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**The Agricultural Structure and Agricultural Co-ops
in Japan**

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1. Introduction

Since 1900, the Japanese agricultural co-ops run business in every village and almost 100% of farm households join the co-ops. There are many ways to discuss the Japanese agricultural co-ops but we intend to introduce the agricultural co-ops within the agricultural structure as the background of their business. Generally, small size farmers organize the agricultural co-ops to get a better position in the market economy. The co-ops' business base on the members' economy, hence the analysis of the agricultural co-ops has to combine with the agricultural structure. This presentation will introduce the Japanese agricultural co-ops with the agricultural structure. Nonaka (2003) had introduced this point of view and analyzed the current agricultural co-ops' situation and the agricultural structure and this presentation is based on the book with the latest research data. The National Agricultural Research Center for Tohoku region always conducts research at research sites in the Tohoku region and research is conducted in many ways but mostly, to interview farmers. The data we use below comes from interview research and statistics.

2. The current situation of the agricultural co-ops

1) A brief history of the agricultural co-ops in Japan

We will introduce the latest Japanese agricultural co-ops' system and situation. We will proceed to explain some analytical overviews on co-ops and the agricultural structure but it is helpful to explain the Japanese co-op's institution and the current situation first.

The co-operative society of German Raiffeisen bank was introduced in 1900. Raiffeisen co-ops were local mutual credit banks based on a Christian church communities. The members were acquainted with one other because they belonged to the same church thereby easily allowing a loan limit for someone asking to borrow credit. The close ties of members made the banking business stable and the safest. However, the establishment of Japanese co-ops in each village were much bigger than churches in Germany for two main reasons, first, due to a lack of strong religious ties in Japan and second, the government urged for co-ops as part of an agricultural policy therefore making it convenient to establish one at each village. At the time, the Japanese government imported the co-op system because money shortages of both short-

term and long-term were big agricultural problems. The Japanese government had already established banks for long-term credit for farmers before co-ops but they did not work well while the agricultural co-ops worked well, which then became the primary bank for farmers. Additionally, not all farmers joined the co-ops; relatively bigger sized farmers joined them before WW2. During the war, the co-ops were forced to transform into government control organizations and all farmers were obliged to join the organization to support the wartime economy.

After WW2, co-ops were re-organized with a more democratic style, known as the Rochdale style. The Agricultural Co-operative Society Act promulgated in 1947, which is the basic legal background of today's Japanese Agricultural co-ops. It is based on the Rochdale style, as a democratic control with each member one vote, freedom of joining, dividends per share and so on. Although being a member was a free choice for farmers, almost hundred per cent of farm households became members, because all farmers had been organized in the government control organization during the war thus farming had strongly been connected to such an organization of purchasing fertilizer and selling their products. At the time, their primary crop, rice, was still under governmental control therefore it was a rational choice for all farmers to become a co-op member. There has been no governmental support for co-ops except for lower taxes, but governmental supports for farmers, like long-term loan, price support system and governmental prices of main crops, were done through agricultural co-ops therefore agricultural co-ops have had a very close relationship with these policies. The area of each co-op was also in each village, town, city as one co-op versus one city hall when the postwar co-ops started, it remained the same reason as co-ops in 1900 that the co-ops were urged to be established by the government and had a close relationship with the agricultural policy, especially major crop control. The part of membership has not changed that almost all farmers are still co-ops members until today, but as far as the village level co-ops' sizes, are currently changing.

The Japanese agricultural co-ops run many businesses such as credit, insurance, purchasing, marketing and an extension service. The prefectural extension offices are the first organization for extension service and although the agricultural co-ops' extension service is originally limited to jobs related to other co-op's businesses, they cooperate with each other. Each co-ops' business has an upper organization at the prefectural and nation level. They have three levels since the beginning of Japanese agricultural co-op history but is changing into two levels in this decade, that village level co-ops are merging into big sizes and prefecture level organizations are being merged into nation level organizations. The reform is still going under and so the basic structure of a three leveled organization remains in many aspects while the background of the reform in the agricultural structure is changing; a decrease in the number of

farmers, a decrease of their business size and industrialization of rural areas and so on.

FIGURE 1 The organization of Japanese Co-ops

2) The trend of co-op studies

The discussions on sociological functions or multiple functions of co-ops are increasing lately more so than economical functions¹. An analysis of the economical function used to be the main argument for the cooperative studies but there were many view points so that all arguments were not building up on one argument or an integrated theory. If we introduce the main theory of co-ops, the following ones would be acceptable ones for most researches as the theories of the agricultural co-ops' economical functions.

