The Reality of Rural Communities Revealed in a Rural Development Project
A Comparative Study on Three Rural Communities in the Red River Delta, Vietnam

I Introduction

The rapid growth of agricultural production in many Asian countries has often been accompanied by the heavy use of agricultural input. At the same time, it had brought serious problems of food safety and environmental stress. There have been tremendous technical transfer initiatives and agricultural extension efforts taken place in many countries. Yet, such difficult challenge of adopting agricultural methods that have less environmental burden in a sustainable manner remains. What has been recognized during such efforts was that farmers in “complex, diverse, and risk-prone” areas (Pretty, 1995) could not be successful in adopting standardized packages of practices with the top-down approach. Then, more farmer participation with the involvement of institutions like non-governmental organizations (NGOs) in agricultural technology transfer efforts has been emphasized, and it was revealed that agricultural progress depended crucially on local knowledge and local solutions (Tripp, 2006). It should be noted that how farmers react to agricultural programs/projects varies in its locality even with farmer participation, and there are very limited number of studies to explain how such complex nature of farmers’ or rural community respond to agricultural technical and agri-business development project, providing evidence of impacts both before and after programs/projects ended (Lutz, 1998).

This paper challenges to describe such complex natures of rural communities in a case of three different socio-political settings of the Red River Delta, Vietnam, showing how farmers and local actors could respond to project actions, which consists of two technical training components: 1) to enhance farmers’ cultivation capacity to adopt the System of Rice Intensification (SRI) method without relying on the use of agrochemical inputs, and 2) to equip farmers with product quality management and marketing skills for their community agri-business development. The project actions were taken place for five seasons, and this paper provides results of seven cultivation seasons, including two post-project seasons.

II Objective and Research Framework

1. Objective

The main objective of this paper is to demonstrate how farmers and related actors in different rural communities of the Red River Delta, Vietnam had responded to technical and agricultural business management project actions with the provision of capacity development opportunities provided to farmers’ communities. There exists tremendous number of research articles on diffusion of new farming techniques and on project sustainability (as known as the “diffusion of innovation” study), with examination of related characteristics of techniques or projects themselves, actors’ behaviors in relation with incentives and constraints, and environmental contexts. Yet, the majority analyzes narrowly and according to specific applications (Rogers, 2010; Wejnert, 2002; Fliegel 1993). Rather than providing an exhaustive review of the literature associated with each particular variable, this paper shows the factual results of rural development attempts, making an abductive inference. In order to capture complexity of rural settings, the research framework is designed to conduct the action research in different socio-political conditions while project actions are not limited to a single “technical transfer” aspect but also a management skill development aspect. In addition, in order to explore possible factors to influence farmers’ decision to continue or drop their practice during and after the project actions, various aspects, such as reactions of different actors in relation with socio-political settings, agricultural productivity and profitability, and farmers’ perception on project actions, are monitored.
2. Selection of research areas

Three study target rural communities were selected based on two aspects which reflect local cultural and social characteristics; (1) magnitude of solidarity among farmers in a traditional and naturally formed rural community, called Thon or Xom in Vietnamese, referred as “Village” hereinafter, and (2) availability of innovative / challenging opportunities for farmers in local farming activities (Inoue and Yamaji, 2012). The magnitude of solidarity is the indicator to capture current quality of social relation within Village to understand whether the strong solidarity can be observed as in old days. The second indicator, the “opportunity in local farming activities,” is used to measure how much small-scale farmers have access to new opportunities in the face of the open economy.

