcharge on imported sugar and the rest, viz., 21.3 billion was paid from government budget.

Raw Silk

Silk production is mostly done by farmers organized into specialized cooperatives known as sericultural cooperatives. In 1986/87 there were 673 such cooperatives. The marketing of silk is done in the open market when the prices are satisfactory. However, when the market prices fall below a particular level, the government corporation purchases the silk and stores it until the prices rise above a certain level, when the corporation may decide to sell the stock from its stores. However, due to the current slump in prices, the corporation has a stockpile of 187,000 tons in its stores. The respective upper and the lower prices for determining the corporation's intervention in 1988 were Y10,600 per kg., and Y9,800 per kg. In case of silk cocoon, the price compensation is based on a system of standard price as in several products described above.

The government has such price stabilization schemes for sweet potatoes, Irish potatoes, tobacco and a few other products.

Cooperative Marketing Turnover

As can be seen from the above paragraphs, the marketing activities of agricultural cooperatives are widespread, covering almost all the major commodities in Japan. The supplementary government effort in stabilizing the price structure helps in ensuring continuation of production in most of the commodities and maintaining the production cycle. The following table gives the total marketing turnover of agricultural cooperatives in major commodities at the three levels.

**Table 39 : Marketing Turnover of Agricultural Cooperatives
(up to 31st March 1990)**

(Yen:million)

	<i>Primary Agril. Cooperatives</i>	<i>Prefectural Eco.Feds. of Agril Coops.</i>	<i>National Fedn. of Agril. Coop (ZEN-NOH)</i>
Rice	1,964,950	1,958,591	2,000,927
Vegetables	1,181,988	1,083,691	736,505
Fruits	712,313	487,563	285,016
Other products	902,109	586,479	291,401
Beef cattle	458,747	366,223)	358,622
Hogs	225,034	263,094)	
Milk	392,225	386,019	163,120 (Dairy P.)
Eggs	78,964	126,865	144,202
Broiler chicken	30,152	80,138	41,445
Other livestock products	274,162	289,659	49,586
Total	6,220,653	5,628,322	4,070,824

Agro-Processing

Although agricultural cooperatives made commendable progress in several directions, the same could not be said in respect of the processing of agricultural produce. Only during the past two decades, large scale agro-processing units have been established aimed at absorbing surplus commodities and to some extent adding value to the primary produce.

Food habits of people have played a major role in determining the scope and nature of agro-processing. Traditionally, soy bean and radish were the two products used for preparing soy bean paste and pickles. Commercial value commodities like silk and tea became important processed items accounting for about 20% of the total output. These two items were also exported outside Japan. During the Second World War, village industries had assumed greater importance to prepare various foods and by 1945, about 8142 factories were functioning although very small in size and volume of production.

During the post-war period, food habits of the people created demand for non-traditional processed foods and by 1950, agricultural co-operatives had started investing in agro-processing industries such as rice mills and juice plants. As processing foods became more common all over the country, private enterprises like Morinaga and Meiji had made their appearance in the market in a big way. Cooperatives were still far behind.

By 1970, cooperatives had entered the milk industry and established milk plants, gradually juice plants too multiplied followed by processed foods like noodles, jams and pickles. The big investment industries appeared when meat processing was taken up. Recently, the diversification of products like a variety of compound juices, milk bi-products, meat bi-products and the cooked rice and other dishes became good investment proposals for multi-purpose and single purpose cooperatives.

Grading and Shipment Centres

With the growing sophistication in quality conscious people, the demand for establishment of grading, marking, packaging and shipment centres also increased year by year. At present, almost all multi-purpose cooperatives have their own grading, storage and shipment facilities in some measure. Smaller cooperatives join hands with other cooperatives to establish such facilities.

Mutual Insurance

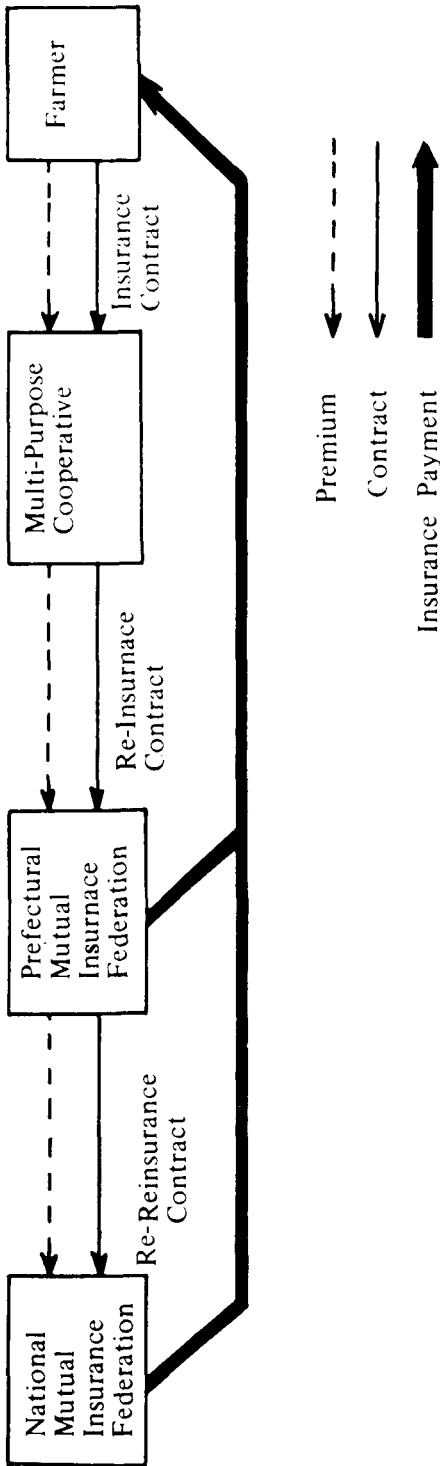
Mutual insurance activities of agricultural cooperatives are aimed at safeguarding the life and property of farmer-members and their families in the farm households. It is different from crop insurance or loss compensation schemes. Essentially, mutual insurance in the cooperative is the same as business by other insurance companies. However, because of the direct dealings between the cooperative and the members, the premiums are lower compared to other companies. The chart on the following page gives the basic structure of mutual insurance activities among agricultural cooperatives.

Mutual insurance activities were started during the post-war period and have now developed into one of the most important activities of agricultural cooperatives. It is also an important source of income for these cooperatives. The insurance contract is made between the farm household member and the primary cooperative which acts as agent of the insurance organization at the higher level. As the primary cooperative cannot, on its own, conduct mutual insurance, its business is linked with the prefectural mutual insurance federation through a re-insurance contract. The prefectural federations, in turn, enter into a re-insurance contract with the National Mutual Insurance Federation. In 1986, the long-term insurance business alone by all multi-purpose cooperatives amounted to Yen 212,035,422,740,000 and the average per society was Y49,691,920,000.

Types of Insurance Offered

Long-term insurance includes life endowment insurance, children's insurance, building endowment insurance and insurance for construction of residential buildings.

Chart 19: Basic Mechanism of Cooperative Insurance Business



Short-term insurance facilities are for fire, cooperative office buildings and other property fire, automobiles, car accident liability, personal accident and fixed-term life insurance.

Mutual insurance has a close relationship with better living activities. Under the insurance plan, medical check-ups are arranged through the multi-purpose cooperatives in order to ensure proper health-care for farm household members and to facilitate early diagnosis of ailments.

Insurance Funds for Loans

The money so accumulated through mutual insurance, especially through long-term insurance policies, is used for loaning purposes through agricultural cooperatives. The balance amounts if any are used for investments elsewhere in order to ensure optimum utilization of available funds.

Chapter Ten

Farm Guidance and Better Living

Farm Guidance

One of the most unique features of Japanese Agricultural Cooperative Movement is its emphasis on farm guidance activities. As a matter of fact, much of the success in achieving a high level of productivity in agriculture goes to careful planning and farm management promoted by agricultural cooperatives for the benefit of their members. The guidance activities could be grouped into two sections; viz., Farm Guidance Activities and Better-Living Activities.

Guidance for Increasing Productivity

The Agricultural Cooperative Law passed in 1947 provides, among other things, for education and guidance of members in the improvement of farming. According to this Law, farm guidance encompasses the following:

1. Projects for the benefit of farmers, meaning the improvement of farm management and provision of necessary facilities for the purpose.
2. Coordination of farm labour and provision of other facilities for the promotion of farm labour efficiency.
3. Reclamation, improvement and management of farmland and provision of irrigation facilities.
4. Education concerning improvement of farming techniques and facilities for the improvement of rural life and culture.

These are the very broad based objectives stated in the Law. Some of these tasks such as reclamation, improvement of farmland and provision of irrigation facilities are generally taken over by the government while the guidance for actually planning farm production is handled at the cooperatives level.

Farm Advisors

Almost all multi-purpose cooperatives have their own farm advisors who function both as advisors in preparing production plans for individual members and as contact persons between the government extension agents and cooperative members. In 1987, there were 19,188 farm advisors working for all the agricultural cooperatives giving 4.6 as the average per

society. Most of the advisors have their own specialization in specific fields as well as commodities. In 1989, the number of advisors according to their specialization was as follows:

<i>Specialization</i>	<i>% to total</i>
Rice cultivation	24.7
Silkworm raising	2.5
Livestock	18.7
Vegetables	24.9
Fruits	11.3
Farm Management	9.0
Farm Machinery	2.7
Others	6.2
Total	100.0

The activities of farm advisors in relation to the farm production activities of cooperative members are broadly as follows :

1. Survey of basic farmland conditions of each farm household and estimation of necessary changes in the farming pattern for planned cultivation;
2. Assessment of member's own farming plans both on a long-term and short-term basis;
3. Selection of farming sectors and commodities for members in the context of farming plans for the concerned region;
4. Fixing up an income target for farm household;
5. Preparation of individual farm plan for the member based on the commodities selected;
6. Raising of needed resources, organising farm inputs and other supplies; plan for procurement of inputs;
7. Preparation of a time-table for planting, irrigating, spraying, etc.;
8. Selection of production techniques for each crop;
9. Plan for livestock breeding;
10. Deciding upon member's role within the regional plans and as a member of concerned commodity group;
11. Preparation of a plan for joint collection, grading, shipment and marketing;
12. Preparation of a work schedule for farm household members; and for hiring labour;
13. Plan for utilization of farm machinery including its hire;
14. Preparing estimates of gross income, payment of loans and other dues and savings;

15. Household expense plan; and
16. Estimation of revenues including income from non-agricultural sources.

Income Target Plan

The most important aspect in the total planning process for individual farmer is the financial outlay for the entire farming operation and the net results in terms of income from different activities. This is summed up in various tables. Table 41 on next page relates to calculations on income target by a farmer member engaged in rice production and livestock breeding:

Better-Living Activities

While farm guidance activities aim at increasing productivity and reaching the income target of the farm households, the better-living activities attempt to enrich life and environment through services and programmes which can enable farm household members in leading "healthier and richer life". The fast moving agricultural scene in Japan has brought about far-reaching changes in the life of rural communities within a span of a few decades. While the economic condition of the rural people has been strengthened through the increased income both from agricultural and non-agricultural sources, the social structure and the family inter-relationship have weakened because of the limited involvement in farming of most of the farm household members and the resulting migration to urban areas either for permanent residence or for employment in industries in the nearby areas. As migration of the menfolk is larger than the womenfolk, increase in the percentage of working population of women in agriculture has become evident.

Better-living activities in agricultural cooperatives are being conducted since the early sixties. However, in view of the rapid urbanization of rural areas and also in view of the weakening of the ties among the rural community members, the need for organising cultural and welfare activities has become more important. The Seventeenth National Congress of Agricultural Cooperatives held in October 1985 formulated a new strategy called "***The Basic Principles of Agricultural Cooperatives - Better Living Activities***". These activities have since become more pronounced and widespread among most of the cooperatives.

The overall aim of better-living activities is to overcome the shortcomings in rural living conditions for better livelihood among farm households while simultaneously preserving the character of the rural society, its culture, traditions and the environment. The emphasis, therefore, is on education, traditional festivals, health programmes, family welfare programmes and activities aimed at obtaining quality goods and services at the most reasonable prices.

Table 40: Standard Table of Management System

		Area	10s	20s	30s	40s	50s	60s	70s
Scale	Yield								
	Investment								
Necessary labour									
Gross income (A)									
RICE	Operating Costs (B)	Material Costs							
		Labour cost							
		Total cost							
Income (A) - (B)									
Scale	Number of Heads								
	Investment								
	Necessary labour								
Gross income (A)									
HOG	Operating Costs (B)	Material Costs							
		Labour cost							
		Total cost							
Income (A) - (B)									
Total income (C)									
Household expense per-capita X number of a family (D)									
Overs or shorts of income (C) - (D)									

Organizational Structure

Better-living activities are basically organised at the primary cooperative level and its interest groups. They differ from cooperative to cooperative. The "Han" groups at the hamlet level take leading part in conducting better-living activities. One Han group consists of 5 to 10 farm households. Only 4 percent of cooperatives have active Han groups. Most activities are handled by the women's association, youth association, the hamlet-level farming groups and other interest groups. At the prefectural level, the prefectural welfare federations, prefectural unions, economic federations and credit federations of agricultural cooperatives provide technical and policy support to the primaries while the Central Union of Agricultural Cooperatives arranges educational activities and provides facilities for the training of better-living advisors. The funding of better-living activities is mainly through the primary cooperatives. Some of the welfare and health-control activities are conducted in line with the linkages with the mutual insurance activities of primary and higher level federations.

Better-Living Advisors

Most of the large cooperatives have their own departments for better-living programmes encompassing both welfare and economic activities. Some of the smaller cooperatives rely on general staff for this purpose. The interest groups are the most important in this field. The staff members responsible for coordinating and conducting these activities are the better-living advisors. In March 1987, there were 2,948 better-living advisors in all the cooperatives; the average per society being 0.7 of such advisors.

Main Activities

There is wide scope for each cooperative to organise these activities as the range of such activities is unlimited. However, the main group of activities are as follows :

1. *Activities for Good Health*

Information gathered through the National Survey on Agricultural Cooperative Activities suggest that 87% of the cooperatives had arranged facilities, in smaller or greater degree, for health-control of farm household members. These included health examinations, agricultural labour accidents, health education, post-examination follow-up, health consultation, exercises and sports and health surveys.

2. *Consumer Activities*

Over 84% cooperatives were engaged in consumer related activities for their members. These included joint purchase activities, guidance in keeping household accounts and insurance by farm households.

3. *Consultancy Services*

Almost two-thirds (66%) of the agricultural cooperatives provided consultancy services to their members covering matters such as traffic accidents, annuity-related problems, travel, educational finance, tax and legal matters, housing, marriages, food and diet and non-agricultural employment.

4. *Cultural Programmes*

Cultural activities are mostly arranged with the help of women's or youth associations and the association for elderly people. Sixtyseven percent of the cooperatives organised such activities which included cooking classes, lecture meetings, handicraft-making, sports, dressing of the traditional kimono ,gardening, flower arrangement, group tours, etc.

5. *Programmes for Senior Citizens*

With the growing number of elderly people habitating rural areas due to the increasing longevity of life, decrease in birth rate and the migration of able-bodied to the urban centres, the need for organising meaningful activities for them is becoming increasingly important. Sixtynine percent of the cooperatives arranged such activities which included sports for the elderly like gate ball, health examinations, facilitating the transfer of management rights to farm successors, singing and dancing, handicrafts, group travel, lectures, campaigns for policy changes in government and the creation of additional value adding activities in agricultural cooperatives.

6. *Environment Protection*

The Japanese society is becoming increasingly aware of the dangers caused by rapid industrialization and indiscriminate use of chemical fertilizers and agro-chemicals in farming. Hence, more and more cooperatives are paying greater attention to environmental protection. Such activities, at present conducted by about 22% of the cooperatives, include contamination by agricultural chemicals, pollution by livestock farming, soil contamination, problems of inadequate sunshine, water pollution and other related issues.

7. *Measures for Supplementary Income*

Seventeen percent of the cooperatives were active in finding sources of additional income for their members through activities such as promotion of local industries, taking on lease for management private enterprises, arranging supplies from outside, public relations work and information service for group visits to tourist farms.

8. *Better Living for Mutual Advantage*

The better-living activities obviously bring greater happiness to farm households through improved health standards and recreation. They are equally

beneficial to cooperative growth as well. As a result of better-living activities between 1970 and 1984, the cooperative business also increased due to members' awareness of the importance of these activities. This growth in real terms amounted to 5.7 times rise in savings; 3.8 times rise in credit business, long-term mutual insurance policies by 14.5 times and short-term policies 36.3 times. The purchasing business for better living rose 5.3 times which is more than the recorded rate of demand increase in rural communities. There was also sizable increase in tourism and newspaper circulation.

9. *Better Public Relations*

With the fast rate of urbanisation and consequent declining interest in farming by the younger generation, the cooperatives are now strengthening their public relations activities and creating better awareness among school children and urban dwellers of the rural life and farming communities. For this purpose, excursions for school children to farms, giving them opportunities to try simple farming tasks such as rice planting and picking of fruits and vegetables, are organised from time to time. In addition to this, more festivals and group-tours are being arranged for rural residents in order to sustain their interest in the agricultural related occupations.

Chapter Eleven

Regional Agricultural Promotion Plan* and Member Groups

The Objectives

The objectives of the Regional Agricultural Promotion Plan (RAPP) are: (1) To modernize agricultural production; (2) To modernize agricultural structure; and (3) To modernize farm management. The RAPP is Agricultural Cooperative Movement's answer to the challenges posed by two major developments affecting Japanese agriculture. These are; firstly, over production of certain agricultural commodities and the resulting need for diversification of crops; and secondly, the imports of farm products into Japan. These challenges could not be met by isolated efforts by each farm household. The need was felt, therefore, to pool together the production plans of different members into a cohesive action programme and establish farming complexes with the help of farmers producing identical commodities so that joint activities could be organised on a planned basis for using the resources to the optimum level and utilize the available facilities to their full capacities.

Location and Area of Operation

The plan originates in the primary agricultural cooperative which remains the centre of all plan activities. All the programmes under the plan are carried out within the area of operation of the concerned society. The plan is based on a full consensus of all members involved in its activities. It is important that all members are fully aware of the extent of their involvement and the responsibilities they have to shoulder for fulfilling plan objectives. The RAPP, therefore, is a sum total of the identified needs and responsibilities of all farm households in the area for increasing production which involves restructuring the present farmlands and reorienting the present-day farm management.

Plan Period

Usually three to five year period is prescribed as duration of each regional plan because it is difficult to visualize policy and other changes that could take place beyond three or five years. Also, a longer term plan is

* The word 'regional' refers to a defined area of operation of an agricultural cooperative.

bound to be less realistic and may have to be changed from time to time. A three year period is the most ideal duration for such a plan.

Although the plan duration is restricted to three or five years, the planners are recommended to look ahead and forecast development programme outlines and estimated resource requirements over the next ten years or so. The plans are also subject to annual review for assessing the performances so far and to make adjustments, if any, in the action plan. Essentially, RAPP is a well-defined and time-bound programme of action based on realistic targets and supported by resources at the command of primary cooperatives and their members.

Major Sections of RAPP

The regional plan is divided into four major sections each dealing with specific objective and covering a group of activities within the overall aim and targets of the plan. Each of these sections is a plan by itself and can be managed on its own subject to overall directives of the regional plan. The four major components are :

1. *Regional Agricultural Promotion Master Plan:*

This is the overall plan for regional development of agriculture drawn up by the primary agricultural cooperative and giving the basic policy directives and targets.

2. *Member Farmer Management Plan:*

This part of plan is based on the plans of individual farm households. However, the discussions for formulating these plans are generally conducted at the level of the regional farming group (also known as hamlet organization) or the commodity-wise group. Hence, a group identity is established at the grass-root level to bring cohesion into the total effort. These groups have to make the regional level plans even if any particular household is unable, for some reasons, to formulate a farm plan on its own.

3. *Regional Agricultural Promotion Action Plan:*

As can be seen from its title, this part of the plan incorporates the actual tasks to be performed relating to production and other activities associated with productivity. It deals with matters concerning fulfillment of the targets for production and related activities, Essentially, this plan is the sum total of the individual plans of action of farm households within the area of operation of the primary cooperative.

4. *Business Plan of the Agricultural Cooperative:*

This part of the plan deals with activities in relation to external resources and organizational links. For example, it deals with marketing of produce, purchasing of supplies, procurement of resources and introduction of

suitable machineries or installation of facilities. The chart on the next page gives the various tasks to be accomplished under the above major four sections of the regional plan.

Procedure for Formulating RAPP

The process to be followed for drafting the RAPP is very laborious and demands comprehensive survey and discussions in various forums. Some of the most important steps in this process are as follows :

Survey and Analysis

One of the most important part of plan formulation is the basic survey for assessing the future plans of the farmers and the present condition of farm management in the area to be included in RAPP. The basic survey to be conducted covers both internal and external factors. The internal factors include actual conditions of agriculture in the region with special reference to national and socio-economic conditions, farmlands and their use, farm household population, the available labour force, farm machineries used, the status of natural resources like forests and their potential, agricultural production, average income of farm households, marketing of the produce, and full-time as well as part-time farmers. The analysis of data on these points is aimed at bringing out the character of regional agriculture as compared to national and prefectural characteristics. Also, the special features of the region on the basis of the special features of hamlets comprising it have to be brought out.

The external factors to be surveyed include trends in demand for farm products and their prices. This is important in view of the current crisis due to excess farm production and their imports into Japan. Also, the socio-economic development trends in the country and the policies pursued by government in agricultural development. Although the cooperatives have no control over the external factors, their analysis is important for deciding the priorities and the strategies of the RAPP.

Committees for Plan Formulation -

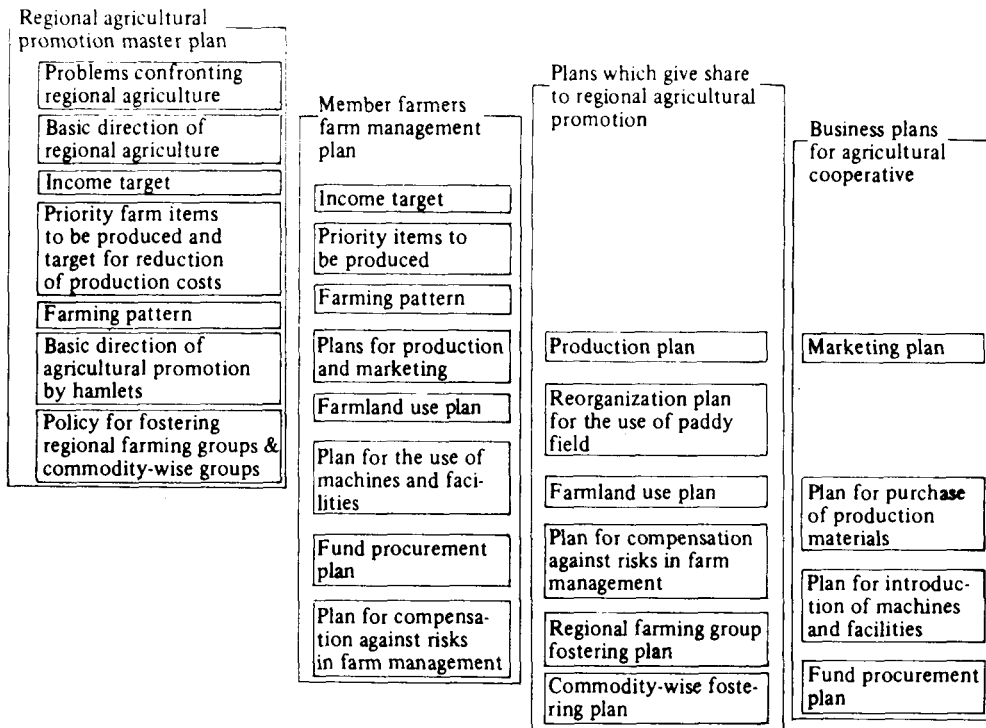
The actual work of surveys, analysis and drafting the plan is done by two major groups as follows :

Regional Agricultural Promotion Council

This forum is also known as the Agricultural Promotion Committee. This committee is formed within the concerned primary cooperative consisting of representatives of the following organizations and offices:

1. Representatives of farm households from traditional hamlet farm associations, hamlet farming groups, commodity-wise groups, women's associations and youth associations;

Chart 20: Principle items which are to be incorporated into the Regional Agricultural Promotion Plan



2. Representatives of other bodies such as Agricultural Committees, Land Consolidation and Improvement Office, Agricultural Mutual Insurance Association, Prefectural Unions and Federations;
3. Representatives of municipalities, agricultural extension service offices, agricultural and statistics offices; and
4. Specialists from research institutions and experts from wholesale markets.