Kondo (1976) built a strict theory of co-ops economical function in the nation economy. Co-ops take part of the merchandising sector in the nation economy and it saves the total merchandising cost by building wide co-ops network and effective businesses. Inoue (1949) analyzed the relation between the agricultural structure and co-ops and he conclude that co-ops work as a pipe to connect the capitalism economy and family farming that does not survive in capitalism because of a shortage of management skills. According to both, co-op is one form of commercial capital in the capitalism economy, so that it connects farm household to markets but it is unable to do anything for production process directly, like innovate the way of producing corps or reform farmers' management style. Miwa (1969), Saeki (1972) have the same position on this.

Tohata (1948), Midoro (1956), Ito (1960) and Otawara (1979) had objections against the commercial capital theory and they built theories that agricultural co-ops were able to reform the production process directly and read innovation of farming. However, no one has denied the co-ops' function to bring the innovation of farming through introducing new technologies like machines, varieties, fertilizer etc as ordinary purchasing businesses or extension services. It was the matter of direct action on reform of the production process.

Fujitani (1989) had a different approach to this argument, in that he analyzed the co-ops' managing function for farming as a regional agriculture realignment function. Fujitani (1989) focused especially on grope farming that needed to be organized for maintaining and improving family farming, and indicated co-ops were able to show effort on this issue.

The discussion tells that there is a big argument if co-ops have stable function to realignment the agricultural structure, including they can originally involve in the innovation of

¹ Sociological and multiple functions of co-ops tend to be discussed at the Japanese society for cooperative studies, and economical function tend to be discussed by publishing books.

farming or not. Nonaka (2003) indicated that there was big limitation on the capability of Co-ops to reform the production process, then Nonaka (2003) also indicated that each theory was built with focusing on different agricultural structures. Generally, the theory that maintained that co-ops had no direct effect on production process focused on the full-time farming oriented agricultural structure and the theory that told co-ops had a direct effect on production processes focused on the part-time farming oriented agricultural structure². The former one represents the traditional theory of co-ops and the latter one represents current issues.

2. Agricultural structure in Japan

1) A brief history of the agricultural structure after WW2

Table 1 The movement of the Number of Farm Households

When the Japanese agricultural co-op system started, farmers meant people who relied on agriculture as an income resource. The Japanese economical boom started around the late 50's to the early 70's, and withdrew the labour force from agriculture creating a Japanese major phenomena, part-time farming. Table 1 shows the decrease of the number of farm households since 1950 that shows it became almost half, and also shows a regional difference on the decrease of farm households.

FIGURE 2 Regional Differences on Income and Family Budget

FIGURE 2 shows the relationship between income and budget for farmers. The figure shows incomes and family budget for each adult family member from age 20 to 59. The figure indicates there are three groups in the relationship between family budgets and incomes. The first is the four on the left that they have enough non-farming incomes to meet family budgets, the second is the ones in the middle, Kanto (North), Tohoku and Kyushu, they have to combine the non-farming incomes and farming incomes to meet family budgets. The last one is of the others in the right that have shortages for meeting the family budget. The regions in the last group are known as aged farmers' regions, that is why the incomes and the family budgets do not balance in Figure 1. The shortages are filled by pensions that aged people have

² The review brought more complicated categories but in the relation of this manuscript, it can be simplified like this.

and they do not appear in Figure 1. Other two groups are known as industrialized regions and farming regions therefore, they indicate the structural difference. Tohoku is the typical region that farming income is necessary for farm households and Kinki is the example for the regions where non-farming incomes is high enough to cover the family budgets.

FIGURE 3 The Adequacy of Family Budgets in Tohoku region

FIGURE 3 indicates the trend of farming and non-farming income. It shows the farming income was primal until 1965, and it is still important to cover the family budget until 1980'. At 1990, non-farming income reached 100% adequacy of the family budget. The figure includes pension and other incomes so the adequacy is higher than FIGURE 2, however it indicates that the farming income lost the position of primal income in the 1970's. If we focus on farming income and non-farming wages, many farmers need farming income to cover their family budget. We always find the necessity of farming income in the researches in Tohoku region like FIGURE 4. The figure shows non-farming wages per Adult in each family in our research site in Akita prefecture, and it shows that most families do not reach the average family budget in the region. It is the same when we indicate the total non-farming incomes in each family that they do not reach the family budget, hence farming incomes are necessary to cover the family budget for most farmers.