The former Ha Tay province (merged into Hanoi City in 2008) where the agricultural production was the largest in the Red River Delta were chosen as research targets, and attitudes of local agricultural cooperatives (AC), the window organization for agricultural activities in the Red River Delta, were tested initially to judge availability of opportunities for farmers in local farming activities. Secondly, people’s daily life was observed to see how people were interacting each other in cultural, working, and social context and then to judge whom each villager feels comfortable to be with in daily life. For instance, if more villagers seem to have social life or more personal time shared with their own traditional community, then solidarity among villagers were evaluated as “strong”. After those investigation, three areas under AC X, Y, and Z which manage Village a under Commune A in Chuong My District, Village b under Commune B and Village c under Commune C in My Duc District, respectively, were selected. In addition, the level of solidarity was confirmed through to the 2012 survey result, questioning “which of following unit do you feel the most attachment” with answer options with traditional units such as Xom and Thon as Village and governmental administrative units such as Commune, District, and Province/City. And, the result showed that 92% of villagers felt the most attachment to their Village in Commune A, while 68% and 68% of Commune B and C expressed their attachment to their Villages; Contrarily, 3%, 18% and 30% of villagers answered that they has the most attachment to governmental administrative units. To note, “Commune” is the smallest administrative unit under the Vietnamese government system, while typical “Commune” was formed by merging several traditional “Villages” in late 1970s. The “Cooperative Society (Hop Tac Xa, in Vietnamese)” under the collective production regime in 1970s – 1980s was transformed into “Agricultural Cooperative (AC)” after the collapse of collective system to be agricultural service providers for farmers in 1990s. Since then, the role and power of ACs varies among localities depending on their orientation and capacity. Profile of each area with categorized characteristics is given in Table 1.

| Study areas (Note1) | Commune A | Village a | AC | Socio-political features of farming Management | Relative Solidarity within Village |
|--------------------|-----------|----------|----|-----------------------------------------------|----------------------------------|
| HH No. / Total area / Agri. area | HH No. / Total area / Agri. area | (Agricultural cooperative) | | |
| A | 1,400 HHs / 350 ha / 240 ha | Village a: 202 HHs / 45 ha / 25 ha | X | Village autonomy | Stronger |
| B | 1,827 HHs / 490 ha / 219 ha | Village b: 623 HHs / 175 ha / 100 ha | Y | Top-down | Weaker |
| C | 2,048 HHs / 692 ha / 473 ha | Village c: 570 HHs / 150 ha / 115 ha | Z | Bottom-up | Weaker |

Note: 1) The data of Commune A is approximate numbers informed by commune’s resource person. HH No.: Number of Households. Note 2) Details of socio-political features and relative solidarity within a village are described in Table 2. Please refer Kako Inoue and Eiji Yamaji (2012) for more detail.

3. PAMCI-SAFERICE Project

In order to strengthen small-scale farmers’ capacity to conduct more sustainable agricultural practice, the PAMCI-SAFERICE (Production and Marketing Capacity Improvement for Sustainable Agriculture, Farmer Empowerment, Rice Improvement, and Cleaner Environment) Project was introduced to the areas in May 2012 (while fieldworks started in 2009), just before 2012 summer-autumn season (referred as “summer season”). Then, the project was implemented until 2014 summer season. Project actions originally planned were technical transfer actions on 1) the SRI (System of Rice Intensification) method techniques (referred as “TT”), and 2) agricultural business management, including quality management with traceability improvement and marketing activities (referred as “Sales”). For technical transfer of the SRI method, the project worked with farmers to stop using plant protection agro-chemicals such as...
herbicide and pesticide, not losing yield by transferring the SRI method. Basically, the technical transfer on cultivation technique was firstly guided from authors (including Kako INOUE and NGUYEN Thi Nga) to farmers directly by means of the Farmer Field School (FFS) and the On-the-Job Training bases. Specifically, the techniques guided were: 1) use young seedling with age of 2.5 – 3 leaves, 2) transplant seedlings with less density (25 hills / m²), 3) transplant one seedling per hill, 4) replace chemical fertilizer to organic fertilizer, 5) apply no pesticide or herbicide, and 6) apply intermittent irrigation (flooded 5 times, while drained 5 times in between).

For technical transfer on agricultural business development, the project had a role to transfer techniques, knowledge, and attitudes towards safe and environmentally friendly crop production directly to farmers, but also had played an important role to communicate with consumers to connect between farmers and consumers (see Fig. 1). By participating in the project, farmers were expected to save input cost, using less agricultural input, with possibility of increasing their agricultural income by selling high-quality rice, while both ACs/Communes and Villages could promote their reputation as safe agricultural production entities. However, it was a challenge for small-scale risk averse farmers and related stakeholders to participate in the project, as they were afraid of losing yields as a result of using less agricultural input and not finding marketing channel as they never had experience in differentiating their product in its quality.

