

A Study on the Movement of Agricultural Land for Cultivation in Japan —Stress on Analysis of the Actual Conditions—

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日本における農地流動に関する一考察

—実態分析を中心に—

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Summary

1. Sale area of owner-farmer's agricultural land for cultivation has steeply decreased since about 1975, remarkably in Hokkaido. And the price of agricultural land for cultivation has been continuously rising much more than the rate of rise in consumer price.

2. Purchase of agricultural land for cultivation is generally unprofitable because of high price of it. But, the rate of it has differences by agricultural region and size of planted area.

There is still some possibility in purchase of cultivated land in theory of management, but in reality sale and purchase area is limited because of high price.

3. Since 1980 in Prefectures (excluding Hokkaido), lease area has been more than sale area. In Hokkaido, sale area has been more than lease area, but the share of lease area has been increasing steadily.

4. Farm households expanded their area of cultivated land "by rent" more than "by purchase" since 1972 in Prefectures, and since 1979 in Hokkaido. Especially, farm households with large size of cultivated land have expanded their area of cultivated land mainly "by rent".

5. The ratio (net earnings for paddy field in rice production to rent of paddy field) of large size farm households are larger than the one of small size farm households. And the ratio means the payability by rent for cultivation.

6. The economy of farm households earned main income from other jobs is relatively wealthy, and the position of agricultural income in total farm households income is very low in recent years. And besides the agricultural productivities are low.

Therefore, for farm households earned main income from other jobs, lease of agricultural land for cultivation is not unprofitable in the aspects of economies of farm households and land utilization. Yet, lease of agricultural land for cultivation does not increase favorably.

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It is necessary to transfer the right for utilization of agricultural land for cultivation from farm households earned main income from other jobs to full-time farm households.

7. The systematic village farming including farm households earned main income from other jobs, is one of very important means to improve the structure of farming which depends on mainly size of land area, in addition to upbringing viable farms by means of lease of agricultural land for cultivation.

But, unless viable farm is brought up in the systematic farming, which come to a deadlock early or late.

1. Preface

One of the most important problems of Japanese agriculture through the 1980's into 21st century is modernization of farming which depends on mainly size of land definitely. Therefore, success or failure on movement of agricultural land for cultivation, such as lease or purchase and sale, holds the key to the modernization on farming which depends on mainly size of land through the 1980's into 21st century.

Compared with the remarkable development of farming which depends on mainly facility, farming which depends on mainly size of land has been staying fundamentally in the structure of small agricultural land-utilization under small agricultural land-ownership in Japan.

This agricultural structure causes mainly the low self-support ratio and high price in grain remarkably, compared with any other advanced country.

And recently, the criticism on Japanese agriculture is gradually increasing abroad, especially in U. S. A., as well as at home.

If people desire to rise the self-support ratio in grain and to supply cheap grain, all the parties concerned in agriculture must improve, above mentioned, agricultural structure to realize the national request.

Therefore, the promotion of agricultural land movement for cultivation holds an important position in agricultural policies today.

Well, in this report, mainly actual conditions on movement of agricultural land for cultivation will be considered from various angles by means of statistical data.

2. Tendency of sale area of owner-farmer's agricultural land for cultivation and rate of yield on purchase of agricultural land for cultivation

1) Sale area of owner-farmer's agricultural land for cultivation

Table 1 shows that sale area of owner-farmer's agricultural land cultivation has steeply decreased since about 1975. National, prefectures (excluding Hokkaido), and Hokkaido have this tendency in common. And it is remarkable in Hokkaido.

There are mainly two reasons as follows.

