

Bridging training and extension activities <Part 1>

Case study: Conducting training that contributes to the clarification on training needs and extension activities in Syria

Training should not be a stand-alone activity. We can only expect effective application of outputs from training, through using what is acquired in related work and activities. It is relatively easy to link training and action plans when training activities are conducted as part of a project on the ground. In this case, action plans can be directly based on training contents and training contents can be designed to suit the extension activities of the project concerned. By contrast, in the case of training in Japan, bridging between training and actual activities on the ground becomes more difficult, for reasons such as the fact that it is not necessarily guaranteed that the trainees can engage in the relevant activities once they return home. In this mini-series, we would like to introduce different mechanisms and innovations to link training with extension activities so that training will become more beneficial.

This time, we would like to introduce the project on Development of Efficient Irrigation Techniques and Extension in Syria. In this project, to promote the mindset of water saving irrigation to decrease water use for agriculture and to extend relevant technologies, a training course was organized targeting irrigation extension staff. The training was structured in “four steps”, aiming to provide skills and knowledge to them to deal with issues related to water saving irrigation, which farmers are facing. In the first step, training focused on teaching examples of surveys on farmers so that the trainees can understand water saving irrigation circumstances and the related issues farmers face. In the second step, training was provided on basic issues related to design and installation of water saving irrigation facilities, as well as operation and maintenance of the facilities. The third step focused on development of extension materials such as posters and pamphlets which will be useful for future extension activities. In step 4, trainees developed and implemented an action plan to implement extension activities fully utilizing knowledge and techniques they acquired in the training and extension materials that were developed during the training. As a follow up activity, support for implementation of the action plans was continued. The

support action plan included organization of a field day, field visits, seminars, mobile theater, and poster competitions. Well conceived or priority actions were selected from the plan, and projects, in the form of OJT and were implemented by dividing staff into groups.

Previously, training courses were mainly lectures in classroom, explaining old teaching documents. They felt that they had no techniques nor information to extend, did not have the know-how, and did not have confidence to teach farmers. The practical training this project offered provided the extension staff with the necessary means to deliver concrete and practical advices and supports to farmers. Moreover, in the past, extension activities were neither properly prepared nor planned. However, in the extension activities under this project, the staff set clear objectives based on farmers needs’, developed plans and undertook the activities after thorough discussions and preparation. As a result, extension activities could respond better to the farmers’ needs, and extension staff capacities increased. Furthermore, various efforts such as evaluation of understanding of participating farmers and review meetings after extension activities made the whole work much more solid and fruitful compared with the way things were done in Syria previously. Irrigation extension staff’s ability continues to improve.

This project consists of a cycle comprising; identification of training needs – selection of training themes – training implementation for trainee extension staff – implementation of extension activities by trainee extension staff – extension to farmers (resolving of farmers problems). Through this cycle, we could establish the “results-oriented training and extension method”. The main characteristic of this method is that trainees acquire knowledge and techniques that are actually needed on the ground, and the project provide “places” and “opportunities” to use them in the form of follow up projects.

The future challenge is how to make the results-oriented training and extension method as a norm and replicate it in other regions. Extension activities in Syria are not confined to irrigation, and it is necessary to apply this method in other extension activities.



At the irrigation research station



Problem analysis session



Extension activity



Discussion with farmers

Bridging training and extension activities <Part 2>

Clarification of extension needs and implementation of training that is directly useful for extension activities: Case study from JICA Tsukuba

AAI has been implementing the group training course: “Vegetable Cultivation Technology II” since 2005. From 2010, AAI has also been entrusted to deliver the group training course: “Vegetable Cultivation Technology for Small Scale Farmers”. The training program these days has an “action plan” as a training component, and training objectives have shifted from the previous leader training type to a train-the-trainer program aiming to develop the human resource base in developing countries in the broad sense through training participants to acquire skills for training others in their home countries. It is requested to formulate the extension activity action plan to increase effectiveness of extension activity. In this issue, we would like to introduce various procedures and twists to bridge the training in JICA Tsukuba and the work area of participants in their own countries.