4. Action Research

The project was implemented in line with action research which is an orientation to knowledge creation that arises in a context of practice, requiring researchers to work with practitioners (Huang, 2010). Specifically, the action research was conducted with following four steps in each season, and such steps were repeated until the project ended in 2014:

i. The project firstly proposes a plan to conduct the season’s action plan to 1) AC, 2) Village leaders, and 3) individual farmers before each cultivation season starts, and then make an agreement, indicating who wish to participate in the project, conditions and contents of technical transfer activities and agricultural lands under the management of project participants;

ii. Conduct technical transfer activities

iii. Hold feedback meetings to review the TT and Sales results of the season.

After the cultivation and marketing results were reviewed every season jointly among local authorities, AC, Village leaders, farmers, and project implementers (i.e., authors), technical transfer activities were re-designed and proposed to be agreed among participating farmers and then to be implemented locally. The acceptance of TT and/or Sales activities of the next season was confirmed as a form of season’s agreement signed by farmers who are willing to continue their practice along with project actions. The principles of the actions taken by the project side were along with the concept, “Putting the Last First” (Chambers, 1983), providing the highest priority to farmers’ willingness to participate in the project, listening and learning from farmers.

III Data and Results

1. Pre-Project

The target areas had different initial conditions in their experience in introducing and adopting SRI method as well as farming-relating organizational arrangements. Table 2 and 3 show the results of data collected and interviews conducted in 2010 - 2012. Three areas are different in its socio-political context as well as local agricultural situation; Commune B had the longest experience learning about the SRI method, while Commune A was the area where the use of herbicide and pesticide was the least.

| Table 2 Pre-project situation (Note 1) |
|----------------------------------------|
| **Timing of SRI introduced to the area** | **Commune A with AC X service** | **Commune B with AC Y service** | **Commune C with AC Z service** |
| 2007 | (through AC with a NGO support) | 2006 | (through AC with a NGO support) | 2013 | (through project action) |
| **Farming technique and Rice sales** | | | | | |
| Transplanting density | 32 hill/m² in Spring season | 37 hill/m² in Spring season | 40 hill/m² in Spring season |
| | 31 hill/m² in Summer season | 37 hill/m² in Summer season | 37 hill/m² in Summer season |
| Age of seedling at transplanting | 29 days in Spring season | 26 days in Spring season | 26 days in Spring season |
| | 15 days in Summer season | 14 days in Summer season | 14 days in Summer season |
| Use of fertilizer | Mainly chemical fertilizer | Mainly chemical fertilizer | Mainly chemical fertilizer |
| Use of pesticide, herbicide | No use (only a few farmers use herbicide) | Approx. 80% of farmers used both pesticide and herbicide (majority use them once per season). | Almost 100 % farmers used both pesticide and herbicide (Majority spray more than twice per season). |
| Price of rice | 7,750 vnd/kg | 7,200 vnd/kg | 7,200 vnd/kg |
| Sales channel | Farmer → middlemen | Farmer → AC/Seed company | Farmer → AC/middlemen |

Note: 1) Based on interview conducted to individual farmers (23 households in A, 23 households in B, and 3 households in C) in May – June 2012, asking results of spring season of 2012. The figures specified are the average of each Commune. The price of paddy indicated in this table is for the case of variety BT7 (Bac Thom No. 7; high-quality, low yield variety).

Note: 2) Use of pesticide and herbicide is based on the interview results conducted Jan.- Feb. 2012 to 266 households in 3 communes.
The project actions were introduced to 1) AC, 2) Village leaders, and 3) individual farmers just before summer season of 2012, and the project was designed to match local settings and conditions. Since then, the farming and sales results of each season were reviewed with related actors, receiving feedbacks, and then re-designing project action plans. Table 4 shows how each actor reacted towards planned actions, and how the project was ended and / or internalized into their farming practice during and after the project. At the time of initial actions in 2012, the AC and AC Y were positively responded to the project, implementing activities in their communes while AC Z observed risks in the SRI method, and did not wish to be involved. However, individual farmers in Village c expressed their interests in learning the SRI method, and decided to join TT activities in Village b (as Village b is located nearby Village c).