(1) In the process of high level economic growth, rate of yield on purchase of agricultural land for cultivation, as Table 2 shows, has fallen steeply (except Hokkaido)

Table 1. Sale and purchase area of owner-farmer's agricultural land for cultivation and area of creation of right for lease. unit : hectare

Year	National		Prefectures ¹⁾		Hokkaido	
	sale and purchase ²⁾	right for lease ³⁾	sale and purchase	right for lease	sale and purchase	right for lease
1965	73,947	2,462	40,541	1,570	33,406	892
1966	74,862	4,845	41,732	1,807	33,130	3,038
1967	72,329	2,106	40,670	1,460	31,659	646
1968	70,973	2,429	39,519	1,574	31,454	855
1969	76,804	4,064	42,058	1,542	34,746	2,522
1970	71,211	1,838	36,091	1,022	35,120	816
1971	69,225	3,293	34,083	2,253	35,142	1,040
1972	70,820	3,796	38,120	3,018	32,700	778
1973	73,828	4,608	38,769	3,334	35,059	1,274
1974	54,166	5,136	30,302	3,704	23,864	1,432
1975	47,568	5,920	25,173	3,840	22,395	2,080
1976	47,296	10,130	26,327	7,532	20,969	2,598
1977	46,293	12,148	25,964	9,527	20,329	2,621
1978	42,133	15,833	24,565	12,474	17,568	3,359
1979	40,338	25,535	24,104	20,462	16,234	5,073
1980	40,496	37,582	25,008	32,005	15,488	5,577
1981	36,884	39,927	24,538	35,452	12,346	4,475
1982	38,400	50,143	24,872	42,150	13,528	7,993
1983	37,940	46,421	24,565	38,912	13,375	7,509
1984	38,562	46,075	24,602	36,774	13,960	9,301
1985	38,098	47,198	24,038	37,231	14,060	9,967

Footnote 1) Excluding Hokkaido

2) Sale purchase area of owner-farmer's agricultural land for cultivation

3) Area of creation of right for lease. Including creation of right for lease by the Agricultural Land Law establishment of use right by the Agricultural Land Use Promotion Project until August 31, 1980, and establishment of use right by the Agricultural Land Use Promotion Law since September 1, 1980. Including "rights by trust of agricultural management" in establishment of use right since 1981, by the Agricultural Land Use Promotion Law.

Source 1) 『Transfer and Change of Agricultural Land』 Ministry of Agriculture, Forestry and Fisheries.

since the first reduction policy of rice production which started in 1969, especially case I.

(2) Many farmers regard their agricultural land as the most sound property. So, they scarcely sell any agricultural land.

After all, the reason of those is that, in the process of high level economic growth, as Table 3 shows, the price of agricultural land for cultivation has been continuously rising much more than the rate of rise in consumer price.

But in Hokkaido, the price of agricultural land for cultivation has been decreasing since 1983. And it is needless to say that the price of agricultural land in urban areas and for non-agricultural use have been steeply rising.

Table 2. Transitions of rate¹⁾ of yield on purchase of paddy field for cultivation unit : percent

Year	National				Hokkaido	
	average		3.0 hectares and over		average	
	Case I	Case II	Case I	Case II	Case I	Case II
1965	8.72	11.05	8.05	10.35	14.41	21.35
1966	8.49	10.67	7.69	9.65	10.22	16.26
1967	9.11	11.20	10.10	11.85	22.84	27.46
1968	7.36	9.43	8.41	10.18	20.52	25.45
1969	4.94	7.29	3.91	6.05	8.61	14.56
1970	4.21	6.75	5.42	7.47	16.74	23.92
1971	2.95	5.48	3.60	5.59	8.99	16.93
1972	3.26	5.52	5.05	6.87	19.60	27.39
1973	3.69	5.68	5.19	6.80	18.25	24.89
1974	4.67	6.77	7.09	8.83	17.40	22.41
1975	5.35	7.60	6.97	8.82	16.98	23.39
1976	3.03	5.57	5.32	7.35	10.58	16.76
1977	3.50	6.15	6.19	8.44	15.78	22.38
1978	3.06	5.91	5.77	8.22	14.18	21.22
1979	1.91	4.79	4.00	6.41	8.25	14.97
1980	1.07	4.08	3.82	6.03	5.45	11.89
1981	0.76	3.71	2.20	4.40	2.31	9.08
1982	0.72	3.61	2.71	4.96	5.17	12.23
1983	0.51	3.45	2.63	4.82	※	7.42
1984	1.68	4.56	3.69	4.68	8.87	16.56
1985	1.15	4.03	3.11	5.26	5.59	13.50

Footnote 1) Rate is percentage of net earnings for paddy field in rice production to price of middle paddy field per 10 ares.

