

New Series: Reconsideration of Support Activities for Agriculture and Farmers – Comparison between Syria and Japan

Part 1 – Introduction

We have visited a large number of rural areas in many countries around the world through our normal company duties and through our grass roots level activities with the establishment of the Muscat Fund (see AAI News Vol 49 for example activities). During our visits, we have had ample opportunity to see farmers and farming activities, and to listen to their problems, hear about their challenges, as well as their requests for certain kinds of assistance. Farming systems in different regions have been formed and influenced by the historic contexts and social backgrounds of their particular areas. Farmers' ways of thinking and their situations also differ very much from each other. Our activities can be described as various forms of assistance, such as technical support and mechanism creation for farmers in different situations and with different farming systems, based on certain key words such as livelihood improvement, income increase, and production technology improvement. It is vital to explore and select the most effective and efficient ways to assist the farmers, taking into consideration regional and individual differences and the diversity of farming and farmers. This issue has been our challenge in providing assistance to farmers in other countries with varied traditions, however, it has also been a source of motivation in our work.

On the other hand, in Japan, support to Japan's agriculture and farmers includes policy formulation, subsidy administration, cultivation technology guidance and lifestyle improvement projects. Most agricultural support activities were implemented by the public sector such as the national and local public sector institutions, however, today there is an increasing participation from private sector companies. Projects by the national government and local public sector organizations include agricultural extension activities, research & experiment, and land improvement projects. In addition, support for agricultural cooperatives that aim at reciprocal support and collaboration is considered in a broad sense as a way of assisting agriculture and farmers, as well as supporting corporate agricultural associations that are established to increase collective profits through collaborative agricultural production. Furthermore, in recent years, new types of support activities are increasingly prominent such as various movements and support for farmers by NPOs and citizens' organizations.

This trend is also seen abroad where we mainly work. The type of assistance for the agricultural sector is shifting from the traditional agricultural development approach that aims to increase productivity, to the agricultural community development approach placing more emphasis on improving the livelihoods and environment of a particular area as a whole. Today's agricultural community development projects aim for holistic regional development, with agricultural technology still as a foundation, but also embracing a wide range of sectors such as medicine, health and education based on the community participation principle. However, in developing countries, we often experience the general lack of, or insufficient systemic and legislative aspects of, agricultural policies due to delays in the consolidation of a government administration base and due to a shortage of capable technicians. Given this situation, our challenge in cooperation activities is how to ensure that farmers and residents in farming communities, who should be the direct beneficiaries, can reap the fruits of our support.

Before this series was conceived, we had a chance to have good discussions with Japanese farmers and people working in the agricultural sector when we joined two Syrian counterparts on their study trip around Japan. The Syrian trainees said that the impression and knowledge they gained through their agricultural site visit in Japan was highly beneficial to them. The trip prompted them to look at Syria from different perspectives, having provided a chance for them to reflect on agriculture and problems of farmers in their own country from a far-away foreign country. We, who accompanied them during the field trip and shared their experience in Japan, reconfirmed that it is possible to ensure that information and experience gained in training courses in Japan can be fed back to developing countries. In this series, we would like to discuss individual types of agricultural support activities such as agricultural extension, research and experiment, agricultural cooperative and land improvement, within the framework of overseas assistance in the agricultural sector in developing countries. In our discussion, we would like to reflect on the fundamental and basic issues of different forms of assistance. We think that support activities for agriculture and farmers in Japan and their many accumulated achievements and experiences can be linked more actively to our assistance in developing countries so that lessons learned can be utilized at a practical level. In particular, we would like to compare various perspectives and examine water saving irrigation extension projects currently implemented in Syria and the existing Japanese experiences and knowledge, while reconsidering the reality and problems of Japan's support to agriculture and farmers, as well as its future challenges and potential.



Engineers from Syria receiving a lecture on the agricultural improvement and extension system in Japan during a counterpart training program. There were active and solid exchanges between the tutor and trainees in this small group seminar.