AC X firstly asked Village a to invite their farmers, while the project was asked by farmers to contact directly to farmers, not communicating with AC X. Since then, Village a leaders became the manager for the TT and Sales activities, and the number of participants for Sales activities were eventually increased and then expanded to neighboring Village a (which also utilize its village autonomy for area farming management) as shown in Fig. 2. It was the village leader (not AC X) who discussed and worked with individual farmers, land-use-right holders in the area where farmers of Village a decided to commit for TT and Sales activities in each season. And, the Village a formed a farmers’ group consisting of all participating farmers to organize agricultural business management activities, such as processing, packaging, quality control with traceability ensuring, delivering rice to consumers directly, and financial management. With these management arrangements, small-scale farmers as a group could be able to continue and improve their technical and business management capacities every seasons, and by the end of the project, farmers as a group were capable enough be independently manage their production and marketing activities by themselves. When Village a started to gain their reputation as a trustful and high-quality rice provider, AC X wished to expand the area to other Villages under their service coverage without ensuring product and service quality. Such AC X initiatives had brought a tension among villagers, protecting their reputation by insisting in maintaining their village management structure.

| Socio-political farming arrangement | Village autonomy: Each Village (Thon/Xom) under Commune A forms production groups (called “doi”) under AC X, to self-manage local farming activities. Villagers are the member of the production group, being a part of local farming management system, and cultivating their own land as well as being responsible for a part of village’s farming tasks (e.g., technical transfer, water management, etc.). | Top-down: AC Y directly communicates with individual farmers, and AC Y’s staffs are responsible to manage area farming, not allowing traditional Village leaders to take part in agricultural activities. AC Y provides instructions to individual farmers. | Bottom-up: AC Z’s agricultural service is limited to basic service such as irrigation service. Some farmers started to operate necessary farming service (e.g., renting pumping machines and operating fertilizer shops). Not much technical transfer opportunities are provided by AC Z. Farmers cultivate their own land with their own initiatives. |
| Village’s involvement in area farming | Villages manage local farming by deciding farming strategies (e.g., variety, sales, etc.) | No involvement of village. | Sub-AC based on Village (rather than AC based on Commune) provides services. |
| Involvement of Village leaders in farming | Village leaders work as a Production Group leader to manage agricultural work in own Village. | No involvement. | No involvement. |
| Influence from Village on farmers’ farming management | Villages manage individual farmers to plant the same variety or to unify techniques to improve competitiveness of local agricultural products. | None (AC directly instructs individual farmers, and farmers react whether to comply with AC’s guidance.) | None (Individual farmers make own decision on farming activities.) |
| AC attitude on introducing new techniques (Note 2) | As soon as the evaluation result of new technique is confirmed. | Earlier than any other AC’s introduction. | When the technique is widely extended. |

Note: 1) Based on interview conducted to AC leaders and village leaders in August 2010 and June 2011.
Note: 2) The questionnaire to ask AC attitudes included a question “when do you introduce new farming technique?” and answer options with “1) Earlier than any other AC’s introduction”, “2) As soon as the evaluation result of new technique is confirmed”, “3) When government recommended to introduce the technique”, and “4) When the technique is widely extended”, referring concepts introduced by Rogers with Shoemaker (1971).
AC Y also positively responded to the project actions, and only interested farmers were invited to join Sales activities for 2012 summer season. However, as AC Y did not provide self-management power to Village b, participating farmers themselves were required to manage rice quality and sell rice to consumers directly. Farmers felt difficulties in their management capacities, and could not believe in AC Y’s capacities either. Furthermore, farmers’ land was re-allocated according to government policy in early 2014, resulted in forcing farmers to give up cultivating land with fertile soil after replacing chemical fertilizer to compost. Farmers who had joined the TT and Sales activities explained that it was impossible for other farmers who used neighboring fields to join project activities as they cannot form a self-management group, and finally Village b gave up in participating TT and Sales activities in 2014.

In case of Commune C which did not have experience in the SRI method previously, AC Z and Village leaders were reluctant to participate in the project as they observed risks too high as in 2012. However, a few farmers who were eager to learn new techniques were invited to join TT activities in Village b. After reviewing the results of 2012 spring season, such farmers decided to utilize their own land to be used as FFS sites in Village c, inviting other farmers to participate in project’s TT activities. After witnessing TT activities results, Sub-AC (which manage area of Village c) had changed their attitude towards the farming technique, and then initiated to learn the SRI method with a government support in 2014 summer season, introducing it to other farmers at 50 ha of paddy fields.