2) Net earnings for paddy field in rice production of Case I is average one. Average net earnings=gross income-total cost-capital interest.

3) Net earnings for paddy field in rice production of Case II is marginal one. Marginal net earnings=gross income-total cost+depreciation-capital interest×0.26

4) Price of middle paddy field per 10 ares is rural areas' one (excluding data of urban one).

5) Star-mark shows net earnings for paddy field in rice production is minus.

Source 1) 『Production Cost of Rice, Wheat and Barley (1978)』 Ministry of Agriculture, Forestry and Fisheries.

2) 『Survey on Price of Paddy Field and Upland Field (1979)』 National Conference of Agriculture.

2) Rate of yield on purchase of paddy field for cultivation

Table 2 shows, in case II, marginal net earnings of paddy field is used, the rate of yield on purchase of paddy field for cultivation in Hokkaido has been more than 10 percent, almost every year. It means the purchase of paddy field for cultivation is profitable.

But, in case I, average net earnings of paddy field is used, the rate of yield on purchase of paddy field for cultivation in Hokkaido has fallen less than 10 percent since 1980.

Table 3. Price of middle paddy field for cultivation per 10 ares
unit : 1,000 Yen

Year	National		Prefectures ¹⁾		Hokkaido		Consumer	
	Price	Index	Price	Index	Price	Index	Price	Index
1966	225	100	228	100	79	100	100	
1967	269	119.6	271	118.9	100	126.6	100.4	
1968	327	145.3	329	144.3	127	160.8	109.2	
1969	396	176	400	175.4	146	184.8	113.3	
1970	448	199.1	451	197.8	147	186.1	120.8	
1971	477	212	488	214.0	137	173.4	127.5	
1972	534	237.3	539	235.1	132	167.1	133.1	
1973	666	296	671	294.3	158	200	153.3	
1974	840	373.3	849	372.4	210	265.8	190	
1975	914	406.2	925	405.7	325	411.4	204.7	
1976	988	439.1	1,001	439.1	290	367.1	220	
1977	1,042	463.1	1,054	462.3	352	445.6	237.8	
1978	1,116	496	1,129	495.2	395	496.2	245.6	
1979	1,202	534.2	1,218	534.2	441	558.2	255.6	
1980	1,310	582.2	1,327	582.0	485	613.9	277.8	
1981	1,402	623.1	1,420	622.8	520	658.2	288.9	
1982	1,502	667.6	1,523	668.0	527	667.1	295.3	
1983	1,561	693.8	1,584	694.7	524	663.3	296.9	
1984	1,604	712.9	1,628	714.0	520	658.2	299.7	
1985	1,658	736.9	1,683	738.2	512	648.1	304.4	
1986	1,685	748.9	1,710	750	502	635.4	—	

Footnote 1) Excluding Hokkaido.

2) Price of middle paddy field is agricultural area's one.

3) Index computed on the 1966 based.

Source 1) 『Survey on Price of Paddy Field and Upland Field』 National Conference of Agriculture.

2) 『Annual Report on the Consumer Price Index』 Management and Coordination Agency.

Generally, farm household purchases paddy field for cultivation little by little at a time. Therefore, the results of case II have more real meaning.

Table 2 also shows the rate of yield of "National average" and "3.0 hectares and over of National", in case I, have been less than 6 percent (except the rate of 1974, 1975, and 1977 of "3.0 hectares and over") since 1969. Even in case II, the rate of yield of "National average" has not been paying since 1979, and similarly "3.0 hectares and over" since 1982.

On the other hand, rates of yield by agricultural region and size of planted area of paddy field rice in 1985, as Table 4 shows, are not paying all over the regions and sizes, in case I. And, even in case II which has more real meaning, the almost rates are less than 6 percent, except Hokkaido and large size of Tohoku, Hokuriku, and Kyushu.