Task Force

While the Council is made of representatives from various organizations, the Task Force is composed of officers of various departments of the concerned agricultural cooperative. This group is important in view of the fact that not all cooperatives have adequate number of farm advisors and planners to look after this additional work. Hence, the special responsibilities concerning RAPP can be handled by the Task Force. The association of the staff with the Task Force also facilitates the implementation of RAPP because of the good understanding they develop of various plan priorities and dimensions.

Plan Vision Through Discussions

For creating better understanding among rural community members about the regional plans and the responsibilities and advantages arising out of such plans it is important to ensure their involvement. Two important groups are identified for such dialogue. One is the group which influences opinion and socio-economic conditions in the rural communities and the other is the farm household in the hamlet. While the opinion lobby is to be taken into consideration for getting support for the plan, the farm households need to be oriented in order to create a proper perspective for plan implementation. Hence, the exchanges with farm households concerning their individual plans and the management pattern they wish to follow are important. In this process, the most important matters for discussion are the income forecasts, the choice of crops or livestock to be handled for maximization of income and for reducing costs of production and the farming pattern to be established for each farm household. The farming pattern is determined by combining crops with livestock, poultry and such other farm activities. The two charts on the following pages give the intricate pattern of dialogues and inter-relationship among various units for plan formulation and for selection of key commodities.

Major Items Included in the RAPP

The regional plan, when finally prepared, consists of almost all the major aspects related to regional agriculture and matters concerning the farm households. These are based on the survey, analysis of the data and the exchanges between the cooperative and its members.

Chart 21: Flow chart on the formulation of the Regional Agricultural Promotion Plan

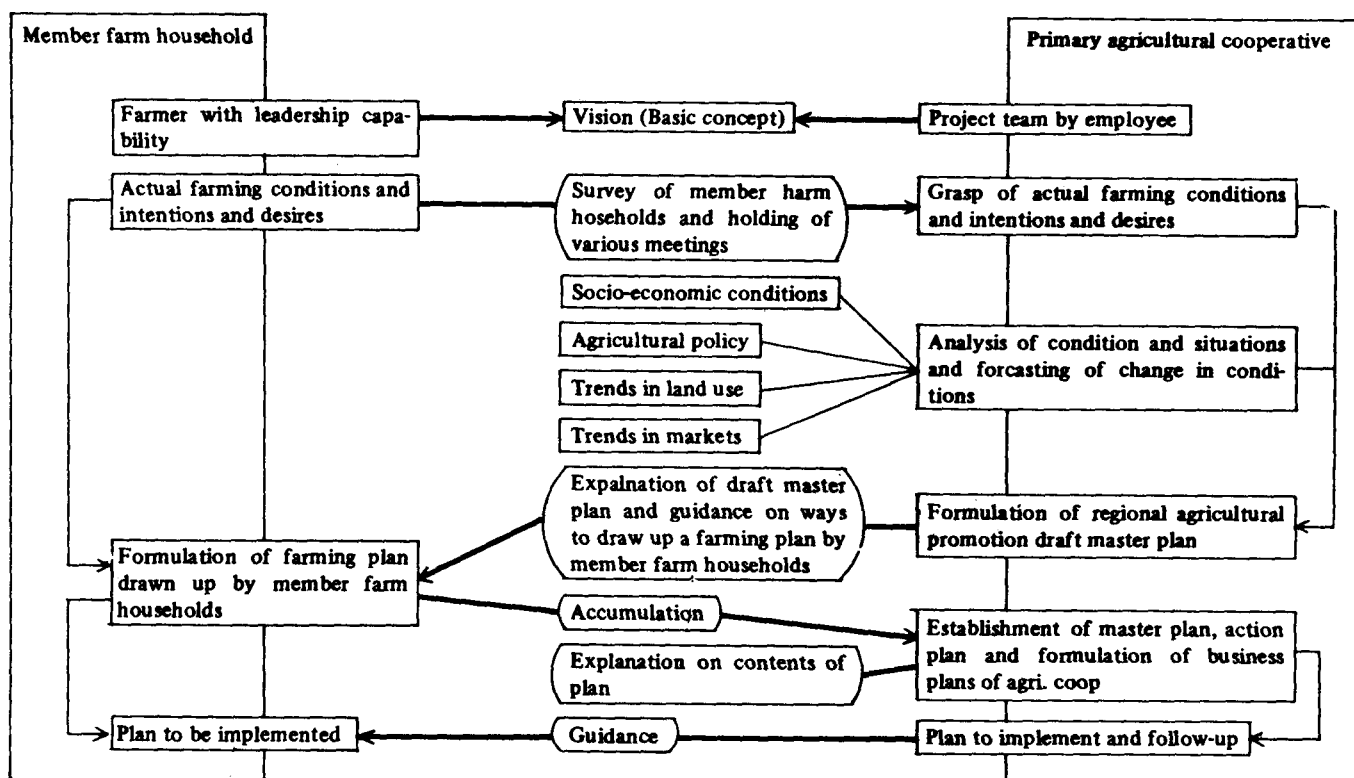
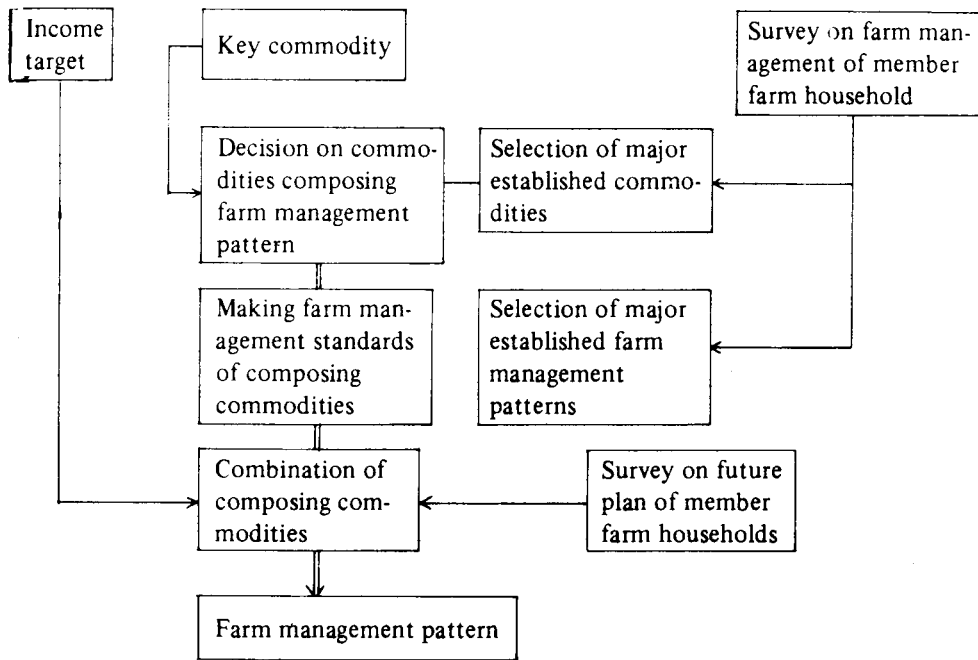


Chart 22: Flow Chart of the Working Process for making Farm Management Patterns



1. *Income Target*

It is very difficult to determine an income target unless meticulous planning precedes fixation of such a target. However fixing of an income target is very important because only the prospect of an added income will provide motivation to the farm household to gear itself up for increased productivity. Two kinds of targets are determined. Firstly, the farm household income target and secondly, the agricultural income target. The two targets are fixed on the following basis:

$$\begin{array}{rcl} \text{Estimated necessary} &) & \text{Estimated Surplus} &) & & \text{Farm Household} \\ \text{family expenses in} &)\text{PLUS} & \text{in target year} &) & = & \text{income target} \\ \text{target year} &) & & & & \end{array}$$

AND

$$\begin{array}{rcl} \text{Farm household} &)\text{LESS} & \text{Est. non-agricultural} &) & = & \text{Agricultural income} \\ \text{Income target} &) & \text{income in the target} &) & & \text{Target} \\ & & \text{year} & & & \end{array}$$

The above formula has to be varied in case of part-time farmers some of whom are mainly dependent on agricultural income or others who depend mainly on non-agricultural income source. Items like family expenses or non-agricultural income seem irrelevant in this context; however, they are important in order to judge the trend in non-agricultural sector as potential employment source and the pattern of household expenses in the context of changes outside.

2. *Selection of Key Commodities*

For every regional plan, the basis for planned production is a group of selected commodities. These commodities will determine the income targets in a more realistic way. The selection of these commodities called 'Key Commodities' is inevitable for success of the plan. If such commodities are not selected, each individual farmer may select a commodity which may not fit into the general pattern of commodities promoted under the plan. Also, the cooperative may not be able to help in respect of these commodities in providing common facilities with other members. It is also important that the key commodity fits into the pattern of regional agriculture. It is not necessary that the key commodity has to be a new commodity. Even the existing commodities could be fitted into the plan through a process of re-adjustment of their production and marketing.

The following pattern is followed in respect of production strategy for the selected key commodities, either existing ones or the newly introduced commodities.

Established Commodities	Commodities under adjustment	-- Commodities of which production is to be decreased
	Core Commodities	-- Production scale is to be kept as it is but the commodities have a large share in the composition of farm income.
	Promoting commodities	-- Commodities of which production is to be expanded
Non-established commodities	Newly Introduced commodities	-- Commodities newly introduced and production of which is to be expanded.
	Trial commodities	-- Commodities for which it is necessary to conduct test cultivation for future introduction.

Criteria for Selection of Key Commodities:

The key commodities are selected with great care and after detailed examination of all factors related to their productivity and marketing. Following considerations are important:

1. National conditions should be favourable for production.
2. The acceptability of new production techniques by farmers.
3. Relations with core commodities must be complimentary to each other and not overlapping in seasons or posing as a competitive commodity.
4. The supply and demand of the commodities have to be studied and decreasing demand items have to be avoided.
5. Commodities which can give stable income rather than high income for a short time and much lower later on.
6. Competitive power of the commodity in the wholesale market.
7. Potential of the commodity as a raw material for processing so that both value adding to primary produce and additional employment opportunities are made available.

3. *Farm Management Pattern*

One of the most important part of the plan is the recommended pattern for farming for each farm household in accordance with its resources, the available labour force and the technical feasibility of the activities included in the pattern. In combining the commodities, the data in respect of each commodity has to be carefully analysed so that the total pattern takes a realistic shape. For example, a pattern may include cultivation of paddy on 0.5 HA; garlic on 0.3 HA; plus milch cattle numbering 15 to be reared. The charts on the following pages give examples of the farming patterns recommended for adoption by individual farm households (both for full-time and part-time farmers) in the context of their farming conditions:

4. *Target for Reducing Production Cost*

The main factors responsible for increasing the income of farmers are : (a) increasing productivity, (b) securing higher price per unit of agricultural product, and (c) reducing production cost. While preparing the plan, maximum effort has to be built into the programme of action to reduce production cost so that the gains out of increased productivity and marketing efficiency are not lost due to high cost of production. The process of computing reduction of production cost can be done through the three recognised methods as follows:

1. **Factors Analysing Method:** Through this method, an analysis of all the factors of production is done individually in order to examine the possibility of reducing costs in certain respects;
2. **Comparative Analysis Method:** In this case, an analysis is made of production costs of the same commodity in different areas of the same region because of different management techniques or other factors in individual households. A rational method of cost reduction can be devised after such a study;
3. **The Standard Method:** The standard method involves the thorough examination of costs of all aspects in production from the production of raw material to the marketing of end-product. This method can facilitate reduction of costs at one of the points in the total chain of activities.

1.2.3. Movement

In order to popularize the concept of cost reduction and increasing income of farmers, the agricultural cooperative movement has devised the campaign known as '*1.2.3. Movement*'. The basis of this campaign is in the three slogans adopted for this purpose. They are: (a) 10% increase in production, (b) 20% decrease in production cost, and (c) 30% increase in member's income.

**Chart 23: Plan for the Reduction of Production Costs
INDICES ON THE STANDARD FARMING**

Items	Yield per 0.1 ha	Gross income per 0.1 ha	Production cost per 0.1 ha	Income per 0.1 ha	Working hours per 0.1 ha	Gross profit per quantity	Production expenses/qty.	Income per quantity	Working hours per quantity
1. Paddy	600	189,000	88,263	100,737	57	18,900/60kg	8,826/60kg	10,073/60kg	5.7
2. Wheat	420	77,700	31,857	45,843	30	11,100/60kg	4,551/60kg	6,549/60kg	4.2
3. Beer Barley	350	69,825	28,629	41,196	30	9,975/50kg	4,089/50kg	5,885/50kg	4.2
4. Soy-beans	300	86,050	35,968	50,081	36.5	17,210/60kg	7,193/60kg	10,016/60kg	7.3
5. Cabbage Winter	5,500	275,000	89,100	185,900	120	750/15kg	243/15kg	507/15kg	0.33
Spring	5,000	350,000	113,400	236,600	120	1,050/15kg	340/15kg	709/15kg	0.36
6. Broccoli	1,500	300,000	126,000	174,000	320	400/2kg	168/2kg	232/2kg	0.42
7. Onion Fresh	5,000	350,000	199,500	150,500	184	1400/20kg	798/20kg	602/20kg	0.73
Preserved	5,000	400,000	212,000	188,000	240	1,600/20kg	848/20kg	752/20kg	0.96
8. Strawberry Farcig	2,000	1,800,000	864,000	936,000	1,635	279/0.31kg	134/0.31kg	145/0.31kg	0.25
Short cooling	2,000	1,400,000	672,000	728,000	1,008	217/0.31kg	104/0.31kg	112/0.31kg	0.15
9. Green housemelon	3,500	875,000	393,750	481,250	572	1,500/6kg	675/6kg	825/6kg	0.98
10. Green house tomato	9,000	1,260,000	604,800	655,200	930	560/4kg	268/4kg	291/4kg	0.41
11. Chinese cabbage	6,000	240,000	84,000	156,000	71	400/10kg	140/10kg	260/10kg	0.11
12. Pig	Shipping Weight 110 kg Period 3 months	per head 38,000	per head 32,300	per head 5,700	per head 12.2	per head 38,000	per head 32,300	per head 5,750	per head 12.2
13. Piglet	Per female pig Annua/pig let 16 heads	400,000	260,000	140,000	83.2	per head 25,000	per head 16,250	per head 8,750	5.2
14. Fattening cattle	Shipping Weight period 680 kg 15 month	per head 630,000	per head 567,000	per head 126,000	per 100 kg 136.7	Per 100 kg of live cattle 93,000	Per 100 kg of live cattle 83,000	Per 100 kg of live cattle 18,529	Per 100 kg live cattle 20.1

Chart 24: Indices on the Standard Farming

Farmhousehold

Items Unit	Kinds	Scale of farm management	Production quantity	Unit Price (Yen)	Gross Income (thousand Y)	Income Ratio (%)	Income (thousand Y)	Working hours/ 0.1 ha or head	Target (core farmhousehold)	
									Area - Head	Income (1000 Y)
Full-time labour forces Women 2 persons Man 1 person	A	Paddy 200 a (600 k)	200 bale	18,900	3,780	53.3	2,014	57 hrs	500 a	5,035
		+ Wheat 200 a (420 k)	140 bale	11,100	1,554	59	916	30	500	2,290
	+ Soybeans 50 a (300 k)	25 bale	17,210	430	58.2	250	36.5	7	350	
	Total				5,764		3,180			7,675
	B	Paddy 80 a (540 k)	162 bale	18,900	3,061	53.3	1,631	57	175 a	1,249
+ Cabbage 40 a (5.5 t)		22 t	50	1,100	67.6	743	320	40	743	
C	+ Broccoli 30 a (5.0 t)	15 t	70	1,050	67.6	709	120	50	1,181	
	+ Broccoli 30 a (1.5 t)	4.5 t	200	900	58	522	320	30	522	
Total				6,111		3,605			3,695	
D	Paddy 150 a (570 k)	142.5 bale	18,900	2,693	52	1,400	60	140 a	1,316	
	+ Onion 30 a (5 t)	15 t	70	1,050	43	451	184	30	451	
E	Chinese Cabbage 60 a (6 t)	36 t	40	1,440	65	936	71	80	1,248	
	Total				7,183		3,727			3,955
D	Paddy 120 a (540 k)	108 bale	18,900	2,041	42	857	74.5	112 a	800	
	+ Green-house 15 a (2 t)	3 t	900	2,700	52	1,404	1,635	15	1,404	
E	Short period cooling 5 a (2 t)	1 t	700	700	52	364	1,008	5	364	
	G. H. Melon 10 a (3.5 t)	3.5 t	250	875	55	481	572	20	962	
Total					6,316		2,249		3,530	
E	Paddy 150 a (570 k)	142.5 bale	18,900	2,693	52	1,400	60	140 a	1,316	
	Annual Cattle fattening 20 heads	14 heads	630,000	8,820	20	1,764	136.7	40 heads	3,528	
E	Pig (200 heads in a year)	200 heads	42,000	8,400	15	1,260	12.2	400 heads	2,520	
	(Raising 70 constantly)							(Raising 140 constantly)		
Total					11,513		3,164		4,844	

Note: 10 a = 0.1 ha

Farmhousehold

Indices on the Standard Farming

Items Unit	Kinds	Scale of farm management	Production quantity	Unit Price (Yen)	Gross Income (thousand Y)	Income Ratio (%)	Income (thousand Y)	Working hours/ 0.1 ha or head	Target	
									Area - Head	Income (1000 Y)
Part-time labour forces Woman 1 person Man 0.5 person	A	Paddy 100 a (600 k)	100 bale	18,900	1,890	42	793	75 hrs	94 a	745
		+ Wheat 80 a (420 k)	56 bale	11,100	621	59	366	30	90	411
	+ Soybeans 25 a (300 k)	25 bale	17,210	430	58.2	250	36.5	30	300	
	Total				2,941		1,409			1,456
	B	Paddy 100 a (570 k)	95 bale	18,900	1,795	42	753	75	94 a	745
+ Cabbage 30 a (5.5 t)		16.5 t	70/kg	1,155	67.6	780	120	40	1,040	
+ Wheat 70 a (350k)	49 bale	9,975	488	59	287	30	85	348		
Total				3,438		1,820			2,133	
C	Paddy 100 a (540 k)	90 bale	18,900	1,701	42	714	75	94 a	745	
	+ Green-house Strawberry 8 a (2 t) twice cropping	1.6 t	900/kg	1,440	52	748	1,635	10	936	
+ Melon 8 a (3.5 t)	2.8 t	250/kg	700	52	364	572	10	455		
Total				3,841		1,826			2,136	
D	Paddy 80 a (570 k)	76 bale	18,900	1,436	40	574	78	75 a	538	
	+ Green-house Strawberry 8 a (2 t)	1.6 t	900/kg	1,440	52	748	1,635	8	748	
+ Tomato 5 a (9 t)	4.5 t	140/kg	630	52	327	930	5	327		
+ Melon 3 a (3.5 t)	1.05 t	250/kg	262	52	136	572	6	272		
Total				3,768		1,785			1,885	
E	Paddy 80 a (540 k)	72 bale	18,900	1,360	40	544	78	75 a	538	
	+ Green-house Strawberry 5 a (2 t)	1 t	900/kg	900	52	468	1,635	5	468	
+ Livestock Production of piglet mother pig & others	50 heads	25,000	1,250	35	438	5.2	83 heads (mother pig 5)	727		
Total				3,510		1,450			1,733	

Note: 10 a = 0.1 ha

Farm Land Utilization Plan

The basic factor in promoting agricultural productivity is the availability of suitable kind of land on the basis of which modernized as well as mechanized methods of farming could be practiced. The RAPP envisages land utilization through four channels, viz., (a) farmland zoning plan, (b) farmland consolidation plan, (c) commodity allocation plan, and (d) farming right re-adjustment plan.

1. Farmland Zoning Plan

The zoning of agricultural land has become necessary in view of the rapid urbanization in Japan and the resultant factors of pollution harmful to agriculture due to industrial waste and urban area discharges and to urban dwellings due to the use of chemicals in farms adjacent to residential areas. The zoning is done in two ways, viz., the land used mainly for urbanization is referred to as “*urbanization zone*” and the lands used for promoting agriculture are included in the “*agricultural promotion zones*”.

2. Farmland Consolidation Plan

As has been stated in the earlier pages of this book, land consolidation work in Japan was initiated through government development programmes as it is very expensive to achieve land consolidation through cooperative effort alone. The objective of land consolidation plan is to enlarge the scale of farmland management and to arrange planned construction of roads and irrigation facilities. It also aims at improving the chemical, physical and organic character of the soil through a balanced use of chemical fertilizers and agro-chemicals.

3. Commodity Allocation Plan

The allocation of different commodities to specific areas is a must in the farm management plan for any regional agricultural development. Firstly, individual commodities need particular kind of soil, drainage and climatic conditions. Secondly, the mixing of several commodities in an area would hinder the process of organising irrigation and other facilities for different crops. The cropping pattern therefore, needs to be determined.

4. Apart from the need for land consolidation, there is an equally important aspect of agriculture in modern Japan and that is the under utilization of farmland and also lands remaining idle of farmers who have taken up jobs in non-agricultural sector. Many of the part-time farmers cultivate the land, mostly paddy, during leisure hours and the rest of their time is spent in other occupations. They are not doing any careful planning for using the lands and hence, the productivity remains at a low level. Secondly, the idle lands left by farmers migrating to urban areas not only reduce the optimum use of available lands, but also creates problems of weeds and plant diseases. The cooperatives are now promoting the transfer of farming rights of these lands

to the active farmers to enlarge their farm management scale. The agricultural committees in municipal areas promote the transfer of idle or under-utilized lands to full-time farmers.

5. *Production Plan and Marketing Plan*

The production and marketing plans cover the two major steps in agricultural production. While the production plan is related to farm guidance activities, the marketing plan is implemented through the operational channels of the cooperative which creates facilities for grading, transport and joint shipment. The production plan contains information on (a) the number of farm households engaged in a particular commodity or livestock, (b) cultivated land area or number of livestock, (c) production per 0.10 HA or per animal, and (d) total production in the area. The marketing plan consists of (a) marketing volume, (b) unit price of marketable products, (c) value of goods marketed, (d) quantity marketed through primary cooperative, (e) unit price of products marketed through the cooperative, and (f) marketing turnover of primary cooperative.