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Part 2 – Trend of the Public Extension System

In this part, we would like to compare trends of the public extension system in Syria and Japan, as the system can be regarded as the core of support activities for agriculture and farmers. This part is an introductory phase and in the next issue we plan to discuss the relationship between research and extension activities in Syria, as well as challenges they face.

Japan's case

Japan's extension system was established through the post-war democratization process of the country. The system evolved around the cooperative agriculture extension projects of the national and local governments. Japan's cooperative agricultural extension projects have developed a multi-layered extension system such as teaching about farming by agricultural cooperatives, work by private companies and by farmers themselves. At the same time, compared with other industrialized nations where privatization is the trend for public extension systems, it is a characteristic of the Japanese system that the national government has been the main arm of the country's extension activities. The pillar of the public extension systems has been to nurture "thinking farmers", and agricultural improvement and extension workers are expected to teach farmers as both advisors and servants. The qualification exam for agricultural improvement and extension workers is conducted by local governments. To become a specialist technician who teaches agricultural improvement and extension workers, one has to pass a national qualification exam. The specialist technicians have been expected to bridge between researchers at experimental centers and agriculture improvement and extension workers. However, in 2004, when the Agricultural Improvement Assistance Act was amended to abolish mandatory establishment of regional agricultural improvement and extension centers by the national government, the extension organizations came entirely under the jurisdiction of local governments. This change meant that the specialist technician qualification was also abolished. The specialist technician qualification was amalgamated with the agricultural improvement and extension worker qualification creating a new national qualification of agricultural extension advisor. The agricultural extension advisors are expected to possess higher expertise and skills that can respond to increasingly varied issues and the sophisticated needs of farmers. The amendment was a reflection of many phenomena of that time, including decentralization trends of government administration, decrease of farming households, merger of municipalities, villages and agricultural cooperatives, marked reduction of agricultural extension project budgets, and promotion of government administration reform.

Syria's case

As in the case in Japan, in Syria, extension activities are also led by public institutions. The extension department of the central government and the regional department of agriculture at a prefecture level conduct extension activities in a cooperative manner. However, Syria has a centralized government, much more so than Japan. Extension projects tend to follow a top-down approach, with policies and technologies being communicated from the central to the local governments. Therefore extension workers often control farmers, and are expected to act like the police, taking action against illegal planting quotas. This is similar to pre-war extension programs in Japan. In those days, extension workers were sometimes seen more as the police with state power, rather than as advisors for farmers. In Syria, extension workers are considered as convenient communicators to spread central policies to farmers, as they are positioned at the end of the top-down administration. However, most of the extension workers are from villages and most still live in farming villages. Most of them farm along with their formal jobs. Unlike Japan's case whereby new graduates without actual experience get jobs as extension workers, it is Syria's biggest strength that extension workers themselves are farmers. The drawback is that their technical levels are generally low. Therefore, the Syrian government is exploring in its on-going reform effort to build a system to position specialist technicians with high level knowledge and skills who would support the activities of extension workers.



An extension worker (right) and counterparts (left) interviewing farmer at an apple farm in Kafr Hour Village, Rural Damascus

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Part 3 – Research and Extension (Why Research tends to be far from the actual needs)

As a part of the support activities for agriculture and farmers, agricultural research activities and utilization, and the extension of their results, have played a significant role in Japan and many other countries. With agricultural extension programs, production and productivity have been increased and the agricultural economics and livelihoods of farmers have been improved. Needless to say, it is highly essential and important to ensure coordination between research and extension activities. We need to share results and achievements of research with farmers as end-users. We also need to communicate problems farmers face with research organizations in order to solve these problems and to generate new research themes.

