

Analysis of non-settlement factors of local people in a district of Kyotango City: From a community survey

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1. Introduction

Most part of the population movement from rural areas is explained by young people for education or job opportunities (Watanabe, 1994; Otomo, 1996). After this young age movement, the populations of rural areas are either stable or slightly decreased, and then, we can sometimes see population increase in rural areas by retired 60s moving back to rural areas (Hayashi et al., 2004). Furthermore, most rural areas experience another outflow after people enter their 70s (Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (PRIMAFF), 2020). According to Kondo et al. (1995), the reasons of population movement by people who have settled in rural areas since their childhood, without leaving the areas for school or jobs, but left later were due to poor income or lack of social infrastructure, e.g., amusements facilities and shopping places. Tanimoto and Mori (2007) attributed the reason of population movement among those in their 30s and 40s to the lack of educational facilities for children or child-rearing environment. Based on prior research, in general, even those adults who have settled in rural areas often leave in pursuit of higher income or better living environment.

At the same time, a movement of people from urban areas to rural areas has recently been observed. Even in rural areas from where young people have left and the population is aging, people are moving in to pursue their desire for self-fulfillment, sometimes with their skills. A lot of young Local Vitalization Cooperators have settled in their place of assignment after finishing their three year contract. This population flow to rural area is called the Return to Rural Life (Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (PRIMAFF), 2020). Besides seeking jobs and farmland (Imai, 2010) and housing (Tarumi, 2001), people moving to rural areas are also seeking ties to the local community (Odagiri, 2014), while those moving away from rural areas to urban areas may be seeking different conditions (Figure 1).

Looking at these different reasons for population movement, we will focus especially on “community,” which was identified as a reason for people moving from urban areas to rural areas. With the goal of clarifying whether ties with people in rural communities are correlated with settlement in rural areas, we conducted a questionnaire survey of residents in a district of Kyotango City to ascertain the reasons for settlement.

2. Methodology

Kyotango City is a depopulated municipality in western Japan. In 2017, we conducted a survey of 1,081 residents (15 years and older) in the city’s district A to learn their opinions on future community planning. The questions were whether they wanted to settle, what their complaints about living there were, their means of transportation, where they shopped, and their satisfaction with community events. The number of responses was 901, with a response rate of 83.3%. We used the survey data to build a model that used “willingness to settle” as the explained variable and “work environments”, “living environments”, and “community satisfactions” as explanatory variables. We then analyzed the data with a logistic regression analysis.

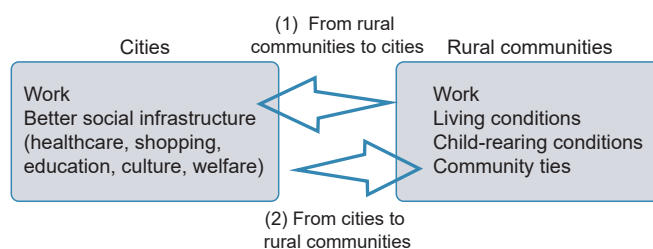


Figure 1. Major reasons for population movement in rural areas and cities

Source: Author

3. Results

The results are given in Table 1. The table shows five significant variables that we found, which are underlined. These are 1) the older people grew, the more it affected whether they would continue living there (younger people did not want to settle); 2) discomfort or problems in daily life, such as meal preparation, laundry, and trash disposal, affected whether people wanted to settle; 3) discomfort or problems with maintaining or managing their farmland or forests affected whether people wanted to settle; 4) discomfort or problems with local events or neighborhood interaction affected whether people wanted to settle, and 5) having no one in the community to trust affected whether people wanted to settle. Furthermore, when we conducted an associa-

tion analysis to investigate the links between explanatory variables 2) through 4) on community life and the psychological explanatory variable 5) (Figure 2), there was a high probability that 2) meals, laundry, and trash disposal and 4) discomfort with local events or neighborhood interaction would occur simultaneously with 5) no one to trust. We saw that residents who reacted to these variables responded more frequently that they did not want to settle there. There was a high probability that residents who had 3) discomfort or problems with maintaining or managing farmland and forests simultaneously felt that they 5) had no one to trust in the community. However, residents who reacted to this variable 3) responded more often that they wanted to remain in the community. This suggests that people who have no one to take care of their farmland or forests may settle there to take care of the property by themselves.