6. In most cases, the cooperatively marketed quantity will be less than the total production because not all farmers will market the total produce through their cooperative. In some cases, a part of the produce may be left for home consumption, another part may be damaged and a farmer-member may decide to sell some portion of his produce directly in the wholesale market for reasons of his own. While estimating the quantity to be marketed through a cooperative, the data of the past ten years is used to make as accurate forecast as possible. Also, the survey findings and the interviews conducted with the members help a great deal in determining the targets.

7. *Promotion of Members' Groups*

The primary agricultural cooperative can communicate with all the member farm households, but a meaningful communication may not be possible in view of the average number of members per cooperative exceeding 1200. It is difficult for the cooperative to obtain the consensus of such a large number of members. On the other hand not all members can solve their problems on their own. It is therefore necessary to have small member groups linking the activities of the cooperative with those of the members. The promotion of the member groups such as Hamlet Farming Group and the Commodity-wise Group is, therefore, an important aspect of the regional planning process. The chart on the following page shows the pattern of member group structure for various groups.

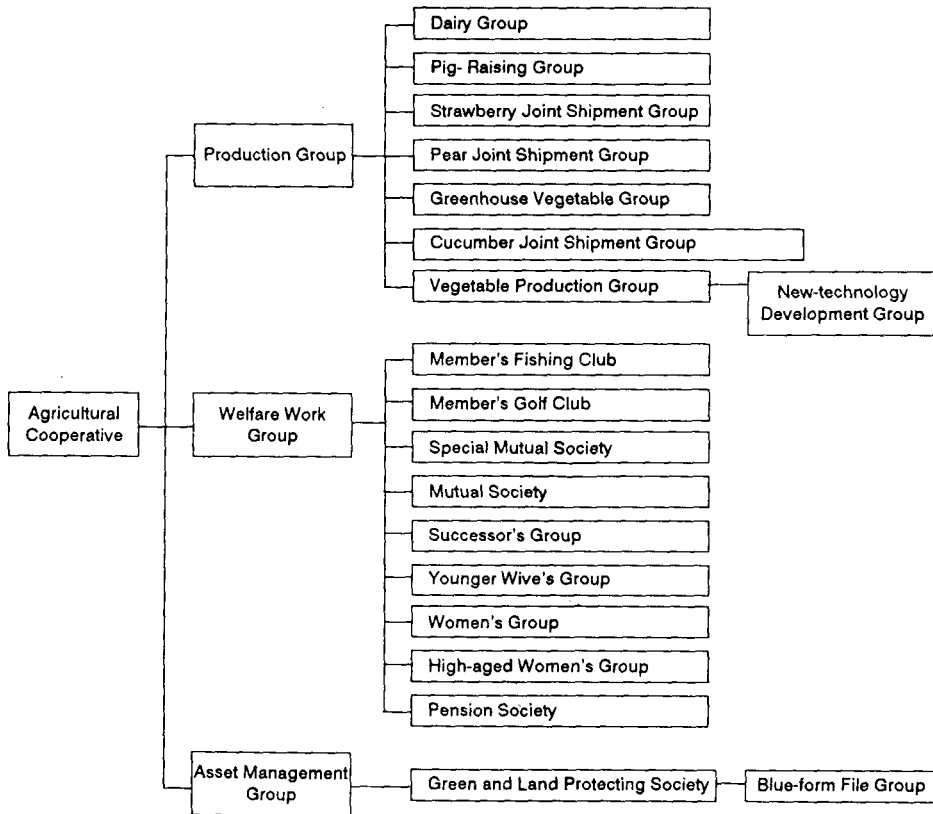
Commodity-wise Groups

The commodity-wise groups are being promoted in Japan since the mid-fifties in order to develop common forums for farmers interested in growing identical commodities. These groups function within the overall

Chart 25: Members' Organisations within Multi-Purpose Agri. Coops

- Commodity Groups: Rice Growers Group
 Horticultural Group
 Citrus Growers Group
 Pig Raising Group
 Poultry Farmers Group
 Dairy Farmers Group
 Other Groups according to local conditions
- Functional Groups: Coop Store Management Group
 Insurance Policy Holders Group, etc.
- Hamlet Groups: Farming Associations
- Youth & Women's Groups: Youth Association of Agri. Coop.
 Women's Association of Agri. Coop.

Model Structure of Members' Organisations



Note: Structural Chart is of Iruma-Tobu Agricultural Cooperative in Saitama Prefecture

plan objectives of the primary cooperative. The activities of the groups are coordinated with the guidance and marketing functions of the primary cooperative. Hence, these groups are not supposed to function independent of the cooperative. Following are the main activities of these groups :

1. Diffusion and improvement of production technology;
2. Grading and standardization of commodities for shipment;
3. Deciding upon quantities and time-table for shipment;
4. Coordinating joint activities such as collection, grading, packaging for shipment;
5. Market research; and
6. Deciding upon the markets and the quantities to be shipped to each of them.

Even if the commodity-wise groups are organized in almost all cooperatives, a fresh look at them is necessary while drafting the regional plan in order to rationalise the relationship of key commodities with each other and to activate existing groups which may not be functioning effectively. It is also likely that in some cooperatives, a commodity group may not have been formed for a particular commodity. Table below gives the process of development, in various stages, of these groups:

Table 41 : Development Stages of Commodity-wise Groups

<i>Stage</i>	<i>Initiation Stage</i>	<i>Development stage</i>	<i>Completion</i>
Producing households	Produced by small number of leading farm households	Produced by certain number of farm households who could collect certain amount	Produced by most farm households who are able to produce in the region
Production Techniques.	Introduction and diffusion of techniques from external sources	Minimizing gaps among farm households through good.	Research and development of new techniques
Marketing Power.	Trial shipment	Establishment of brand name.	Establishment of dominance in the market.
Regulation for members.	Weak	Unification of variety, production method, quality standardisation grading for shipment.	Regulations for timing of shipment and amount of shipment

Regional (Hamlet) Farm Management Group

During recent years, the policy emphasis has shifted from farming complexes to Regional Farm Management Groups at the Hamlet level. As hamlet is the basic unit of habitation in rural Japan, this movement emphasized the grass-root level approach in agricultural planning. The plan period is divided in three phases of three years each, totalling nine years.

One of the most important reasons for giving priority to regional plan is the fast decreasing number of farm successors and the aging of the farm population. Because of this trend, many of the farms do not receive proper care and attention and many others are just abandoned. The Regional Farm Management Plan is aimed at enlarging the scale of farm management by arranged leasing of the land to interested groups and by optimum utilisation of machinery, equipment and available manpower. The other objectives are to reduce production cost and maximise productivity. The plan also aims at fostering core farmers, who are not necessarily farm successors, but who wish to develop farming as a full-time occupation.

The agricultural cooperatives are expected to play a very important role in the process of developing the regional farm management plan as follows:

1. The selection of total area is to be done on the basis of one or more hamlets taking into consideration geographical conditions and irrigation system.
2. Formation of regional farm management group in consultation with the farmers in the selected area.
3. To form a consensus among group members concerning farmland utilisation, introduction and utilisation of facilities and farm machineries, division of labour and auditing.
4. Promoting the production of safe and high quality products at low cost;
5. To reduce production cost of rice by 30%, wheat 40-50%, and soy bean 50% of the total national average cost.

Action Plan:

The general pattern of regional farm management plan is to lease the lands of farmers who do not wish to cultivate them to the persons willing to manage these farms. The rent or share of income for leasing has to be determined through negotiations and consensus. For example, if 40 farmers agree to form the regional farm management group, the cooperative will arrange all the formalities for leasing the land, for determining the core farmers, their wages and the ratio of returns to the farm owner. In other words, a detailed action plan accompanied by detailed budget for all operations will have to be prepared.

An elaborate process of consultations has to be initiated by the agricultural cooperative to ensure proper planning and smooth implemen-

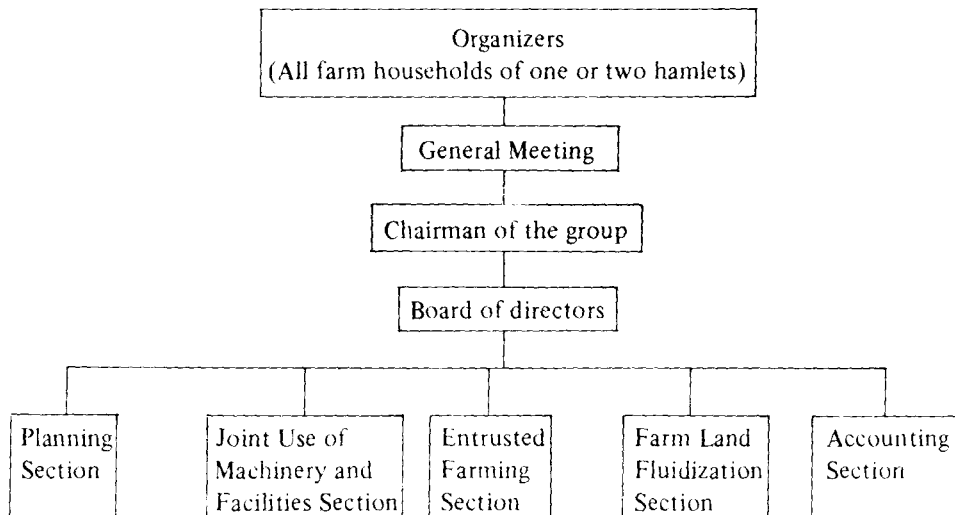
tation of the regional farm management plan. The sequence of steps for planning are as follows:

Procedures to be followed for Action Plan

1. Identification of Regional Agricultural Promotion Plan of the cooperative,
2. Designation of a hamlet or a group of hamlets (region) for which Regional Farm Management Group is to be fostered.
3. Securing leaders as a propelling force to promote fostering the group,
4. Creating common understanding on the problems faced by the people in the region through discussions at hamlet level,
5. Identification of the problem areas to be tackled and the examination on the future directions of regional agricultural,
6. Submission of proposal to the identified hamlets (groups) for fostering plan of the group,
7. Forming the consensus for fostering the group by all the concerned people at hamlet level,
8. Establishment of concrete plans containing activities and organisation of the group and its action plan,
9. Establishment of the group and implementation of its activities.

The following chart gives the basic structure of the Regional Farm Management Group.

Chart 26: Example of Internal Structure of Hamlet Farming Group



Other Groups

Apart from the hamlet farming groups and the commodity-wise groups formed by members, there are several other interest groups formed by members in accordance with their requirements for on farm activities as well as off-farm activities for better living. Reference has already been made to some of these groups. The most prominent among these are the women's association and the youth association. They also have groups for the elderly and the children.

Agricultural Coop. Women's Association

Over 85% of agricultural cooperatives have established their own women's associations with a total membership of 2,250,000 accounting for less than 51% of the total number of farm households. The membership is rather stagnant due to the decreased interest of younger members of the farm households. Perhaps, they need a separate organization like young housewives group. At present, this association is the second largest in Japan and the largest in rural community. The main principles of women's association are: (a) promotion of agricultural cooperative movement, (b) membership open to farming women only, (c) self-governing management, (d) solidarity, and (e) political neutrality. In addition to better-living activities, the associations take interest in farm management and improvement of women's status in the society. In September 1986, the association decided upon a three-year plan for developing community activities. Recently a policy has been formulated to 'The Path for Agricultural Cooperative Women's Association to Follow to the 21st Century'. In December, 1990, there were 3169 Women's Associations with a total membership of 2.25 million members.

Youth Groups

Fortyeight percent of agricultural cooperatives have their own youth groups with 164,000 members. They also follow the five principles adopted by women's association. Their main activities include agricultural management, counter-measures for popularizing farming, influencing agricultural policies, study meetings, making suggestions to agricultural cooperatives and others.

Elder and Children's Groups

Seventyone percent of cooperatives have organizations for the elderly which include friendship associations, pensioners' groups and groups for different health and welfare activities. The children's groups look after activities during vacations and mother and child care forums.

Three H Groups

These groups attempt to promote general well-being of the community through Health, Harmony and Heart-related activities.

Chapter Twelve

Central Union of Agricultural Cooperatives

Brief Background

The stage was set for establishment of unions and federations when the second amendment to the Cooperative Society Law of 1900 was passed in the year 1909. An organization named The Great Japan Central Union of Cooperatives was in existence before this date, but without much significant role in relation to guidance activities. After the above amendment, the Central Union of Cooperatives (CUC) was established. The CUC played a significant role in cooperative development during the following two decades. As the war clouds gathered over Japan, the true cooperatives lost their identities and were forced to work for the then government. When the Agricultural Cooperative Law was passed in 1947, a new organization called National Guidance Federation of Agricultural Cooperatives was established. However, the opinion was still divided among cooperative leadership about the role of federations in providing guidance services to primary cooperatives. In such circumstances, the federation could not play any significant role in cooperative development.

Emergence of CUAC

The First National Congress of Agricultural Cooperatives held in October 1952, unanimously passed a resolution underlining the need of combining the economic and guidance activities into a single cooperative organization in order to achieve highest level of efficiency in agricultural production. The Second National Congress of Agricultural Cooperatives held in February 1953 passed a resolution to establish a union to work as a general guidance body for agricultural cooperatives which was duly adopted. It was also decided at this Congress to launch a campaign to amend the Law to facilitate the formation of such organization. As a result of these efforts the Law was revised in September 1954 which authorized the formation of a union in each prefecture and a central union at the national level. Accordingly, the National Guidance Federation of Agricultural Cooperatives was dissolved and the Central Union of Agricultural Cooperatives (CUAC) was established which started functioning on first December 1954.

The character of CUAC differed from that of the National Guidance Federation of Agricultural Cooperatives in that the latter was just a parallel organization to other national federations. On the other hand, the CUAC is an apex organization for all types of agricultural cooperatives at the three levels, viz., primary, prefectural and national. The CUAC is a general guidance organization functioning for the entire agricultural cooperative movement for its development through guidance and education activities to all agricultural cooperatives irrespective of their membership of CUAC. According to its by-laws, "This association (CUAC) has for its object to contribute to the wholesome development of the entire movement by enhancing the spirit of cooperation, formulating and propagating common policies relative to all the local societies as well as federations of agricultural cooperatives." The prefectural unions in all prefectures carry out the union activities in their respective areas on the same lines as the CUAC but with the variations needed to suit local conditions and development needs of the area covered by them.

Membership

The primary agricultural cooperatives have the option to join the prefectural union. However, the prefectural unions are required, under the Law, to affiliate with the CUAC. When the prefectural unions join the CUAC, all their member cooperatives automatically become members of the CUAC. Hence, almost all the primary cooperatives also have become members of the CUAC by virtue of their joining the prefectural unions. Also, the national federations are also members of the CUAC. Membership of both the CUAC and the prefectural unions is divided into two categories, viz. regular members with voting rights and associate members with the right to make use of their services. At present all the prefectural unions and federations are members of the CUAC and in turn, all the primary cooperatives and prefectural level business federations are members of the prefectural cooperative unions. Associate members are those which are not registered under the cooperative laws but which function for the agricultural cooperatives. These are the Central Cooperative Bank for Agriculture, and Forestry (Norinchukin Bank), the UNICOOPJAPAN and such other organizations.

Union Functions

The functions of the unions in general are identical in nature. However, being the apex organization, the CUAC has much wider and important role to play in respect of lobbying with government and other bodies and in international activities. The main functions of the CUAC are as follows:

1. Guidance

The guidance functions of the CUAC and the prefectural unions are divided into three categories. First, the guidance related to organizational

aspects such as area of operation, membership, eligibility, members' relations, membership of the federations; secondly, guidance on business matters relates to sound and efficient business performance, proper selection of business areas, business administration, participation in business activities by members, etc.; and thirdly, the guidance on cooperative management includes internal structure, administrative aspects, business and financial controls and such other matters.

2. Auditing

The audit conducted by the Unions is somewhere between the internal audit and the government audit. It helps the cooperatives in improving their managerial and accounting systems. The Unions are also benefited by this audit because the information so collected helps the Unions in formulating guidance and educational activities in a more realistic way. The CUAC conducts qualifying tests for auditors and appoints them on the basis of these tests. The regulations for audit are also drafted by the CUAC. The programmes for audit are made annually by the Unions in consultation with the concerned cooperatives. The regulations are subject to approval by the governors of the respective prefectures. A certain amount of fee is charged by the Unions for the audit services rendered.

3. Education and Information

The CUAC and the prefectural Unions are responsible for the education of cooperative officials and members. The educational activities are carried out through the Central Cooperative College for those wishing to join cooperatives and also for those already working for the cooperatives. Also, various types of courses are conducted on the basis of felt needs in different areas and in consultation with the prefectural unions and their affiliates. For cooperative personnel from other countries, the CUAC has established the Institute for the Development of Agricultural Cooperation in Asia (IDACA). CUAC publishes a wide range of books and periodicals related to various aspects of cooperative activities including the newsletter ZENCHU NEWS.

4. Liaison and Mediation

The unions take up various issues for study and help the cooperatives solve their problems through information and guidance. The unions also mediate between cooperatives for solving any disputes which may arise from time to time.

5. The CUAC and the prefectural unions conduct studies and undertake research on issues affecting cooperative business and other related matters affecting the cooperatives from time to time. The CUAC takes lead in formulating new policies and programmes for cooperative reorganization and development such as amalgamation, regional planning, diversification of crops, establishment of farming complexes, etc.

6. *Legislative Activities*

The CUAC plays an important role in policy formulation at the government level. This is done through lobbying, campaigns and representations to government. So far, the unions have proved themselves as very important bodies in moulding the opinion in respect of agricultural policy and programmes in government circles and in international organizations.

7. *Liaison with Prefectural Unions*

The CUAC maintains continuing contact and relationship with all the prefectural unions in order to exchange views on current matters and get a feed back on the situations in the prefectures. This keeps the CUAC information system upto date and helps it to represent the interests of all agricultural cooperatives in an effective manner.

National Cooperative Congress

The CUAC is responsible for organizing the national cooperative congresses from time to time. At present, these congresses are held once in three years. The issues for discussions at the congress are formulated on the basis of information gathered through questionnaires sent to prefectural unions and cooperatives and through consultations at various levels. The congresses have become the main forum for generating the common will of the cooperative movement and for outlining the policy directives for future development.

Finance of the Unions

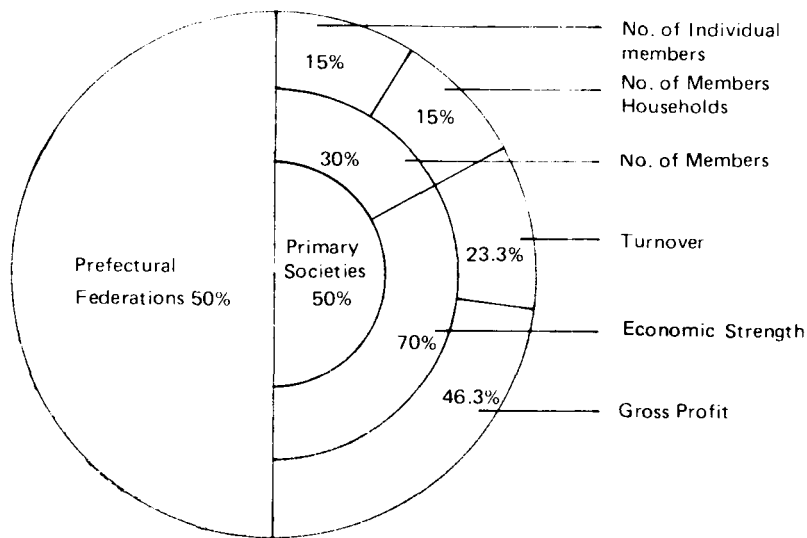
As the unions are engaged mainly in guidance and education activities and are not involved in any business activities, their source of income is mostly through membership subscriptions. The formula for membership subscription is based on policy directives from time to time. At present a standard formula is followed in respect of subscriptions to prefectural unions and to the CUAC. Mutual consultations play an important part in determining the quantum of subscription from year to year. Following are two patterns of membership subscriptions followed in respect of the prefectural unions and the Central Union:

Prefectural Unions

The total budget of the union is divided into two parts. One part is subscribed by the prefectural level business federations on the basis of yearly consultations. The other part is allocated to the primary cooperatives which are their members. The amount of subscription for each cooperative is fixed on the basis of its economic strength and the membership coverage. While fixing the amount the points to be taken into consideration are: total individual and household membership; the economic strength of the cooperative; the business turnover; and the allocation to gross profit. A certain

percentage is fixed for each of the above aspects. The following graph gives the idea of the percentages allocated to various aspects of cooperative functioning:

Budget of Prefectural Union

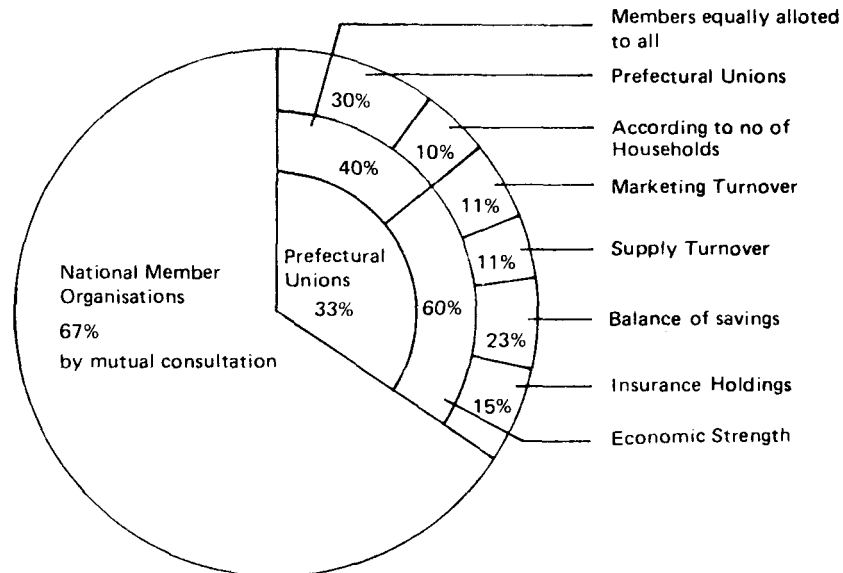


CUAC Budget

The budget of the Central Union is also divided into two parts. One part is allocated to national federations and the other to the prefectural federations. No hard and fast rules are fixed for the exact percentage for both types of members. However, the national federations generally pay 67% of the budget and the prefectural federations the remaining 33%. The amounts for each of the prefectural unions are also fixed in accordance with their economic strength, membership coverage, business coverage, savings, insurance business, etc. The subscriptions of the various national organizations are fixed by mutual consultation and on the basis of contributions in the past few years.

The graph on the following page gives the percentage allocations for various financial aspects in the member organizations affiliated to the Central Union.

Budget of Central Union



The Central Cooperative College

The CUAC established in September 1969 the Central Cooperative College on a new campus constructed for the purpose on the outskirts of Tokyo. The Eleventh National Convention of Agricultural Cooperatives held in November 1967, had earlier recommended measures for the promotion of cooperative education and the establishment of the college. The College was earlier located in a residential area of Tokyo. College imparts training in cooperative principles and practices in order to improve the capability of cooperative personnel currently working for the cooperatives or those willing to take cooperative careers in future. Recently a decision has been taken to convert the college into a university to promote training and research in order to face the challenges posed by internationalisation of agriculture and consequent changes in the rural community. Following are the three main activities conducted at the College.

1. Basic Education

High school graduates are trained for a period of three years for preparing them to work in agricultural cooperatives or related institutions.

2. Training for Staff

This training is given to existing staff and officials of the agricultural cooperatives, the unions and federations. The training programme for each

category is designed in accordance with the specific requirements of such category of staff.