FIGURE 4 Non-farming wages per adult in Nishiki village (Akita prefecture, Tohoku region)

The situation is quite different in the Kinki region. FIGURE 5 indicates farming and non-farming income in Kinki region like FIGURE 3, and the figure shows that non-farming income have been primal income since 1965 and it reached 100% of the family budget in 1975³. It means farming is not necessary for most farmers as an income resource in the Kinki region. We also see the situation in our research in FIGURE 6 that non-farming incomes per adult in each family are high enough to cover the family budget. Most family have enough non-farming incomes to cover the family budgets. The difference came from three factors, one is wage levels in both regions, two is different classifications of jobs, and three is the job structure

³ The statistics sometime changes the category so we drew the limited years but it was known by researches that the non-farming incomes always came first there since pre-war time.

of farmers. Tohoku has lower wage levels than urbanized areas such as Kinki and also non-farming jobs in Tohoku tend to be unskilled manual labour, on the other hand, the interviewees in the research in Kinki have more managing positions than Tohoku region, accordingly Kinki tends to have higher wage levels⁴. Although the job structure of farmers that the most people in the age more than 50' have farming oriented job in Tohoku region⁵, it is a big factor to define the low levels of non-farming wages in FIGURE 4. The generation gap in job structure also exists⁶ in Kinki region but it is between the ages already retired and younger, so there is no such gap among adults in the families. All of them have full-time non-farming jobs as ordinary workers in the Kinki region.

FIGURE 5 The Adequacy of Family Budgets in Kinki region

FIGURE 6 Non-Farming Wages per Adult in Chuzu town (Shiga prefecture, Kinki region)

Some part of Tohoku region has the same structure as the Kinki region, for example, there are some people who have enough non-farming wages to cover the family budget. And there is also the same aspect as the Tohoku region inside Kinki region, like there are full-time farmers or people who have farming oriented job structure and rely on farming income. However, when we take the relation between the agricultural co-ops business and the agricultural structure in a whole, Tohoku region still have the old agricultural structure and the Kinki represents the new phase of agricultural structure.

The priority of the agricultural co-ops' business is to improve the profitability of agriculture in the Tohoku region. In this case, marketing is very important as the agricultural co-ops' business. The co-ops try to improve the profitability of the crops that farmers are already growing by taking a new strategy in marketing, and the co-ops also try to introduce new crops to farmers to extend the farmers' business size, and so on.

On the other hand, the agricultural co-ops have different priorities in the Kinki region, like organizing group farming, finding and supporting next generation full-time farmers, and helping agricultural reform to maintain farming in the area, because most farmers do not need to

⁴ Nonaka(2003b)

⁵ Nonaka(2003b)

⁶ Nakayasu(1976) found the generation gap by analyzing statistical data. Most argument on the Japanese agricultural structure have relation with Nakayasu's analysis, and Nonaka(2002) and Nonaka(2003) researched regional difference on the generation gap.

continue their farming for economical reasons.

There are other types and problems of Japanese agricultural co-ops but the two types, Tohoku and Kinki indicates the latest situation and typical problems of today, which is defined by the agricultural structure.

3. The new phase of co-ops' economical function

1) Tohoku type agricultural co-ops

Farmers have a basic capability to complete their farming because they have full set of machines, enough labor power for farming, and skill for growing the crops. However, they do not have skills after production process, especially in marketing, because they are small size family farmers that do not have enough quantity of crops to sell in the market by themselves, and have survived with agricultural co-ops that substitute marketing skills for farmers.

The agricultural co-ops try to sell their members' products in the best prices at the markets, which is necessary to build knowledge about the market, skills in dealing commodity in the markets in the different regions. Co-ops gather small farmers' products into a big amount to get a bargaining power in the market, but the knowledge and skills are also important. It is also important to introduce new crops to farmers for extending their business size, this works as a key for a smooth and effective set aside. All those marketing activities are primarily aiming at improving profitability of farming, but it also works as an indirect method to reform regional farming.

2) Kinki type Agricultural co-ops

As we saw on FIGURE 2, there are regions where farmers do not need farming incomes to meet the family budget like Kinki region. Even in these regions, there are full-time farmers and people who have farming oriented job structure like Tohoku region, accordingly the agricultural co-ops have to perform the same function as they do in the Tohoku region. However, Kinki has the different agricultural structure so the agricultural co-ops have to perform different functions than in the Tohoku region. The biggest difference is that the agricultural co-ops have to engage in the activities to maintain rice farming. The major method of the maintaining rice farming is to organize group farming. Small farmers are unable to have full set of machines these days⁷ so that they have to rely on group farming or farming service to maintain their rice farming. The number of the farmers who want to borrow or buy field so small that is getting harder to stop farming for part-time farmers because if they stop farming without lending the field, the field would become rugged land and disturb other farmers.