Table 1. Results of logistic regression analysis of the District A survey

Explanatory variables	Approximate standardization coefficient	Odds ratio	VIF
Age (ordinal variable)	-.393 **	.548 **	1.632
Family size (ordinal variable)	.017	1.026	1.332
Years of residence (ordinal variable)	-.103 +	.704 +	1.232
Health-related	-.112	.574	1.407
Caregiving-related	.005	1.024	1.341
Child rearing-related	-.050	.701	1.485
Career path (school, employment)	.065	1.584	1.429
Work-related	-.065	.711	1.470
<u>Meal preparation, laundry, trash disposal, and other daily chores</u>	.149 *	4.179 *	1.141
Light work done at home, such as gardening and repairing electric appliances and furniture	-.064	.548	1.088
<u>Maintenance and supervision of farmland and forests</u>	-.233 *	.304 *	1.267
No one to talk to about everyday things	-.002	.978	1.269
No one to help me or to take care of me when I am sick	.019	1.175	1.379
No heirs	.064	1.492	1.203
No one to contact in an emergency	.038	1.510	1.280
Related to going shopping, to the doctor, etc.	-.080	.658	1.163
<u>Related to local events and neighborhood interaction</u>	.215 **	4.458 **	1.131
Related to disaster preparation and evacuation	.003	1.019	1.170
Related to dangerous birds and animals (monkeys, wild boars, deer, badgers, etc.)	-.085	.652	1.259
Nothing in particular	-.087	.353	1.165
<u>No one that I can rely on nearby</u>	.209 **	14.098 **	1.147
Dummy R ²	.444 **		

Source: Author

Note: ** means significant at the 1% level, * means significant at the 5% level, and + means significant at the 10% level. If the odds ratio is greater than 1, the probability of occurrence is greater than the probability of non-occurrence, and if the odds ratio is less than 1, the probability of non-occurrence is greater than the probability of occurrence.

4. Conclusion

It has been thought that many people have left rural areas because places to shop and work are limited and therefore settling conditions are hard. On the other hand, this study suggests that those who have remained in rural areas could leave if they have no one in the community to trust. Paradoxically, this corroborated the assertions made in Odagiri (2014), which discussed ties to the community as a purpose of people who move as Return to Rural Life.

Policy Research Institute, Ministry of Agriculture, Forestry and Fisheries (PRIMAFF) (2020) showed that the local community is more receptive in rural areas where many migrants come in. In addition, Sato (2017) showed the importance of making place for new migrants after they arrive in local communities. Despite the pros and cons of rural community ties, which are considered to be stronger than those in urban areas, the results are understandable in the point that people in rural area are attracted and settle there because they have someone in the community to trust, and conversely, they move out when they no longer have anyone to trust.

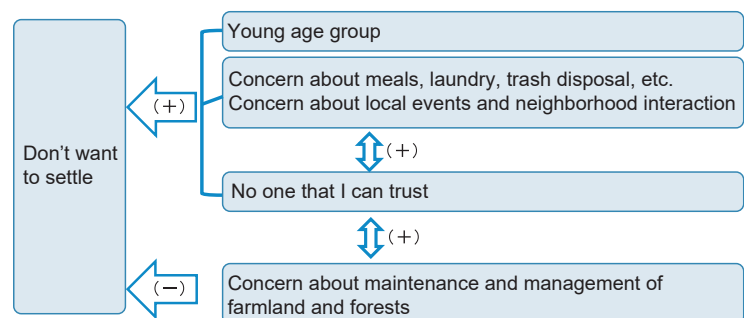


Figure 2. The relationship of non-settlement factors derived from the logistic regression analysis and association analysis

Source: Author

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