Having individual themes and problems raised in the inception reports prior to coming to Japan, participants attend lectures, master theories through individual and group experiments and practical sessions, and see the actual application of the theories at field visits. The ambiguous problem at the inception report stage becomes clearer after the lectures and workshop on problem analysis and individual interviews/discussions with technical advisors, leading to the decision on the theme of individual experiments. Once individual experiments begin, field days, mid-term progress report presentation and group discussion meetings on the results are organized, which should guide the participants to develop action plans. The results of experiments and practical sessions are recorded in technical reports and an action plan to improve the participants’ jobs will be developed. Action plans are drawn up with careful confirmation of whether the information and knowledge gained through individual experiments and what was learned in the training course are reflected and whether these are really something that can be applied in the participants’ home countries. By revising through these checks, by the time of the action plan presentation session just before participants’ return home, their plans become more tightly focused on actions that can be implemented in their daily work in their home countries. For evaluation tests of newly introduced technologies, it is necessary to have an implementation plan of a minimum 3-year period, to reproduce the technologies in their home countries, as the results are evaluated using locally appropriate

materials and methods. Therefore action plans often entail on-farm experiments involving local farmers. Factors and levels that are important in experiment plans have to be developed with full consideration to issues such as social and natural environmental conditions and feasibility of material procurement at the local level. The final draft action plans are expected to be shared with other staff in the participants’ work division after their return home in November.

As described above, we have been trying to improve the action plan formulation process so that it will include actions that are implementable at the participants’ work place. This is one of our efforts to link training courses and the field. In addition, from 2010, in order to enhance the participants’ understanding, as part of the inception report presentation, participants will be asked to discuss what kinds of activities they would like to engage in, in their home countries after the training. This will enable the participants to reconfirm their post-training action plans during the training period. We also added a section “describe useful subject learned and applicable to your duty is preferable” in the weekly evaluation sheets that are filled out and submitted by the participants. Through the monthly consolidation of the evaluation sheets and our feedback to the participants, we hope to ensure that the action plans at the end will be meaningful.

Furthermore, in addition to the above mentioned efforts in our training activities in the field of extension, we hope to further improve the field day activities. To date, field days were merely the opportunities for participants to make presentations on the mid-term progress of their experiments. However, we hope to make the field day provide a place for practicing extension techniques so that the participants will be able to communicate necessary information in an accurate and effective manner for their extension activities. Through these efforts, we expect that contents of our training courses will become highly relevant to actual practical work on the ground.



Field day – participant play a role as an extension worker and others as farmers

Bridging training and extension activities <Part 3>

Implementing training courses that are useful for extension activities

The field day of group training course on vegetable cultivation technology for small scale farmers is a program to present the main findings of technique application for particular vegetables and the results of experiments at the cultivation field. It aims to enhance accurate understanding of Japan’s vegetable cultivation techniques. Another aim of this program is for participants to become used to communicating about experiment objectives and other necessary points to explain what they have done in an accurate, effective and easily understandable manner. However, individual participants’ presentations are limited to simply reading their original cultivation plans and experiment results. We as the instructors feel that the program needs much improvement. Therefore, we decided to position the field day as an exercise for extension activities, trying to ensure meaningful training.

We set the following imaginary scene: “A cultivation technique was developed at a central experiment station in a region which is ready for extension. A technique extension conference is being held in order to promote this technique widely through the local extension centers.” At the conference, the experiment station’s subject matter specialist explained to local extension officers the significance of this new technique, and detailed important points to remember during extension activities to the beneficiary farmers. The participants were invited to jointly examine concrete extension methods. Using a watermelon training technique and a method to determine planting density of potato as examples, participants debated what would be the best communication method for the subject matter specialist and how they should prepare what they will use for presentation including rehearsals, and then put the results into concrete action. In this exercise, instructors first explained the imaginary scene and divided the participants into two groups. Facilitated by the instructors, each group looked at concrete plans and made a presentation.

As part of the program support, in the lecture on irrigation techniques for vegetable cultivation during the first part of the training in April, we introduced the

results-oriented training and extension method used in Syria. In this methodology, targets are set based on farmers’ needs and plans are thus formulated. We explained that implementation of the plans is carried out through careful discussions and preparation, and stressed the importance of the process flow and feedback including the evaluation of the level of understanding of farmers. Moreover, during the cultivation practice, we explained the features of the employed techniques following the growth of watermelon and potato, and examined the results of the various investigations conducted up to the harvest. Furthermore, after explaining the program’s challenges, a lecture on presentation methods was provided, introducing different ways to communicate information accurately and effectively.