There was an influence from demand with consumers on farmers’ product as a result of Sales activities. Farmers with project actions cultivated rice under two cultivation methods in 2012 summer season, one is “50% less (chemical) fertilizer SRI” which halved the amount of chemical fertilizer in comparison with the conventional method, and the other is “Organic-SRI” which did not use any chemical fertilizer. Then, the demand for the “50% less fertilizer SRI” sold at 24,500vnd/kg was less than “Organic-SRI” sold at 30,000vnd/kg, and the “Organic-SRI” was sold out quickly. With such positive reaction from the market to the “Organic-SRI” rice, farmers preferred to practice the “Organic-SRI” even if it had lower productivity. Consequently, farmers in A and B participated in the project by producing only “Organic-SRI” rice since 2013 spring season if they participated in Sales activities.

| Table 4 Reaction to project actions |
|------------------------------------|
| **Commune A** | **Commune B** | **Commune C** |
| **AC’s attitude** | **Village a’s involvement** | **Farmers’ participation** | **AC’s attitude** | **Village b’s involvement** | **Farmers’ participation** | **Sub-AC attitude** | **Village c’s involvement** | **Farmers’ participation** |
| Summer 2012 | Interested | Positive | TT & Sales | Interested | None | TT & Sales | Not interested | Not interested | (TT in Village b.) |
| Spring 2013 | Interested | Manage activities. | TT & Sales | Wished to control who to participate | None | TT & Sales | Neutral | Neutral | TT |
| Summer 2014 | Wished to expand | Manage activities. | TT & Sales | - | TT & Sales | Neutral | Neutral | TT |
| Spring 2014 | Wished to expand with own control | Manage activities. | TT & Sales | - | - | - | Positive | Neutral | TT |
| Spring 2015 | Manage activities. | Sales | - | - | - | - | - | - |
| Summer 2015 | Manage activities. | Sales | - | - | - | - | - | - |

3. Productivity and profitability

As described in the previous section, the techniques applied were different among villages. Receiving high demand on “Organic-SRI” rice from the market, farmers in Village a and b did not use any agro-chemicals if they participate in Sales activities. However, farmers in Village c did not participate in the Sales activities, but joined TT activities only, practicing the SRI method with reducing the use of chemical fertilizer, not using pesticide and herbicide. The average yield “with project” farmers in each village is shown in Table 5; the “Organic-SRI” has relatively lower yield than conventional or the SRI method with use of less chemical fertilizer.

With project, farmers roughly doubled rice sales income as shown in Table 5. Farmers with project were not allowed to use any chemical fertilizer or any agro-chemicals according to “Organic SRI” rules, which lowered agricultural input cost. The fertilizer cost was cheaper with “Organic SRI” using compost rather than chemical fertilizer. It was estimated that the cost of chemical fertilizer per hectar was 5.8 million dong for the conventional method in comparison with 3.3 million dong for organic fertilizer for the project case. Moreover, farmers did not need to buy pesticide and herbicide as they did not use it. However, as farmers did not use herbicide, more weeding labor cost was expected. The labor cost with use of herbicide was estimated as 15.3 million dong while it was 19.4 million dong with manual weeding for the “with project” case.

Regarding income side, farmers could sell their rice at higher price (about 10,000vnd/kg higher than “without-project” rice). Consequently, farmers under the project could double their profit in comparison with the “without-project” case.