Recent years in Japan have witnessed a trend towards formally integrating extension programs with research activities. This trend is represented by the creation of synthesized centers that integrate the functions of extension projects and research with farmer training and education. One of the reasons for this trend is that Japan has been down-sizing extension programs. Another important factor, however, is that despite a wide-spread recognition of the needs for closer coordination between research activities and extension programs, it has not necessarily been practiced in reality. Historically, extension programs in Japan focused on relatively simple extension activities that aimed to increase crop yields and promote high-quality varieties. However, in recent years, both the expectations of farmers and expectations for farming have diversified, and this necessitates extension activities to become more sophisticated and diverse. As agronomy developed, research themes also became more sophisticated and ramified. This does not necessarily equip technicians and researchers to respond to the diversified needs of farmers. With a limited research budget, it is very difficult to respond to all the requests from farmers and farming entities. In order to secure a budget, researchers sometimes need to propose themes that are attractive to people who approve budgets rather than themes that are based on farmers' needs.

In Syria, the separation between research and farmers' needs is also becoming a serious problem. For example, in the case of grape cultivation in Syria, the common irrigation method is to trail lateral tubes along shelves and to connect them with tubes called "spaghetti" which is extended to the roots. However, at irrigation experiment stations, drip lines are installed on the ground to test irrigation amount. As the irrigation methods differ, it would be difficult to expect the test results to be applied at farms as they are. It is necessary that experiment stations also use the same irrigation method as farmers and compare results from different methods. Moreover, although some experiment stations are located in areas with substantial vegetable cultivation, they do very few tests related to vegetables. Furthermore, in case fruit farms switch from basin irrigation system to water-saving irrigation systems such as the drip system, it is possible that they may see reduced productivity just after the switch due to the different soil wetting patterns of the two systems. Measures to minimize such negative effects are highly important for farmers, but there is no such testing and research in irrigation experiment stations.

The main reason for research not responding to farmers' needs is that researchers do not know the problems farmers face as they have hardly any opportunity to visit production sites. Linking research with practicing farmers is one of the most important roles of extension activities. Syria is exploring the possibility of establishing a new professional category, the Subject Matter Specialist (SMS). An SMS is expected to serve as a bridge between researchers and extension officers. As explained in the previous issue, this seems to be the sort of reform that goes completely against the trends in Japan. This may be because in Syria, the basic capacity of extension officers is considered to be low and the capacity building of the officers is regarded as a medium to long-term national objective. In addition, in the short run, the SMSs are expected to have a base in regions, and to play a role as the closest counselors for extension officers and as advisors to augment technical gaps. Furthermore, ideally, SMSs need to play an important role in communicating various problems farmers face to researchers through extension officers. Researchers at research facilities can obtain information pertaining to problems on the ground through the SMSs and they should be able to use the information for their research activities.



Grape Cultivation in Syria



An example of poor irrigation management by an ordinary farmer



The very orderly plots in an Irrigation Experiment Station

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Part 4 – Shipment of agricultural products and agricultural co-operatives

In previous issues, we discussed agricultural extension and research in Japan and Syria. In part 4 of this series, we would like to look at the future of agricultural co-operative activities in Syria, using agricultural co-operatives in Japan as parallels to enrich the discussion. Japanese Co-operatives are known as the JA group which is organized under the auspices of the Central Union of Agricultural Co-operatives (JA-Zenchu). The basic organizational unit of the JA is its members. Membership consists of full members, and associate members who are not farmers. When compared with the standards of agricultural co-operatives elsewhere in the world the JA has a system and structure that is unique. The distinctive agricultural co-operative system in Japan developed because of the post-war government's policy of total and direct control of rice distribution as stipulated by the Staple Food Control Act. Almost all Japanese farming households are full members of the JA. They are organized in regional units. There are also different levels of organizational units at the area, prefectural and national levels, forming the JA's highly unique organizational system. Another characteristic of the JA is its wide range of enterprises. These range from agricultural production-related businesses including collection and shipment of agricultural products, stock management, transport and sales, procurement of production materials and coaching in agricultural business administration, to more diversified businesses. Other JA economic activities include an advisory service for improving living conditions, provision of wedding and funeral services, garage and petrol station businesses, insurance and financing enterprises, as well as trading enterprises. This is why the JA is often referred to as a multi-purpose comprehensive co-operative.