3. Research

The College conducts research in various aspects of training and education in the context of specific cooperative activities.

IDACA

The Institute for the Development of Agricultural Cooperation in Asia (IDACA) is also operated by the CUAC. It was established by the Central Union in accordance with the recommendations of the First Asian Agricultural Cooperative Conference held in Tokyo in April 1962. The IDACA building was earlier located in the residential parts of Tokyo. However, it is now located near the Cooperative College campus outside Tokyo. The building is named after the then President of CUAC as Hasumi Memorial Hall.

The main emphasis in IDACA activities is to train cooperative leaders and personnel from developing countries involved in the agricultural cooperative movement in one form or another. The Institute conducts three types of courses, first, independent courses designed to suit needs of developing cooperative movements; secondly, courses organized jointly with international agencies, and thirdly, training courses conducted at the request of the Japanese Government, for example, the training course under the Colombo Plan. The Board of Directors of CUAC presided over by the CUAC President, supervises IDACA activities and when it functions as the board of advisors, representatives of concerned ministries and research organizations are also invited to attend. IDACA celebrated its 25th anniversary in August 1986.

CUAC and ICA

The Central Union is a member of the International Cooperative Alliance (ICA) and over the past few decades, has played a significant role in activities geared to the development of agricultural cooperative movement especially in the Asian Region. Since the inception of IDACA, the Japanese Agricultural Cooperative Movement, led by the Central Union, has contributed a great deal in training and in developing cooperative leadership. So far IDACA has trained over 2000 cooperative leaders and personnel from developing countries and has also conducted many follow-up training programmes in the respective countries. Apart from the annual contributions made by CUAC to ICA head office and the Asia-Pacific Regional Office, the CUAC has played a key role in persuading the Japanese Government in sanctioning an annual grant to ICA which has made it possible for the ICA to launch the Management Training Project for Agricultural Cooperatives in the Asian Region. This collaboration has been

greatly strengthened during the past few years, following the decision of the ICA to hold its 30th Congress in Tokyo during October, 1992.

Strategy for Twentyfirst Century

The Eighteenth National Congress of Agricultural Cooperatives held in October 1988 has discussed the strategy for cooperative development during the twentyfirst century and has formulated' guidelines on the basis of which such development is to be articulated. Following are the main policy directives for cooperative development during the early part of next century:

1. Changing Economic Society

In order to meet the challenges of the next century, the agricultural cooperatives have to change their structure, policies and functioning in the context of the following basic issues, viz., first, the internationalization of agriculture which means more commodities will be imported into Japan and production will have to be modified to suit these changes; secondly, the impending deregulation in the financial and banking sector is going to make resource mobilization from the rural areas the most competitive, and hence the cooperatives will have to gear themselves up for meeting this challenge; and thirdly, the information network in the cooperative movement will have to be strengthened in order to meet the requirements of a fast-moving society.

2. Remodelling Agriculture

The internationalization of agriculture will necessitate the remodelling of agriculture in three ways, first to emphasise "High Quality" production; secondly to develop "Healthy" agriculture through reduction of pollution in environment; and thirdly to introduce "High Technology" in production. For this the gradual shifting to large scale farming and streamlined management would be necessary. In addition to this, the reduction in the cost of production will get high priority. For this purpose the guidance to farmers for achieving high productivity will have to be very effective. Also, the demand and supply position of staple food such as rice will have to be adjusted to market forces and consumers' preference as it will play an important role in deciding the pattern of farm products.

3. Creating Attractive Regional Community

The inevitability of blending of rural and urban communities will have to be faced. This challenge is to be faced through adjustments in rural life in the context of surrounding urbanization. The farm household concept is to give way to individualistic needs of each member of the farm family. The opportunities in the non-farm sector to be explored and only those keen on agriculture are to be encouraged to engage in high-tech farming. The regional production centres will cater to needs of all communities. And the

community will have access to a Comprehensive Life Center with all the facilities for a happy life and recreation to meet the diversified needs of rural communities for better living.

4. *Competitive Management*

The process of introducing financial deregulation in Japan has already set in. The removal of restrictions on interest rates is creating a situation which will make financial markets the most competitive in Japanese banking circles. The cooperatives will have to gear themselves up for facing a tough competition from commercial and other financial institutions. While preparing for the competition, the identified needs of the farming and other residents in the rural areas will have to be taken into account. The involvement of farm successors and women in cooperative management will be encouraged to create a broad base for a management responsive to the needs of members. The cooperatives will have to look at management from the point of view of soundness in every sector and in every aspect of business so that activities which are not viable could be restructured. specialization in various sectors of management will be encouraged to pay expert attention to specific tasks. Above all, the process of amalgamation will have to be accelerated so that *by the turn of the century, only about 1,000 multi-purpose cooperatives will remain to serve the rural communities* and will function through an efficient system of management in which the primary cooperatives and federations at the prefectural level will function in a coherent manner.

5. *National Consensus on Common Goals*

For a successful implementation of the basic strategy for the 21st Century, it will be necessary to create a consciousness among officials and employees to improve cooperative services from the point of view of members. This has to be combined with improvement of work atmosphere in cooperative functioning. Also, for increasing the combined strength of the entire cooperative movement, closer collaboration will be further strengthened with the consumers, fisheries and forestry cooperative movements.

It is expected that both long-term and short-term plans will have to be worked out by the cooperatives to achieve the above objectives. Following three points termed "**3 Buildups**" will be the basis of the plans:

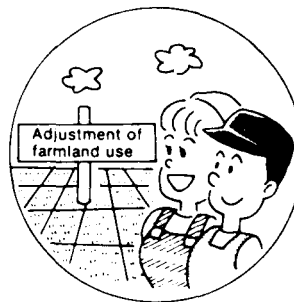
“3 Buildups”

Agricultural cooperatives will together get down to work by attaching priority to the following three points on the basis of a plan worked out by themselves from a medium- and long-term perspective.

Buildup of agriculture making the most of people and farmland

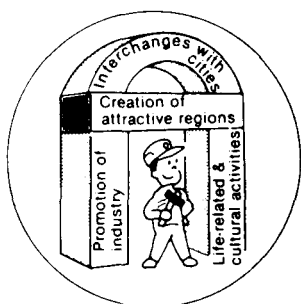
Units of farmland use and production, consisting of one to several communities, will be newly set up on the basis of a long-term outlook for available resources, such as persons in charge of regional agriculture and land for farming. On that basis, organizational adjustment will be promoted on the basis of regional consensus and ingenuity, including the systematization of farmland use and reorganization of production to reduce costs.

Through these measures, persons who will be in charge of agriculture in the future will be secured, and at the same time, the establishment of regional agriculture will be promoted amid internationalization.



Regional buildup based on creativity and interchanges

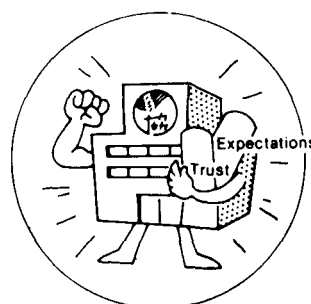
Needs and creative ideas will be defined and taken up in the course of deepening intra-regional communications, while efforts will be made to build an affluent, comfortable and peaceful region through the promotion of a variety of regional industries with agriculture as the nucleus, improvement of life-related convenience, intensification of cultural activities and interchanges with urban areas. Through these efforts, attractive regional communities with distinct characteristics will be created.



Buildup of agricultural cooperatives living up to expectations and trust

Management of agricultural cooperatives will be always guided primarily by the consideration of the members' interests, and their business will be operated in such a way as to ensure greater "member participation" and "democracy," "honesty" and "caring for others." Moreover, a system will be built up to enable the improvement of service to the members and the implementation of specialized projects.

Through these efforts, agricultural cooperatives capable of living up to the expectations and trust of the members and the regional community will be built up.



Continuing the debate for reorganising and restructuring the Agricultural Co-operative Movement, the Nineteenth National Congress of the Agricultural Cooperatives in Japan, held in Tokyo, on October 8, 1991, has adopted the following resolutions aimed at future strengthening the basic policies and programmes for leading the movement successfully to the Twenty-first Century.

Congress Resolution

The national congress of agricultural cooperatives was held with the participation of the representatives of agricultural cooperatives all over the country in a bid to carve out the future of agriculture, rural communities and agricultural cooperatives.

Today we are facing an unprecedentedly severe situation, but we should avail ourselves of such a situation as a springboard in promoting the new development of the cooperative movement and should vigorously press ahead towards the 21st Century. with the reorganization of agriculture, the reform of cooperative businesses and organisations and changes in the attitudes and images of cooperative officers.

Viewed from these points of view, we, in accordance with the consensus of agricultural cooperative organisations adopted a resolution on 'agricultural cooperatives' challenge towards the 21st century and reform' a special resolution on 'preventing the opening of the rice market, etc.' 'a special resolution on the establishment of basic policies for agriculture and rural communities, the revision of the Agricultural Cooperative Society Law, etc.' and 'a special resolution on the early realization of plans to merge agricultural cooperatives and reform businesses and organisations through agricultural cooperative organisations.'

We will therefore make every possible effort to put these resolutions into practice with all members and officers of agricultural cooperative organizations united as one body.

Resolution on Cooperatives' on Challenge Towards the 21st Century and Reform

Against the backdrop of increases in agricultural imports, agriculture and rural communities in Japan have faced difficult situations with rural communities becoming increasingly inactive, affected by the stagnation of agricultural production, a decrease in the number of successors to farming, the aging of the population and depopulation in rural areas.

Again, the businesses and management of agricultural cooperatives are becoming increasingly difficult in the face of fierce competition with other industries and financial deregulation.

In a move to cope with these situations, we will give more concrete shape to the 'basic strategy of agricultural cooperatives looking ahead to the

21st century,' which was resolved at the previous National Congress of Agricultural Cooperatives. At the same time, the members and officers of agricultural cooperative organisations will make united efforts to establish basic policies for agriculture and rural communities, to achieve agricultural reform, to reform the businesses and organization of agricultural cooperative organizations and to change the attitudes and images of the officers of these cooperative organizations, in a bid to realize three goals. The three goals are (1) the establishment of a new outlook on agriculture adapted to the situations which have changed since the previous national congress of agricultural cooperatives and the reconstruction of Japanese agriculture through the diverse development of regional agriculture, (2) the creation of a comfortable regional society based on the development of agriculture and rural communities and (3) the reorganization of agricultural cooperatives in a manner which fully measures up to the expectations of member farmers and local residents and which responds to their faith.

Special Resolution on the Establishment of Basic Policies for Agriculture and Rural Communities, and the Revision of the Agricultural Cooperative Society Law, etc.

Agriculture and rural communities in Japan are in extremely difficult situations, affected by the stagnation of agricultural production, the aging of population and depopulation.

In particular, the food self-sufficiency rate continues to fall every year while the shortage of successors to farming and the aging of farmers are assuming alarming proportions. In addition, arable lots of land in mountainous areas are being abandoned in increasing numbers. In these circumstances, it would be no overstatement to say that agriculture and rural communities in Japan are in danger of ruin. The situation has already started to exert a serious impact on the conservation of national land and the natural environment.

With this well in mind, we demand that the government should do justice to the diverse roles played by Japanese agriculture in the maintenance of rural society and in the conservation of national land and the natural environment as well as in the stable supply of food to the people and in securing food safety, and will thereby establish new basic policies for agriculture and rural communities to give the farming population bright hope for the future.

Again, we demand that the government should revise laws and institutions, which are necessary to expand the business functions of agricultural cooperatives and federations and for the improvement and reinforcement of the cooperative management system, from the standpoint of fully meeting the diversified and sophisticated needs of member farmers and also enabling agricultural cooperatives to give full play to their roles in promoting the development of regional agriculture and invigorating regional policy.

Special Resolution on the Early Realization of Plans to Merge Agricultural Cooperatives and the Reform of Businesses and Organizations through Agricultural Cooperative Organizations

In rapidly changing environments such as the internationalization of agriculture, the easing of various regulations, progressive aging of the population and increasing information-orientedness, primary agricultural cooperative societies are urged to lay solid organizational foundations which will enable them to continue to respond to the faith of member farmers, and also to fulfill their roles as bases for farm managements and the lives of member farmers.

To this end, we should more vigorously push ahead with agricultural cooperative mergers in an effort to arm agricultural cooperatives with high levels of business functions and also to establish a system which will enable them to operate on their own, from the standpoint of responding to the needs of member farmers. At the same time, there is an imperative need for us to muster our full organizational strength in establishing rational and efficient two-tier business systems through agricultural cooperative organizations and reinforcing the organizations on the basis of two-tier organizations, i.e. primary agricultural cooperatives and unified federations comprising both prefectural and the national level.

We will therefore formulate, by March 1993, plans to strengthen agricultural cooperative organizations at national and prefectural levels and translate such plans into action without delay.

Two other emergency resolutions such as (1) special resolution on preventing the opening of the rice market, etc. (2) emergency resolution on counter-measures for typhoons and other disasters, were also adopted in this congress.

Chapter Thirteen

Fisheries and Forestry Cooperatives

Fisheries and forestry cooperatives in Japan have a vast network of facilities and their activities cover the entire length and breadth of the country. To deal with their activities in the book on agricultural cooperatives would mean giving almost equal space to these two types of cooperatives. These two categories would singularly need the space of a book each. Hence, very brief information is given in this chapter on these two types of cooperatives in order to acquaint the readers with their organisation and functioning.

Fisheries Cooperatives

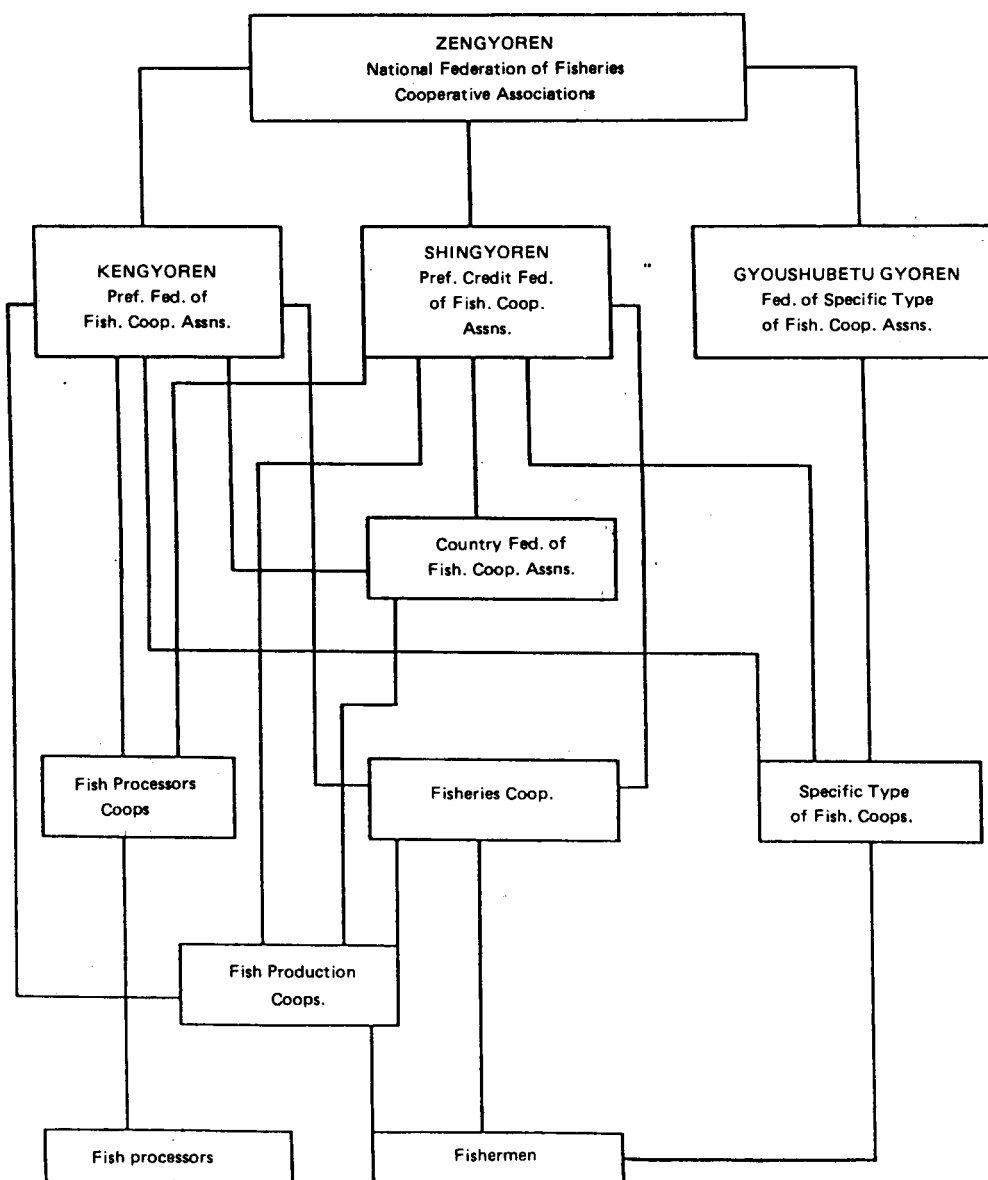
The Fisheries Cooperative Law passed in 1949 facilitated the establishment of fisheries cooperatives. The National Federation of Fisheries Cooperative Associations (ZENGYOREN) came into being on October 25, 1952. The fisheries cooperatives have their own three tier structure of national federation, the prefectural federations of fishery cooperatives, the prefectural credit federations of fisheries cooperatives and some specialized federations. The national federation has 81 such members which are regular members; the National Mutual Insurance Federation of Fishery Cooperatives is an associate member. On 31st March, 1991 there were about 4,125 primary fisheries cooperatives with 550,000 members. Out of a total of 2.6 trillion yen worth of fishery production in Japan, the fisheries cooperatives account for 1.5 trillion yen worth of production. ZENGYOREN is a member of the International Cooperative Alliance. Chart 27 on the next page gives the organizational structure of fisheries cooperatives with ZENGYOREN as the apex organization.

Major Activities

The federation handles both economic and guidance activities for the member cooperatives. The guidance and advisory activities are carried out by the following departments:

1. Fishery Policy Planning Section.
2. Fishery Policy Department.
3. Coastal Fisheries Promotion Department.
4. Guidance Department; and
5. Credit Business Promotion Department.

Chart 27: Organisational structure of ZENGYOREN
 (1) The organisational structure of Zengyoren is as in the following figures.
 Chart of Organisational Network of Fisheries Coops.



The economic activities are carried out through the following two divisions:

1. *Marketing Division* : This division has three departments:
 - 1.1 Marketing Department.
 - 1.2 Tohoku Branch Marketing Department; and
 - 1.3 Laver and Seaweeds Department.
2. *Purchasing and Supply Division* : This division has two departments:
 - 2.1 Petroleum Department; and
 - 2.2 Fishing Materials Supply Department.

Table No.42 on page 171 shows the number of fishery cooperatives, their federations and their business volumes.

Table No.43 on page 172 shows the average savings and earnings per cooperative.

Forestry Cooperatives

The Forestry Owners' Cooperative Law was passed in 1951 to facilitate the registration of forest owners' cooperatives. Such cooperatives existed even before the War, but during the war period they were compulsorily brought under the National Forestry Federation. The National Federation of Forestry Cooperatives, established soon after the passing of the Law is engaged in guidance, purchasing and marketing and providing utilisation services for its member prefectural federations and their affiliates. The forestry cooperatives also have their own three-tier organisational structure with primary cooperatives at the base, the prefectural federations at the prefectural level and the national federation at the apex level. There is a prefectural federation in each of the country's 47 prefectures which also conduct similar activities for their members. The National Federation of Forestry Cooperatives is a member of the International Cooperative Alliance. The chart on page 173 shows the organisation pattern of forestry cooperatives and their association.

Primary Cooperatives

There are about 1,683 forest owners cooperatives in Japan. Over 60% of private forest owners are members of these cooperatives. Two-thirds of the cooperatives are multi-purpose and about one-third are production cooperatives. Most of the forest owners cooperatives have a rather modest scale of business operations because most of their members are owners of small size forests. From a survey conducted in 1986 involving 1740 cooperatives with a membership of 1,712,041 it was revealed that they owned 10,298,364 ha. forest lands which is about 70% of the privately owned forests in Japan. The table on page 174 gives the number of these cooperatives, their members and business turnover of surveyed cooperatives.

Table 42: Number of Fishery Coops & their Feds. by their Engaging Business

				60. 3	61. 3	62. 3	63. 3	1. 3	2. 3	3. 3
				1985. Mar.	1986. Mar.	1987. Mar.	1988. Mar.	1989. Mar.	1990. Mar.	1991. Mar.
合 計 Grand Total				4 366	4 355	4 295	4 214	4 177	4 145	4 125
単 位 組 合 Unit Coops	出 資 組 合 Invested Coops	地区漁業協同組合 District Fishery Coops	海 沿 Coastal District Fishery Coops	2 151	2 151	2 145	2 141	2 133	2 127	2 118
			内 水 面 Inland-Water District Fishery Coops	733	737	732	732	733	730	730
			業種別漁業協同組合 Specific Fishery Coops (Classified by the Kind of Catch)	280	272	264	261	248	242	237
			漁業生産組合 Fishery Production Associations	817	814	781	711	697	686	683
			水産加工業協同組合 Marine Products Processing Coops	188	186	179	177	176	172	169
		計 Total	4 169	4 160	4 101	4 022	3 987	3 957	3 937	
		非 出 資 組 合 Non-Invested Coops	197	195	194	192	190	188	188	
	実施事業 別組合数 Number of Coops by Business	信 用 Credit	2 061	2 044	2 035	2 015	1 988	1 958	1 945	
		販 売 Marketing	2 030	2 021	2 001	2 012	1 988	2 003	2 019	
		購 買 Purchasing	2 123	2 112	2 112	2 106	2 109	2 101	2 103	
漁業自営 Fishing		850	816	774	753	753	705	724		
合 計 Grand Total				212	210	210	209	210	198	197
連 合 会 Federa- tions	漁 連 Federa- tions of Fishery Coops	計 Total	153	151	152	151	160	151	150	
		うち 販 売 of which Marketing	65	64	69	68	65	72	71	
		購 買 Purchasing	62	61	63	61	62	71	68	
	水 加 工 連 Pref. Federations of Marine Products Processing Coops	漁 連 Pref. Credit Federations of Fishery Coops	12	12	12	12	15	12	12	
		信 用 漁 連 Pref. Credit Federations of Fishery Coops	35	35	35	35	35	35	35	
		信用水産加工連 Pref. Credit Federations of Marine Products Processing Coops	1	1	-	-	-	-	-	
		全 国 連 National Federations of Fishery Coops	11	11	11	11	11	9	9	

資料 水産庁「水産業協同組合作次報告」
(注) 大臣認可と都道府県知事認可の合計数。

Source: Annual Report of Fishery Coops, Fishery Agency

Note: Total Number of Coops authorized by Competent Minister and Prefectural Governors.

