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Abstract

Japan Agricultural Cooperative (JA) is a major economic force in rural Japan and the local communities that comprise it. The present dramatic ageing of the population and falling birthrate in agricultural areas threaten the survival of these communities. As JA originated from mutual aid associations of smallscale farmers, based on cooperation, what kind of role can JA play in today's Japan? We conducted a questionnaire survey of all households in 29 rural settlements. Our general aim was to clarify the types of services currently needed by rural communities. We also personally interviewed 20 farmers. Our results indicate that many local residents ranked medical service, welfare and education as the most essential services for their communities. However, most of those surveyed and interviewed preferred these kinds of services to be run by local administrations (public agencies), reflecting low expectations of JA.

1. INTRODUCTION

After its defeat in WWII, Japan faced two major challenges in relation to agricultural policies. One was to institute thorough democratization by means of agrarian reforms. The other was to resolve food shortages. The Agricultural Cooperative Association Law was enacted as a part of this effort. These agrarian reforms were aimed largely at breaking the hold of landowners on vast areas of land, which had become entrenched before and after the war, and also to resolve problems of farmer tenancy. As a result of these reforms, the proportion of tenanted land in

Japan dropped from 46% to less than 10%, and a unique agricultural structure emerged, unlike that anywhere else in the world, combining small-scale land ownership and small-scale farm management (Yamazaki [11, pp.1078-1079]). This pattern of agriculture was the background to the formation of Japan Agricultural Cooperatives (hereinafter JA). A key characteristic was their multiple purposes (Bannai [1, pp.15-8]). Each organization tried to maximize a diversity of economic benefits through collaboration between small farmers, by operating various different businesses, including banking, sales, purchasing and agricultural consulting. A brief history of the JA movement follows, based on research by Saeki [9], Miwa [8], The Norinchukin Bank [6], and others.

JA was first established in December 1947 as a vehicle to guide the process of democratization and agricultural reform in rural Japan. However, it eventually fell into widespread and significant financial difficulty due to weak business practices (Miwa [8, p.36]). During this period of high economic growth, agricultural production began to fall further and further behind manufacturing industry production. In order to prop up the agricultural industry, in June 1961, the Japanese government enacted the Agricultural Basic Law to usher in a new set of agricultural policies. The central pillar of this reform was the 'Agriculture Structural Reform Initiative', launched in 1962. This programme aimed especially at expanding the scale of business operations, promoting collaboration and correcting the prevailing income disparity between workers in the agricultural and manufacturing industries (Saeki [9, pp.62-3]).

Since then, JA has, broadly speaking, carried out two major organizational reforms through two sets of 'mergers'. In parallel with these mergers, JA also pursued business reforms. The first mergers were aimed at adapting new administrative districts, resulting from the mergers of towns and villages, throughout the 1950s and 60s. During this period, the merger of JA was achieved through 'selective expansion of farm household entities' as a matter of policy. This set of mergers also focused on establishing appropriate systems among geographically scattered minority groups of large scale farmers, who specialized in livestock, horticulture, and other non-rice products (Miwa [8, p.38]). The mergers included measures to bolster the business operations of JA. The second set of mergers was conducted in response to financial deregulation after 1985. In this way, the mergers that took place in the late 1980s aimed to strengthen JA's management systems and administrative functions, and enhance its banking business. At the same time, JA's three-tiered organizational structure—municipal JA at the lowest level (the end organization), prefectural JA (intermediate organization) at the middle level, and national JA at the highest level—was reviewed (The Norinchukin Bank [6, p.95]).

JA's business operations and the expansion of its services were also reviewed between the two sets of mergers, which took place all over Japan. A major turning point in this respect came with the 'basic lifestyle concept', adopted at the 'National JA Meeting' in 1970. This concept emphasized JA's involvement in providing a complete range of services not related directly to agriculture. This move was a response to the increase in urbanization and mixed-livelihood households in traditional rural areas, as growing numbers of JA-member farming households took up secondary employment or set up businesses during this period of relentless economic growth (Bannai [1,p.31]). Another factor behind JA's expansion of services was the growing number of urban workers migrating to rural areas. In 1972, annual household expenditure per head of wage-earning household was 300,000 yen, in contrast to 310,000 yen of expenditure per head of farming household. For the first time since the Meiji period—a span of more than 100 years—the household expenditure of farming households exceeded that of wage-earning households in urban areas, demonstrating that JA's 'basic lifestyle concept' was indeed a turning point (Saeki [9, p.40]). This concept was undoubtedly a response to socioeconomic trends rather than the demands of agricultural communities arising from increasing agricultural productivity, the resulting rise in agricultural income of JA members, or other reasons. The reform of JA was implemented in response to factors external to the agricultural industry, such as the growth in income from secondary sources, and the earnings derived from selling off farm land as urbanization progressed, thus increasing the number of mixed-livelihood rural households. The second set of JA mergers, which began in the second half of the 1980s, also focused on dealing with management issues facing JA, in response to financial deregulation. In this way, these mergers did not reflect the desires of JA members, nor were they founded on any logical concept.

Today, in all parts of rural Japan, the livelihoods of those whose primary occupation is farming are under pressure as the prices of agricultural commodities decline due to the internationalization of agriculture under the WTO system and the intensification of rice output adjustments resulting from excessive production. In addition, the downward pressure on population due to a falling birthrate and ageing is starting to pose a threat to the very survival of local communities. It is reasonable to conclude that agricultural areas of Japan are sustained largely by the income that farmers earn from secondary activities. This situation calls into question the current justification for JA's existence as a cooperative organization of farmers. Most current JA members are small-scale farmers. This concept dates back to a time when there was a significant disparity between the income of those working in agriculture and those working in industry. However, the *mura* (rural agricultural community) has changed significantly since the time of JA's inception in the wake of WWII—an era of a homogeneous society and independent farmers. Particularly since the 1990s, rural communities have become increasingly diverse in terms of occupations, although they remain permanently settled (Nakajima [5, p.18]). It is now widely believed that because the trends toward mixed habitation and secondary income sources have accelerated dramatically, JA, traditionally organized on the principles of a cooperative organization, faces conflicting demands. As the strongest economic force in rural areas, the JA movement must urgently exam-

ine what it can do to preserve Japan's rural communities, as well as its own existence, and then act accordingly.