In Syria, generally, compared to the situation in Japan, farmers seem to have a more independent spirit and try to develop their business on their own. There is also a tendency to stick to the individual family business paradigm, and one can observe a disposition not to prefer co-operation with neighboring farmers. We have little knowledge of cases where farmers voluntarily get together and organize a co-operative to collect, ship, transport and sell their products collectively. In traditional society, at the tribal unit level, people organize themselves to collect and ship milk products in a mutually supportive manner. In some agricultural villages, however, at the present time, there are cases where wealthy farmers with a vehicle collect and ship produce from neighboring farmers acting as a representative of a particular area. In these instances, though, it is more of a case of a one-to-one "contract" and therefore individualistic and businesslike. Although, farmers' organizational operations are largely inactive in Syria, agricultural co-operatives do exist. Historically, Syrian agricultural co-operatives emerged in parallel with farm land reform implemented several times after WWII. Agricultural co-operatives have been very much national government-led initiatives, spurred by land reform and the abolition of the feudal system and functioning as a means of collectivising small scale farmers. The main activity is purchase of fertilizer, seeds and production materials. Although farmers' main interests and the first principle of agricultural co-operatives are market related, businesses such as collection, shipment, distribution and sales of products have been lacking in agricultural co-operatives since their inception. In Syria, there are often top-down restrictions on planting of crops. When statesmen want to unilaterally control small scale farmers as village-level units, co-operatives are used very effectively. This point is similar to the JA's role as an agent acting between the national government and local farmers when the government's rice production control is implemented.

We have realized, through our investigation into both JA and Syrian agricultural co-operatives, that they are the products of history. Each has developed to a background of unique circumstances. It goes without saying that we cannot expect to easily draw lessons by comparing co-operatives in different countries, as the differences between countries are extremely large. However, there is one point we can make. Looking at the issue from a Syrian farmer's perspective, it seems that it is necessary to explore the possibility of organizing a production, collection and shipment system as part of the co-operative's activities. The two counterparts who studied agricultural co-operatives in Japan as part of their counterpart training program had the same idea. In Syria, there are many middlemen and farmers tend to have to sell their products at a very low price. Given this situation, it is important for farmers to collectively defend themselves and it is necessary to consider what agricultural co-operatives can do for farmers in this regard. We believe that what is needed are organized activities to achieve advantageous deals for farmers under conditions of unstable market prices. However, what should we start with? A desirable model for agricultural co-operatives is not the gigantic JA of Japan. There is also no need to explore the possibility of a desirable model based on Syria's existing government led agricultural co-operatives. The basic principle of agricultural co-operatives is mutual support among farmers. Perhaps we need to go back to the drawing board and start by organizing small-scale activities. Syrian farmers may easily accept a small group of activities or suggestions from Japanese nationals who are outsiders. With these considerations in mind, we continue our support activities for Syrian farmers.

Friday Market in Syria



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Part 5 Two types of water users' associations and Japan: Traditional and future types.

Land improvement district is a Japanese farmer's water users' association which has been established under the terms of the 1948 Land Improvement Act. Last summer, we had a chance to visit Kamedagou land improvement district in Niigata Prefecture with the Iraqi trainees from the third country training. The Iraqi participants were truly interested in the land improvement district, which is acclaimed internationally as a highly successful water users' association. They listened enthusiastically to the explanations of the guide about everything from legal framework establishment, water management, operation of organizational structures to the history of the land improvement districts. The trainees have a huge mission; re-establishing irrigation facilities using water from the Euphrates and forming water users' associations. They, therefore, expressed concrete and practical interest, trying to acquire tips from Japan's experiences, which showed that they were extremely eager to learn and had a pressing need for this training. There were also exchanges of active questions and answers during lectures. It was impressive to see that trainees tried to take in one or two new lessons and ideas even when a lecturer pointed out that it would be difficult to apply Japan's water users' association system directly in Iraq, as the water users' associations have been formed in Japan's village society that have been in continuous existence since the pre-Edo era based on paddy field rice cultivation. It is obvious that there is a considerable difference between what water means to people in dry lands and in a wet environment. However, seeing the trainees' enthusiastic attitudes, we felt that there was a possibility that they would be able to utilize the experience of Japan's land improvement districts as roles for traditional water users' associations for the benefit of people in Iraq, a nation so far from Japan.