As explained above, purchase of agricultural land for cultivation is generally un-

Table 4. Rates¹⁾ of yield on purchase of paddy field for cultivation by agricultural region and size of planted area of paddy field rice in 1985

unit : percent

agricultural Region	Case	Average	0.3 hectares under	0.3~0.5	0.5~1.0	1.0~1.5	1.5~2.0	2.0~3.0	3.0 hectares and over
National	Case I	1.15	※	※	※	1.37	2.51	3.40	3.11
	Case II	4.03	1.46	2.06	3.23	4.21	5.05	5.72	5.26
Prefectures ²⁾	Case I	1.09	※	※	※	1.36	2.48	3.47	4.42
	Case II	3.98	1.44	2.03	3.19	4.15	5.00	5.71	6.40
Hokkaido	Case I	5.59	—	—	※	2.81	—	3.00	6.00
	Case II	13.50	—	—	※	13.49	—	13.55	13.69
Tohoku	Case I	3.65	1.26	1.65	2.17	2.95	3.72	4.85	5.63
	Case II	6.74	3.65	4.28	5.40	6.08	7.05	7.95	8.41
Hokuriku	Case I	1.51	※	※	※	1.09	2.13	3.50	4.64
	Case II	4.37	2.59	1.45	3.19	4.24	4.67	5.74	6.39
Kanto·Tosan	Case I	0.87	※	※	0.22	1.34	2.08	2.21	3.53
	Case II	3.16	0.89	1.99	2.73	3.64	4.11	3.98	4.92
Tokai	Case I	※	※	※	※	1.03	2.39	2.34	—
	Case II	2.43	1.24	0.85	2.08	3.31	4.10	4.12	—
Kinki	Case I	※	※	※	※	※	0.16	1.94	—
	Case II	1.71	0.31	1.11	1.69	2.08	2.25	3.39	—
Chugoku	Case I	2.40	※	※	※	※	2.72	—	—
	Case II	8.86	0.21	1.36	4.45	5.26	7.35	—	—
Shikoku	Case I	0.15	※	※	0.03	0.37	1.70	—	—
	Case II	2.72	1.39	2.59	2.70	2.97	3.55	—	—
Kyushu	Case I	0.86	※	※	※	2.11	2.68	3.51	5.13
	Case II	3.71	2.43	2.26	3.06	4.46	5.06	5.20	6.50

Footnote 1) Rate is same as Footnote 1) of Table 2.

2) Excluding Hokkaido.

3) Definitions of Case I and Case II are same as Table 2.

4) Price of middle paddy field per 10 ares is rural area's one (excluding data of urban one).

5) Star-mark shows net earnings for paddy field in rice production is minus.

Source 1) 『Production Cost of Rice, Wheat and Barley (1985)』 Ministry of Agriculture, Forestry and Fisheries.

2) 『Survey on Price of Paddy Field and Upland Field (1986)』 National Conference of Agriculture.

profitable because of high price of it. But, the rate of it has differences by agricultural region and size of planted area.

The average price of middle paddy field including urban area's one is too high, so in this report, the price of rural areas is used. And the results of case II and large size of planted area have more real meaning. Because, the greater part of the agricultural land is found in the rural areas and farm households with large size of planted area gain high net earnings from paddy field, besides they aim to expand the size of agricultural land for cultivation.

As I have seen, there is still some possibility in purchase of cultivated land in theory of management, but in reality sale and purchase area is limited because of high price.

Therefore, the government and self-governing bodies must control the price of agricultural land and must supply the funds with long-term and low-interest in the future.

3. Tendency of lease of agricultural land for cultivation and economic character of lease of agricultural land for cultivation

Since about 1960, many types of lease of agricultural land for cultivation, such as illegal tenancy or contract farming, have come into existence in each area widely.

On the point of system, agricultural land policy has been changed from "sale and purchase" to "lease" by a partial reform of the Agricultural Land Law in 1970. After that, new systems for promoting lease, so-called the Agricultural Land Use Promotion project, started in 1975 and 1979.

Furthermore, in 1980, government consolidated the systems on agricultural land, such as the establishment of the Agricultural Land Use Promotion Law and a partial amendment of the Agricultural Land Law and so on.

1) Area created in right for lease

Area created in right for lease from 1965 to 1985, as Table 1 shows, has been increasing in contrast with the trend of sale area of agricultural land for cultivation. Especially, since the operation of the Agricultural Land Use Promotion Project 1975 and the establishment of the Agricultural Land Use Promotion Law 1980, lease area for cultivation has been increasing remarkably.