Many discussions have been held to envision the ideal form of a future JA. One stated ideal is to run JA as a business that responds to the needs of JA members. This ideal is referred to as the 'needs theory'. (The historical evolution of the 'needs theory' is explained in detail by Suganuma [10].) In this paper, we will focus the discussion by limiting the topic to the 'needs of JA members and other rural residents (including non-farmers) in relation to JA business'.

Iwatani [2, p.135] pointed out that the honest attitude of farmers towards JA was that it expands its business operations only in areas where it can earn large profits, while neglecting those areas where farmers would prefer it to get involved. In other words, farmers felt that after the first set of mergers, JA has put priority on economic efficiency while disregarding the needs of its members. This comment is quite typical. The interpretation of 'needs' here is very thought-provoking, as demonstrated by an episode related by Iwatani [2, pp.133-134]. On a remote island where transportation is inconvenient, residents previously grew vegetables for their own consumption on narrow terraced fields. However, as the monetary economy pervaded the district, the idea of purchasing vegetables for money took root, allowing people to focus their energies exclusively on earning cash. Thus, they abandoned their vegetable fields. As a result, most of the residents ended up suffering from anaemia. At this time, instead of selling vegetables to the afflicted islanders to help them recover their health, the local JA sold them colour televisions. Additionally, in order to make their repayments for the televisions, the residents had to keep earning cash. This episode, titled 'anaemia and colour televisions', does not address the needs, desires or demands of JA members in relation to the various enterprises of JAor their degree of satisfaction with JA services. It discusses the 'needs theory' in terms of the question, 'What services do local JA members consider most essential?' In other words, it discusses the 'agriculture and living' needs of local residents—that is, 'community needs'. More specifically, this episode tries to assess the needs on the basis of 'area', representing an entire local community, as opposed to assessing the particular needs of individual JA members. The needs are those related to agriculture and living for the purpose of sustaining a society (community) in the rural (agriculture, forestry, and fisheries) villages of Japan, and to enable a worthwhile human lifestyle. We shall adopt this basic perspective in this paper.

One example of a survey on the degree of satisfaction of JA members was conducted by the Management Auditing Department of the Central Union of Agricultural Cooperatives [7]. The survey found that, of the various kinds of JA activities, the greatest dissatisfaction was felt in relation to 'agricultural technology consulting', 'overall management and business of JA', and 'production material purchasing'. Dissatisfaction focused on agriculture-related activities because of a decline in the level of service to JA members after the 'wider area' mergers. This dissatisfaction may also be related to the fixed management structure of JA, whereby operating losses from agricultural management training, and sale and purchasing operations, are offset by profits generated by financial and insurance services. This structure can be interpreted to mean that the agriculture and lifestyle of residents in agricultural areas are sustained by the profits in fields of business other than agriculture. From the viewpoint of JA management, this interpretation strongly suggests that the services (business operations) needed by residents of agricultural areas (both farm and non-farm households) to ensure that their agricultural activities and livelihoods can be sustained—that is, 'community needs'—serve to indicate the appropriate direction for JA's future business expansion (forming community cooperatives).

Kitagawa [3] focused on welfare for the elderly as an area of business where local needs exist, and conducted a questionnaire survey on JA member interest in welfare for the elderly, as well as their expectations and evaluations regarding the possibility of JA providing such services. The survey considered welfare services as a test to assess whether JA can grow as a cooperative that contributes to local communities. According to the results, JA members are highly interested in welfare for the elderly, and desire to receive information on the subject. However, they hold relatively low expectations of JA as an effective provider of such services. In other words, JA members regard JA as just one of several kinds of service providers they look to, along with private companies. In this paper, this attitude is described as a 'relative view of JA by members'. Of JA's business activities, members tend to rate 'deposits' high, but 'lending'

low. Satisfaction is high overall for mutual aid (life insurance), but low for agriculture-related business, while some members rate oil supply and gasoline stations highly. This survey clearly shows that JA does not need to provide all services required to meet the needs of local communities.

Two questions arise here: (1) Which of their community needs do local inhabitants expect JA to meet by operating a business? (2) Can these business operations be profitable to JA? This paper aims principally at answering the first question through a questionnaire survey and interview survey, as described in the following sections.

2. METHOD FOR CONDUCTING ATTI-TUDE SURVEY OF RURAL INHABITANTS

This paper aims to elucidate the 'community needs' of rural inhabitants. We conducted a questionnaire survey of rural inhabitants, followed by an interview survey. In the questionnaire, we first asked the rural inhabitants about the extra, current business activities of JA. We asked if these services would be best executed by municipal, prefectural or state governments (public agencies), by JA, or by a private company. Respondents then ranked the most 'essential' and the most 'non-essential' business activities (services) for their communities.

Our first questionnaire survey, conducted in 2005, was directed at full and associate members of each branch office of a merged JA in Kumamoto Prefecture (JA 'A'). The list of business activities (services) in the first questionnaire is shown in Table 1 for '2005'. Many of the items are services that JA 'A' is actually providing. However, because we attempted to assess the need for all JA's business activities, we included too many items in the questionnaire. Perhaps for this reason, the respondents seemed to tire of answering the questions, and many gave up halfway through completing the survey, so that we could draw no clear conclusions from the results. Reflecting on this mistake, we narrowed down the list of business activities for '2006', as shown in Table 1. We thus distributed small-scale questionnaires in Settlement 'B' of Iwate Prefecture (plain area) and Settlement 'C' of Ishikawa Prefecture (rural-mountain area).

Table 2 shows the results of the questionnaire, conducted in 2006, relating to 'essential' and 'non-essential' business activities (services) for life in these rural communities. A small sample number for

each settlement, and more than three items in the same order, is denoted by '-'. We can see that 'Medical care facilities', 'Banking' and 'Welfare for the elderly' were ranked as highly essential services. It is noteworthy that 'Sale of agricultural products' and 'Sale of agricultural supplies' are rated as less essential than the services relating to health (medical and welfare services) and finance (banking). The services rated the most 'non-essential' were 'Gambling facilities', 'Travel agencies' and 'Sale of home appliances'. Ironically, JA members regard gambling facilities as 'non-essential', yet pachinko parlours are a very lucrative JA business—so much so that large numbers of pachinko parlours are found in many rural areas. It is also of interest that JA members feel that 'Travel agencies' and 'Sale of home appliances' are 'nonessential' to JA. Overall, residents in rural areas (like urban residents) feel a strong need for medical and welfare services and banking. These businesses do not relate directly to agriculture, but rather to the concern of rural inhabitants about their current situation, threatened by a declining birthrate and an ageing and decreasing population. In addition, we can say that local residents no longer feel the need for travel agencies, which used to be a centrepiece welfare service for JA members.