Table 43: Outstanding Savings & Borrowings per Fishery Boat owned or Type of Fishing (National Average)

残高 Amount	漁船トシ未満 Powered Boat Under 10T.	預貯金等 Savings and Others								
		預貯金 Savings						貸付金 Advance- ment	有価証券 Securities	合計 Grand Total
		漁協 with Fishery Coops	農協 with Agr. Coops	都市銀行 with City Banks	地方銀行 with Regional Banks	その他 預貯金 Others	計 Total			
		3 336	832	522	1 194	1 612	7 496	196	455	8 147
	1～3T.	3 856	477	232	1 381	1 588	7 534	—	556	8 090
	3～5T.	5 847	348	222	1 305	1 346	9 069	16	731	9 816
	5～10T.	7 276	673	339	1 605	1 531	11 424	9	1 047	12 480
	10～30T.	11 678	—	2 620	—	1 958	16 256	1 180	1 610	19 046
	30～50T.	11 532	—	2 590	—	2 910	17 032	3 353	882	21 267
	50～100T.	36 446	—	11 344	—	3 349	51 139	4 561	1 398	57 098
	100～200T.	87 793	—	28 823	—	12 620	129 236	19 206	9 086	157 528
	200～500T.	129 079	—	75 271	—	42 585	246 935	27 220	11 389	285 544
	500T.～	270 740	—	243 805	—	55 529	570 073	78 979	64 142	713 194
	のり養殖 Laver Culture	9 678	2 455	777	3 873	1 389	18 171	29	718	18 918
	かき養殖 Oyster Culture	13 438	1 264	98	1 920	4 604	21 324	—	842	22 166
	より養殖 Yellowtail Culture	17 279	2 078	43	6 411	4 070	29 881	775	1 922	32 578
	小型定置 Small Set-Net	6 200	699	303	1 766	2 024	10 991	99	1 468	12 558
	大型定置 Large Set-Net	109 015	—	9 448	—	1 671	120 135	15 396	574	136 105
構成比 Component Ratio	漁船トシ未満 Powered Boat Under 10T.	40.9	10.2	6.4	14.7	19.8	92.0	2.4	5.6	100.0
	1～3T.	47.7	5.9	2.9	17.1	19.6	93.1	—	6.9	100.0
	3～5T.	59.6	3.5	2.3	13.3	13.7	92.4	0.2	7.4	100.0
	5～10T.	58.3	5.4	2.7	12.9	12.3	91.5	0.1	8.4	100.0
	10～30T.	61.3	—	13.8	—	10.3	85.4	6.2	8.5	100.0
	30～50T.	54.2	—	12.2	—	13.7	80.1	15.8	4.1	100.0
	50～100T.	63.8	—	19.9	—	5.9	89.6	8.0	2.4	100.0
	100～200T.	55.7	—	18.3	—	8.0	82.0	12.2	5.8	100.0
	200～500T.	45.2	—	26.4	—	14.9	86.5	9.5	4.0	100.0
	500T.～	38.0	—	34.2	—	7.8	79.9	11.1	9.0	100.0
	のり養殖 Laver Culture	51.2	13.0	4.1	20.5	7.3	96.1	0.2	3.8	100.0
	かき養殖 Oyster Culture	60.6	5.7	0.4	8.7	20.8	96.2	—	3.8	100.0
	より養殖 Yellowtail Culture	53.0	6.4	0.1	19.7	12.5	91.7	2.4	5.9	100.0
	小型定置 Small Set-Net	49.4	5.6	2.4	14.1	16.1	87.5	0.8	11.7	100.0
	大型定置 Large Set-Net	80.1	—	6.9	—	1.2	88.3	11.3	0.4	100.0

資料 農林水産省「漁業経済調査報告」(漁家の部)(企業体の部)

Chart 28: Organisation of the Forest Owners' Cooperative Associations & Related Organisations

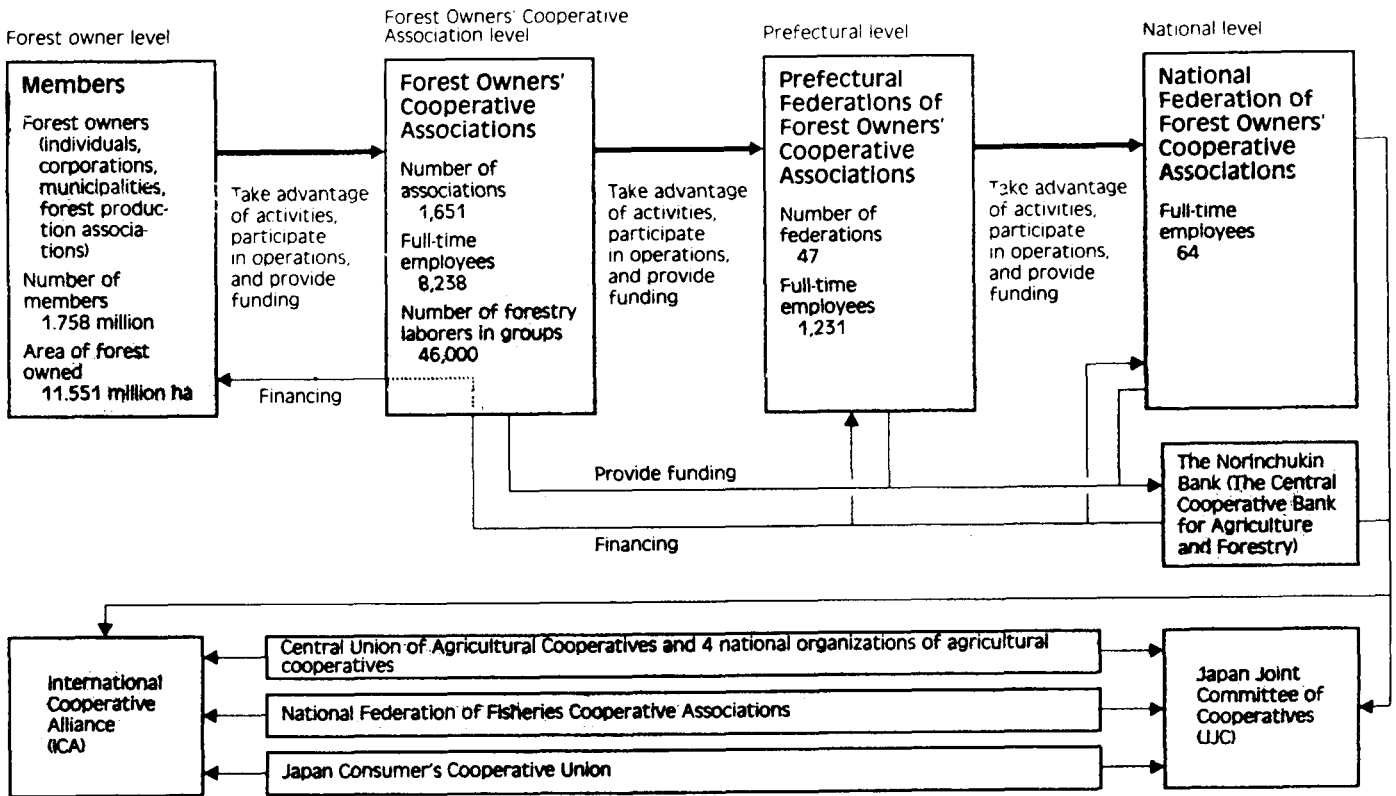


Table 44: Number of Forestry Coops & their Feds. by their Engaging Business

(Unit: Million Yen
1,000 ha
100 Persons)

		59.3 1984. Mar.	60.3 1985. Mar.	61.3 1986. Mar.	62.3 1987. Mar.	63.3 1988. Mar.	1.3 1989. Mar.	2.3 1990. Mar.	
森林組合 Forestry Coops	出資組合数 Number of Invested Coops	1 791	1 770	1 756	1 740	1 709	1 674	1 651	
	(組合総数) (Total Number of Coops)	(1 821)	(1 804)	(1 790)	(1 773)	(1 746)	(1 715)	(1 683)	
	組合員数 Number of Members	正組合員 Regular	17 264	17 232	17 211	17 120	17 062	17 050	17 006
		准組合員 Associate	528	535	547	571	574	586	577
		計 Total	17 792	17 767	17 758	17 691	17 636	17 636	17 583
払込済出資金 Share Capital Paid-In	25 715	27 419	28 740	30 001	31 211	32 542	33 881		
組合員所有森林面積 Area of Forest Owned by Members	11 690	11 663	11 645	11 623	11 597	11 555	11 551		
生産森林 組合 Production Coops	組合数 Number of Coops	2 910 (3 228)	2 958 (3 277)	2 949 (3 305)	3 026 (3 352)	3 051 (3 390)	3 100 (3 410)	3 148 (3 437)	
	組合員数 Number of Coops' Members	2 834	2 883	2 889	2 931	2 942	2 951	2 971	
	払込済出資金 Share Capital Paid-In	27 815	28 088	28 635	28 999	29 631	29 932	30 297	
	組合経営森林面積 Area of Forest Operated by Coops	333	344	347	355	355	357	364	
連合会 Feds. of Forestry Coops	連合会数 Number of Feds.	47	47	47	47	47	47	47	
	会数 Number of Affiliated Coops	1 867	1 841	1 830	1 816	1 788	1 759	1 714	
	払込済出資金 Share Capital Paid-In	3 618	3 869	4 110	4 288	4 416	4 575	4 739	

資料 林野庁「森林組合統計」、全農連「森林組合連合会統計」

(注) 森林組合、生産森林組合については森林組合統計の調査組合数。

Source: Statistics on Forestry Coops, Forestry Agency and Statistics on Federations of Forestry Coops, National Fed. of Forestry Coops

Note: Forestry Coops and Forestry Production Coops are only those surveyed.

Major Activities

The main activities of the forest owners cooperatives are as follows:

Guidance

Majority of the forest owners' cooperatives are engaged in guidance activities as it is considered an important task for achieving high productivity and for developing closer relationship with members.

Purchasing

On the basis of 1986 survey involving 1740 cooperatives, the total purchasing business of these cooperatives was to the tune of Yen 24,983,823,000. These activities include supply of agricultural inputs, equipment and production of seedlogs.

Marketing

The total marketing turnover of the surveyed cooperatives amounted to Yen 41,573,017,000 while the logging business was worth Yen 63,585,896,000. Two-thirds of the marketed products are logs while the rest are pulp and other products.

Lumbering and Manufacturing

This business of the surveyed cooperatives amounted to Yen 26,437,876,000. This kind of activity involves considerable investments and infra-structural facilities.

Tree Planting Business

The new tree planting activities of the above cooperatives was worth Yen 130,160,953,000. This suggests how great is the importance attached by the cooperatives in recycling the forest growth operations and preserving the forest wealth of the country.

Finance

Most of the forestry cooperatives are also members of the agricultural multi-purpose cooperatives in their areas. Hence according to Forestry Cooperatives Law, they are not accepting deposits from their members. Hence they have to raise funds for their use by borrowing from financial institutions. The Forestry Credit Fund Association provides guarantees for loans extended by financial institutions to forest owners. The forestry cooperatives, their federations as well as private forest owners are members of the Association. The Agriculture, Forestry and Fishery Financial Corporation (AFFFC) also provides loans to forestry cooperatives mainly for establishing facilities and maintenance and improvement of forests. The table on the following page shows the break-up of business performance in various activities.

Table 45: Amount of Business Transactions of Forestry Coops by Type of Business & by Handled Goods

(Unit: Million Yen)

年 度	販 売 事 業 Marketing						Fiscal Year	
	立 木 Standing Trees	木 材 Timbers	うち 一般用材 of which General Use	パルプ材 Pulp	そ の 他 Others	計 Total		うち 委託販売 of which Consigned Marketing
60	1 609	30 854	22 032	5 155	10 916	43 379	...	1985
61	1 766	29 374	21 118	4 114	10 433	41 573	...	1986
62	1 948	33 805	26 416	3 153	11 730	47 483	...	1987
63	1 887	34 188	26 511	2 973	11 257	47 332	...	1988
1	1 924	37 378	28 927	3 339	11 824	51 126	...	1989

年 度	林 産 事 業 Forestry Produce					加 工 製 造 事 業 Processing & Manufacturing				Fiscal Year	
	木 材 Timbers	一般用材 General Use	パルプ材 Pulp	加工原料 Processing Use	そ の 他 Others	計 Total	製材品 Sawlogs	チップ Chips	そ の 他 Others		計 Total
60	53 978	43 913	8 245	1 820	1 294	55 272	10 851	7 712	5 915	24 478	1985
61	53 802	44 674	7 167	1 961	1 538	55 340	11 884	6 715	6 826	25 425	1986
62	58 075	50 027	6 260	1 787	1 899	59 974	13 964	6 062	7 061	27 887	1987
63	59 736	51 209	6 727	1 800	1 949	61 685	15 342	6 115	9 284	30 741	1988
1	63 329	54 921	6 891	1 518	1 707	65 036	16 119	6 535	9 487	32 141	1989

年 度	購 買 事 業 Purchasing				養 苗 事 業 Seedlings			Fiscal Year
	山行苗木 Seedlings	肥 料 Fertilizer	そ の 他 Others	計 Total	山行苗木 Seedlings	そ の 他 Others	計 Total	
60	11 580	587	13 848	26 015	1 525	147	1 672	1985
61	10 227	703	14 054	24 984	1 393	177	1 570	1986
62	9 604	684	13 477	23 765	1 290	178	1 468	1987
63	9 729	666	13 816	24 211	1 234	177	1 411	1988
1	8 693	568	12 329	21 590	1 125	272	1 397	1989

資料: 林野庁「森林組合統計」

Source: Statistics on Forestry Coops, Forestry Agency

Chapter Fourteen

IE-NO HIKARI Association and Agricultural Press

The Agricultural Cooperative Movement in Japan is duly supported by the IE-NO-HIKARI Association and by the Agricultural Press (Nihon Nogyo Shimibun) in publicising cooperative activity and in bringing the relevant news to the door of the cooperative members. Following is a brief description of their activities.

IE-NO-HIKARI Association

Organisation

The origin of IE-NO-HIKARI (Light of Home) dates back to about 65 years when the publication of the magazine of this name was started in 1925. At present the IE-NO-HIKARI Association (National Publishing Federation of Agricultural Cooperatives) is a non-profit organisation and it has 52 members which includes ZEN-NOH, 47 prefectural unions, Central Cooperative Bank for Agriculture and Forestry, the National Association of Prefectural Credit Federations; one prefectural welfare federation of agricultural cooperatives and the National Mutual Insurance Federation of Agricultural Cooperatives. The IE-NO-HIKARI Association is an associate member of CUAC and a member of the International Cooperative Alliance as well as of the International Raiffeisen Union.

Activities

The Association is constantly endeavouring to improve educational and cultural standards in rural communities through information and publication of books, magazines and through programmes on television, radio etc. Besides IE-NO-HIKARI monthly magazine, it publishes "GOOD EARTH" and Light of Children magazines. The circulation of IE-NO-HIKARI is about 1,200,000 copies, which is the largest circulation among magazines in Japan. The Association earns Yen 10,000 million out of which 10% comes through advertisements. The chart on the following page gives the status of the three magazines. IE-NO-HIKARI is published from seven prefectural capitals.

Publication of Monthly Magazines

<i>Name of Magazine</i>	<i>First published</i>	<i>Average circulation Copies</i>	<i>Price Yen</i>
1. The IE-NO-HIKARI (The Light of the Home)	1925	1,200,000	515
2. The CHIJO (The Good Earth)	1947	60,000	494
3. The KODOMO NO HIKARI (The Light of Children)	1964	70,000	391

Besides publication of the three magazines, the Association arranges readers' meetings of all the three magazines separately at district and prefectural levels and arranges cookery and dance lessons, seminars on cultural matters and house-keeping. Books on these aspects are also published from time to time. The Association publishes since 1949 the Japan Agricultural Year Book and from 1986, the Cooperative Dictionary.

The Association has instituted from 1949 a prize for outstanding performance of cooperatives every year. It is awarded to three such cooperatives annually. It also employs qualified personnel to educate cooperative leaders. Also it appoints a Cultural Coordinator in each cooperative to help in implementing IE-NO-HIKARI's cultural programmes. Two correspondents are assigned to each prefecture for collecting news and views of cooperative leaders and correspondents are also appointed for a few countries in Europe and Asia. All copies of the magazines are sent to subscribers and hence the question of unsold copies does not arise. The profit is returned by the Association to its members and member farmers through various programmes of cultural activities.

NIHON NOGYO SHIMBUN (Japan Agricultural Press)

Background

The Japan Agricultural Press is a daily newspaper published since 1928 with the purpose of providing news to Japanese farmers. It also functions as a spokesman for the agricultural cooperatives. The scope of the newspaper was expanded after the National Press and Information Federation of Agricultural Cooperatives was established in 1948. During early years the newspaper was published weekly. Later it was published twice a week and gradually on a daily basis. 180 agricultural cooperatives in all the prefectures have jointly established the Federation. The main office of the Federation is located in Tokyo with branch offices in several prefectures. It has a total staff of 360 employees and over 3000 correspondents in different cooperatives. It has a circulation of half a million copies.

Editorial Policies

The main motivation for starting the newspaper in 1928 was the serious agricultural situation due to sharp fall in prices of agricultural produce. The Great Depression of 1930s had affected Japanese agriculture to a great extent. One farmers' group then started the newspaper in order to ensure fair reporting of market situation in relation to agricultural commodities. The newspaper has since grown in stature and its editorial policies are firstly to express opinion from the view point of the farmers and make it known to the outside world; secondly to report on latest trends in agricultural field with special reference to aspects relating to modernisation of agriculture and to improve the farm household economy as well as their environment and thirdly to generally look after the interests of rural communities. Besides the daily newspaper, the Press also publishes periodicals, special issues on subjects of interest to farmers and their agricultural cooperatives.

Chapter Fifteen

Role of Government

The role played by the Japanese Government in facilitating the formation of agricultural co-operatives and in assisting them is unique in several ways and very few governments in other parts of the world have given such support without in any way infringing on the autonomous character and independence of the co-operative organization. The assistance and subsidy given by the government to farmers and agricultural cooperatives has already been mentioned in the respective chapters in this book. This chapter deals with the general aspects of facilitating and assisting the agricultural cooperatives in the country.

Legislation

The Agricultural Cooperative Society Law of 1947 provides the basic framework for registration of cooperatives and regulating their business activities. The object of the Law No.132 of 1947 states: "This Law has for its object to promote the sound development of farmers' cooperative system, thus improving the agricultural productivity and enhancing the living and socio-economic standards of farmers, as well as to secure the wholesome development of the national economy." The object of business as stated in the Law is: "A cooperative has for its object to do business in order to render its maximum services to its cooperative members and member cooperatives (herein after in this Chapter, known generally as 'cooperative members') and it shall be allowed to do its business for profit-making purposes."

The Law deals with the general provisions relating to registration, supervision, business aspects, membership, administration, establishment, dissolution and liquidation of agricultural cooperatives and also provides for penalties in case of breach of the provisions of this Law. Section 9 of the Law exempts agricultural cooperatives from the application of the Anti-Monopoly Law. Article 9 states: "Under the Law No.54 of 1947 (the Law for Prohibition of Private Monopoly and Security of Fair Trade), a cooperative shall be construed to meet the requirements specified in each of the items of Article 24 of the same Law." This exemption facilitates the cooperative business in certain fields of activity and exclusively for members. Separate chapters deal with provisions concerning Farmer-group Corporation and the establishment of the Central Union of Agricultural Cooperatives

(CUAC). Farmer group corporations are established to undertake installation and joint use of common facilities or to undertake farm management or forest management.

Agricultural Budget

The Government of Japan provides every year, through budget appropriations, certain amounts for assistance and subsidies in implementing various schemes for improvement of agriculture. Most of these amounts are for helping the rural communities directly or through their institutions. Following table gives the amounts earmarked for various schemes approved by government for assistance and subsidies:

Table 46 : Outline of Agricultural Budget for Fiscal 1991

<i>(Unit: Million Yen)</i>	
Total Agricultural Budget	2,491,987
1. Measures for production	1,575,041
(i) Selective expansion of agricultural production	284,946
i. Promotion of livestock production	94,382
ii. Promotion of horticulture	16,092
iii. Rationalization in production of rice & wheat	174,092
iv. Promotion of sericulture	380
(2) Improvement of agricultural productivity and rural environment	1,127,908
i. Agricultural and rural improvement (land improvement, agricultural development in designated area, farmland development)	1,036,996
ii. Development and dissemination of agricultural techniques (development of agri. techniques, extension services)	90,909
(3) Measures for disaster	162,190
2. Improvement of agricultural structure	294,916
i. Promotion and improvement of agri.structure	43,463
ii. Promotion of farm mechanisation	1,481
iii. Agricultural modernization fund	13,791
iv. Subsidy through AFFFC*	120,851
v. Fostering core farm households & farm successors	2,311
vi. Special measures for local agricultural policy	3,019
vii. Mobilisation of farmland	290
viii. Agriculturist pension scheme	109,710

* AFFFC : Agriculture, Forestry and Fisheries Financial Corporation

3. Measures for price, distribution and income	376,703
(1) Price stabilization and rationalization of distribution	337,602
i. Price stabilization for agri.products	334,990
Operation of Food Control System	210,000
Price stabilization for major agri. products	19,761
Price stabilization for livestock products	72,650
Price stabilization for fruits and vegetables	7,839
ii. Rationalization of distribution for agricultural and livestock products	2,612
(2) Improvement of distribution system for perishable foods	9,822
(3) Promotion of demand for agri.products & agro-processing	12,134
(4) Rationalization of production, distribution & price stabilization for agricultural production materials	13,198
(5) Stable procurement of imported agricultural and forestry products	3,947
4. Improvement of Welfare of those engaged in farming	31,516
(1) Measures for women and elderly persons	459
(2) Introduction of electricity	59
(3) Development of depopulated areas	12,819
(4) Development of mountain villages	12,929
(5) Promotion of settlement in farming villages	5,250
5. Agricultural organizations	58,158
6. Agricultural statistics and survey	11,915
7. Others	143,738
Total National Budget for fiscal 1991	70,347,419
Share of Agricultural budget	3.5%

Agricultural Extension Services

Simultaneously with the farm guidance and better-living activities of agricultural cooperatives, the government has its own network of extension services organized under the Ministry of Agriculture, Forestry and Fisheries (MAFF). These activities are coordinated with cooperatives and other agencies functioning in rural Japan and jointly they attempt to improve not only the productivity of Japanese farmer but also help him in improving the living standards of the farm household.

Agricultural Extension Services are organized under the Agricultural Improvement Promotion Law of 1948. "The Purpose of this Law shall be to enable farmers to have access to wholesome, appropriate and practical knowledge relevant to their agricultural issues and to increase public welfare

in order to ensure the development of efficient agricultural practices, increased agricultural production and the improvement of farm households' living." The main characteristics of extension services are as follows:

1. They are designed to help farmers themselves to be able to engage in agricultural improvement as well as in elevating their living standards in order that human elements may be more emphasised than material ones.
2. The improvement of farm households' living has been incorporated into the extension programme from the viewpoint of ensuring better farm operations in view of the fact that Japan's agriculture is characterised by a family farm system; and
3. These services also aim at upbringing of farmers sufficiently responsible for their agricultural production and rural construction, especially ensuring the line of farm successors for the future of agriculture in Japan.

Agricultural Extension Offices

After the amendment of the above Law in 1958, Agricultural Extension offices have been set up in various prefectures to coordinate the extension services and to work in close liaison with the prefectural governments. The extension agents, as they are called, are attached to these offices and work in close association with the agricultural experiment stations at national and prefectural levels and research institutions and draw most of their technical know-how from these institutions. Apart from the technical guidance activities to farm households, the extension agents are also responsible for training rural youth so that adequate number of farm successors are assured for preserving the rural communities.