Iraqi trainees exchanging opinions in front of water use map (Tsukuba International Center)



Syrian counterparts during their training visit in Japan (At the Farm Pond at the Miyakojima Land Improvement District)

The counterpart training course in Japan, which was conducted as an integral part of the Project on Development of Efficient Irrigation Techniques and Extension in Syria (technical cooperation project), also included a field visit to a land improvement district; i.e. the underground dam of the Miyakojima Island. Syrian counterparts are also very interested in the topic of water users' associations and this visit seemed to have made a vivid impression. In Syria, in the 1960s, there were over 350 large and small water users' associations along the Euphrates and around the country. As they did in Iraq, traditional water users' associations in Syria developed as the needs arose for public water access to rivers, springs and underground canals (Qanat) to be distributed. The counterparts were primarily interested in introducing modern irrigation to traditional water users' associations. However, what was really worth noting was that they were investigating the possibility of applying the water users' association model as an effective joint management method for underground water sources which farmers traditionally regarded as being under individual ownership. Here, a new type of water users' association is being designed, using the example of a generic and traditional water users' association which is based on shared water resource utilization. Such a new type of water users' association aims to promote the integrated and joint utilization of the groundwater which is traditionally viewed as under individual ownership.

In Syria, the depletion of fresh water resources is a seriously pressing issue, resulting in the tight supply-demand situation. Therefore, the necessity of water saving irrigation in the agricultural sector, which accounts for nearly 90% of the total water use in the country, is called for. In particular, around 60% of the water use in the agricultural sector is groundwater pumped from wells by individual farmers, and water saving measures to curb individual use are urgently required. The problem is that most of the wells are dug illegally. Over-exploitation of groundwater resulting from the rapid increase in wells since the mid 1980s has been causing serious lowering of the groundwater table. There is no way that these illegal wells can be left alone. In order to tackle this problem, Syria is attempting to reduce illegal wells by consolidating wells. The country is exploring ways to achieve effective use of fresh water resources, such as the introduction of modern irrigation system and organizing water saving farmers' groups. However, grouping of farmers and the consolidation of wells are not as easy as they may sound. The larger the farm size is and the farther the distance between wells, the more complicated and difficult it becomes. Even if a certain measure is feasible technically, whether it is workable in terms of necessary initial investment and operational costs needs to be investigated. In addition, what is the social viability of a measure? In Syria, there still is much more room for further investigation. Furthermore, in order to communalise wells and fresh water resources, a substantial mind shift from private water to communal water needs to be cultured among farmers. Evidently, the Syrian plans to create water users' associations by communalising wells requires different thinking from traditional water users' associations. It is also clear that there is no sufficient legal framework for the organizations. Under these circumstances, what should we do in our technical cooperation activities? Should we dismiss the futuristic idea of the water users' association as totally unrealistic? Or should we explore the possibilities even if their results might seem small? What is effective cooperation assistance? Whatever the answer may be, diverse discussions and analysis as well as repeated consideration of issues are important in these technical cooperation activities.

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Part 6 - Reconsideration of support activities for agriculture and farmers (Last in the Series)

This series attempted to examine current situations and problems in Japan's support systems for agriculture and farmers, comparing Japan's issues with Syria's, and to utilize lessons learned for future support for developing countries. This series was triggered by the fact that we hosted counterpart trainees from Syria and participated with them in field visits to learn about Japan's agriculture and extension activities. In farmer support projects we are involved in, support tends to be provided through the government and NGOs which support agriculture and farmers, rather than offering support to farmers directly. In this type of support, it is difficult to see the project impact on the ground. At the same time, if the support activities are conducted systematically, there is a high potential for the support to have ripple out effects to a large number of farmers. It is essential to consider the possible weaknesses and strengths and their relationship when providing support.