When preparing for our interview survey, based on the earlier questionnaire survey, we discovered that the person who served as an organizer for the questionnaire survey of Settlements 'B' and 'C' is a JA stakeholder. We had asked that the questionnaire be distributed through the land improvement district cooperative (for Settlement 'B') and the prefectural agriculture and forestry office (for Settlement 'C'). The organizers of the questionnaire were a former JA cooperative president for Settlement 'B' and a JA staff member for Settlement 'C'. In view of these connections, the expression of local needs could not be said to be fair or accurate. In addition, we only received a small number of responses. We therefore decided to conduct the survey again, based on the items for 2007, as shown in Table 1.

We began by asking respondents to specify the kind of organization most suited to providing a specific service—a public agency, JA, or a private company. We then asked them to state which services were most 'essential' and most 'non-essential' for life in their community.

For the 2007 survey, a total of 10 settlements were

selected, with the help of a public office, in Otamachi, Daisen City, Akita Prefecture—a community that is categorized as 'a rice farming-based plains rural area'. We distributed questionnaires to all households in the area, including non-farming households, through the former Ota-machi municipal office. Later

we collected the questionnaires from these households. For the purposes of comparison, we distributed and collected questionnaires from all the farm households (including those with secondary income sources) through municipal offices in a total of 19 settlements in Bando City, Ibaraki Prefecture, which

Implementation (fiscal) year	Specified items				
2005	Gasoline stations (SS); LP gas sales; agricultural technology consulting; laundering; shipping of farm and livestock products; building and automobile-related non-life insurance (mutual) underwriting; deposits (savings) management; life insurance (mutual) underwriting; various kinds of agriculture-related lending, e.g., for purchase of farms and farming equipment; retail (home delivery) of food, clothing and daily necessities; sales of fertilizer, agricultural chemicals and household materials such as plastic; indemnification against loss of agricultural (livestock) products due to accidents/disasters; various kinds of lending for ordinary living expenses, e.g., life, education, home; sales and repair of agricultural equipment; sales and repair of automobiles; operation of direct sales outlets for agricultural products; farmland loan mediation; parcel home delivery business; lifestyle advisory; cooperative purchasing of fuel (fuel oil, kerosene); operation of rice production/processing facilities (e.g., 'country' elevators); operation of accommodation facilities; travel agencies; home tuition; operation of agricultural storage facilities; mediation of burials and sales of tombstones; farm work contracting; operation of cooperative fruit grading facilities; operation of community facilities (meeting halls, community centres); supply of housing land; mediation of wedding ceremonies; lifestyle purchasing; welfare for the elderly; brewing and sale of local sake; real estate business (agency and maintenance); automobile safety inspections; restaurant and food/beverage businesses utilizing local agricultural products; mediation of funeral ceremonies; operation of healthcare facilities for the elderly; operation of day care facilities				
2006	Insurance and pensions; agricultural technology consulting; gasoline stations; banking; sale of agricultural supplies; sale of daily necessities; medical care facilities; travel agencies; welfare for the elderly; sale of home appliances; farm work contracting; sale of agricultural products; gambling facilities; lifestyle advisory; nursery facilities				
2007	Insurance and pensions; agricultural technology consulting; gasoline stations; savings (deposits); finance (lending); sale of agricultural supplies; sale of foods and daily necessities; medical care facilities; travel agencies; welfare for the elderly; sale of home appliances; farm work contracting; sale of agricultural products; <i>gambling facilities</i> ; lifestyle improvement; <i>nutrition education</i> ; welfare facilities; <i>sale of PC software</i> ; wedding and				

The item of the italics body points at the dummy (Those businesses aren't actually being carried out in JA).

funeral venues and mediation; direct sale of agricultural products

Table 2. 2006 questionnaire results

		Settlement 'B' (sample size=28)		Settlement 'C' (sample size=18)	
		Business items	Response (%)	Business items	Response (%)
Essential' business 1st	1st	Medical care facilities	50.0	Medical care facilities	38.9
	2nd	Banking	30.0	Banking	22.2
	3rd	Sale of agricultural products	10.0	Welfare for the elderly	16.7
Essential' business 2nd	1st	Welfare for the elderly	26.3	Welfare for the elderly	38.9
	2nd	Sale of daily necessities	21.1	Medical care facilities	16.7
	3rd	Gasoline stations	15.8	_	_
Essential' business 3rd	1st	Sale of agricultural products	21.1	Lifestyle advisory/medical care facilit	ies 18.8
	2nd	Sale of agricultural supplies	15.8	_	_
	3rd	Nursery facilities	15.8	_	_
'Non-essential' business 1st	1at	Combling facilities	76.5	Gambling facilities	72.2
Non-essential business 1st				Gamoning facilities	12.2
	2nd	Travel agencies	17.6	_	_
	3rd	Insurance and pensions	5.9	_	_
Non-essential' business 2nd	1st	Travel agencies	35.7	Lifestyle advisory	47.6
	2nd	Sale of home appliances	28.6	Travel agencies	20.0
	3rd	Farming advisory	14.3	_	_
Non-essential' business 3rd	1st	Sale of home appliances	30.8	Nursery facilities	36.4
	2nd	Travel agencies/gambling facilities	es 23.1	Sale of daily necessities/travel agence	ies 18.2
	3rd	_	_	_	_

More than three items in the same order, is denoted by '-'.

is a 'vegetable farming-based plains rural area' not far from the Tokyo metropolis. Based on the results, we then conducted six preliminary interview surveys during February in Daisen City, and 14 interview surveys during April.

3. ATTITUDES OF RURAL INHABITANTS TOWARDS JA

Daisen City in Akita Prefecture was established on March 22, 2005, by the merger of one city, six towns and one village—Omagari-shi, Kamiokamachi, Nishi-senboku-machi, Nakasen-machi, Kyowa-machi, Nangai-mura, Senboku-cho and Otamachi. Daisen City is located in an inland area of southern Akita Prefecture, bordering Senboku City and Iwate Prefecture to the east, Yokote City and Misato-cho to the south, Akita City and Yuri-honjo City to the west, and Senboku City to the north. The area has long been an important transportation node of southern Akita Prefecture. Efforts are being made to enhance the infrastructure and capabilities of the

area as a road and railway junction, through the Akita Shinkansen (Omagari, Kakunodate), Akita Expressway (Omagari I.C.) and other projects. Ota-machi, the area examined in this study, has no major arterial roads, expressways, or railways. There are not even any convenience stores in the Ota-machi area, which is completely agricultural, characterized by scenes of farmhouses dotted over paddy fields. The area falls under the jurisdiction of JA Akita Obako, whose local JA branch office is sited in the former JA Ota building. Agriculture in the area is categorized as 'rice farming-based plains rural'. However, more and more farmers are pursuing secondary sources of income, mainly by commuting to neighbouring areas. We chose this area because it featured in a survey by the Agriculture Department of Tohoku University (Kudo[4]) and because this study made a positive contribution to agriculture in the former Ota-machi. The local people cooperated wholeheartedly in this survey.

