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Evaluation and Prospects of Policies for Less Favoured Areas in Japan

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Abstract

Since 2000, ‘The System of Direct Payment of Subsidies to Farmers in Hilly and Mountainous Areas’ is in operation in Japan. The objective of this paper is to evaluate and survey Japan’s policy for less favoured areas. This system has two characteristics: ‘coverage subsidies for disadvantage’ and ‘subsidies for rural community activation’. Given these characteristics, the subsidy system can be evaluated to have exhibited high effectiveness. I have statistically analyzed the outcomes of this system. But I conclude that it does not have a promising future because subsidies are inadequate for maintaining household finances of farmers.

Keywords: Rural Policy, Direct Payment, Less Favoured Areas, Subsidy, Japan

JEL Classification: Q18

1. Preface

Since 2000 Japanese fiscal year (April 2000), ‘The System of Direct Payment of Subsidies to Farmers in Hilly and Mountainous Areas’ has been in operation as the policies for less favoured areas in Japan. Each term under this system has five-year duration. The second term was completed in 2009 and the third is currently being carried out since April 2010. The objective of this paper is to evaluate and survey Japan’s policy for less favoured areas.

2. The frame of the system

First, I will explain the frame of this system. Farmers who are participants of the system are obliged to conclude the ‘Agreement of the Rural Community Group’ with each other in principle. The amount of payments is as shown in Table 1. Moreover, it is explained by policy maker that the difference of the required costs to maintain the farmlands between the flatlands and slopes. In short, the important role of the system is to support steep farmlands.

Table 1. Amount of payments of direct payment to farmers in hilly and mountainous areas

Type of land	Classification	Amount of payments per 1 a
Paddy field	1/20 or above	¥2,100
	less than 1/20, 1/100 or above	¥800
Dry field	15° or above	¥1,150
	less than 15°, 8° or above	¥350
Grassland	15° or above	¥1,050
	less than 15°, 8° or above	¥300
	flatland of Hokkaido Region	¥150

Source: MAFF (Japan)

3. Characteristics of the system

This system, however, has not been constructed only to make direct payments to farmers who maintain steep farmland. I will now consider the characteristics of this subsidy system. One of the characteristics of this system is that there is no restriction on the beneficiaries of the subsidies. In addition, as mentioned earlier, the farmers who are a part of the system are obliged to conclude the Agreement of the Rural Community Group with each other in principle. Furthermore, the system requires more than half of the subsidiaries to be used together with the participants of the Agreement of the Rural Community Group. The system is based on two characteristics: ‘coverage subsidies for disadvantage’ and ‘subsidies for rural community activation’. Therefore, the system may be evaluated from two viewpoints: ‘reducing the abandonment of cultivation’ and ‘strengthening ties within the rural community’. In addition, the expressions ‘a direct effect’ and ‘an indirect effect’ are used in the

government records. Furthermore, it can be said that the first is in line with WTO regulations and the second, aimed at Japanese policy makers.

An important point to note is that the launch of the system's second five-year period is being considered. The Agreement of the Rural Community necessarily requires the 'Master Plan of the Rural Community' from the second period too. One more significant difference is the change in the amount of payments. If farmers continued to employ the same measures for farmland maintenance, the order of payments would be reduced to 80% of that in the first period. Therefore, it can be said that the characteristic of 'subsidies for rural community activation' have increased.