To summarize this series, based on knowledge and lessons gained from the Syrian counterpart training program, I outline different angles related to training contents and examine how to evaluate the applicability of the contents in the home countries of the trainees.

	Support for Experiment, Research and Extension Activities	Support for Organization of Farmers	Support for Non Governmental Sector
Training Subjects	<ul style="list-style-type: none"> - Visit to agricultural experiment centers - Visit to extension centers - Lecture on extension system - Visit to farmers 	<ul style="list-style-type: none"> - Introducing agricultural cooperative activities - Introducing water users' association activities - Introducing examples of different support 	<ul style="list-style-type: none"> - Visit to the Ground Work Project - Visit to activities of NPOs - Farms targeting tourists - Seed and nursery company
Trainees' Tasks in Syria	<ul style="list-style-type: none"> - Identification and confirmation of roles of agricultural experiment center and extension organization, and their utilization - Understanding of historical background - Significance of improving product quality - Legitimacy of value addition 	<ul style="list-style-type: none"> - Understanding of historical background - Judging the needs for a farmers' organization - Confirmation of applicable areas 	<ul style="list-style-type: none"> - Understanding support capacity and present circumstances - Understanding historical background - Examination of applicable areas
Roles of Japanese Specialist	<ul style="list-style-type: none"> - Support for strengthening extension activities - Advice on farmer support methods - Assisting technology transfer with TOT 	<ul style="list-style-type: none"> - Introducing case studies - Support for organization 	<ul style="list-style-type: none"> - Provision of data and materials - Advice on application

Setting future targets: There is a significant difference between Japan and developing countries, be it with agricultural systems, technical levels and surrounding economic and social circumstances. It is often difficult to apply the Japanese systems as they are, in developing nations, therefore, in aiding understanding of what is taught, it is necessary to adjust training substance in a way that better suits the situations in developing countries. However, it is possible to introduce Japan's case as a future target for the trainees' country. For instance Japan's water users' associations are promoted as an integral part of efforts for equitable water distribution and land improvement. It is not possible to apply this system directly to Syria which has a totally different historical background.

Learning from history: Japan's extension system and agricultural cooperatives evolved over many years. Therefore, there is a lot one can learn from the past and processes, rather than trying to apply, or learn from, the present day system alone. For instance, rather than looking at Japan's current situation of extension projects being consolidated and diminished, there is more to learn from the close and trusting relationship between extension workers and farmers and how the friendly atmosphere was created during the time of active extension activities represented by the "green bicycle" approach which extension workers used to visit farmers.

Negative example: It is difficult to say "learn from Japan" nowadays. Japan's agriculture has a lot of problems which are not common in developing countries, including aging of farmers, a lack of successors, and increasing abandoned farmlands. Therefore our legislative system, organizational set-up and activities are designed to respond to the existing problems. These aspects might be useful as "negative examples" for learning.

The significance of training programs in Japan, in a surrounding with political, historical and environmental differences, is that they enable trainees to discover techniques adaptable to their own countries, with a firm understanding and full acceptance of the differences that exist between Japan and their home countries. In order to enhance the actual effects of the training programs, it is necessary to extract useful lessons and techniques from both the strengths and weaknesses of Japanese way in supporting agriculture and farmers. It is also important for the training hosts to confirm necessary issues and challenges from the reactions of trainees, in order to improve the quality of our future support.

This training program in Japan was designed to include the technical cooperation project staff from the Japan side. It was very meaningful for both the counterparts and the project staff to discuss the adaptability of different techniques, as we made field visits and listened to lectures together. Ideas coming from joint experiences and mutual understanding need to be passed on in the efforts to support agriculture and farmers in Syria.