Bando City in Ibaraki Prefecture was also formed

on March 22, 2005, by the merger of Iwai City and Sashima City, and is fittingly called 'a garden suburb'. It is located in southwestern Ibaraki Prefecture, and borders Noda City, Chiba Prefecture, at the Tone River. Bando City thus acts as a gateway from Chiba Prefecture and metropolitan Tokyo, to Ibaraki Prefecture. The city is located within 50 km of the Tokyo metropolis. Since the Tsukuba Express began operating, the city has been well within commuting distance of the Tokyo metropolis. The entire city is designated as a 'Tokyo Metropolitan Suburb Improvement Zone'. Taking advantage of the relatively mild Pacific coast climate and its convenient location, farmers grow vegetables for the Tokyo market, rather than rice. There are several JA offices in the area. JA Iwai in particular is well known for producing branded vegetables.

1) Results of Questionnaire Surveys

Figure 1 shows the responses to the question, 'Which of the three types of organization would you prefer to see handling each of the following activities (items 1 to 20): a public agency, JA or a private company?'. The upper bar gives the responses for Daisen City; the lower bar for Bando City. JA scored

relatively high on '2 Farming advisory', '6 Sale of agricultural supplies', '12 Farm work contracting', '13 Sale of agricultural products' and '20 Operation of direct sale outlets for agricultural products'. Two of these business activities ('12 Farm work contracting' and '20 Direct sale of agricultural products') are not conducted by JA in either of the two districts, and are agriculture-related items. JA scored lower, but still relatively high, on '1 Insurance and pensions', '4 Savings (deposits)' and '5 Finance (lending)'. However, for items related to medical care, welfare, lifestyle and education, a public agency was the preferred service provider. The items for which 'a private company' was most preferred were '3 Gasoline stations', '7 Sale of foods and daily necessities', '9 Travel agencies', '11 Sale of home appliances', '18 Sale of PC software' and '19 Wedding and funeral venues and mediation'.

A comparison of Daisen City and Bando City shows that for all items, a public agency is favoured as a service provider in Bando City. Another feature of the results relates to the items on which public institutions scored high—'1 Insurance and pensions', '3 Gasoline stations', '4 Savings (deposits)' and '5 Finance (lending)'. It seems that people tend to react

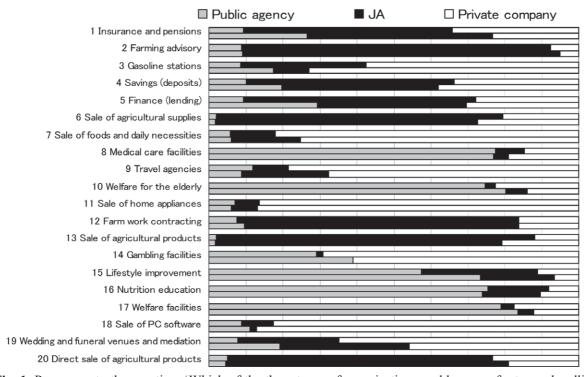


Fig. 1. Responses to the question, 'Which of the three types of organization would you prefer to see handling each of the following activities (items 1 to 20): a public agency, JA, or a private company?'. (proportion per activity)

with some anxiety and dissatisfaction to the idea of these activities being conducted by JA or a public agency. Furthermore, in Bando City, which enjoys particularly good access to the Tokyo metropolitan area, JA scored notably higher than Daisen City on items '7 Sale of foods and daily necessities', '9 Travel agencies' and '19 Wedding and funeral venues and mediation'. If we consider this result in the light of the high dependence on private companies, a possible hypothesis is as follows: Because access to the Tokyo metropolitan area is easy, existing private companies quickly sort themselves out by a kind of natural selection, so that JA's 'comprehensive power'—its unique ability to offset losses in one part of its business operations with profits from another part (mainly insurance/pensions finance)—could be considered a significant advantage and a favourable asset.

Tables 3 and 4 show the questionnaire survey results for Daisen City and Bando City, respectively. In both cases, the results for farming households that sell their agricultural products ('sales farmers', hereafter 'SF') and those that do not ('non-sales farmers', hereafter 'non-SF') are listed separately. 'SF' derive an income from selling agricultural produce, regardless of whether they sell to JA or not. 'Non-SF' have large-scale 'kitchen gardens', the produce of which is distributed to relatives, friends and so on, but not sold. Inhabitants who do not have agricultural land are included in 'non-SF'. Note that, in both cases, most respondents are full JA members. 'Medical care and welfare facilities' was considered 'essential' in both districts and by both 'SF' and 'non-SF' households. However, 'Gambling facilities' was considered the most 'non-essential' in both districts, and by both household categories. 'Travel agencies', 'Sale of home appliances' and 'Sale of PC software' were also frequently nominated as 'non-essential'. Comparing 'SF' and 'Non-SF' households reveals that 'SF' households tend to consider agriculture-related activities, such as 'Sale of agricultural products' and 'Sale of agricultural supplies' to be 'essential', whereas 'non-SF' households rate the 'Sale of foods and daily necessities' to be more important than agriculturerelated services. Interestingly, 'Gambling facilities' shows up in the rankings for 'non-SF' households as 'essential'. The households of the rural district of Daisen City uniformly rated agricultural and medical activities as most 'essential'. In contrast, however, the households of the suburban district of Bando City did not consider agriculture-related services to be so essential. The items that are 'essential' to 'SF' households span the range of 'essential' and 'non-essential' for 'non-SF' households. These results could be attributable to the fact that the differences between the districts result from different kinds of involvement with JA—and by extension with agriculture. We can infer that, for 'non-SF' households in particular, the commonality between districts is due not only to homogenization of the social and economic conditions of the households, but also to homogenization of the services (businesses) provided to the residents of farming and urban districts.