⁷ Rice price keeps going down and average farm size is almost half in Kinki region than Tohoku region.

The agricultural co-ops have to engage in borrowing and lending field, and lead the liquidity of land toward the new agricultural structure in which full-time farmers or farming company grow their business with maintaining and harmonizing regional agriculture in a whole. The new function is important function of the agricultural co-ops in urbanized area like the Kinki region.

Conclusion (as a latest situation of co-ops business)

The Japanese agricultural co-ops have performed a business as a kind of commercial capital, it provide farmers reasonable prices on necessities for farming and living, better condition on insurance, and better prices on their products than in case they sell them by themselves. The co-ops also perform great functions related to policy such as governmental loan, control of rice, organizing set a side. The agricultural co-ops have showed efforts on those issues for both farmers and government.

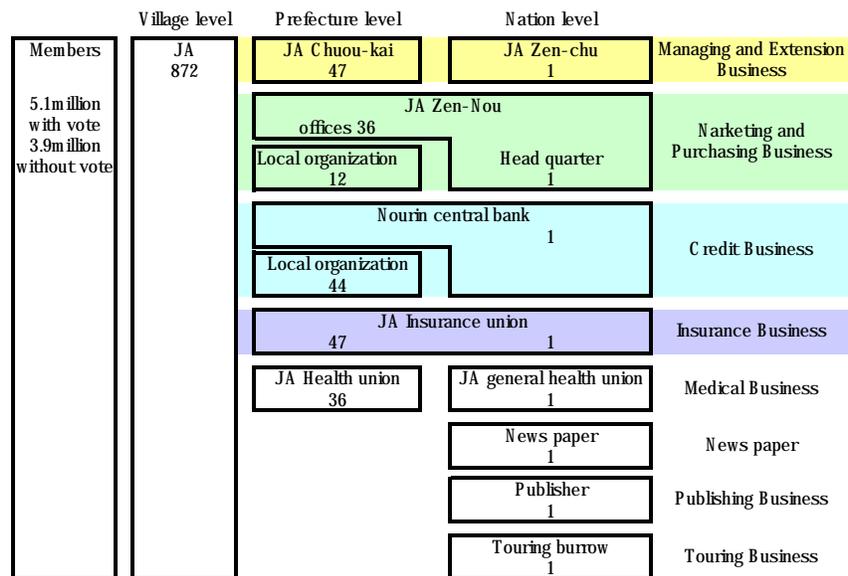
According to the agricultural structural change as we saw in Kinki region, expectation for the agricultural co-ops has been changed, that the agricultural co-ops have to engage in many phases of regional agriculture. The bottom line is if the agricultural co-ops perform no effort for maintaining rice farming in the area, the agricultural production and number of farm households would decrease rapidly. This type of agricultural co-ops has to maintain and reform the agricultural structure in the area to forester full-time farmers or farming companies.

If we put the view point on the market, both try to do the best performance in the markets to get the best bargaining power for improving the members economy. The markets of agricultural products and the nation economy are also changing, it seems like the speed of changing is increasing. The agricultural co-ops have more strategies on marketing than ever to get better conditions on marketing, such as direct marketing to super market, cooperating to consumers' co-ops, open their own shops, aiming at niche markets and so on. It came from a change in the national economy and agricultural structure. Coops have to be aware of the situation of their members and markets' conditions more than before, and build a best strategy to survive, it means their businesses are getting difficult, especially under the latest economic policy that is under Neoclassical Economics. It is also a background of Co-ops' reformation currently under way.

