

Final Report —Activity Report—

Project Title: “Development of Organic Farming in Myanmar: gaining knowledge and lessons from Japan”

I have been in the Center for International Field Agriculture Research and Education (iFC), College of Agriculture, Ibaraki University, Ami for two months (15-4-2019 to 19-6-2019) as a research fellow. I spent my time by participating in (1) research activities of post-graduate students of iFC: Seminars, Field work as well as laboratory analysis; (2) Field day activities of the Ibaraki University (Every Wednesday) (3) University students’ activities of rice transplanting, and growing vegetables, and their plantation.

I have learned new technologies of organic farming, particularly use of living mulch for protection of soil nutrients from erosion by rains. Cash crops are grown with cover crops like clover, hairy vetch, clover, some legumes plant. If there is no cover crop between the rows of cash crops, the nutrients will leach from the upper soil layer. By growing a cover crop which will act as living mulch, the cover crop will absorb the soil nutrients, protecting from leaching. When the crop reaches a certain growth it will be cut and applied as dry mulch, supporting soil moisture and nutrient conservation.

		
Students of College of Agriculture practice hand transplanting (Field Day)	Dr. Khin explains the current rice cultivation in Myanmar	Students in iFC filed: a digging machine for Soil sampling
		
A post graduate student of iFC: taking data of GHG sampling	Harvesting time of cover crops at iFC research field	Making experimental plot: preparing to grow vegetables
		
A robot mower working at a pear orchard at iFC(A Ph.D student’s experiment)	Glasshouse Experiment field of iFC at Hokota, prior to spinach growing	Peony flowers were organically grown: inter-cultivated with a cover crop (oat), a Ph.D student’s research of iFC

In addition, one of the key research findings of the iFC showed that community gardens provide many types of health and well-being benefits. The psychological and physical effects of stress were measured and analyzed while performing community garden activities of various intensity levels. It was generally agreed that home gardening helps provision of food security for the community, a therapeutic landscape, and increased social activity. The local municipality and some patients and staff of Tokyo Medical University together with the iFC members work in the organic fields every Wednesday, such as seeding, weeding, cleaning the sites, application of composts, etc. The center also sells the organic vegetables and flowers every day to the public so that the iFC is very often seen with several visitors.

I also had a great opportunity to visit at Matsumoto, International Nature Farming and Research center (INFRC) for a week. I learned the existing activities and practices of nature farming of the center. Dr. Eri Matsuura of INFRC and I had a productive and effective discussion for future research collaboration with Myanmar and Japan. The outcome of the research will promote the role of nature farming in Myanmar agriculture sector. It will also extend the friendship and provide the mutual leaning among countries. Moreover, I found that the center's training programs and trainees who are currently taking training courses were enthusiastic and impressive. I had a chance to see the organic farms of former graduates from the center; they are doing well with a successful organic crop production business. It was also noted that the local government provides a piece of land and financial support to establish an organic farm in their locality. Matsumoto area is advantaged with favorable weather and clean water from the mountains around the city for the prolific crop yields. Therefore, Matsumoto is one of the most famous areas in Japan for its large production of good quality fruits, such as watermelon, pears, apples and etc. It was also noted that there are many more young farmers in this area compared with other areas of Japan. It means that the young generations are interested in farming because it gives reliable and good income in this area.

		
<p>A Study tour to a glasshouse organic farm at Matsumoto</p>	<p>An organic farm near the INFRC, Matsumoto</p>	<p>A compost factory at Saku area</p>
		
<p>INFRC visited by Prof. Dr. Miguel Altieri, a world-known Chilean scientist, author of books on organic farming.</p>	<p>Kasu Hospital and its community farm</p>	<p>An organic farm of a former trainee of INFRC at Saku-Usuda area,</p>
		
<p>A study tour to Wasabi farm</p>	<p>A study visit to Mr. Tateno, an organic farmer at Nogi, guided by Prof. Kobayashi</p>	<p>A memory of friendship with organic farmers at Nagano Symposium dinner</p>

In conclusion, I have gained lots of academic knowledge and experiences related with my research theme during the two-month study in iFC, Ibaraki University. Apart from this, I could see the nature of a typical local city of Japan, peace and quietness, culture, life style and etc. This fellowship gave me invaluable information and knowledge to my academic career which will, in turn, help to improve the agriculture sector of my country. The judicious and sensible support of the Japan Foundation, the Asia Center Fellowship program is highly acknowledged.

Annotations etc.

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