If the 'essential' business activities shown in Tables 3 and 4 are taken to be 'community needs,' the association between the preferred provider (Fig. 1) of these needs is given below. In relation to medical and welfare-related businesses ('8 Medical care facilities', '10 Caregiving for the elderly' and '17 Welfare facilities'), a high proportion of respondents nominated 'public agency' as their preferred kind of provider. However, JA was regarded positively in relation to agriculture-related activities, while a 'private company' was the preferred service provider for '7 Sale of foods and daily necessities'. Thus, looking at different community needs, we can conclude that JA is judged to be a suitable provider only of agriculture-related services.

2) Results of Preliminary Interview Survey

After receiving the questionnaire results, we conducted preliminary interview surveys at six 'SF' households in the Daisen City (formerly Ota-machi) zone. Of the community needs of 'SF' households, JA was considered to be a suitable operator only of agriculture-related business activities (such as sale of agricultural products, farming advisory, farm work contracting, sale of agricultural supplies). The summarized results of the preliminary interviews are shown in Table 5. Half of the interviewees replied that their impression of JA was 'neither good nor bad'. Apart from farm household D, the reasons given for this valuation reveal both satisfaction (or at least acceptance) and dissatisfaction with JA. Overall, the attitude displayed by the interviewees was not characterized by opposition or disagreement. Rather, the answers indicated a strong sense of identification with JA, suggesting a feeling of 'our JA'. Note, however, that there were also comments like that of person A:

Table 3. Daisen City (formerly Ota-machi) questionnaire results

		SF Households (170) Activity	Response (%)	non-SF Households (37) Activity	Response (%)
'Essential' business 1st	1st	Sale of agricultural products	23.6	Medical care facilities	26.7
	2nd	Medical care facilities	17.1	Gambling facilities	23.3
	3rd	Farming advisory	15.4	Sale of foods and daily necessities	13.3
'Essential' business 2nd	1st	Sale of agricultural supplies	15.4	Medical care facilities/welfare for the elderly	14.3
	2nd	Sale of agricultural products	13.7	Gambling facilities	10.7
	3rd	Medical care facilities	10.3	_	_
'Essential' business 3rd	1st	Sale of agricultural products	14.0	Farm work contracting/sale of PC software	12.0
	2nd	Medical care facilities	12.3	_	_
	3rd	Farm work contracting	9.6	_	
'Non-essential' business 1st	1st	Gambling facilities	73.3	Gambling facilities	73.9
	2nd	Travel agencies	12.9	Travel agencies	17.4
	3rd	Sale of PC software	3.4	Gasoline stations/direct sale of agricultural products	4.3
'Non-essential' business 2nd	1st	Travel agencies	36.8	Travel agencies	38.9
	2nd	Gambling facilities	16.8	Gambling facilities	22.2
	3rd	Sale of PC software	12.6	Sale of PC software	11.1
'Non-essential' business 3rd	1st	Sale of PC software	23.0	Sale of PC software	27.8
	2nd	Sale of home appliances	17.2	Sale of home appliances	22.2
	3rd	Travel agencies/wedding and funeral venues and mediation	12.6	Travel agencies/wedding and funeral venues and mediation	16.7

More than three items in the same order, is denoted by '-'.

Table 4. Bando City questionnaire results

		SF Households (89) Activity	Response (%)	Non-SF Households (218) Activity	Response (%)
'Essential' business 1st	1st	Gambling facilities	18.2	Medical care facilities	25.2
	2nd	Gasoline stations/medical care facilities/sale of agricultural products	13.6	Sale of foods and daily necessities	18.9
	3rd	-	13.6	Gambling facilities	11.7
'Essential' business 2nd	1st	Medical care facilities	18.6	Medical care facilities	24.8
	2nd	Welfare facilities	11.6	Gasoline stations/savings (deposits)	10.5
	3rd	Sale of agricultural supplies/sale of PC software	9.3	-	-
'Essential' business 3rd	1st	Gasoline stations/welfare facilities	12.2	Welfare facilities	14.6
	2nd	Sale of agricultural supplies/medical care facilities	9.8	Medical care facilities/welfare for the elderly	11.7
	3rd	-	_	Wedding and funeral venues and mediation	10.7
'Non-essential' business 1st	1st	Gambling facilities	80.0	Gambling facilities	80.0
	2nd	Sale of PC software	8.9	Travel agencies	3.6
	3rd	-	_	Sale of home appliances/sale of PC software	2.7
'Non-essential' business 2nd	1st	Sale of PC software	35.0	Sale of PC software	29.1
	2nd	Travel agencies/sale of home appliances	15.0	Sale of home appliances	11.6
	3rd	Gambling facilities	7.5	Lifestyle advisory	10.5
'Non-essential' business 3rd	1st	Travel agencies	22.9	Sale of PC software	20.5
	2nd	Sale of home appliances	17.1	Travel agencies	14.1
	3rd	Sale of PC software/wedding and funeral venues and mediation	14.3	Finance (lending)/sale of home appliances	9.0

More than three items in the same order, is denoted by '-'.

Table 5. Daisen City preliminary interview results (summary)

Farm household	A	В	С	D	Е	F
Settlement name	Shimoshinko	Arayashiki	Ohgihata	Eitai	Hagurodo	Minamikokaminari
Impression of JA	Neither good nor bad	Neither good nor bad	Quite bad	Neither good nor bad	Bad	Good
Reason of impression	Since JA has to deal with farming households like us, which are struggling (economically), business must be tough for them too.	I mainly grow rice, so we don't have much to do with other kinds of agricultural business.	The number of JA staff (services) per farm household has fallen since the merger, and due to poor sales strategy the burden has been shifted to the farm households.	I don't have any complaints about JA.	If farm households become corporate and handle their own sales there would be no need for JA.	The unit price for the rice we deliver to JA is not transparent. Apart from that we don't have anything to say.
Direction of JA	We want to see high- level farm households join together to form working groups, and establish production districts that have market impact. JA can serve as a bridge to this. For farming advice we want the top-level households to transfer their agricultural expertise to others within working groups.	We hear that horticultural households would like to see better farming advisory services. JA needs to review its business, but since credit and insurance are where JA makes a profit, we think these businesses should not be separated.	We need to introduce crops other than rice that can provide a stable income. JA needs to play a leading role in this.	Nothing in particular to say.	Farm households should establish a corporate structure, and handle everything, including sales, by themselves, like a company. JA needs to serve only as a financial cooperative.	All of the services provided by JA can be obtained from other providers. It's inevitable that JA has to compete in the commercial market place.