4. Effectiveness of the system

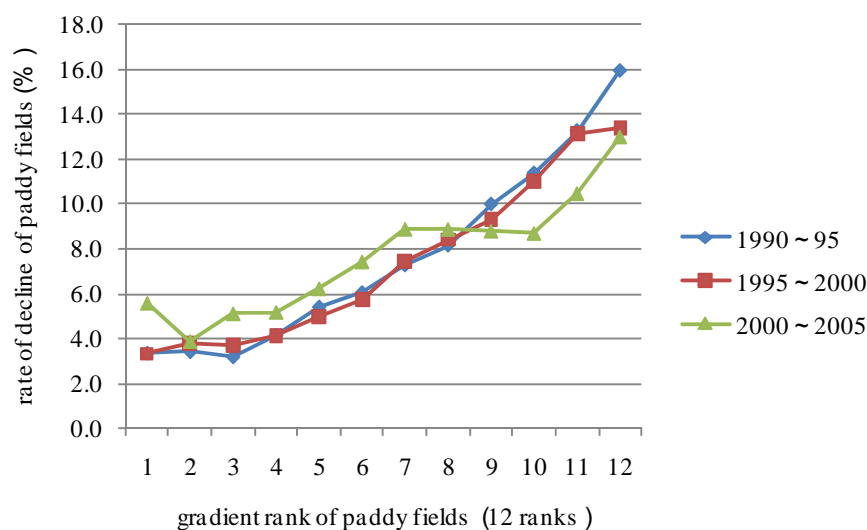
1) The premise

While having those characteristics, it can be said that the subsidy system has exhibited high effectiveness. Part of its effectiveness is indicated by the results of the 2000 and 2005 Census of Agriculture, which show the status before and after the implementation of the first term of this system. In addition, information has been proactively provided through the system's implementation status, which makes a considerable amount of data available for the evaluation of the system. This action deserves a positive comment, as it is a significant project when compared with other projects of the Ministry of Agriculture, Forestry and Fisheries (MAFF) of Japan. Therefore, as the third problem of this paper, I perform a statistical analysis of the outcomes of this system, using the data of the Census of Agriculture and various data of MAFF of Japan. However, the difficulties involved in quantitative evaluation must also be recognized. This is because various factors are encountered in carrying out the system, for example, the conditions of farmlands, and the existence of active participation by related organizations. Thus, it is difficult to compare areas where the system has been implemented under very similar conditions with those areas where the system has not been implemented.

2) Analysis of the rate of decline of paddy fields

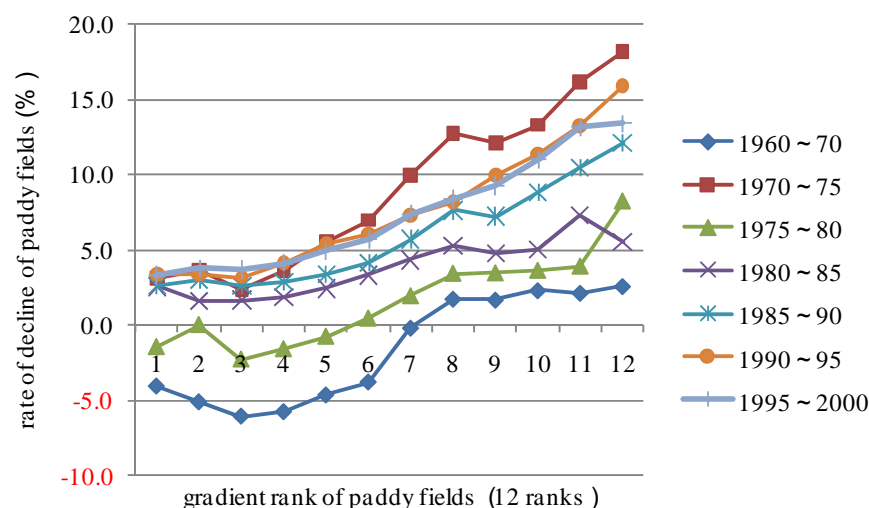
In acknowledgment of the above statements, I will analyze the outcomes of this system. Figure 1 shows the relationship between the rate of decline of paddy fields and the slope of the paddy fields using the original concept of 'gradient rank of paddy fields (12 ranks)'.

I will now explain the original concept of the 'gradient rank of paddy fields'. As shown in Table 2, the value of the weighted average of the gradient for rank 8 is $1/20 \sim 1/15$. It is just fit the object for the System of Direct Payment of Subsidies to Farmers in Hilly and Mountainous Areas in Japan. Apparently, as compared to the long-trend from 1960 to 2000, this system introduced a different trend from 2000 to 2005 regarding the relationship between the rate of decline and slope of the paddy fields.