Since 1981 in National and 1980 in Prefectures (excluding Hokkaido), lease area has been more than sale area. In Hokkaido, sale area has been more than lease area, but the share of lease area has been increasing steadily.

2) Number of farm households increased cultivated land by reason of increase

According to "Report of Annual Sample Survey of Agriculture", generally, farm households expanded their area of cultivated land "by purchase" more than "by rent (including contract farming)" from the early years of 1960's to the same of 1970's.

But, as Table 5 shows, "by rent" has been more than "by purchase" since 1972, in Prefectures (excluding Hokkaido). On the other hand, in Hokkaido, "by rent" exceeded "by purchase" finally in 1979.

And after those years, the dominant position of "by rent" is constant. Those actual conditions correspond nearly with the contents of Table 1, Table 2, and Table 3.

3) Percentage of farm households which have rented land and of rented land area by size of cultivated land

As Table 6 shows, the average percentage of farm households which have rented land in Prefectures (excluding Hokkaido) fell down gradually from 27.4 percent in 1965 to 16.9 percent in 1980, and it rose a little in 1985.

But, in the case of farm households 2.0 hectares and over, the above percentage

Table 5. Number of Farm Households increased cultivated land by reason
unit : number

Year	Region, Reason of increase	National		Prefectures ¹⁾		Hokkaido	
		by purchase	by rent ²⁾	by purchase	by rent	by purchase	by rent
1 9 6 8		54,580	42,810	48,020	40,950	6,560	1,860
7 1		50,640	42,080	43,220	39,890	7,420	2,190
7 2		49,090	49,890	42,860	44,460	6,230	2,430
7 3		47,220	45,020	40,920	43,140	6,300	1,880
7 4		44,790	53,680	39,620	51,390	5,170	2,290
7 6		27,900	57,940	24,880	55,230	3,020	2,710
7 7		27,510	67,910	22,620	65,240	4,890	2,670
7 9		26,740	95,400	23,560	89,640	3,180	5,750
8 1		28,510	103,890	25,990	99,310	2,520	4,590
8 2		24,570	94,730	22,490	90,500	2,080	4,230
8 3		28,710	81,680	26,340	78,140	2,370	3,540
8 4		25,110	73,060	23,610	69,940	1,500	3,110

Footnote 1) Excluding Hokkaido.

2) Including contract cultivation.

Source 1) 『Report of Annual Sample Survey of Agriculture』 Ministry of Agriculture, Forestry and Fisheries.

Table 6. Percentage of farm households which have rented land by size of cultivated land in Prefectures¹⁾

unit : percentage

Size of cultivated land	Year	1965	1970	1975	1980	1985
total		27.4	27.2	20.6	16.9	18.0
0.3 hectares under		21.0	20.2	13.8	9.7	9.4
0.3 ~ 0.5		27.8	27.8	18.9	13.9	13.7
0.5 ~ 1.0		31.6	30.7	22.6	17.7	18.2
1.0 ~ 1.5		30.4	31.6	25.4	22.1	23.9
1.5 ~ 2.0		25.5	28.4	25.3	24.4	28.1
2.0 ~ 2.5		19.8	24.3	24.4	25.8	31.4
2.5 ~ 3.0		15.0	20.1	23.5	27.4	34.9
3.0 ~ 5.0		} 10.0	16.1	24.3	30.8	40.9
5.0 hectares over			18.4	29.7	38.4	52.8

Footnote 1) Excluding Hokkaido.

2) Excluding data of Okinawa prefecture until 1970.

3) Percentage of farm households which have rented land = (farm households which have rented land/total farm households) × 100%

Source 1) 『Census of Agriculture 1965, 1975, 1985.』

2) 『World Census of Agriculture and Forestry 1970, 1980.』 Ministry of Agriculture, Forestry and Fisheries.

rose up gradually. Especially, for example, from 3.0 hectares to 5.0 hectares or 5.0 hectares and over are remarkable. And in 1985, the percentage of the former is 40.9 and the latter's one exceeds 50.