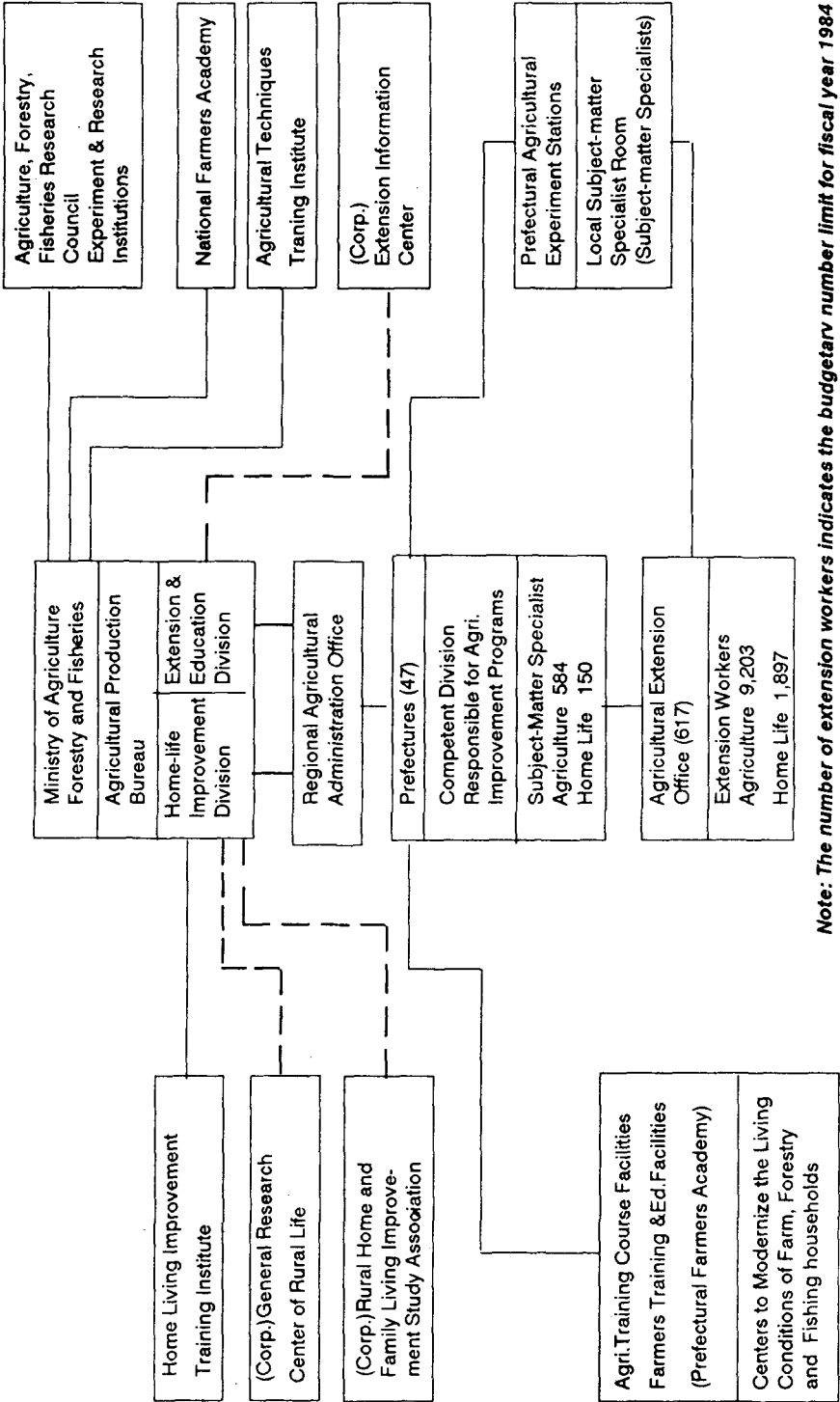
Subject-matter Specialists

Attached to each extension office are subject-matter specialists who provide expert guidance to extension agents whenever a reference is made to them by the latter or by any field worker. The agricultural research stations, the experimental stations, the subject-matter specialists and the extension agents work in close coordination with each other for providing technical guidance services to farm households.

Home-life Improvement

Besides the extension agents, the extension services provide for home-life improvement workers who help the farm households in improving their health and living standards through various educational and guidance activities. The following two charts give details of the administrative structure and the contents of government extension services for the benefit of the farm households:

Chart 29: Chart of Administrative Structure



Note: The number of extension workers indicates the budgetary number limit for fiscal year 1984

Chart 30:

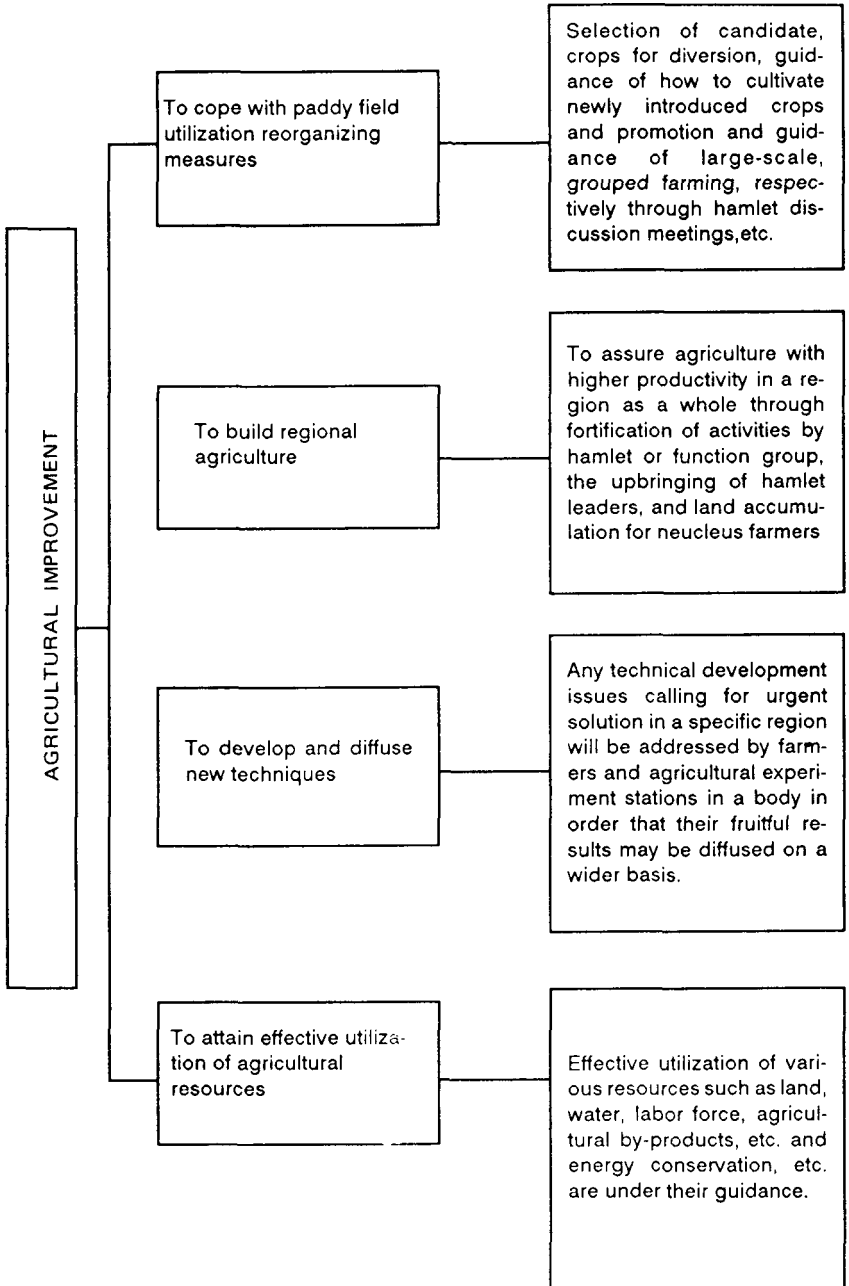


Chart 30: Continued

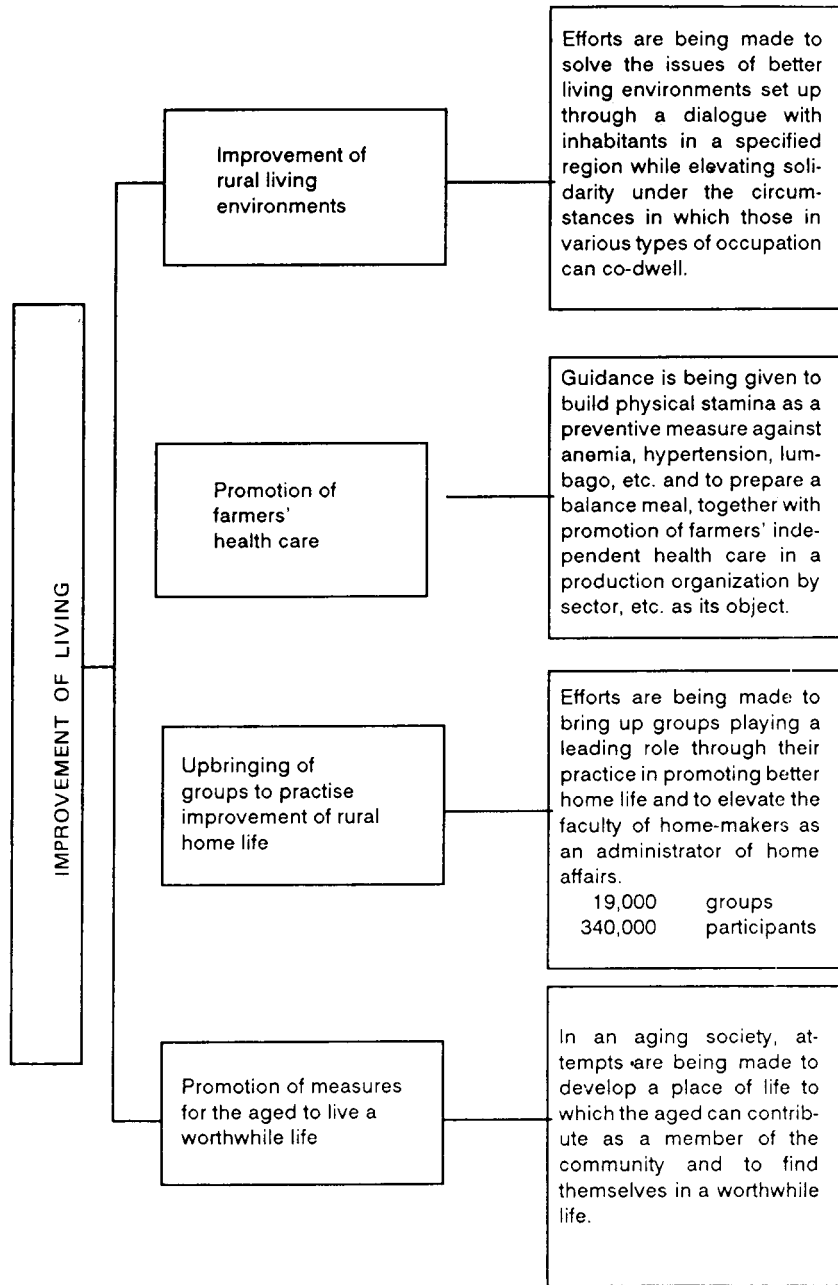
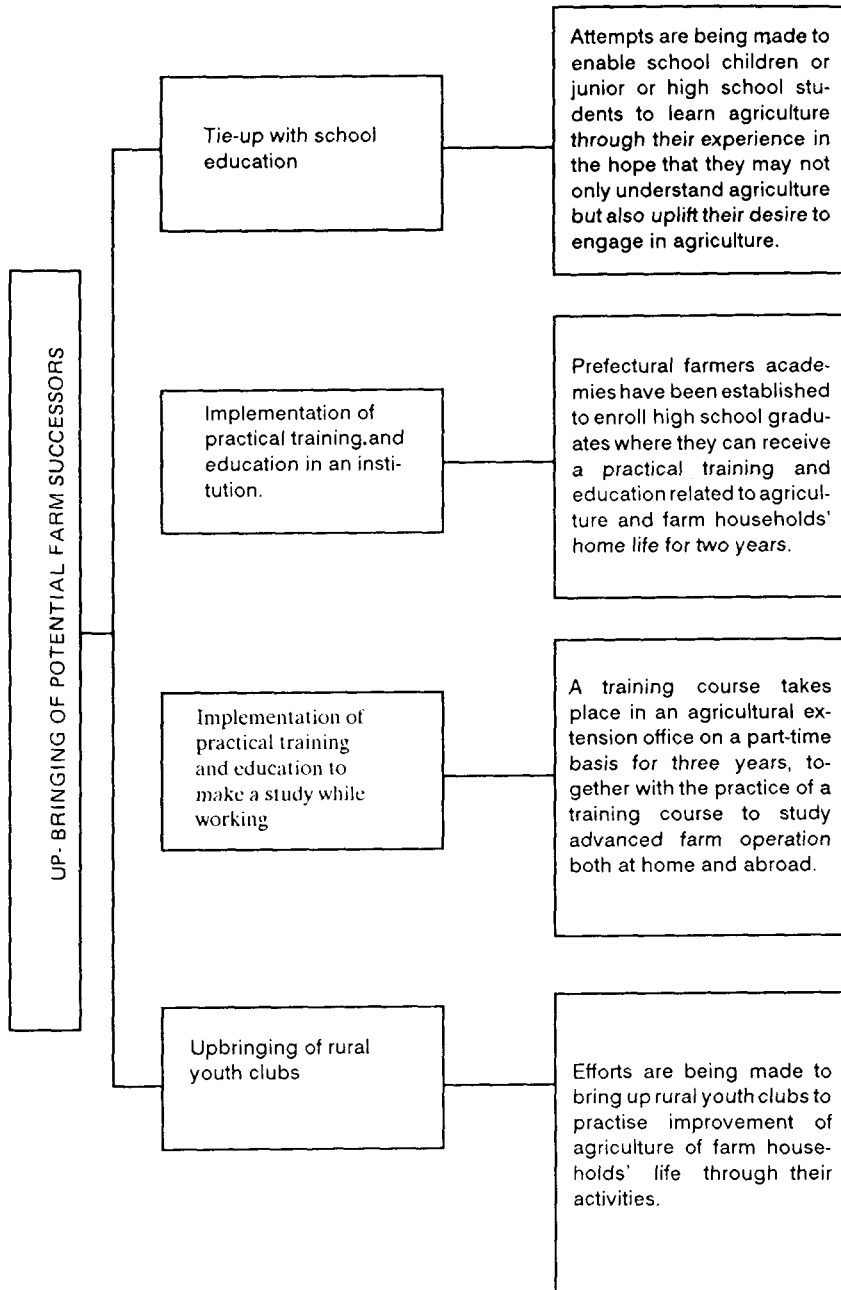


Chart 30: Continued



Appendix-I

Case study : Mikkabi-cho Agricultural Cooperative Society *(Average size cooperative)*

In order to give the reader an idea of business management results of a primary agricultural cooperative in Japan, I am giving below the important figures and statements of Mikkabi-cho Agricultural Cooperative, near Nagoya, in Shizuoka Prefecture.

Established	: May 1948 (after dissolution of the War period Mikkabi-cho Agricultural Association)
Temporary Bankruptcy	: May 1951, due to mishandling of funds by President and Board of Directors. But recovered due to joint efforts of members and staff, supported by government.
Amalgamated	: March, 1961, Higashihama Agricultural Cooperative merged with Mikkabi-cho cooperative.
Total Land Area	: 70.24 sq.km. (north-south 10 km, east-west also 10 km)
Cultivated Land Area	: 1997 ha. (Citrus 1744, Paddy 240 ha, others 13 ha)
Annual Average Precipitation	: 1880 mm (average temperature : 16.2°C)
Population	: 16,486
Households	: 3,758
Hamlets	: 33 (out of which 11 urbanized)
Main farming commodities:	Mandarin oranges, melons, fruits and vegetables, flowers, livestock, broilers, paddy.
Farmhousehold members	: 2,901 (full-time)

Officials:

Full-time President	: 1
Full-time Director	: 1
Part-time Directors	: 15
Auditors	: 5

Employees:

General Manager	: 1
Employees	: 168 (124 males, 44 females)

Organisation structure

The co-operative has wide variety of activities and consequently has established an elaborate administrative structure which compliments the activities of the groups established by members themselves. The chart on the following page illustrates the organisation and internal structure of the Mikkabi-cho Cooperative:

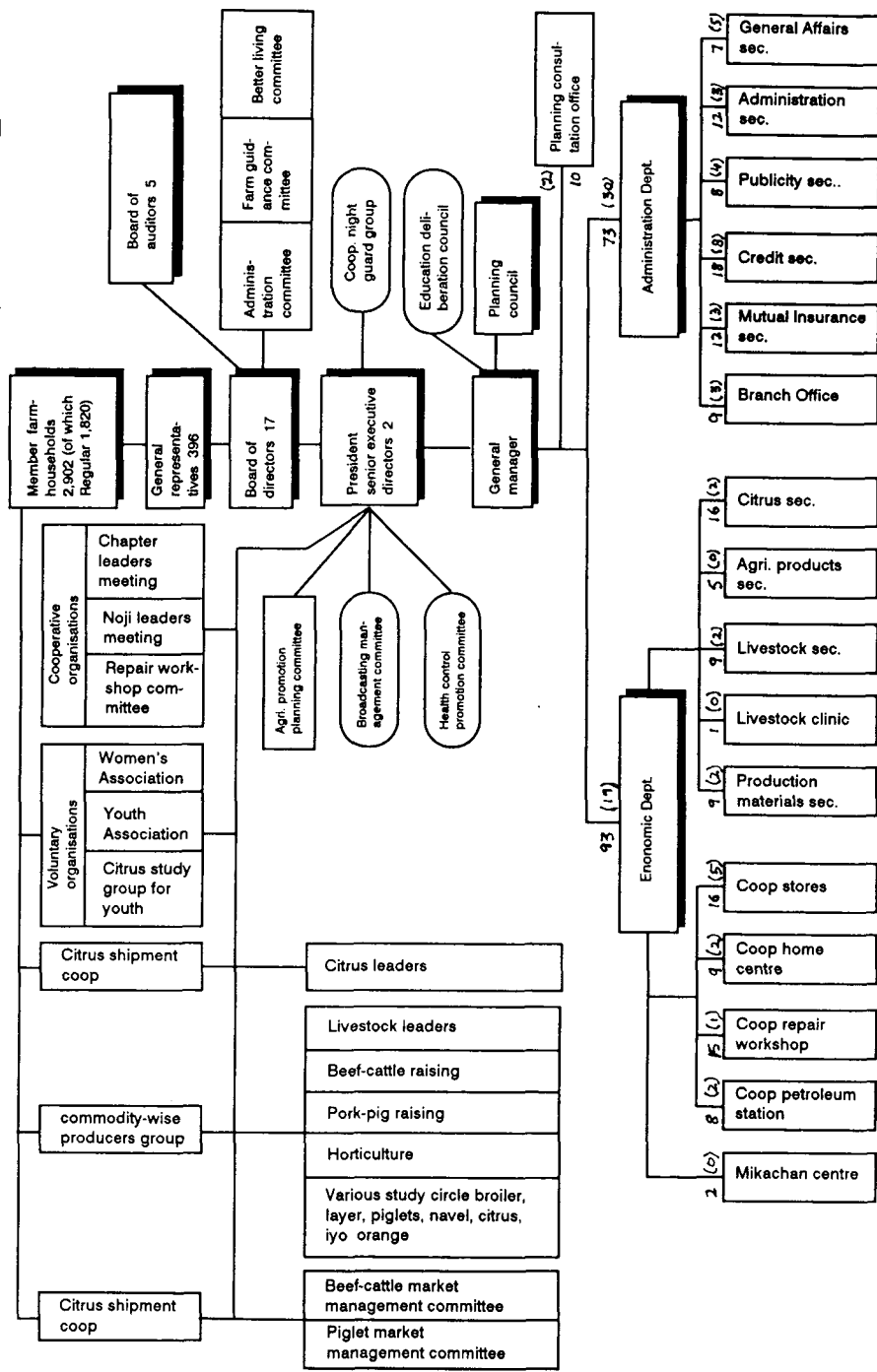
Major Facilities

- Head Office building
- One branch office
- Citrus breeding centre (Nursery)
- Four warehouses for inputs (fertilizers, feed, agro-chemicals, agricultural products, consumer supply items)
- Machinery Centre
- Livestock wholesale market (usually such markets are operated by prefectural level cooperatives)
- Two cooperatively operated farms
- Automobile Repair Workshop
- Two Petroleum stations
- Two Cooperative Super Stores
- Orchid Nursery Centre
- Farm Guidance Centre
- Physical Fitness Centre
- Wire Broadcasting stations (MBS)
- Special Products Centre
- Special School for music, language and other hobbies for children
- Coin-operated Laundry
- Mikka-chan Centre (for marketing oranges for citizens) at bus station
- Restaurant

(as of March 31, 1991)

Chart 31 : Organisation and Internal Structure

- No. of full-time directors 2
 - No. of male employees 124
 - No. of female employees 44



Member Representation and Participation

General Assembly of all 2901 members, held once in five years.

Annual general Representative Meeting : 396 representatives

Hamlet leaders (representing each chapter)	:	33
Noji leaders (representing all activity groups)	:	73
Repair Workshop Committee members	:	33
Women's Association Chapter leaders	:	28
Han Leaders (representing 1,521 members)	:	172
Youth leaders (representing 219 members)	:	17
Young Citrus Study group members	:	9
Study group-Mandarin Orange Greenhouse production	:	30
Commodity group members	:	
Citrus Shipment members	:	1081
Representative committee members of citrus (24 members, one chairman, one vice-chairman, Han leaders 127)	:	26
Committee for Livestock producers	:	107
Members of beef-cattle raising group	:	40
Members of pig raising groups	:	19
Members of Pig breeding groups	:	32
Members of broiler raising group	:	11
Members of vegetables and fruits growing group	:	79
Members of orchid nursery group	:	22
Members of Kiwi growing group	:	187
Members of asparagus growing group	:	50
Members of melon producers group	:	30
Members of flower producers group	:	130

Mikkabi-cho Citrus Shipment Association

Citrus fruits constitute 65% of the total marketing turnover of the cooperative. It has, therefore, promoted the establishment of the Mikkabi-cho Citrus Shipment Association which was established on September 20, 1960.

Self-Regulation for Association activities

The members of the Mikkabi-cho Citrus Shipment Association (MCSA) has established the following policy guidelines for regulating their shipment activities:

1. The member of the Maru-M Citrus Shipment Association is to be a member of the Mikkabi-cho Agricultural Cooperative Society and who contracts to ship all his citrus produced in his farm land.

2. To become a member of the association, a collateral is required and the agreement of more than 2/3rd of the Maru-M Citrus Association members of each hamlet (Chapter)
3. Those who violate regulations of Maru-M Citrus Association, will not receive the settlement account (10% reserved capital of the total net income pay) and will be excluded from membership of the Maru-M Association.
4. Those who withdraw or have been excluded from membership will not be allowed to re-join the Maru-M Association for at least 5 years.
5. The shipment quantity of each shipment period and pooling account period is to be reported to hamlet (chapter) units of shipment members. The actual shipment quantity has to be within a 15% quantity of that reported. If the actual shipment quantity surpasses this limit, the chapter will not receive activity aid funds. Furthermore, they will be penalized by a fine of 20 yen per Kg.

Also for the business activities of the MCSA, the Association has approved the following regulations.

Regulations of the Mikkabi-cho Citrus Shipment Association

Established : September 20, 1960
 Revised : September 16, 1963
 Revised : September 15, 1965
 Revised : August 3, 1984.

