

THE ACTUAL CONDITION AND PROBLEMS FOR PROMOTING THE UTILIZATION OF ABANDONED FARMLAND IN THE LESS-FAVORED AREAS: A CASE STUDY IN SHITARU, TSUSHIMA CITY

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1. BACKGROUND AND OBJECTIVES

The concept of SATOYAMA is now drawing widespread attention. SATOYAMA is not only important for producing food but also serves multiple ecosystem functions, such as groundwater recharge and habitats provision for various kinds of species. However, keeping a well-functioning SATOYAMA environment is facing problems from, for example depopulation and aging in the primary industries and changes of lifestyle in general. Above all, the expansion of abandoned farmlands in the rural areas is a serious problem especially in the less-favored areas such as Tsushima City, Nagasaki Prefecture. Tsushima has a unique ecosystem where the top-level predator is Tsushima Leopard Cat. For a long time, local people have been utilized the SATOYAMA environment and lived in a harmonious way. Therefore, various approaches should be addressed for solving the issue of abandoned fields such as the history of traditional lifestyle and the importance of SATOYAMA's biological diversity. Such multifaceted approach, which has not yet been applied for addressing this issue, is adopted by this research. In addition, this study also takes into consideration the impact brought by migrated population from the cities to the rural areas. Such phenomenon is considered to be the result of revitalization of rural areas and will cause social problems in the future.

This research aims to examine the actual conditions and changes of natural resource utilization (including cultivation) in the SATOYAMA of Tsushima city, to identify the reasons for abandoning farmlands and to examine the role of outside supporters for promoting the utilization of abandoned farmland.

2. STUDY AREA AND METHODS

This study is based on the case in Shitaru, Kamiagata-machi, Tsushima City, Nagasaki Prefecture. Three different methods are used in this study. One is Aerial Photograph analysis (in 1955, 1997, 1993 and 2015), to identify the changes of land use. The second method is direct interview for local residents to investigate the current situation of natural resources and land use. The last one is participatory observation for activities of utilization promotion for abandoned farmlands.

3. RESULTS AND DISCUSSION

This study showed that the utilization in local natural resources area where the people used for forestry and farming as their local industry has greatly declined. This declination further resulted in a vicious circle for the degradation of natural resources. Comparison between 2015 and 1995 showed that there was a reduction of 79.3% for functioning farmland. While 60% of households still have farmland to grow vegetables for self-consumption, 90% of the rice fields disappeared compared to the area in 1995.

From 2013, several programs were introduced to promote the use of abandoned rice fields such as producing rice, mowing and burning in abandoned land, and contract farming for red pepper. The direct interview results showed that all the respondents agreed upon promoting the use of abandoned areas. In fact, 8 people participated in contract farming. It revealed that this program is easy to participate for rural residents. On the other hand, maintaining paddy fields became possible by asking for the help of outside supporters. Also, Using abandoned farm land as grazing land was possible in a large-scale. However, it is facing difficulties from reaching consensus among land owners.

In the rural area with depopulation and aging problems, self-initiative actions from local population towards solving the problems are less likely to happen. In the context of promoting land utilization, outsiders could play an important role to motivate the locals. In addition, issue of abandoned farmland is rooted in the mindset of individual landowners. It is necessary to consider it as a problem that relates beyond the people live within the area.