

Research Summary

Analysis of agricultural Biotechnology Adoption by Farmers in Japan and Vietnam

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Biotechnology has been considered to be one of the technologies for the future because of its potential impact on global agriculture. Vietnam has assigned the highest priority to agri-biotechnologies and it has been considered as a break-through to improve the quality and strengthen the competitiveness in the market of agricultural products especially in the period of international integration. On the way to achieve this aim, on January 12, 2006, the Prime Minister of Vietnam signed the Decree 11/2006/ND-TTg for “Key Programs and Application of Biotechnology in Agriculture to 2020”. This study was conducted to investigate the Vietnamese farmers’ perceptions of, and attitudes to agricultural biotechnology. Comparison between Vietnamese and Japanese farmers regarding agro-biotechnology adoption was also discussed based on previous data in literatures. Interview survey was done, involving 72 representative farmers from 5 provinces of Vietnam including Hanoi, Bac Ninh, Hai Duong, Hai Phong, Thanh Hoa. The purpose of the questionnaire was to assess the farmers’: awareness of agriculture problems affecting the development and production of agriculture; knowledge of current technologies and applications of biotechnologies in crop production; interest and expectation of farmers on techniques and policies to improve their production; trust in organizations providing information about biotechnology; attitude to adoption of technology and biotechnology. Most of interviewed farmers have optimistic attitudes; perceive more benefits to agricultural biotechnology. Much less number of farmers ever knew about some biotechnological technologies of different complexity and cost such as hydroponics, aeroponics, cell and tissue culture techniques, etc. and especially very low percentage of farmers ever heard of genetic modified organism and genetic engineering. There is a very high rate of “don’t know” answers to questions relating to the bio-safety matter and the consumer acceptance of biotechnology derived products.

In Japan, farmers seem to have better access and well-informed to different techniques of biotechnology. They also have positive attitude to the potential use and benefits of bio-technologies. However, there are numerous restrictions that further discourage farmers from using the technology including the bio-safety regulatory system which have become stricter, more complex, and costly and consumer rejection.

It become obvious that to promote successfully the adoption and uses of biotechnologies by the farmers in Vietnam, beside intensive and selective investment on technology development and research capacity building in public and private sectors, it is necessary to increase the perception level of the farmers about biotechnology which resulting to their adoption and use of the technology and produce biotechnology derived products. Education program and other outreach activities on agro-biotechnology therefore

should be enhanced to increase the awareness and knowledge of farmers and other target population about risks and benefits of the agro-biotechnology. This study was funded by grant of the Sumitomo Foundation that supports small Japan- related projects of Asian researchers in 2008.

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