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Source: JA group promotion material, 2006

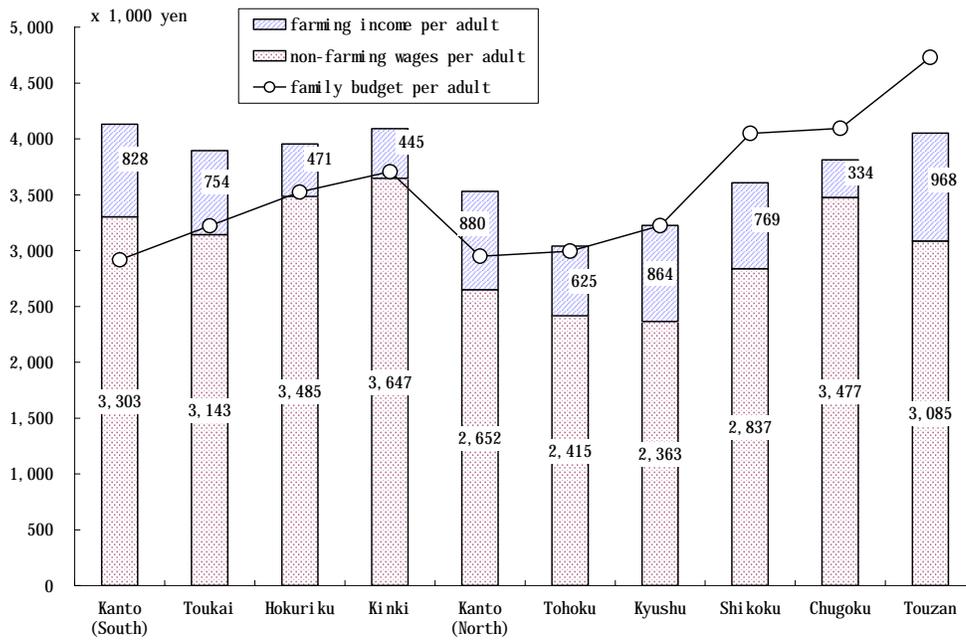
FIGURE 7 The organization of Japanese Co-ops

Years	Number of Farm Household		
	Main Island	Tohoku region	Kinki region
1950	100.0	100.0	100.0
1955	97.9	101.5	97.4
1960	98.2	104.8	95.7
1965	92.2	102.8	88.8
1970	87.3	100.8	83.4
1975	81.3	96.4	76.7
1980	76.6	92.5	72.8
1985	71.9	87.4	68.8
1990	63.1	81.0	59.2
1995	56.7	74.1	53.3

Source: Yearly Census

Data: Put 1950's number as 100 and show each year in percentage.

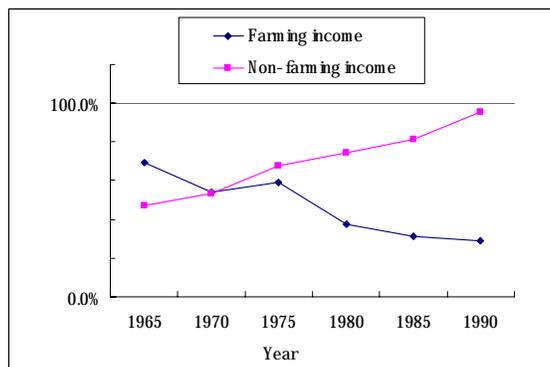
Table 2 The movement of the Number of Farm Households



Source: Yearly Census

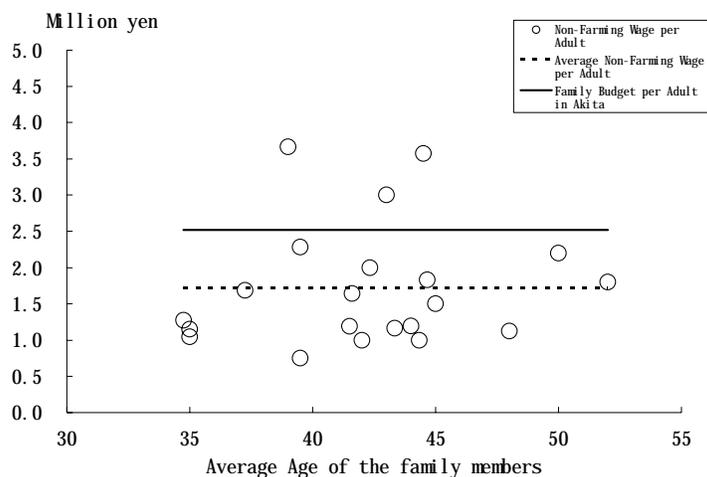
Statistical Survey on Farm Management and Economy (Statistics on Trend of Management), Statistics Department, Ministry of Agriculture, Forestry and Fisheries.