Table 7. Percentage of rented land area by size of cultivated land.

unit : percentage

Year					
Size of cultivated land	1965	1970	1975	1980	1985
total	5.8	6.2	5.5	5.7	7.1
0.3 hectares under	11.5	11.1	7.2	5.2	4.9
0.3 ~ 0.5	9.6	9.4	6.4	4.9	4.8
0.5 ~ 1.0	7.4	7.5	5.6	4.8	5.0
1.0 ~ 1.5	5.3	6.0	5.2	5.2	5.8
1.5 ~ 2.0	3.8	4.6	4.8	5.5	6.8
2.0 ~ 2.5	2.5	3.7	4.7	5.9	7.7
2.5 ~ 3.0	1.7	2.9	4.6	6.5	9.0
3.0 ~ 5.0	} 1.2	2.5	5.6	8.3	11.9
5.0 hectares over		7.6	10.3	13.6	20.5

Footnote 1) Same as Table 6.

2) Percentage of rented cultivated land area = (rented, cultivated land area/total cultivated land area) × 100%

Source : Same as Table 6.

Now, the percentage of rented land area in total cultivated land is shown in Table 7. The average percentage was nearly constant from 1965 to 1985. However, in the case of farm households 1.5 hectares and over, the percentage rose up gradually. Especially, 5.0 hectares and over is remarkable and percentage in 1985 is 20.5 percent.

And in 1985, farm households from 3.0 hectares to 5.0 hectares have rented land 106 ares and 5.0 hectares and over have rented land 283 ares each per number.

As I have seen, since the latter half years of 1970's, main means of expansion of cultivated land has become "by rent", and especially farm households with large size of cultivated land have expanded their area of cultivated land "by rent".

In contrast with this, both of the above percentage have fallen down gradually, in the case of farm households 1.0 hectare under.

4) Number and share of farm households by size of cultivated land in Prefectures

Number of farm households in Prefectures, according to the Table 8, decreased 1,199 thousand, 22 percent, from 1965 to 1985. Looking at the Table 8, we understand sizes of 2.0 hectares under decreased consistently, and sizes of 2.5 hectares and over increased consistently, especially 5.0 hectares and over remarkably.

And yet, the share of 1.0 hectare under is still 71.2 percent and 3.0 hectares and over is only 2.6 percent, in 1985.

These structural changes correspond with the results which were previously analyzed. And it is obvious that they were mainly brought by the increase of lease of agricultural land.

Table 8. Number and share of farm households by size of cultivated land in prefectures¹⁾
unit : thousand farm household, percentage

Year Size	1965	1970	1975	1980	1985
Total	5,466 (100)	5,176 (100)	4,819 (100)	4,542 (100)	4,267 (100)
0.5 hectares under	2,096 (38.3)	1,999 (38.6)	1,995 (41.4)	1,922 (42.3)	1,855 (43.5)
0.5 ~ 1.0	1,762 (32.2)	1,604 (31.0)	1,436 (29.8)	1,304 (28.7)	1,182 (27.7)
1.0 ~ 1.5	945 (17.3)	868 (16.8)	727 (15.1)	652 (14.4)	583 (13.7)
1.5 ~ 2.0	407 (7.4)	404 (7.8)	349 (7.2)	328 (7.2)	300 (7.0)
2.0 ~ 2.5	156 (2.9)	170 (3.3)	162 (3.4)	161 (3.5)	154 (3.6)
2.5 ~ 3.0	59 (1.1)	71 (1.4)	74 (1.5)	79 (1.7)	80 (1.9)
3.0 ~ 5.0	38 (0.7)	55 (1.1)	67 (1.4)	82 (1.8)	93 (2.2)
5.0 hectares and over	2 (0.0)	5 (0.1)	9 (0.2)	13 (0.3)	19 (0.4)

Footnote 1) Excluding Hokkaido

2) The total percentage of individual figures is not necessarily equal to 100 percent because of counting fractions of 0.5 and disregarding the rest.

Source 1) 『Census of Agriculture 1965, 1975, 1985』

2) 『World Census of Agriculture and Forestry 1970, 1980』 Ministry of Agriculture, Forestry and Fisheries.

5) Net earnings for paddy field in rice production and rent of paddy field

The relations between net earnings for paddy field in rice production and rent of paddy field each per 10 ares are shown in Table 9.