'Farmers and JA must collaborate to develop concrete proposals'. In other words: 'If we did this, then things would improve somewhat'. This lack of satisfaction could also be due to the greater physical and mental distance that has opened up between farmers and JA since the regional mergers. Apart from B and C, all interviewees are 'accredited farmers'. Farm household A grows vegetables, C grows leaf tobacco and D grows soybeans. Farm household E operates a mixed management system centred on raising wagyu (Japanese-style beef), while B is the only farmer in the district focused on community farming. While we can conclude that these differences definitely influenced the variety of interview responses, clearly the desire of farmers A and B to strengthen support for horticulture aligns quite closely with the desire of farm household C for the introduction of staple crops other than rice. Comments from farm households E and F show that they are resigned to the current state of JA. However, farm household E would still like to see JA provide economic backup (financing and funding of operation expenses and assistance with taxation procedures) in areas other than credit and insurance even after the farmer incorporates his farm business to become a private enterprise operation.

Summarizing the above, we can say that the hopes held by farmers towards JA are: (1) the introduction of crop items other than traditionally grown main crops, which can return a stable income, and the creation of specialty farming districts for these, and (2) a focus on economic backup to complement farmers' business improvement initiatives (community farms, incorporation).

Farm household E also expressed the concern that even if farm households establish a corporate structure, they may not have sufficient human resources with necessary management expertise. Thus, in relation to (2), farm households expect JA to provide expertise on managing corporate operations.

3) Results of Interview Survey

During the preliminary interview survey, we could more or less confirm which business direction farm households preferred JA to take. In our interview surveys, which also included non-SF farm households, our focus was to ask if people believed that a public agency—rather than JA or a private company—should operate many of the 'community needs' services, such as medical and welfare services and education, and also to confirm the most essential services needed to live in the areas, based on the results of the questionnaire described above. Keeping these points in mind, through the interviews we re-examined the results of the questionnaire and preliminary interview survey. The interview survey was conducted over four days—from April 21 to 24, 2007—at a total of

Table 6. Interview results (summary)

Farm No.	Age	Category	Gender	Settlement	Interview sit	e Impression of JA	Future role of JA	Why JA should not provide medical/welfare/education services
1	59	SF	М	Hagurodo	Home	Good. I am quite old now, so I can't invest in equipment, so I rely on JA facilities (country elevator). They also helped me out with some useful technology, for direct sowing and other things.		
2	71	SF	M	Sougyou	Home	Bad. After the merger, I have not been satisfied with farming advisory services.	A system where it is not necessary to buy our own machinery (agricultural equipment leasing) would be good. It would be good if JA could manage farmland (paddies) on contract for us.	I trust public agencies to handle these services, but I wouldn't depend on JA to do so.
3	67	non-SF	M	Eitai	Home	Neither good nor bad. Apart from bank savings, we only use JA out of a sense of social obligation, so we would not suffer without JA.	Condition do	
4	72	non-SF	M	Kamikosono	Home	Neither good nor bad. It is easier to get loans from JA than from banks, but since the merger, JA seems more remote than before.	I don't find any notice loss and fin ferming	It would be OK with JA, but publi agencies would be better.
5	43	SF	F	Kamikosono	Home	I am not dissatisfied with JA. When we wanted to establish a production district, for tonburi (seeds of broom cypress), a local specialty, JA cooperated as much as they could. Unfortunately, though, local government didn't join in the effort.	I don't feel any particular need for farming advisory services, because I want to control all aspects of management myself. However, from the perspective of going corporate, I would like assistance from JA with things like management expertise, cultivation of sales channels, operation of facilities, and inventory control (not just at the time of harvest but all year round).	JA is an agricultural co-op, so it is OK for agriculture-related service I feel that public agencies would be better for other things, however.
6	66	SF	M	Kamikosono	Home	After the merger, screening for loan qualification became very strict, but this is desirable. It is ultimately not good for farmers if JA lends out money to needy farmers even when it is likely that the loan will not be repaid.	JA needs to focus on promoting crops that generate stable income (by creating working groups), and it should specialize in agriculture-related activities. Also, I expect it to play a backup role in community-based agricultural technology consulting and incorporation.	JA has extended too far into various non-agriculture-related activities. To preserve farmland as farmland, JA must specialize in agriculture-related activities. It als needs to provide agricultural supplies more inexpensively.
7	66	non-SF	M	Uwazeki	Govt. office	JA has expanded too far into activities unrelated to agriculture. Although it is reducing the price of rice, JA is selling agricultural supplies at a higher price than home centres.	Farm work contracting.	JA has extended too far into businesses that are not related to agriculture.
8	71	SF	М	Ohgihata	Home	Even just in terms of the way JA staff communicate, JA is inferior to other private companies. Since JA is chiefly concerned with rice distribution, it lacks the ability to serve people.	Dry field farming (of crops that provide a stable income) is more laborious than rice farming. We are too old to establish a production district (scale expansion). The situation seems hopeless. What JA needs to provide, more than a	I wouldn't say that it would be impossible for JA to provide these services, but unless it worked harder than it's doing now, I don't think it would be successful.
9	58	SF	М	Ohgihata	Home	Buying agricultural supplies from JA is more expensive than going to the local home centre. JA needs to try harder to reduce prices.	gricultural technology consulting, is information about management expertise, accounting and cultivating sales channels, for farmers who want to form companies. More direct consulting, as in 'This is what you should do for your business' would be good.	I don't think that JA has the human resources to operate these kinds of businesses.
10	68	non-SF	М	Uwazeki	Home	I inherited my full JA membership. So I have always used JA, without trying other private companies. And I am going to keep using JA until I go out of business.	The unit price of rice should be more stable.	Even JA will eventually disappear think. Medical, welfare and education are important, so I wou be happier to see them left to stable public agencies.
11	57	SF	M	Uwazeki	Home	Quite bad.	Agricultural supplies are expensive. JA needs to put more effort in to its management. However, JA is better than banks in some finance-related businesses.	I think these are beyond the limits defined by the existing Agricultur. Cooperative Association Law. For example, a co-op would not be ab to accommodate such services. (Therefore, not possible under current conditions.)
12	54	SF	M	Kamikosono	Home		Realistically, given the aging of the population, it would be difficult to achieve our request for JA (1). It would also be difficult to achieve our request for JA (2), since providing community-based agricultural technology consulting and forming corporate structure are difficult to accomplish under current conditions.	Traditionally these have been handled by public agencies.
13	53	non-SF	M	Eitai	Workplace		securing a stable income source over the medium to long term. The prosperity of farming districts will be closely tied to the prosperity of farming businesses.	At present JA does not have the investment capital to take on all these responsibilities.
14	41	SF	M	Kamishinko	Workplace	JA looks after us settlement by settlement. It provides more specific information, more quickly, than the private sector. It has awareness at the local level.	I don't think JA needs to do anything more than it's doing now.	
15	43	SF	M	Sougyou	Workplace		Right now, JA seems unable to respond to changes in agricultural administration, and is unsure about its policy on vegetables and other matters. I want to see JA clarify its strategy and show us the direction it is moving in.	I don't really know.
16	64	SF	F	Kamishinko	Home	Agricultural technology consulting became quite undermanned after the merger. Things got quite rough.	Since farming households cannot seem to group together themselves to form community farming or corporate ventures, I would like to see JA organize this. I don't have any particular demands of JA, but when they send people to village-level consultations.	Up to now, these things have been handled by public offices. I think would be best to leave things as they are.
17	61	SF	М	Eitai	Govt. office	Both JA and local government administrations are doing their best.	Since even JA members do not use JA, I guess it would be difficult for JA to implement business that promotes the profit of members.	JA is already too extended in its non-core business commitments, but I would not say that it should specialize only in agriculture. But think it needs to focus on farming instead of these other things.

