Conditions Associated with Residents' Participation in Activities for Preserving the Rural Environment: A Case of Agricultural Canals in Japan

Hideo Aizaki and Hironori Yagi National Institute for Rural Engineering, Japan

An agri-environmental scheme (AES) that financially promotes the communal activity of preserving and improving the rural environment by both farmers and non-farmers will be enforced in Japan in April 2007. Each area, such as a village, will be able to undertake AES on the basis of its residents, agriculture, or environment. However, the factors affecting the residents' participation in this activity should be examined so as to develop an effective scheme. One factor would be the interaction between residents, since a resident's decision regarding the supply of local public goods in environmental preservation is influenced by those of others. We examined the influences of both the interaction and residents' socioeconomic characteristics on their participation in improving the ecological condition of the agricultural canals using stated preference methods. Agricultural canals provide water for rural life, environment, and irrigation. Survey data were collected from 130 residents living in a village in Japan. Each participant was asked whether or not he/she wished to participate in the activity given the percentage of others residents involved in it. After analyzing the data using a random parameters logic model, the following results were obtained. First, some farmers tended to decline participation if others had decided to participate. Second, other farmers and all the non-farmers tended to participate provided others had decided to participate too. Finally, participation was also significantly influenced by the participants' attitude toward agricultural canals, their relationship with agriculture, and their sex, age, and family size.

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