- Article 1:** This union shall be called the Mikkabi-cho Citrus Shipment Association with its offices at Mikkabi-cho Agricultural Cooperative, 885, Mikkabi, Mikkabi-cho.
- Article 2:** The aims of the Association shall be towards the mutual profits of the members of the association and the establishment and the strengthening of the Mikkabi-cho Agricultural Cooperative Citrus Marketing System.
- Article 3:** The members of this Association are the members of the Mikkabi-cho Agricultural Cooperative who contract shipment of the whole citrus products to the society.
- Article 4:** Application for membership to this Association shall be done by filling in and signing the designated application form with one guarantor. Application during the business year shall not be accepted.
- Article 5:** The organization of this Association is as follows: there shall be one representative, one assistant representative in each hamlet, and a chief of Han. The representatives of hamlets shall represent the hamlets and the chief of Han shall represent the HAN each taking charge of their respective areas.

Article 6: This Association shall be composed of the following officials and secretariats:

- i. Chairman : 1 (elected at the General Assembly)
- ii. Vice Chairman : 1
- iii. Committee representatives - few (elected by the hamlets)
- iv. Advisers - few (elected at the General Assembly)
- v. Secretariats - few (composed of the Citrus Sales Section-members)

Article 7: The term in service of the officials shall be 2 years. Re-election is possible.

Article 8: The chairman of the association shall represent the Association and carry out business in general. The vice-chairman assists the chairman and in case of his absence, the vice-chairman will take charge.

Article 9: This Association shall have General Assembly and Committee meetings.

General Assembly shall be held once a year. But an extraordinary General Assembly shall be convened by the Chairman, as required. It shall come into effect with an attendance of 1/2 or more and resolutions shall be passed with a majority vote. However, the Committee Meeting has the power to make decisions in case of urgency or the Committee Meeting shall be called by the Chairman of the Association and shall be held for the purpose of the smooth running of the business.

Article 10: The committee meeting shall be composed of the Chairman and Vice-chairman of the Association and Committee members.

Article 11: Should any member hinder in any way the order of this Association, the following penalty regulations may apply in accordance with the decisions of the Committee:

- i. Secondary settled account shall not be paid
- ii. Advice for withdrawal or dismissal of membership.

Article 12: The accounts of the Association shall be entrusted to the Mikkabi-cho Agricultural Cooperative.

Article 13: The business year of the Association shall start on 1st July and end on 30th June, each year.

Article 14: Supplementary clauses:

- i. Alterations, additions and deletions to these regulations shall be decided at the General Assembly.
- ii. These Regulations shall be put into effect as of August 3, 1984.

The revisions so far are as follows:

Established	Sept. 28, 1960
Revised	Sept. 16, 1962
"	Sept. 16, 1963
"	Sept. , 1967
"	Sept. , 1972
"	Sept. , 1974
"	Jan. , 1976
"	Aug. 1, 1984

The Policy guideline of the Mikkabi-cho Citrus Shipment Association's Business Operations

The aim is towards the improvement of the system of joint marketing and better business results. This is promoted by other commodity groups.

Similar regulations have been formulated though not in so much detail as the Citrus Association, for all the other commodity-wise groups listed above.

Better Living (Welfare) activities

Besides the extensive business activities, the cooperative has created facilities for better living activities for members, their families and the local residents. These include wedding halls, sports facilities, health centres and guidance and consultation services. The cooperative is also very active in organising excursions, group tours in Japan and abroad and in arranging community festivals for members and other residents in the area.

The following graphs illustrate membership composition of the cooperative, its organisational structure, multifarious business activities at the cooperative and the averages per members in various fields.

Chart 32: No. of Households by Types of Farming in 1991

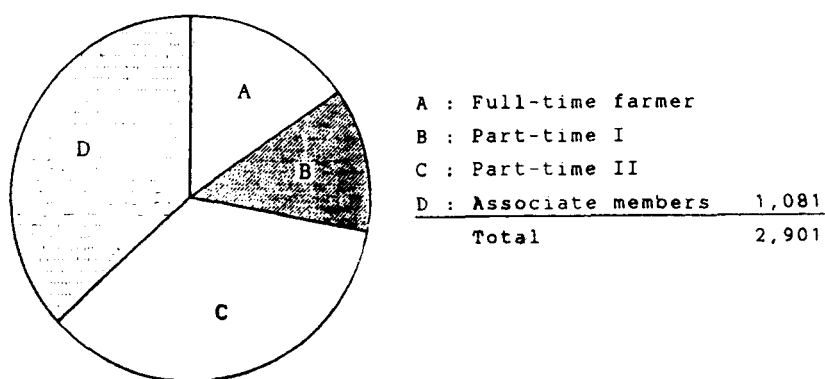
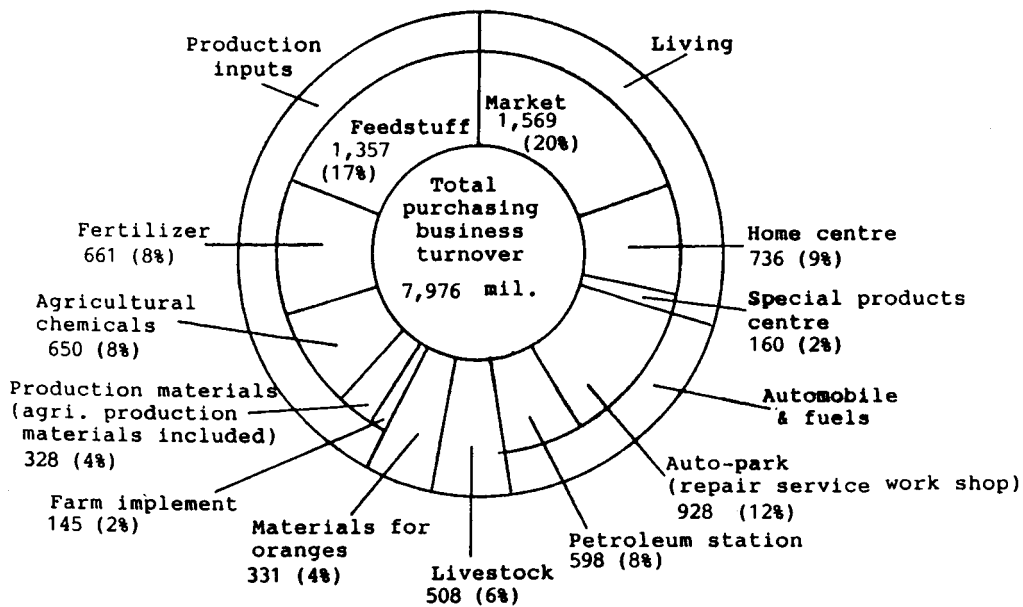
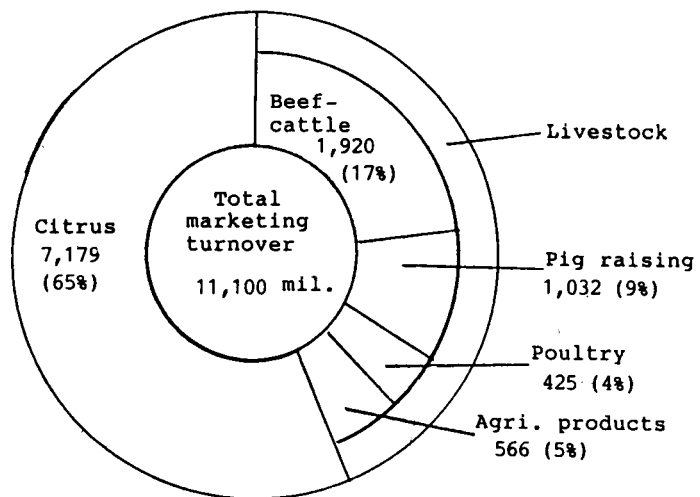


Chart 32: Total Purchasing Business Turnover

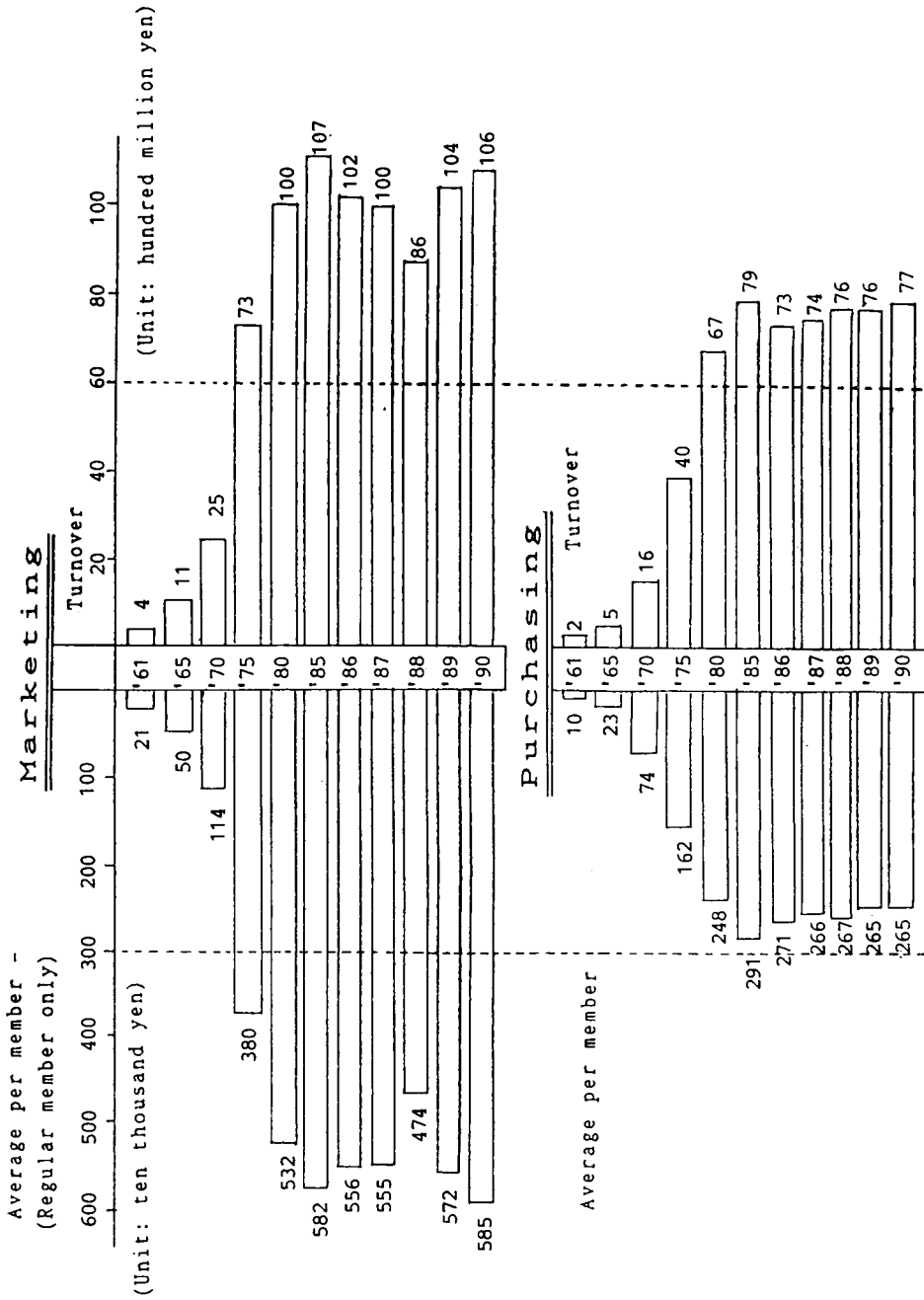
(Unit: million yen)



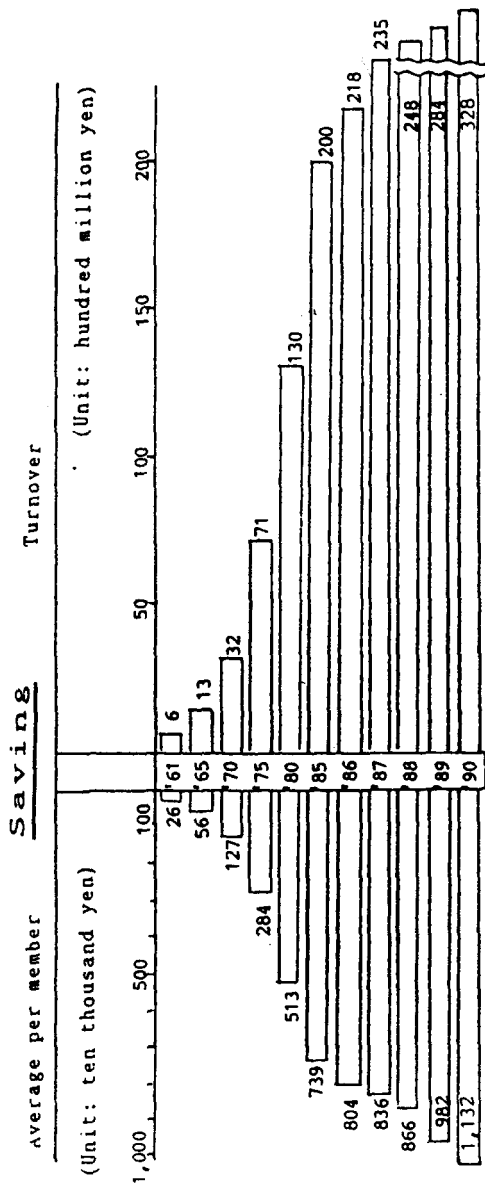
Total Marketing Business Turnover



Total Purchasing Business Turnover

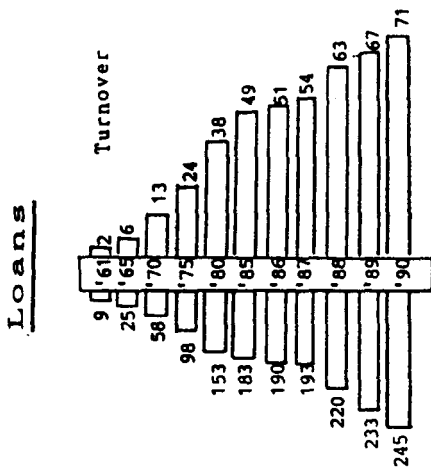


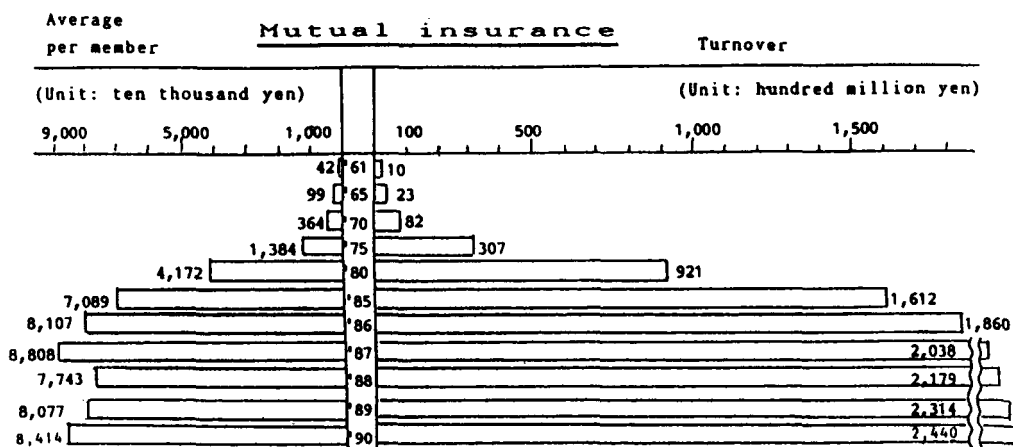
Changes in the Principal Business Turnover



(Unit: thousand yen)

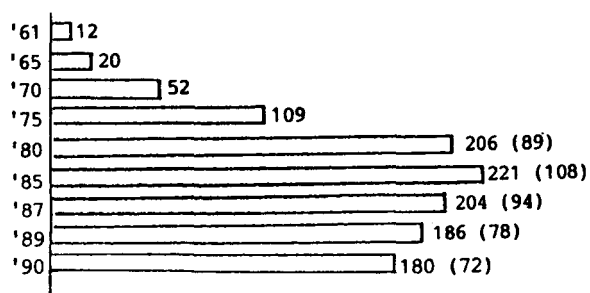
	Savings	Loans
Whole country	6,280	1,520
Shizuoka Pref.	6,920	2,130
Mikkabi	9,820	2,330





Changes in the Share Capitals per Member

() shows revolving capital
(Unit: thousand yen)



Trends of number of members

Year	No. of persons
1961	2,584
1965	2,572
1970	2,526
1975	2,507
1980	2,532
1984	2,661
1985	2,713
1986	2,765
1987	2,814
1988	2,865
1989	2,892
1990	2,901

7th Long Term Plan. Business Plan of Mikikabi-Cho Agri. Coop.

(Unit: 1,000 Yen)

Item	Year		Past Years			Standard Year		Long Term Plan										
	1980	annual ratio	1985	annual ratio	1990	annual ratio	1991	ratio to pre. yr.	1992	ratio to pre. yr.	1993	ratio to pre. yr.	1994	ratio to pre. yr.	1995	ratio to pre. yr.	Annual ratio	
Financial/Mutual Insurance	Savings	13,008,715	12.8	20,078,153	9.1	32,856,143	10.4	36,000,000	109.6	40,000,000	111.1	43,500,000	108.8	47,000,000	108.0	51,000,000	108.5	9.2
	Loan	3,874,972	9.6	4,999,640	5.2	7,102,534	7.3	8,000,000	112.6	8,400,000	105.0	8,900,000	106.0	9,500,000	106.7	10,000,000	105.3	7.1
	Insurance Policies	92,114,320	24.6	161,268,150	11.9	244,088,410	8.6	252,000,000	103.2	264,000,000	104.8	276,000,000	104.5	288,000,000	104.3	300,000,000	104.2	4.2
	Pension Type Insurance			89,300		316,320	28.8	343,000	108.4	383,000	111.7	420,000	109.7	460,000	109.5	500,000	108.7	9.6
Purchasing Business	Production Inputs	738,511	8.2	940,799	4.9	1,124,771	3.6	968,500	86.1	1,003,800	103.6	1,019,300	101.5	1,032,600	101.3	1,050,000	101.7	0.5
	Fertilizer	643,529		681,531	1.1	661,094		611,149	92.4	622,288	101.8	638,891	102.7	658,020	103.0	677,060	102.9	
	Feeds	2,239,134		2,060,940		1,357,866		1,343,870	99.0	1,352,000	100.6	1,326,000	98.1	1,366,000	103.0	1,325,000	97.0	
	Home Centre	408,141	7.9	492,891	3.8	736,288	8.4	634,540	86.2	656,700	103.5	681,300	103.7	709,800	104.2	741,900	104.5	0.1
	Market Mikikabi	900,104	11.6	1,215,642	6.2	1,282,503	1.1	1,327,560	103.5	1,371,527	103.3	1,440,000	105.0	1,512,000	105.0	1,587,600	105.0	4.4
	Market Tochiku	193,684	10.4	268,209	6.7	287,319	1.4	286,400	99.7	295,000	103.0	304,000	103.1	313,000	103.0	325,000	103.8	4.3
	Mikachan centre	99,975		123,468	4.3	160,102	5.3	172,450	107.7	180,000	104.4	190,000	105.6	200,000	105.3	210,000	105.0	2.5
	Auto Park	596,088	7.5	935,205	9.4	928,403		906,575	97.6	910,325	100.4	920,525	101.1	987,600	107.3	987,600	100.0	1.2
	Mikikabi Petrol station	388,913	11.8	444,650	2.7	436,823		436,701	100.0	474,630	108.7	499,135	105.2	523,340	104.8	549,070	104.9	4.7
	Tochiku Petrol station	144,808	12.3	169,489	3.2	161,244		168,355	104.4	173,620	103.1	179,455	103.4	186,030	103.7	193,180	103.8	3.7
	Livestocks			346,239		508,797	8.0	495,464	97.4	458,798	92.6	463,247	101.0	471,137	101.7	482,417	102.4	
	Agri. Products			17,924														
Agri. Products for Milkan	348,545		290,870		331,069	2.6	350,000	105.7	321,090	91.7	352,275	109.7	330,803	93.9	372,435	112.6	2.4	
Total Supply	6,701,432	10.6	7,987,857	3.6	7,976,279		7,701,564	96.6	7,819,778	101.5	8,014,128	102.5	8,290,330	103.4	8,501,262	102.5	1.3	
Marketing Business	Citrus	5,100,057	9.8	5,611,385	2.0	6,968,381	4.4	6,410,488	92.0	6,498,549	101.4	7,199,671	110.8	7,364,910	102.3	8,324,944	113.0	3.6
	Transport cost of Milkan	165,387		175,710		210,875	3.7	210,934	100.0	207,825	109.7	228,010	109.7	214,112	93.9	241,058	112.6	2.7
	Livestocks	4,391,521	2.4	4,467,674	0.3	3,955,000		3,372,865	100.5	3,395,442	100.7	3,430,909	101.0	3,449,884	100.6	3,492,637	101.2	0.8
	Agri. Products	364,511	6.9	513,754	7.0	566,346	2.0	655,850	115.8	676,000	103.1	706,000	104.4	749,000	106.1	805,000	107.5	7.3
	Marketing Turnover	10,021,476	6.4	10,768,523	1.5	11,100,602	0.6	10,650,137	95.9	10,777,816	101.2	11,564,590	107.3	11,777,906	101.8	12,863,639	109.2	3.0

Average annual increase ratio for 5 years.

Cooperative Farming Complexes

Preamble

During the early eighties, cooperative farming complexes were being promoted all over Japan and considerable planning had taken place to make them a reality. The government was heavily involved in technically and financially assisting the projects initiated for the scheme. Towards the end of the eighties, however, the farmers' interest in the scheme had dwindled and a new plan was drawn up for establishing the regional farming associations at hamlet level which later formed an integral and major part of the Regional Agricultural Promotion Plan (RAPP). As the scheme for the establishment of cooperative farming complexes was a very elaborately planned project, it may still be useful as a reference material for other countries considering initiating similar efforts. I have, therefore, included the earlier chapter on Cooperative Farming Complexes in the from the first edition, Appendix form in this edition.

-Author

Basic Idea and Concept

The Regional Agricultural Promotion Plan (RAPP) discussed in the previous chapter is by itself not sufficient to bring about a comprehensive development of agriculture which can help the farmer improve his economic condition. The success of RAPP depends on the base on which the planning is done. The reality of Japanese agriculture with the small size scale of farming and the mounting pressures on the farming community to adjust itself to the forces operating in the country and abroad, cannot be ignored. The only alternative left with the farm households and agricultural cooperatives is to improve their scale of operations and strengthen their ability to ensure continuation of agricultural production in the highly competitive society surrounding them.

The Cooperative Farming Complex is a complimentary effort to the planning process within the agricultural cooperative movement to improve the scale of farm management. The farming complex is much more than an effort in planned production. It attempts to convert agriculture into an

industry with the total chain of activities attuned to the level of a highly organized factory. The farming complex, envisages homogeneous productive efforts on a large scale through coordination of all farm-related activities such as farm guidance, resource mobilization, supply of agricultural inputs, joint use of facilities, and organized shipments to designated markets. All these activities are to be coordinated through agricultural cooperatives and the commodity-wise and other members groups.

A cooperative farming complex is not necessarily based on pooling of lands of different members. What is involved is the planned use of lands for production of identical commodity through collective efforts with division of labour and responsibilities. The farming complex retains individual member's identity and the economic independence of the farm household. However, all productive efforts of the household members are carried out within a given framework and subject to a time-bound programme.