17 farm households, taking approximately one hour in each case. Table 6 shows results of interview survey.

The two predominant responses from the preliminary interview survey on the business direction people wanted JA to take were: (1) the introduction of crop items, other than traditionally grown main crops, which could return a stable income, and the creation of specialty farming districts for these, and (2) a focus on economic backup to complement farmers' business improvement initiatives (community farms, incorporation). In the interview survey, some farmers expressed positive opinions regarding point (1) (farm households 6 and 13). However, some expressed doubt, saying that even if JA tries to create districts to grow such crops, ageing farm households may not be able to secure sufficient labour. Furthermore, farmers might hesitate to invest in machinery to make up for a lack of labour because they have no visible successors, or because of a perceived lack of stability in agricultural administration. Thus, even if led by JA, this initiative could be difficult (farm households 8 and 12). The most common opinions on the expectations of JA correspond to point (2) (farm households 5, 6, 9, 12, 15 and 16). Of these, services desired from JA can be further categorized as follows: (1) In-depth consulting services to guide individual farm households in detail on how they manage their operations, in addition to providing management expertise (farm households 5, 6 and 9); and (2) In cases where consensus on the question of introducing community farming and establishing a corporate structure cannot be reached, external mediation by JA to reach consensus (farm households 5, 9, 12, 15 and 16). The opinions on category (2) were expressed as a result of the following situation. In the survey area (formerly Ota-machi in Daisen City), managers of large-scale farms place the highest priority on the management of their own farms, and thus cannot spare any labour for community farming. However, the class of small-scale farmers and elderly farmers cannot participate effectively in community farming as workers. Furthermore, they have a strong attachment to their own farmland (paddies) and feel reluctant to entrust or hand over their land to other people. As for category (1), we can see that people feel a need for agricultural technology consulting—a service that JA began to withdraw after the wide-area mergers. Some farm households felt that their sense

of distance from JA increased after the mergers, and that agricultural technology consulting became understaffed (farm households 2, 4 and 16). However, some farm households claimed that the agricultural technology consulting provided by JA is effective, and that JA is working hard for the good of farm households (farm households 1, 5, 14 and 17). We would guess that these opinions may differ because the agricultural technology consulting provided by JA has changed from the traditional 'bottom-up type' for small farm households, and farm households facing business difficulties, to 'selective and intensive type' for large-scale and well-performing farm households.

The surveyed rural inhabitants want many of their 'community needs', such as medical and welfare services and education, to be handled by public agencies, rather than by JA or private companies. The reason vaguely expressed for this was that these services had long been provided by public agencies (farm households 12, 15 and 16). Many also claimed that JA is overexpanding its businesses in fields unrelated to agriculture, and should instead specialize in agriculture-related businesses (farm households 5, 6, 7 and 17). A significant number claimed that JA lacks the ability to handle such businesses (lack of personnel and stability compared to public agencies; 'worry about JA's future') (farm households 2, 8, 9, 10 and 13).

The view that JA should specialize in agriculturerelated businesses is possibly the flip-side of the expectation of growing crops that provide a stable income (farm household 6) and the hope that JA will supply cheaper farming materials than private 'home centres' (farm households 6, 7, 9 and 11). For example, when we addressed more in-depth questions to the farm households, we heard opinions to the effect that it might be difficult for JA to survive as a business if it specialized in agriculture-related business (farm household 6), or that JA might not be able to make a profit if it stuck to providing the services demanded by farm households (farm household 7). In short, combining these opinions with the trends in expectations of JA, mentioned earlier, farm households are aware of the fact that the services that are necessary and important to them are not necessarily profitable for JA. Yet, despite being aware of this fact, they continue to depend on JA as a 'last resort' organization, which can save the farmland (paddies) of Japan, now threatened by devastation because of a rapidly

aging society, the move by farmers to secondary income sources, reduction in acreage, and changes in agricultural administration.

The view that JA is lacking in management capabilities and worries about the future of JA seem to reflect a distrust of the JA organization, distrust of agricultural administration, dissatisfaction with the quality of JA staff, and a sense of their greater remoteness since the mergers. For example, some claimed that the communication skills of JA staff are inferior to those of private company employees (farm household 8). In addition, some felt that JA's financial services were inferior to those of banks, and that its mutual aid business was inferior to that of insurance companies (farm household 3). One farmer revealed that he inherited his full JA membership and will use JA services exclusively until JA goes out of business. However, if JA should one day disappear, he thought it desirable that public agencies take over its most important services (farm household 6). If this kind of unease in relation to JA is behind the general feeling that medical, welfare and education services have always been handled best by public agencies, it is likely that this simmering concern and distrust of JA is gradually strengthening. We would like to note the minority view of one respondent, who mentioned that many public agencies are also finding difficulty securing adequate income or funding, with the result that the financial burden for the services of such agencies will end up being met through taxes. However, if services that can be delivered reliably by private companies can be operated as businesses in a competitive market, local residents can enjoy inexpensive and high-quality services (farm household 13).