A discussion was held with the participation of all the participants, where a plan was devised to hold a virtual technique extension meeting exercise. Individual countries’ current situations in the corresponding events were introduced and clues for preparatory activities were sought. The participants from St Vincent reported that he developed an evaluation sheet for demonstration projects to be used to inform future activities. He also reported that he prepared for the field days to extend useful cultivation techniques, through integrating the needed preparatory activities in his work plan and using a check list to avoid omitting some activities in the process. Participants from Myanmar and Laos reported on the use of information materials and photos summarizing the features of different techniques. The participant from Fiji said that to enhance farmers’ understanding, he first explained the extended techniques using diagrams indoors or under shade. He then took the farmers to the field to show the techniques actually being applied. The Nepali participant reported on the implementation of farmer’s field school method. Therefore we asked the participant to explain the details to share with all the participants.

The second meeting was held in groups to examine the contents of the presentation at the virtual technique extension meeting, presentation order and materials to be prepared, and the participants started presentation material development. The material preparation included poster development with easy-to-understand diagrams and photographs, harvesting of sample vegetables to show the results of the techniques, and an evaluation sheet to be used after the presentation. At the third group meeting, more preparation was done for the virtual technique extension meeting day. Through conducting the training to date, we felt it was effective to hold this type of session whereby one another’s knowledge and wisdom are presented, in order to ensure that field days will be truly useful for extension activities.



Preparatory meeting



Preparing documents and Presentation materials for the meeting

Bridging training and extension activities

Implementing training courses that are useful for extension activities <Part 4>

When we started the virtual technique extension meeting preparation process, we provided the following explanation to the participants to begin with, in relation to the objectives of the training and proceedings of the meeting; the scene set in the virtual meeting is: a new technique ready for extension has been developed at an experimental station in prefecture A. Through the technique extension meeting, the new technique is to be transferred to extension officers in different areas so that they can start actual extension activities.

In this training, the participants are divided into two groups. One group aims to transfer established techniques to extension officers. The other group's job is to extend the technique to farmers. The objective of the virtual meeting is to learn about extension activities through presentations and questions and answers in role playing."

The first group dealt with a new training method for watermelon. At the meeting venue, tea and sweets were provided. Information materials with presentation summary and an easy explanation of the new training method with diagrams were distributed. The presentation was made using a power point projector. Possible questions from farmers were also considered and dealt with including relevant items in the presentation evaluation sheet. These included questions such as notable characteristics of the technique, the difference between the new technique and the existing techniques, and the economic advantages. The second group used an imaginary technique related to the planting density of potatoes. In this group, no information materials were provided. The presentation was done using large paper sheets showing in large letters the presentation summary and the results of the use of new techniques, which were put up on the blackboard. A diagram showing the changing distribution of sizes of crops resulting from differing planting densities was very easy to understand using different colors in a tactical manner, and full consideration was given to supporting the easy understanding of the audience.

In this training course, we teach that verification work for improvement and introduction of appropriate techniques should be done through experimentation and research. However, extension activities of improved techniques are left to individual participants. Our concern has always been how the participants can be supported to perform their extension tasks given that we cannot directly assist participants' work in their countries after the courses. Many of the participants are extension officers. If we can create opportunities for sharing their knowledge and ideas pertaining to extension activities, it would help their work after returning home. Therefore, we trialed the virtual

technique extension meeting, using role play and preparatory meetings in small groups, as part of the training program. In implementing this training program, in order to ensure that those participants can clearly picture the process in the program and role play for the presentation part, it was essential to enhance the participants' understanding on the purposes of the training and procedures for implementation. Fortunately, the process went smoothly due to the participants' prior experiences in similar extension activities.

In order to bring out individual participants' knowledge and experience and to promote effective sharing with other participants, the following points were important for us, as the trainers: (i) to be a good listener, (ii) to create the atmosphere and opportunities for every member of the group to speak in the meetings without hesitation, and iii) not to limit the time in the initial meeting and ensure mutual respect and listening to one another's opinions. From the 2nd meeting, a leader naturally emerged in each group who could facilitate subsequent meetings. However, it was also important for the instructors to observe the discussions and steer the discussions to an agreement supported by the majority rather than influenced unduly by opinions of group members with loud voices. It was also felt that the instructors need to provide resourceful judgment based on varied professional experiences in order to nurture participants' ability to devise their own presentation methods and make concrete preparations in the program.

In the training involving small group meetings, a sense of unity emerged among the participants through mutual support. Small group discussions fostered understanding between different group members. During the preparation of supporting documents for presentations, group members explained technical expressions to those who had insufficient understanding and provided active support to those who were lagging behind in their preparation. It was suggested that this kind of training method is effective for training that targets people with field experience, rather than the lecture-type method which predominantly involves only one-way communication.



Distributing presentation materials



Second presentation