Preparatory Work

Certain conditions have to be fulfilled before a farming complex could come into being. Also, the policy formulation and planning process has to be gone through in a thorough manner for creating favourable conditions for establishing a cooperative farming complex. Following are the main aspects of the preparatory stage:

1. *Enlarging the Organisational Base*

For shouldering responsibility of a farming complex, the operational and management scale of a primary cooperative has to be widened in order to enable the cooperative to provide the needed support and to appoint necessary technical and managerial personnel. The cooperatives in the area, therefore, are required to amalgamate to broaden the organizational base. If, for some reasons, it is difficult to bring about such amalgamation, a joint management system of the complex has to be evolved as an interim measure.

2. *Support by Federations*

The cooperative unions and federations at the prefectural level are required to consolidate existing facilities and create new facilities for agricultural production, for livestock farming and for joint shipment so that the primary cooperatives could use them for the farming complex activities. Also, the primary cooperatives are advised to coordinate their activities with those of all federations at the prefectural level, especially with the departments in these federations which are concerned with the farming complexes. The federations, in turn, are required to open special sections or departments in charge of farming complexes. They have also to provide advisors to work at the farming complexes.

3. *Coordination with Government*

While planning and implementing farming complex activities, the cooperatives are required to coordinate their tasks with the concerned government agencies responsible for such activities. For this purpose, assistance and subsidies available from government under the various laws could be obtained after fulfilling the necessary conditions. These laws are:

- Measures for Developing Agricultural Complexes;
- Measures for Developing side-scoped Cooperative Farming Complexes;
- Rice Production Readjustment Project; and
- Second Agricultural Structure Improvement Project.

While securing such assistance and subsidies, the cooperatives must ensure that the necessary pre-requisites are fulfilled and proper organizational and infrastructural facilities as well as resources are created within the cooperatives themselves.

4 *Pre-requisites of a Farming Complex*

The farming complexes aim at increasing productivity, raise member farmers' income and in general improve farm household economy. It is therefore necessary that the concerned cooperatives ensure fulfilling the following conditions:

- 4.1 The standards have been set for individual farmers for managing their farms.
- 4.2 The cooperative has strengthened its farm guidance unit.
- 4.3 Members have been organized into commodity-wise groups.
- 4.4 A network of integrated facilities from production to marketing have been organized within the society; and
- 4.5 Steps have been taken to bring financial stability in member's farming operations through long-term repayment system.

5. *Policy Framework*

Before establishing the farming complex, the cooperative has to ensure that proper policy support is available for the proposed activity. This support should be in the form of:

- 5.1 Fixing up of targets for production and distribution.
- 5.2 Fixing up of a minimum basic area for planting or a minimum number of animals for feeding by each farmer.
- 5.3 A time-bound plan for improving production techniques.
- 5.4 Strengthening the functioning of commodity-wise groups; and
- 5.5 Easy accessibility to members to all the facilities in the concerned cooperative.

6. *Planning the Complex*

The following seven major steps are required to be taken by the cooperative in order to establish a farming complex.

6.1 Selection of Crops:

The crop selected could be an already established crop within the prefecture with large production. It could either be a new crop with good potential or a crop being promoted by the government. It could also be a crop already handled by the cooperative which has plans to expand its scope of production and marketing.

6.2 Management Standard for Farmer:

The cooperative has to help the farmer member fix his farm management pattern by combining various activities for farm production and/or for livestock farming. Based on this the income target of farm household and the possibility of reducing production costs have to be worked out. If necessary, small scale producers were encouraged to stop production and to switch over to other crops.

6.3 The Scale of a Farming Complex:

The cooperative has to finally decide the size, the scope and the scale of the complex taking into consideration the extension of production area under a crop to facilitate farm guidance activities, the easy accessibility to the member to the facilities owned by the cooperative. (One hour is considered as the reasonable transport time), and the use by members of cooperative facilities at the most economical rates.

6.4 Major Components:

The farming complex has three major components which needs to be prepared. These are; the management plans of individual members for activities within the complex; the individual farming complex plan of the primary cooperative; and the collective plan of a few cooperatives involved in the proposed complex. These plans are to be prepared on the basis of discussions with members, consultations with other cooperatives and in coordination with the prefectural federations.

6.5 Commodity-wise Forecast:

Before the establishment of the complex, a proper study of the capability of producers' groups and the cooperatives in different commodities in productivity, in handling the products and in providing the facilities should be properly conducted. A study also is to be made of the ability of prefectural federation in providing necessary facilities and supporting services for marketing the product. Also, the competitors in the field have to be studied in order to size-up the market

situation. In addition to this, the demand pattern in the market, the changes in the population, the trends in consumption pattern and the introduction of new commodities have to be studied.

6.6 Contents of the Complex Plan:

The farming complex plan should have details covering commodity-wise production scale plans, development plans for farming or for livestock farming for members on the basis of their planted areas or cattle head population, plans for supply of inputs, marketing, finance, facilities to be provided, estimated income and expenses and the farm guidance advisors' role in the whole process.

6.7 Planning Process:

As in the case of RAPP, the farming complex entails an elaborate planning process. The following chart gives the flow of planning activities at the cooperative level with details on the subjects to be discussed at each stage.

Chart 33: Planning Activities at Coop. Level

	Organization	Functions (meetings)	Involves	Subjects for discussion
1.	Primary society	Drafting of a plan of the society.	Officials & employees of the society and leaders of producers' groups.	① Grasp of the situation and decision on the policy. ② Technical consideration on drafting of the plan. ③ Discussion on the planning schedule.
2.	Primary society	Meetings of producers' groups and those of chairmen of hamlet farming associations	Members of producers' groups, chairmen of hamlet associations, and officials & employees of the society.	① Explanations on the purpose of the plan. ② Consideration on the drafted plan. ③ Decision on the way of promoting the plan.
3.	Promotion Council of Societies	Coordination of drafted plans of the societies concerned.	Presidents and staff on duty of the societies concerned, and representatives of head and branch offices of the prefectural union and federations, and business facilities of those federations.	① Mutual coordinations of drafted business plans of the societies concerned.
4.	Primary society	Decision on the draft of the business plan of the society	Board members of the society, members of producers' group chairman committee, and staff on duty of the society.	① Discussion and decision on the drafted business plan of the society

In brief, a cooperative farming complex is a fully integrated programme of producing, in a designated area, a selected commodity, or a group of commodities, or undertaking livestock farming, on a very large scale covering the area of a large sized multi-purpose cooperative and arranging a network of services and facilities for guidance, inputs, collection of produce, grading, standardization, transport, joint shipment to terminal markets or other markets so selected and marketing the produce to the best advantage of the producers. It is a total effort involving the farmer, the commodity-wise groups, other producers' organization in the hamlet, the primary cooperative, the prefectural unions, economic and other federations and ultimately the national federations in the total chain of events leading to the goal of bringing increased benefits to the cooperative farmer members.

Critical Aspects for Success:

The cooperative farming complex can succeed if all the agencies and individuals contribute positively to the total effort and arrange timely services in the production and marketing process. The following four aspects are considered important for ensuring the success of the complex.

1. *Effective Commodity-wise groups*

The existing commodity-wise groups have to be activated, strengthened and made an integral part of the complex activity but at the same time the autonomous character of the groups, or their sub-groups or the producers' associations has to be preserved.

2. *More Rational Use of Facilities*

Many of the cooperatively owned facilities are running in red due to their under-utilization. It is, therefore, necessary to improve the operation of these facilities through better management, through proper division of responsibilities, by establishing direct relationship between the productivity ratio of the commodities and the utilization ratio of the facilities to ensure the balancing of the income and expenditure amounts and by seeking additional contributions from the direct beneficiaries of these facilities. Such measures are very important in case of large scale processing facilities for meats, poultry, eggs and bulk grain handling facilities.

3. *Strengthening Farm Guidance*

Although farm guidance in one form or another is available to most of the producers, the guidance assistance required for farm households in the farming complex area is much more detailed and related to the production activities in the total area of the complex. It is, therefore, essential to ensure availability of adequate number of farm advisors and timely assistance in productivity effort so that the fruits of advanced production techniques are within the reach of all farm households covered by the complex.

4. Management (Financial) Stabilization

For the smooth functioning of the farming complex, it is essential that the financial position of the cooperative remains sound and the fund cycle is maintained all the year round. For this, the cooperative has to ensure; first, that the concerned members are affiliated with the relevant price stabilization funds such as the National Egg Price Stabilization Fund and other such funds; secondly, the cooperative adopts the system of long-term average payment in case of livestock products so that the producers are able to receive the payments in time based on the average price system; thirdly, the members are assured of short-term and long-term loans under the Agricultural Financing System; and fourthly, by making use of the commodity-wise Selling Price Index in the process of planning production of given commodities so that the production plans are based on the prevailing market trends.

Model Guidelines for Farming Complexes

The establishment of a farming complex is a complicated process. In order to facilitate the understanding of these complexes, two model guidelines are given in the following pages. The commodities selected for the two guidelines are grain (rice and wheat) and poultry. Most of the Asian countries are producers of rice and to certain extent of wheat. Secondly, in the diversification process, poultry farming is given priority in many of these countries.

Guidelines for Establishment of a Rice Farming Complex

i. Targets

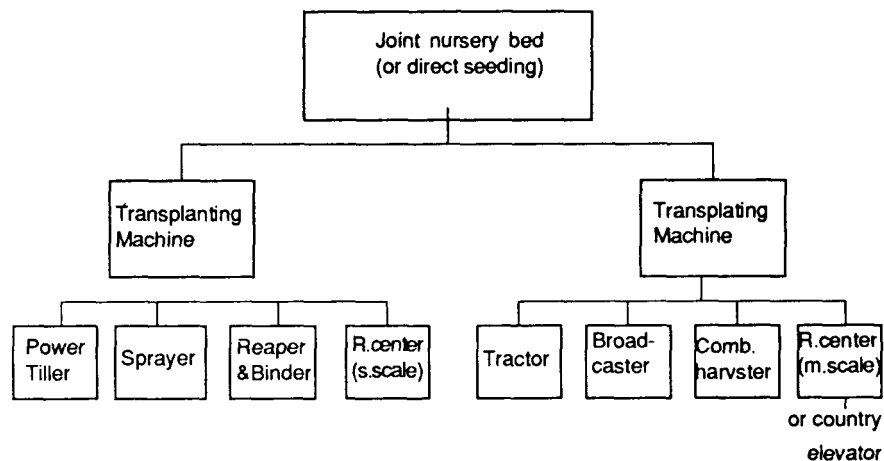
- a. to introduce an integrated system of mechanisation so as to raise the productivity of rice farming and promote organisation of rice producers,
- b. to produce more rice of better quality to meet the consumers' demand.
- c. to stabilise the rice production.

In order to attain the target the agricultural cooperative society is to take the following measures;

- i) organising rice production,
 - ii) planned production to be promoted mainly by the society.
 - iii) suitable arrangements (establishments) of facilities required for paddy production, and
 - iv) farm works, drying, conditioning and storage to be partly or wholly done by the society, and
- d. to make efficient use of labour saved through rationalising rice farming:
 - i) introduction of other crops (vegetables, fruits, livestock keeping, feed crop, wheats, rapeseed, etc.) or

ii) finding a job in a stable industry.

It is most necessary to note this especially, because producers are making efforts to secure their income by 'rice production plus alpha' even in most non-rice farming complexes.



(Note: However, when a part of paddy fields is transferred into production of other than rice under the governmental policy of rice production adjustment, the society is to decide on crops, suitable for introduction in the area, systematically extend to producers guidance on production of these crops and also consolidate its marketing system of these new products. As for paddy fields unused, they should be deposited under the society's maintenance from the view point of avoiding field devastation and maintaining the fertility).

2. Organisation of rice products

For the success of a cooperative rice farming complex, individual farmers need to carry on producing activities with the same object. A territorial group, belonging to the same water system, is to jointly do every farm work according to cultivation agreement made by all its members, such as variety selection, raising seedlings, fertilizing, chemical spraying, harvesting, drying, conditioning and water controlling etc. Furthermore it is also important for the society to conduct some of these farm works for member farmers on the consignment basis. These joint activities are to be always promoted under the leadership of the society.

3. Systematized mechanisation for rice farming

The integrated system of mechanisation is to be established. Under this system, facilities for mechanisation are also to be set up and operated effectively.

- a. to make the mechanisation system as high as possible within the limited scope which could be accepted by all the rice producers concerned, although their irrigation and soil conditions differ within the same water system.

- b. the society is to take a part or whole of the charges in promoting the integrated mechanisation of rice production;
 - i) from the nursery bed to harvesting and drying, mechanisation of rice farming has been remarkably developed. The society is to effectively promote the establishment of a cooperative rice farming complex according to this advanced system of mechanisation.
 - ii) to promote joint field management and consignment system of farm works.
 - iii) to reduce costs of mechanisation of individual farmers through purchasing and operating big machines and facilities jointly at the society or group level.
 - iv) to promote efficient uses of machines on the basis of members' programmes of farm works with a view to maintaining the operation rate of these machines.
 - v) to construct the cooperative workshop for repairing farm machines and equipments as well as for guiding members on operating farm.

4. *Selection and combination of rice varieties*

Selection and combination of rice varieties are to be properly advised for farmers, aiming production of tasty rice and stability of rice farming.

- a. In this case, most producers are inclined to plant branded varieties. Measures should be carefully taken to cope with the following problems:
 - i) the stability of rice farming is to be lost.
 - ii) Utilisation of facilities and machines, such as nursery beds, tractors, and country elevator are constructed at a short period to decline their operation ratio.
 - iii) Peaks of individual farm works are also concentrated.
- b. Good quality seeds are to be secured mainly at the seed production centre. And with a view to avoiding degeneration of seeds, the society has to endeavour to replace seeds in the area according to the fresh seed supply programme. It could be a target to replace the seeds of 30% of paddy farms in the area by new ones every year.

5. *Machines and facilities*

- i. The society has to play a leading role in owning and operating basic facilities required for rice production in order to act as a center of a rice farming complex:
 - a) heavy investments being necessary especially for machines and facilities, the society has to seriously consider about their higher operation rates and planned managements. Large scaled or high-efficiency facilities are to be owned by the society. (eg. joint nursery beds, largesized tractors, combine harvestors, country elevators, speed

sprayers etc.) On the other hand, farm trucks, equipments for farm works, chemical sprayers, farm trucks, equipments for farm works, chemical sprayers, transplanting machines and so on should be jointly owned by members of a rice producers' group.

- b) It is the most important point for the success of integrated mechanisation that the society should secure necessary operators of machines and make constant efforts in raising their technical level.

ii. Measures for wheat production:

The society is to make every effort in its farm guidance activities especially for profitability and increases of wheat production, taking the following into consideration:

- a) To promote the formation of main producing areas of wheat and barley and expand the unit (plot) of production.
 - wheat collection in a wheat production complex .. 15 tonnes (minimum target)
 - minimum production unit per producer.. more than 3 ha.

Individual farmers are generally limited in their planning of wheats (0.2-0.3 ha). The minimum production unit should be secured with the system of borrowing lands only during the winter to spring season or cooperative consignment of wheat production.

- b. To effectively use machines and facilities for raising the productivity of wheat production:

The society is to extend farm guidance on the systematised mechanisation with tractors, middle and large sized machines for farm works, combine harvestors and rice centers.

	<i>Production unit</i>
small mechanisation system	3- 5 ha
middle mechanisation system	15-20 ha
large mechanisation system	50 ha

- c. To organise producers' groups and promote contract farming:
 - wheat and beer barley being produced by contract, the society is to guide producers on contracted variety selection, contract provisions, and cultivation in order to ensure contracted production and raise the level of quality,
 - in the case of contracted production of beer barley it should be always examined whether the society has given farm guidances to producers according to provisions of the contract.
- d. Improved distribution: Wheat in bulk has been increasingly shipped and distributed from producing areas to flour mills or beer factories, for the purpose of rationalising drying and conditioning of grains as

well as reducing distribution costs. The society is to further collaborate with the prefectural economic federation not only in utilisation of cooperative rice centres and country elevators located in producing areas but also in transportation in bulk by containers and the like.

- e. The indexes, which are to be considered for guiding planned production of wheats, could be annual wheat prices, fixed by the government, and additional payment for beer barley. And the annual plan for increasing wheat production should be made and implemented.
- iii. Guidelines for Establishment and Management of Facilities required for Rice and Wheat Productions:

- a. Rice Centre Country Elevator:

Collection of grains:

Collection of grains is to be planned on the basis of use applications of producers. Especially in the case of a country elevator it is very necessary for the society to make the members agree on planting unified variety as well as on joint farm works.

Operation time:

The operation time being dependent upon drying capacity and moisture content of grains, the drying section is to extend its working time if necessary.

Quality control of stored rice country elevator:

With a view to preventing accidents of deterioration of rice quality, the society is to check dryness of paddy taken into the elevator and daily qualitative conditions of stored rice. Farm guidance on harvesting of rice is also important in this connection.

Administration system:

Some of the centres are administrated by the head office of the society, and others by the cooperative branch office. In both cases, the man responsible for the administration should be appointed and his authorities be also clarified.

Labour management:

It is important to keep workers for simple works and operators (at a country elevator) as well as to control them. The increase in costs in labour should be restrained by taking such measures as employment of more part-time female workers, efficient use of operators' spare time, and temporary allocations of ordinary staff. And the society needs to guarantee the status of the manager and operators of a facility.

Chart 34: Standard scale of a Poultry Farming Complex

	Minimum	Target	Remarks
Area	Within the 30 km radius		
Layer hens kept constantly	100,000 hens	300,000 hens	
Egg shipment (unit: egg)	57,000 per day 20,805,500 per year	171,000 per day 62,415,000 per year	Egg laying ratio: 60%
Shipment of aged hens of all out	60,000 hens per year	180,000 hens per year	Rate of replacement: 60%
Shipment of eggs per month			Carrying capacity
by 5 ton-truck	22~25 times	64~65 times	74,400~83,700 eggs (400~450 cases)
by 7.5 ton-truck	17~18 times	49~54 times	102,300~111,600 eggs (550~600 cases)
by 15 ton-freight waggon	13~14 times	36~38 times	139,500~148,800 eggs (750~800 cases)
Feed purchase per month			
by 5 ton-truck	64~71 times	192~221 times	Feed of 3 kg is to be averagely supplied to a layer hen per month.
by 7.5 ton-truck	45~50 times	135~150 times	
by 15 ton-freight waggon	24~27 times	72~ 81 times	

(Note) From a viewpoint of the profitability, the cooperative facility for slaughtering and dressing broilers needs to receive the shipment of some 300,000 broiler hens in a year. 120,000 hens are to be collected out of a complex.

Charge:

The charge could be properly fixed, if the operator rate of a facility is risen through deepening producers' understanding on the relation between the operation rate and costs of the facility. Additional charge may be laid on rice with more moisture, shipment in a very small quantity and non-members' rice.

Increased use by non-members:

Profitability of a facility business is to be improved through increasing non-members' utilisation on the basis of agreements with other neighbouring societies.

b. Departmental accounting:

The rice centre is generally used by a part of cooperative members within a certain area. It is particularly necessary to introduce a departmental accounting system to the rice centre, which is also to meet internal interests and a part of common expenditures, in relation with other departments and facilities of the society.

The charge of a rice centre is to be decided taking into consideration machines owned by farmers, and profitability of rice and wheat production in the area. And efforts should be made to reduce the expenses of the facility.

c. Agricultural machinery service centre:

1. Establishment

a. The centre is to be established after fully considering such factors as farming types in the area, geographical conditions, demands on farm machines, and competitors so as to confirm its possibility of maintaining equilibrium between income and expenditure.

b. It is to be located at a place which is most convenient for farmers. And it should be spacious enough to carry on various activities such as display of machines, assembling, repairing and testing.

c. In operating the centre, the society is to be careful especially in selecting suitable machines (to be supplied to members) and employing capable engineers.

2. Management of the service centre:

a. The service centre is to make a machinery card of each member and fill it up with every information regarding his ownership of farm machines. These cards could be utilised to estimate members' demands and promote planned supplies of machines. Machinery supplies should be done in principle on the basis of advance;

- b. Members' accounts might be settled on the instalment plan or by a long-term loan;
- c. The technical employees have to make continuous efforts to update their techniques. The services with a workshop on wheels are also appreciated by members. Furthermore farmers should be guided on raising their technical level, selection of better machines, and operation rates of machines;
- d. The standard of works per employee is to be settled for the purpose of raising their will to work and labour efficiency;
- e. Financial management
 With a view to keeping the soundness of financial management, the society is to adopt various measures for restriction of stocks, more stock turnovers (target: more than 6 turns in a year), reduction of accounts receivable, prompt collection and depreciation of fixed assets. And the balance between income and expenditure should be improved through raising labour efficiency and lowering the rates of management costs and financial interests.

3. Guidelines for a Cooperative Poultry Farming Complex:

- a. *Scale of the Complex*
 - i. More than 100,000 layer hens are fed in a complex.
 - ii. 1,000 hen is a target for the poultry upkeeping per farm household in a complex.
- b. Poultry farming complex project:
 - i. When the project is worked out, poultry keeping plans of individual farmers should be first accumulated. And those keeping plans are to be adjusted at members' meeting in coordination with the cooperative plan on establishing facilities (and their rates of operation).
 - ii. The results of promoting the project must be regularly examined and the project could be modified in an unavoidable case.
 - iii. Joint breeding facility:
 One day old chicks are to be supplied by the joint brooding facility of the society, with a view to promoting technical standardization and simplification (and specialisation) of feeding works of poultry farmers.

 The society needs to take preventive measures against epidemics in poultry houses by way of all in all out' in cooperation with the rotation programme of farmers.

There have been problems of ineffective arrangements of co-operative breeding facilities, including their duplication and competition. The promotion council of the cooperative poultry complex should discuss on such matters as suitable arrangements of facilities, unification of the management policy and technical improvements.

Technical indications are generally as follows:

Facility land area - 4-5 times of a poultry house.

Supply of chicks : one day old.

Transfer of chicks : 45 or 60 day old.

Empty duration of brooders: 30 days.

Rate of raising : 92% (minimum)

Poultry keeping : more than 10,000 hens per farmer.

Annual feeding scale: 100,000 hens

Rotation in a poultry house: 2-4 times per year.

iv. Other main facilities:

a. For the purpose of effectively operating an egg collection and grading facility, some of old small facilities should be combined and others removed. And the self-inspection system is to be strengthened for shipping packaged eggs of good quality to the market.

b. Aged hens of all out should be slaughtered and processed up to the final stage in order to give more added value to all the parts of these birds.

b. The poultry waste is to be sold to vegetable producers at profitable price in collaboration with neighbouring societies.

e. Measures for collection and marketing:

The society has to endeavour to find new markets as many as possible in the prefecture in cooperation with the economic federation, aiming at increasing net incomes of poultry farmers.

Everyday collected fresh eggs and every two-day collected ones should not be mixed at the shipment so as to keep the market people appreciate quality of all eggs sent from the complex.

Costs of distribution are to be reduced as much as possible for instance through rationalising packaging of eggs.

b. Measures for price stabilisation

The standard price, fixed by the National Egg Price Stabilization Fund is to be supplemented with an additional payment by

collecting funds from the prefectural government, municipalities and poultry farmers at a time of a higher price.

- The society is to promote members' full patronage and formulate the system of long-term average payment for poultry farmers against the price fluctuations in the market.
- c. Measures for large-sized poultry farmers
 - If financial demands of those farmers cannot be met by a society, the society has to request the prefectural credit federation for its special loans.
 - Cooperative employees are to be trained so that they can guide these farmers on their management analysis and tax payments etc.
 - Special measures should be adopted for involving big poultry farmers, who have not been so interested in the cooperative movement, into joint activities of the society in collaboration with prefectural federations.

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