When asked what kind of services are needed for life in their communities, most farm households answered to the effect that there was nothing in particular they needed, that today's lifestyle is vastly more convenient than that of the past. We should point out that some households expressed a need for jobs to earn cash income (farm households who cannot sustain a livelihood with farming as their principal activity) (farm households 13, 14 and 16). From these results, we can conclude that people have no particular need for businesses (services) in order to live in rural areas (since such needs are already fulfilled). Nevertheless they are starting to express the most important need for sustaining a livelihood and worthwhile life-

style (a stable cash income source in today's rural areas). In short, the current state of rural areas of Japan is not one in which JA considers 'community needs' and works to improve the livelihoods and living standards of the people. Instead, rural areas are now confronting a dangerous situation, in which people find that they need 'something' to support the very foundation of their livelihood—even in areas like Daisen City, where people are blessed with ample opportunities to earn money from secondary sources. A comment from the survey that clearly embodies this situation reveals the difficulty of making a living by growing only rice. This farmer pointed out that until recently, farm households had tried to improve their standard of living by going to work in other areas or by initiating secondary businesses. Today, farm households are struggling just to maintain their standards of living, and are finding it difficult to manage their farmland (as paddies). This farmer suggests that, just as farming was done cooperatively on a community basis when sufficient labour savings could not be achieved using machinery, the connection between people needs to be re-established to sustain the life of the community (farm household 12). We can conclude that, due to the penetration of market economics throughout rural Japan, the wide-area mergers of JA and government administration and the restructuring of these institutions due to financial pressures, a new kind of 'community need' is arising—the need to sustain the very lives of these communities. This new kind of need has not yet been grasped by public agencies, JA, or private companies.

4. CONCLUSION

In this study, we conducted a survey of 'community needs' through a questionnaire distributed to approximately 500 farm households from Daisen City, Akita Prefecture, and Bando City, Ibaraki Prefecture. To supplement the survey, we conducted interviews at approximately 20 farm households in Daisen City.

An examination of the results shows that JA members and rural inhabitants do not simply select one out of several service providers, as pointed out by Kitagawa [3], when discussing the so-called 'relative view of JA' by JA members ('JA is one of various service provider options, including private companies, to choose from'). Basically, JA farm households in rural areas need JA to provide agriculture-related services. 'Non-SF' farm households and farm households in

suburban areas tend to feel that services most important to their lives should be provided by more stable organizations. Many go as far as to claim that there is no need for JA to provide non-agriculture-related services.

In addition, since there is no clear agreed set of 'community needs' for rural inhabitants, the intended structure of JA—considering community needs, implementing services, and contributing to the lives of local people—is not established. On this point, Kitagawa [3] also stressed the discrepancy between JA's business activities and the real needs of communities. As Iwatani [2] pointedly illustrated in the 'anaemia and colour television' episode recounted earlier in this paper, the fact is that JA has pursued a business strategy that serves its own management interests; the concept of 'community needs' is raised merely to justify this business strategy. Interestingly, one interview respondent described JA's existence as being supported by 'selling things to farm households to pluck off the cash they earn through secondary (non-farm) work' (farm household 7).

As the inhabitants of rural Japan begin struggling to sustain their livelihoods, and trying to ensure the survival of their communities, very substantial 'community needs' are starting to appear. These needs are like 'blind spots', as yet unseen or unrecognized by government administrations, JA, or private companies. People expect JA to be the organization of last resort for the maintenance of Japan's farmland. The harsh reality for JA seems to be forcing it toward one of two choices: to recognize its 'blind spot' and find a way to meet these real needs, or else to destroy these 'blind spots' and thus sever its roots as an 'agricultural' cooperative.

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References

Bannai, H. (2006) "Sougou noukyou no kouzou to

saisan mondai" (Structure and profit issues of multipurpose co-operatives). Nihon Keizai Hyouronsha, Tokyo.

Iwatani, S. (1974) "Shinka ga towareru noukyou undou – Noukyou humanizum karano kokuhatsu wo" (The true value of the agricultural cooperative association movement is being asked - Accusation from the agricultural cooperative association humanism). Nougyou kyoudou kumiai, 20(3): 131-137.

Kitagawa, T. (1999) "JA no koureisha hukushi kastudo ni taisuru kumiaiin no niizu - ankeeto tyousa kekka wo motonishite" (The needs of welfare for the elderly among JA members - As a result of a questionnaire survey). Nourin toukei chousa, 49(3): 9-14.

Kudo, A. (1988) "Inasaku seisan soshiki no genjyou to saihen kadai - O machi nougyou seisan soshiki no jirei" (The present condition of rice growing production organization and subject of the reorganization). Akitaken JA chuoukai, Document of the agriculture promotion section, Akita: 63-No. 9.

Nakajima, K. (2000) "Ko to ko no jidai kara atarashii kyousei no jidai e - kumiaiin no seikatsu potensyaru to noukyou no kanousei" (To an age of new symbiosis from individual and a lonely age - Life potential of JA members and possibility of JA). Keiei jitsumu, 55(2): 17-22.

Norinchukin Bank (2005) "Kinko no 80 nen - saikin no 10 nen wo tsuushin ni" (80 years of Norinchukin – the last 10 years). Nourin chuou kinko 80 shuunenshi hensan iinkai, 95-97.

Management Auditing Department of the Central Union of Agricultural Cooperatives (1988) "Zenkoku tyousa kara mita kumiaiin niizu to noukyou no taiou" (The needs of the JA members as a result of whole country investigation and correspondence to these needs by JA). Nougyou kyoudou kumiai, 34(4): 51-61.

Miwa, M. (1997) "Seiji keizai nougyou nousei no ugoki" (The trend of politics and economics. agriculture, agricultural administration). In: Nougyou shinyou hoshou seido 30 nenshi. Nourin gyogyou shinyou kikin, Tokyo.

Saeki, N. (1983) "Gendai nougyou to noumin" (Modern agriculture and farmers). University of Tokyo Press, Tokyo.

Suganuma, T. (1993) "Kumiaiin no niizu to noukyou no jigyou" (The needs of JA members and the

business of JA). Kyoudoukumiai keiei kenkyu geppou, 480: 2-9.

Yamazaki, H. (1992) "Nouchi kaikaku" (Farmland

reform). In: Keizaigaku jiten dai 3 ban, Iwanami shoten, Tokyo.