Source: Data obtained from MAFF (Japan)

Figure 1. Gradient rank and rate of decline of paddy fields (3 recent terms)



Source: Data obtained from MAFF (Japan)

Figure 2. Gradient rank and rate of decline of paddy fields (from 1960 to 2000)

Table 2. Definition of gradient rank of paddy fields

Weighted average of the gradient	Gradient level of paddy fields (12 ranks)	Gradient level of paddy fields (5 ranks)
less than 1/500	Rank 1	Flat
1/500~1/300	2	
1/300~1/200	3	
1/200~1/100	4	Semi-flat
1/100~1/50	5	
1/50~1/30	6	Mild slope
1/30~1/20	7	
1/20~1/15	8	
1/15~1/10	9	Steep slope
1/10~1/8	10	
1/8~1/5	11	Very steep slope
1/5 or above	12	

Source: Original definition

3) Conservation of paddy fields

Table 3 shows the situation with regard to the conservation of some regional resources by rural communities. A comparison of the situation between 2000 and 2005 reveals a large difference especially, with regard to rice terraces and paddy fields on valley bottoms. In 2005, 49.3% of the rural communities conserved rice terraces and 20.3% of them preserved paddy fields on valley bottoms. However, in 2000, only 5.8% of the rural communities conserved rice terraces and paddy fields on valley bottoms. On the other hand, I cannot find a large difference with regard to rivers and water channels. Therefore, the changes of rice terraces and paddy fields on valley bottoms have apparently been a result of the System of Direct Payment of Subsidies to Farmers in Hilly and Mountainous Areas.

Table 3. Conservation of regional resources by rural communities

Regional resources	Rice terraces and paddy fields on valley bottoms	Rice terraces	Paddy fields on valley bottoms	Rivers and water channels	
Year	2000	2005		2000	2005
Total area	5.8	49.3	20.3	38.0	35.5
Urban area	-	16.7	8.1	-	27.0
Flat farming area	3.9	48.4	9.0	39.0	38.7
Hilly farming area	5.7	51.5	21.2	37.9	37.9
Mountainous farming area	6.7	52.0	29.9	37.0	35.7

Source: 2000 and 2005 Census of Agriculture by MAFF (Japan)

5. Considering the preface of the system

However, the future of this system is not necessarily promising. The fourth problem of this paper is a survey of the future of the system. The new system started from this fiscal year (April 2010), as the third five-year period can be considered to be more complicated. The background is as follows: there is apprehension that in spite of the increase in the number of aged beneficiary farmers, no rejuvenation of generation has been implemented. A reasonable policy is required to gain the trust of the general public toward the policy. However, it is questionable if the separation of the two characteristics under the current system can prove to be a solution. When the economic characteristics of the system's beneficiaries and the system's effectiveness with regard to the preservation of their farmlands are considered, the surplus income and subsidies gained from preserving the farmlands are inadequate for maintaining household finances.

Table 4. Average of the direct payment to farmers in hilly and mountainous areas in 2006

Region of agency of MAFF	Average per 1 group			Average per 1 farmer who adhere to the agreement	
	Number of farmers who adhere to the agreement	Area (ha)	Amount of payments (¥10,000)	Area (a)	Amount of payments (¥10,000)
Hokkaido	52	798	1,974	1,535	38.2
Tohoku	23	15	193	65	8.4
Kanto	24	8	109	33	4.5
Hokuriku	24	13	218	54	9.0
Tokai	24	8	108	33	4.5
Kinki	24	12	152	50	6.3
Tyugoku and Shikoku	19	11	141	58	7.4
Kyushu	23	14	161	61	7.0
Okinawa	160	413	1,575	258	9.8
Without Hokkaido	22	12	156	55	7.0
Total area	23	23	182	100	8.0

Source: Data of MAFF (Japan)

According to Table 4, the average per one group of the Agreement by Rural Community is small-scale except the Hokkaido and Okinawa Region; both regions are the north and south end of Japan.

Moreover, the average amount of payments to each farmer, who the agreement, is only about ¥70,000 (about 600 euro) except the Hokkaido Region. This is the reason why not only the related person and organization but also farmers who are participants of the Agreement of the Rural Community expect the system to offer ‘subsidies for rural community activation’.

In addition, these data reveal the following facts: for example, a flatland area farmer who gets €100,000 and spends €50,000 can earn a profit of €50,000. On the other hand, if a farmer in the area who is eligible for this system gets €100,000 and incurs costs amounting to €70,000, will earn a profit of only €30,000 pure gains. In this case, if subsidies under the system compensated for the €20,000 gap between both the farmers, the second farmer in the area would continue to maintain his farmland. However, we cannot assume that such a situation is common.

6. Short conclusion

In Japan, there are considerable expectations with regard to the impact of this system on the revitalization of less favoured areas. Nevertheless, it is difficult to foresee a promising future unless this system is made more dependable and many other policies are mobilized while considering the future of the beneficiaries and less favoured areas.