SUMMARY OF DOCTORAL THESIS

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Title: Adoption of Organic Farming and Sustainable Livelihood Improvement of the Smallholders: The Case of Organic Agriculture Extension by PROSHIKA in Bangladesh

有機農業の適用と小農の生活改善

ーバングラデシュ PROSHIKA による有機農業普及事例からー

Due to increasing consumer awareness of health and environmental issues the organic food industry has been growing significantly throughout the world over the past few years. Organic farming as a key to sustainable agriculture has captured the attention of many countries worldwide. Globally, 120 countries are producing certified organic foods commercially, of which 15 are Least Developing Countries. The market for organic foods continues to increase at a swift pace which is anticipated to generate sales of US\$133.7 billion" by 2012. Many developing countries are getting the benefit from this promising organic sector. Asian governments have recently also become interested in organic farming with the expansion of the market for organic products and their potential for promoting sustainable agriculture. Accordingly, almost all have put priority on organic certification and accreditation, even though the major constraints in organic farming in Asia are still at the level of farm production. Unfortunately, Bangladesh is far behind in the organic movements and has very little share in the world organic food industry compared to other Asian countries. This is due to the reason that in general the mass farmers in Bangladesh depend on chemical inputs to supply nutrients and manage pests to optimize crop yields. In parallel to these mass farmers, a small group of farmers are practicing organic cultivation methods to lower the production costs, reduce dependency on agro-chemicals, increase income and improve the long-term sustainability of the agricultural system for attaining sustainable livelihood improvements. The main mentor of this group of farmers is NGO sector.

Among these NGOs, PROSHIKA is the initiator of the organic movements with their "Ecological Agriculture Program (EAP)" since 1978 and changed the name of the program to Organic Agriculture Program (OAP) presently. This NGO is mobilizing the farmers to facilitate growing of varieties of seasonal vegetables following organic methods of cultivation that are sustainable, productive, equitable, and conducive to biodiversity. PROSHIKA has a total of 220 ADCs countrywide; out of these 220 ADCs they are promoting organic farming in 89 ADCs. The mission of PROSHIKA's OAE program is to improve the livelihood of the smallholders and conserve the environment in a sustainable manner through adoption of organic farming. Thus the study was aimed to investigate the contribution of

PROSHIKA's OAE program in improving the sustainable livelihood improvements of the smallholder organic farmers in Bangladesh.

To fulfill the purpose of the study primary data were collected from the smallholder farmers of three villages of Madhupur sub-district through field surveys. The result of the investigation showed that a significant portion of the small farmers in these three villages have already adopted organic farming practices due to promotion of PROSHIKA. The results of the investigation showed that farmers' perception on organic farming is a very important factor in decisions to adopt organic farming. The better farmers' perception about organic farming systems lead to improved income, improved supply of safe food, and reduced environmental pollution contributed to more positive decisions to adopt organic farming.

The results of the study revealed that organic farmers are earning a significant income from OF due to better price premium and lower cost of production. The earning from OF is contributing significantly in their household income which is ultimately improving their lives. It was also evident from the study that adoption to organic farming does not hamper the household food security of the smallholders rather it improves household food security through diversified crop cultivation.

The findings of this study indicate that PROSHIKA's OAE program has not played an effective role in improving the sustainable livelihood of the smallholder organic farmers in rural Bangladesh, although it has contributing to some extent in improving their livelihood. ROSHIKA's OAE program provides farmers with various capital assets, among which social capital (access to information and networks) and human capital (access to training in organic farming) meet the farmers' information needs related to profitable organic farming. In addition, access to the market with premium prices, as provided by PROSHIKA, is also contributing in earning additional income, thereby leading to an improved livelihood.

The findings of the study also noticed that according to the perception of the majority of farmers PROSHIKA's OAE program is found effective in improving their livelihood but not in improving sustainability. However, they have some complaints about the credibility of the extension workers as well as the frequency of contact with the extension workers. If PROSHIKA can increase the credibility of their extension workers and ensure the more frequent contact with the organic farmers that might increase the effectiveness of their OAE program in improving the livelihood of the smallholders. However for improving sustainability of the livelihood through organic farming promotion more careful effort is needed by PROSHIKA and other NGOs to attain political recognition at first. Afterwards the better partnership and cooperation among organic farmers, NGOs, certifiers, marketing people (both local and export), state and the programs that will support OF is very important. All these collective efforts may easily achieve the goals of promoting OF in the country and can create markets for organic produce locally, regionally and globally and ultimately it will contribute in reducing poverty and improving sustainable livelihood of the poor small farmers of Bangladesh.