

Title	有機農業における技術開発の促進要因に関する研究 －有機農業による稲作の事例をめぐって－
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Citation	
Issue Date	2002-03
Type	Thesis or Dissertation
Text version	author
URL	http://hdl.handle.net/10119/369
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Enabler of Technology Development in Agriculture

～ A Case of Organic Rice Farming ～

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March 2002

Keywords : Organic farming, Technology Development, Distribution, Farmer, Regional cooperation

Only few studies have so far been made at technology development in agriculture. However, in recent years, its speed of technological change gets faster, for example, “organic farming”. Once the “outside-market distribution” was made for the purpose of reducing distribution cost. However, the purpose of distribution innovation is changing to meet the customer needs.

The agricultural technology is varying according to the locality. And, the competition between farmers prevents sharing the technological knowledge. Moreover, the passive role of former farmers on technology development, technology choice, and distribution delayed the advance of technology.

Hence, we focused on how the farmers build cooperative relationship and commit each process. Though, various actors commit the technology development, our study gave weight to the role of farmer.

We developed the hypothesis regarding the technology development in agriculture: “In order to accelerate the agricultural innovation process, the farmer must commit each process (technology development, technology choice, and distribution)”. Then we tested this hypothesis by case study analysis.

We chose three categories of innovation for case study, agricultural process, distribution process, and regional cooperation process. We picked the case of distribution process because of its various functions at agricultural innovation (e.g. developing and maintaining the demands, acquiring trust from consumer by its release of information and understanding

consumer needs). Also we picked the case of regional cooperation process because of its advance ness. We drew the success factors and problem from each case, and analyzed them.

As a result, we acquired three findings about success factor of common to most cases: (1) Farmers' active commitment to each process and farmers' sharing of the technological knowledge, (2) Cooperative relationship with frequent communications among all actors (especially between farmers and consumers), (3) Appreciation by the people of the regions to agriculture. It is suggested that the farmers' commitment to each process (technology development, technology choice, distribution) and the cooperative relationship among all actors enable the technology development and the distribution innovation. And, it is also suggested that the regional cooperation enable the construction of mutual trust based on communications, the understanding of the consumer needs and the acceleration of distribution innovation regarding reducing cost, and so on.

These results of case study analysis lead to the conclusion that the role of farmer is critical at technology development in agriculture.