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*This report is about the new challenge by community people to create Solar power alternate to nuclear power.*

**Solar Sharing to Produce Electricity, Soybeans and Wheat in the Field**

By Osamu Ouchi

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After the Great East Japan Earthquake on March 11, 2011, our precious fields were contaminated by radiation from the nuclear accident. While I was struggling to figure out what to do, I met people from APLA (Alternative People’s Linkage in Asia), and in 2012, we decided to hold the "Fukushima Hyakunen Mirai Juku" (Fukushima 100years future) to think about the future of Fukushima and the revival of agriculture together. At the school, I listened to various professors and realized that organic farming is the way to go in Fukushima! At the same time, I realized that I had been ignorant about energy issues. I was aware of the dangers of nuclear power plants, but I had taken the safety myths of the government and TEPCO (Tokyo Electric Power Company) at face value and did nothing.

**Let's start with a project that can succeed.**

Reflecting on this, we immediately set up an energy subcommittee in the Organic Agriculture Research Association and started studying. Initially, we considered biomass gas power generation, in which food scraps, livestock manure, and energy crops are put into a fermentation tank, methane gas is generated, and a gas turbine is turned to generate electricity. I visited advanced sites in Japan and also visited the Philippines and Germany with the help of APLA and Ayusu Buddhist International Cooperation Network, but the more I studied, the more I realized the difficulty of biomass gas power generation, so I could not proceed to concrete discussions. It was during this time that we received advice from Mr. Tetsuya Iida of the Institute for Sustainable Energy Policies (ISEP), who said, "When you start a new business, you must first succeed before people will follow you.

Actually, we were negative about solar power at first. We had witnessed the destruction of the environment and landscape as mountains were cut down and panels were attached. I also had doubts about when to dispose of the panels, so I didn't dare to study about solar power generation, but after observing a solar sharing project where vegetables are grown in the fields and panels are placed on top of them to generate electricity, the idea of commercializing the project took off.

**Overcoming a number of hurdles**

We had to obtain permission to convert farmland to agricultural land in order to set up poles and put the panels on the land. That was the first major hurdle. There have been a few cases of solar sharing in Fukushima Prefecture, but this was the first time Nihonmatsu City had applied for it, so it was a slow process.

At the same time, we had to go through a screening process for a loan from a bank. Under the feed-in tariff system, we can purchase the panels at 27 yen/kW for 20 years, but we also have to have a good agricultural system or we will be ordered to remove the panels, so the screening was very strict and focused on guaranteeing farming for 20 years. We were able to pass the screening and receive the loan. Donations from the panel supporters were also a big help.

We had planned to do the construction work ourselves in the winter during the off-season, but due to delays in obtaining permission for the conversion of farmland, we were not able to start work until May, which coincided with the peak season for farming. We managed to secure the manpower by asking our neighbors who had reached retirement age, but this time we had to work in the intense heat due to the late arrival of materials. Even so, we were able to complete the installation of 990 panels in August, 2020.

Since the completion of the panels, we have been growing soybeans in the summer and wheat in the winter under the panels, but the shade from the panels has had little effect and the crops are growing well. The power generation is also going well, and the income from electricity sales is helping our association to operate.

Currently, the feed-in tariff has dropped to 14 yen/kW, so the key is to reduce the construction cost, but we are working to make the second and third units a reality. In the future, my dream is to be able to use the electricity generated by solar sharing to charge cars and farm equipment, and to be able to do agriculture with less use of fossil fuels.