When this ratio is 1.0 and over, farm households can expand their area of cultivated land by rent in theory of management.

The ratios of average and all sizes are decreasing both case I and case II, as Table 9 shows. The reason of large decrease in 1981 and 1983 is due to bad harvest. Therefore, net earnings for paddy field in rice production decreased sharply in these years.

Only 2.0 hectares and over have ratio of 1.0 and over consistently in case I.

On the other hand, ratio of 1.0 and over extend to 0.5 hectares and over in case II.

The fact of case II corresponds with the actual condition that all sizes of farm households have rented agricultural land as Table 6 shows.

Therefore, these data tell farm households decide on the right or wrong of rent of paddy field for rice production on the point of case II as well purchase.

Table 9. Ratios of net earnings for paddy field in rice production to rent of paddy field in prefectures¹⁾ per 10 ares.

Size of planted area of paddy field rice		1975	1977	1979	1981	1983	1985
0.3 hectares under	Case I	1.16	※	※	※	※	※
	Case II	2.24	1.46	1.25	0.71	0.38	0.71
0.3 ~ 0.5	Case I	1.43	0.38	※	※	※	※
	Case II	2.56	1.84	1.49	1.13	0.94	1.00
0.5 ~ 1.0	Case I	1.91	1.05	0.50	0.02	※	※
	Case II	3.02	2.51	2.13	1.45	1.36	1.57
1.0 ~ 1.5	Case I	2.43	1.72	1.25	0.73	0.53	0.67
	Case II	3.44	3.02	2.76	1.99	1.90	2.05
1.5 ~ 2.0	Case I	2.93	2.45	1.81	1.05	0.92	1.22
	Case II	3.95	3.68	3.18	2.19	2.14	2.46
2.0 ~ 3.0	Case I	3.42	2.90	2.24	1.34	1.32	1.71
	Case II	4.39	4.09	3.55	2.37	2.41	2.81
3.0 hectares and over	Case I	4.18	3.36	2.63	1.60	1.91	2.18
	Case II	5.02	4.41	3.84	2.52	2.88	3.15
average	Case I	2.46	1.64	0.96	0.34	0.25	0.54
	Case II	3.50	2.98	2.51	1.68	1.67	1.96

Footnote 1) Excluding Hokkaido.

2) Star-mark shows net earnings for paddy field in rice production is minus.

3) Case I and Case II mean same as Table 2.

4) 1975, 1977, 1979 and 1985 are good harvest years. 1981 and 1983 are bad harvest years.

5) Rent of paddy field per 10 ares is the following. 21,674 Yen in 1975, 22,368 Yen in 1977, 24,608 Yen in 1979, 33,452 Yen in 1981, 33,583 Yen in 1983, 34,703 Yen in 1985.

Source 1) 『Production Cost of Rice, Wheat and Barley』 Ministry of Agriculture, Forestry and Fisheries.

2) 『Report of survey on rent of paddy field』 National Conference of Agriculture.

But, it is more important that the ratio of large size farm households are larger than the one of small size farm households. And the ratio also means the payability by rent for cultivation.

4. Lease of agricultural land for cultivation and farm households earned main income from other jobs —in place of the conclusion of this report—

In farming which depends on mainly size of land area, to become the full-time farm households whose agricultural income level is equal or over to income level of worker's households, farm households in prefectures (excluding Hokkaido) must expand all the more their area of cultivated land by rent in the future.

The full-time farm households above mentioned are so-called viable farm under the Agricultural Fundamental Law 1961.

Main lessors of agricultural land for cultivation are farm households earned main income from other jobs, and they hold a large majority in farm households of 1.0 hectare under.

The disposable income and living expenditure levels per capital a year of farm households earned main income from other jobs have been more than not only those of full-time farm households and farm households earned main income from farming but also those of workers' households, since 1971.

Besides, since 1977, the non-agricultural disposable income per capital a year of farm households earned main income from other jobs also has been more than the disposable income per capital a year of workers' households, and since 1971, the non-agricultural income of farm households earned main income from other jobs has been more than living expenditure of them.

Thus, the economy of farm households earned main income from other jobs is relatively wealthy, and the position of agricultural income in total farm households income is very low in recent years, for example, only 8.1 percent in 1985.