**Table 5 Yields and Rice Sales Income by village**

| Season sp. /spring su. /summe r | A (Method) | B (Method) | C (Method) |
|-------------------------------|------------|------------|------------|
|                              | Yield (kg/ha) | Price (vnd/kg) | Income (mil. vnd / ha) | Yield (kg/ha) | Price (vnd/kg) | Income (mil. vnd / ha) | Yield (kg/ha) | Price (vnd/kg) | Income (mil. vnd / ha) |
| 2012 sp. N/A                  | 4,139      | 7,750      | 32.1       | N/A          | 5,611      | 7,200      | 40.4       | N/A          | 4,896      | 7,200      | 34.6       |
| 2012 su. SRI (w)              | 3,556      | 14,000     | 49.8       | SRI (w)      | 3,814      | 14,000     | 53.4       | SRI (w/o)   | 4,500      | 7,000      | 31.5       |
|                              | Org. (w)   | 3,333      | 17,000     | Org. (w)     | 3,683      | 17,000     | 62.6       |             |            |            |            |
| 2013 sp. Org. (w)             | 4,389      | 17,000     | 74.6       | Org. (w)     | 4,519      | 17,000     | 76.8       | Org. (w)    | 4,971      | 8,000      | 39.3       |
|                              | Org. (w)   |             |            |             |            |            |            |             |            |            |            |
| 2013 su. Org. (w)             | 2,639      | 17,000     | 44.9       | Org. (w)     | 3,297      | 17,000     | 56.1       | Org. (w)    | 3,694      | 8,200      | 30.3       |
|                              |             |            |            |             |            |            |            |             |            |            |            |
| 2014 sp. Org. (w)             | 3,333      | 17,000     | 56.7       | SRI (w)      | 3,972      | 8,484      | 33.7       | SRI (w)     | 3,908      | 8,400      | 32.8       |
|                              | Org. (w)   |             |            |             |            |            |            |             |            |            |            |
| 2014 su. Org. (w)             | 3,444      | 17,000     | 58.6       | N/A          | 3,833      | 8,501      | 32.6       | SRI (w)     | 4,111      | 8,896      | 36.6       |
|                              | Org. (w)   |             |            |             |            |            |            |             |            |            |            |
| 2015 sp. Org. (w)             | 4,667      | 17,000     | 79.3       |             |            |            |            |             |            |            |            |
| 2015 su. Org. (w)             | 2,380      | 17,000     | 40.5       |             |            |            |            |             |            |            |            |

Note: 1) “N/A”: The method applied by individual farmers without any project actions. “SRI (w)”: The SRI method with TT activities (guided to use 50% less fertilizer) and Sales activities. “Org. (w)”: The SRI method, strictly following the Organic-SRI principles set by the project, without any agro-chemicals. “SRI (w/o)”: The SRI method with TT activities (guided to use 50% less fertilizer) but without Sales activities.

4. Farmers’ perception on project

In October 2015 (at the timing of farmers already experienced two cultivation seasons after project ended), an interview survey with sample size (N) of 30 households per village (90 households in total) (a: N=24 “with”, N=6 “without”, b: N=11 “with”, N=19 “without”, and c: N=12 “with” and N=18 “without”) was conducted to investigate farmers’ perception about project, including questions on 1) positive aspect of project 2) negative aspects of project, and 3) necessary skills and capacities for farmers. The interview result is presented on positive aspect is shown in Table 6.

It can be seen that farmers who had experienced in Sales activities as in A and B identified the profitability as positive aspect while C evaluated cost reduction aspects of the SRI method (specifically, reduction in transplanting labor cost, fertilizer and seed inputs cost). Regarding negative aspects of project, more than a half of A, B, and C answered “None”, but 6 households in A pointed out risk in payment delay from consumers. For perceived necessary skills and capacities by farmers, it was found that 42% of A (with) answered that they already trained enough, and 67% of A (without) answered “no more skills is necessary”, reflecting farmers’ confidence in A. On the other hand, 36% of B (with), 50% of C (with), 37% of B (without) and 39% of C (without) expressed their willingness to improve their skills and capacities, with their special interests in marketing skills.

**Table 6 Farmers’ perception on project (positive aspects)**

| Rank | A (with project) | B (with project) | C (with project) |
|------|------------------|------------------|------------------|
| 1    | Income increase (13) | Income increase (6) | Cost reduction (9) |
| 2    | Improved crop safety (7) | Technical improvement (4) | Technical improvement (3) |
| 3    | Other (“All aspects were good.”) (5) | Improved crop safety (2) | Improved crop safety (3) |
| 4    | Improved environment (4) | Product quality (tasty) (1) | Productivity (2) |
| 5    | Cost reduction (3) | Improved environment (1) | Income increase (1) |
| 6    | Human relations (2) | | Other (“All aspects were good.”) (1) |
| 7    | Other (no answer, no idea) (2) | | |
| 8    | Producer’s health (no pesticide use) (1) | | |
| 9    | Improved life quality (1) | | |

Note: The question asked was “which aspect was the best in the project?”, and answers were provided narratively (i.e., the interview was conducted in a semi-structured manner (not structured)). If there were multiple aspects were answered, the answer were processed as multiple answers.