FIGURE 8 Regional Differences on Income and Family Budget



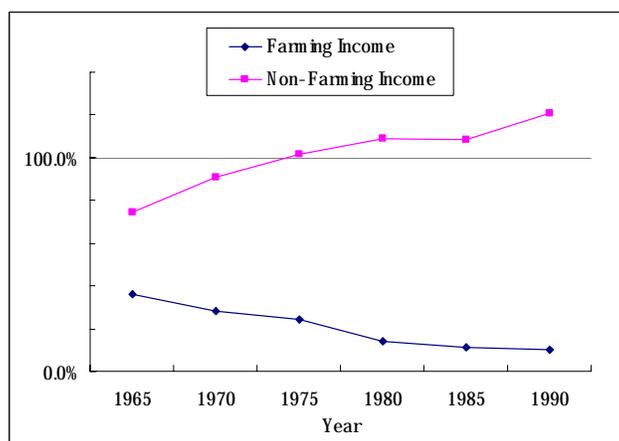
Source: Statistical Survey on Farm Management and Economy (Statistics on Trend of Management), Statistics Department, Ministry of Agriculture, Forestry and Fisheries

FIGURE 9 The Adequacy of Family Budgets in Tohoku region



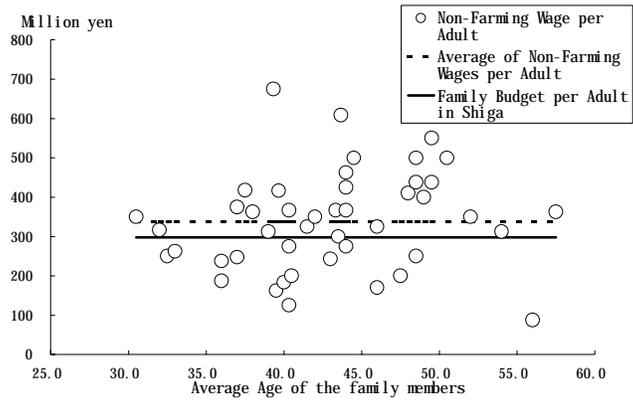
Source: Survey data in 2002

FIGURE 10 Non-farming wages per adult in Nishiki village (Akita prefecture, Tohoku region)



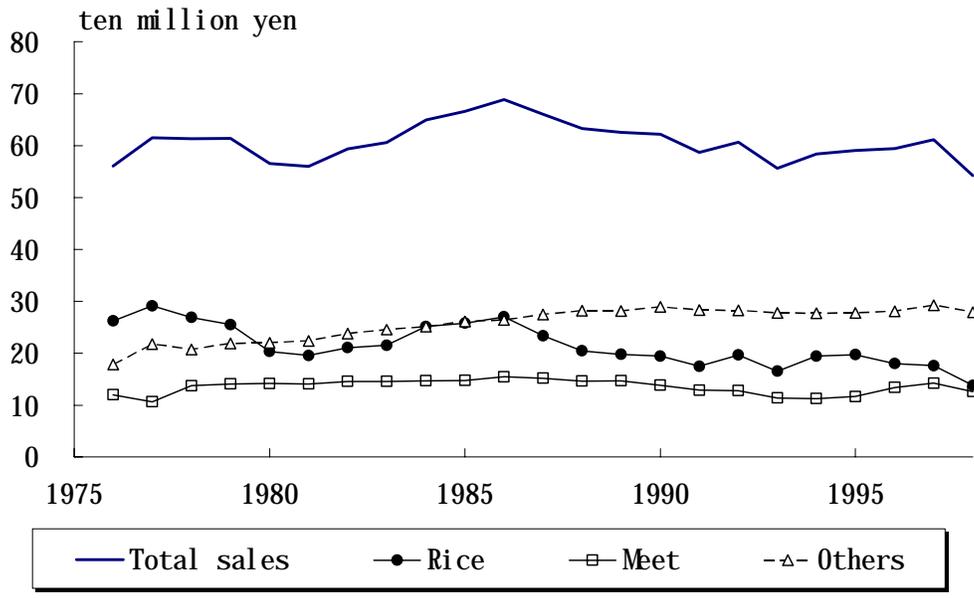
Source: Statistical Survey on Farm Management and Economy (Statistics on Trend of Management), Statistics Department, Ministry of Agriculture, Forestry and Fisheries

FIGURE 11 The Adequacy of Family Budgets in Kinki region



Source: Survey data in 1998

FIGURE 12 Non-Farming Wages per Adult in Chuzu town (Shiga prefecture, Kinki region)



Source: Ministry of Agriculture, Forestry and Fisheries

FIGURE 13 Movement of Agricultural Co-ops' Sales