And, the earnings for paddy field in rice production of farm households of 0.5 hectares under are smaller than rent of paddy field. So, the farming by rent in 0.5 hectares under is not paying recently.

On the other hand, as Table 10 shows, the agricultural productivities and utilization rate of cultivated land of farm households earned main income from other jobs are remarkably low. From 1978 to 1985, those indexes fell down sharply.

Especially in 1985, the average productivity of agricultural land of farm households earned main income from other jobs is one-fourth of the productivity of agricultural land of full-time farm households so-called viable farms, and similarly in case of 0.5 hectares under, only one-tenth.

Nevertheless, in 1985, farm households earned main income from other jobs account for 70 percent of all farm households, 52 percent of all paddy field area and 52 percent of all rice production output.

Under such conditions, it is necessary to transfer the right for utilization of agricultural land for cultivation from farm households earned main income to other jobs to full-time farm households.

In the aspects of farm households economies, as above mentioned, farm households earned main income from other jobs are able to lease their agricultural land for cultivation. Yet, lease of agricultural land for cultivation does not increase favorably.

This is the difficult question on the development of lease of agricultural land for cultivation. Under the private ownership system of land, ownership of agricultural land for cultivation and freedom of utilization based on private ownership must be respected sufficiently. But, the effective utilization of agricultural land for cultivation is a very important matter socially.

Lease of agricultural land for cultivation without occurrence of rental right of cultivation is possible under the present agricultural land system, for example, lease by the Agricultural Land Use Promotion Law 1980.

And, for farm households earned main income from other jobs, lease of agricultural land for cultivation is not unprofitable in the aspect of economy of land utilization.

Table 10. Comparison of productivities between full-time farm household whose agricultural income level is equal or over to income level of worker's household and farm household earned main income from other job (Average of prefectures excluding data of Hokkaido prefecture, F. Y. 1978 and 1985)

		net value of production per 10 ares of cultivated land	net value of production per 10 hours in farm working	net value of production per 1,000 yen of agricultural fixed capital	utilization rate of cultivated land
		1,000 yen	yen	yen	%
full-time farm household whose agricultural income level is equal or over to income level of worker's household ¹⁾	1978	242.2 (100)	9,350 (100)	786 (100)	111.1 (100)
	1985	273.6 (100)	11,585 (100)	609 (100)	117.9 (100)
average in farm household earned main income from other job	1978	78.6 (32.5)	4,496 (48.1)	463 (58.9)	98.9 (89.0)
	1985	63.8 (23.3)	4,129 (35.6)	282 (46.3)	100.2 (85.0)
0.5 hectares under in the same as above	1978	62.3 (25.7)	3,147 (33.7)	328 (41.7)	97.2 (87.5)
	1985	28.0 (10.2)	1,564 (13.5)	106 (17.4)	94.7 (80.3)

Footnote 1) So-called viable farm under the Agricultural Fundamental Law 1961.

Source : 『Farm Household Economy by Kind of Farming (F. Y. 1978 and 1985)』 Ministry of Agriculture, Forestry and Fisheries.

Besides, lease of agricultural land for cultivation releases women and old men from hard farm work, and farm households earned main income from other jobs can have comfortable lives with leisure hours in the aspects of farm households economy.

Most of farm households earned main income from other jobs does not have male principal persons engaged in their own farmings. Besides, principal persons engaged in their own farmings, especially young male, have been decreasing rapidly.

Therefore, it is very important hereafter for farm households earned main income from other jobs to secure and bring up full-time farm households in their villages as tenants of their agricultural land for cultivation.

Not only the organs concerned with agriculture but also farm households earned main income from other jobs must recognize thoroughly many realities themselves above mentioned.

These are inevitable for improvement of agricultural structure by lease of agricultural land for cultivation.

Finally, I must add that the necessity of the systematic village farming including farm households earned main income from other jobs is being watched with a great expectation recently, in addition to upbringing viable farms above mentioned.

The systematic village farming is one of very important means to improve the structure of farming which depends on mainly size of land area. But, unless viable farm is brought up in the systematic farming, which come to a deadlock early or late.