**IV Discussion and Conclusion**

How farmers and related actors respond to project actions varies among localities even within the same region, the Red River Delta, Vietnam. The area farming management structure and system as well as areas’ farming management capacity also varies. To understand the action research results, characteristics of farmers and their socio-political context need to be re-examined. Individual farmers are small in their farming scale and their marketing capacity, and many variables in relation with adopting and accepting project actions are dependent on their socio-political context which may allow them to form or utilize collective “power”. Availability of such collective power is especially critical for the Sales action as seen in the case of farmers in Village a that has an access to village autonomy as a foundation of farmers’ collective power. From the project experience, participated farmers were motivated to
practice the Organic-SRI method not because of its productivity but because of its profitability. Yet, the profitability itself is not a sufficient condition for them to continue their practice. The profitability in this case is associated with the higher price set to the Organic SRI rice sold by the farmer group with management capacity gained through their collective power. The management capacity of the village was a critical factor to receive sustained demand from consumers as seen in the cases of Village a.

On the other hand, the case of Village c indicates that the SRI method is evaluated positively due to its advantage on reducing agricultural input cost while not losing much yield, which reflects farmers’ pure evaluation on the SRI method in an absence of agricultural business management actions. Individual farmers in Village c independently make their own decision and participate in technical transfer activities, and showing positive results to AC, influencing their attitude to amend.

Complex nature of rural communities observed during the action research project was found in socio-political farming arrangement, which could lead to difference in farmers’ ability to practice new method and/or management skills. The monitoring results of transition of farmers’ participation and related actors’ attitudes provide an abductive inference on factors to enable Village a to accept and continue their practice as a balance of two kinds of “power” found in: (1) local politics as in the tension arisen between ACs with their “vested” power in local agricultural settings and small-scale farmers (or Village as a unit of farmers with solidarity) along with strengthened farmers’ capacity as well as a rise in their farming profitability, and (2) consumer-producer relation in the open economy, testing farmers’ “real” power as producers and farming and sales managers, which has to be strong and real enough to receive demand from consumers. Those different kinds of power, however, are inter-related, and the power balance changes in time along with related actors’ decisions, actions, and their interactions. It is necessary to understand such complex nature of rural communities, while planning and implementing rural development project, which possibly influence the local power balance. These complexities are the reality of rural communities and conditions of farmers’ everyday life.

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Summary in Japanese

筆者らは、ベトナム紅河デルタの異なる集落営農体制を有する3つの集落で2012年5月から5作期に渡り、①低投入型稲作技術としてのSRI農法の技術移転、および②トレーサビリティ確保、品質管理、消費者への直売を含む集落農業ビジネス能力向上に向けたアクションリサーチを展開した。本論では、事業開始前の農村社会や農業体制の実態把握期間、事業実施期間である5作期及び事業後の2作期の期間を含む長期間の観察結果を踏まえ、各集落が事業を受け入れ、継続する推移について、各農業集落の農業経営体制上の特性、各主体の態度や行動、農家の意思決定に影響を及ぼし得る生産性や収益性、農家の事業に対する意識等をもって示した。事業においても集落営農ビジネスを継続的に展開している集落は3つのうち集落aであるが、同集落では、個別農家は、集落農業ビジネスの比較的高い収益性をもって継続意思を持続させるためには集落営農を可能とする地域自治力が必要とされ、それを見出しうたのが集落aのみであったと考えられる。また、農業ビジネスを展開する上では、消費者側のニーズを踏ま
え、生産性は劣るもので比較的高価格での一定の需要を見込め有機 SRI 農法が採用されるなど、生産側の論理のみでは対応し難しい現実がある。地域・農家特性は多様であり、また農家を取り巻く環境や地域の各主体と農家の関係性も複雑で変化しうるものである。農業技術の移転や農家の能力向上に向けた事業については、それらの複雑かつ多様な特性を踏まえたものでなくてはならないリアリティを浮き彫りにした。

Keywords (キーワード): Rural Development Project (農村振興プロジェクト), Agriculture in Vietnam (ベトナムの農業), Community Agri-business (コミュニティアグリビジネス), SRI method (SRI 農法)

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