New Series: Coordination between Technical Cooperation and Training Activities

Part 1 – Introduction

Various training programs in different technical cooperation fields are perceived to be increasingly important, in terms of building human capacity and resources. Within development studies and technical cooperation projects in the agricultural field in developing countries, training and extension are becoming important components. For instance, in the project on the extension of saving water in irrigated agriculture we currently implement in the Syrian Arab Republic, the core of our program is training and extension activities related to water saving irrigation techniques. We think that it is very important to utilize experiences and knowledge accumulated through training activities conducted in Japan. This means that it is necessary to wisely link technical cooperation activities outside Japan with training activities in Japan.

In the previous issues of the AAI News, we introduced technical cooperation activities under various schemes such as dispatch of experts and development studies. In the past, JICA had the dispatch program section and training program section within the organization, and different program sections were dealing with different schemes. Apart from the project type technical cooperation, the organizational structure made it highly difficult to ensure collaboration between various schemes. Since then, JICA's organizational structure has improved and the programmatic approach was adapted, resulting in recognition of the importance of coordination between schemes. Furthermore, in recent years, JICA has been actively promoting coordination between schemes within a technical cooperation project. This creates favourable conditions to promote improved coordination between technical cooperation activities outside Japan and training activities inside Japan.

In the AAI News, from Vol. 43 to 48, we introduced our efforts towards training activities. We introduced our agricultural training activities at the JICA Tsukuba center in Japan, and stressed the importance of post-training follow up activities. Ws also touched upon the ripple out effects of the counterpart training activities as part of development studies and expert dispatch projects. Moreover, we suggested a wide range of utilization of facilities that are established and run in developing countries through the Japanese Government's technical cooperation. In the conclusion of the series, we emphasized that the combination of technical cooperation and training activities should be actively considered and implemented.

Based on our experiences gained through diverse activities, the following are the different types of coordination that are possible between future technical cooperation and training activities. This new series aims to make useful suggestions that can be used for future projects, looking at actual examples for each coordination type.

Coordination Type	Content
Follow up Type	Based on our experience in the Tajikistan Vegetable Cultivation Course and Southern African Vegetable and Upland Crops Cultivation Technique Course, we would like to explore the possibilities of nurturing grassroots technical cooperation activities through follow up activities for the former trainees in their countries.
Coordination with technical cooperation projects	For example, in the Project on the Reconstruction of Agricultural Experimental Stations in Afghanistan, providing training in advance for future staff of the experimental stations to be rebuilt will lead to extremely efficient project implementation.
Training in a third country	In countries whose environments differ greatly from Japan, such as arid and semi-arid areas, we should consider effective use of facilities that were established and run with Japanese cooperation, as well as programs with a third-country training component.
Multiple program Type	Instead of implementing activities according to different schemes, we should examine possibilities of developing a program which comprehensively promotes various schemes including technical cooperation and training activities.

Part 2 – Follow-up Type Coordination Activities

Since 1999 for 5 years Tsukuba International Center (TBIC) organized the Tajikistan Vegetable Cultivation Course and trained a total of 60 participants. According to the follow-up survey conducted in 2003 and 2004, the participants were working hard to extend the technologies which they acquired in the training in their respective fields, applying the technologies at farms they are in charge of and with farmers they deal with. The 2004 survey triggered the formation of an alumni association of ex-participants, which has recently become a government accredited NGO. This enables us to establish a system to support our ex-participants who are working in various parts of Tajikistan. The first cooperation activity of the alumni association is to respond to the ex-participants request to support the introduction of green houses to expand cultivation seasons and allow year-round cultivation of vegetables. As there is a serious shortage of fresh vegetables in winter, this would greatly contribute to solving a problem Tajikistan faces. This also leads to support for the alumni's activities to transfer the technologies they acquired in Japan by applying them in a way that fits situations in Tajikistan. In addition, in the long run it is expected that by assisting in the production of a stable and year-round supply of fresh vegetables, our support will also contribute to export promotion of fresh vegetables and processed agricultural products. In fact, a pilot project is planned with the ownership of the alumni association. It is envisaged that with close monitoring of results of the pilot and making the most of lessons learned, the project will evolve into the next stage aiming to improve household economies and stabilize farming village life.

In the Southern African Vegetable and Upland Crops Cultivation Technique Course, a total of 15 participants were trained. Many of the participants have been working to apply the techniques they learned in Japan in their own countries. However, there has not yet been sufficient post-training follow-up support for the participants. As the quality of training courses increases, requests have reached JICA from ex-participants for their activities in their countries. It is highly important to respond to their requests as much as possible, in order for TBIC to ensure positive results of training courses and to ensure the visibility of its support activities. Therefore, it is very important to conduct a follow-up survey with the aim of understanding and evaluating the legitimacy of support requests from ex-participants. If a budget for training follow-up can be made available, it is an idea to support the development of a concrete action plan. Then, for viable proposals, we could introduce various possible funding sources such as the Japanese Embassy's Grassroots Grant Assistance and JICA's grass roots technical cooperation projects, and assist the ex-participants in submitting a funding application. AAI has so far introduced the Japan Fund for Global Environment and AEON Environmental Foundation grants to local NGOs that have been steadily doing a good job.

As indicated in the above examples, a thorough follow-up is necessary to develop new technology cooperation activities based on support for ex-participants work in their countries. Follow-up activities are an essential component of training programs, and a necessary budget should be provided for them within the training program budget. In recent training programs, the development of an action plan is a mandatory activity designed to make effective use of knowledge and skills obtained during training courses. Many participants take such an action plan formulation very seriously. Very promising action plans are also produced in the end, after a presentation session whereby invaluable suggestions could be obtained from participants. For promising action plans, it is necessary to provide further technical support or to support implementation of action plans by advising on formulation of a viable proposal and application. These supports are also an important part of follow-up activities. It is considered that good follow-up activities do not only ensure maximum impact of training programs, but also contribute significantly to formulating projects that respond directly to peoples' needs.

Farmers at a follow-up seminar conducted on the request of ex-participants in Tajikistan

Visiting an ex-participants in Botswana as part of a follow-up survey using the Muscat Fund

Coordination between Technical Cooperation and Training Activities

Part 3 – Coordination with technical cooperation project

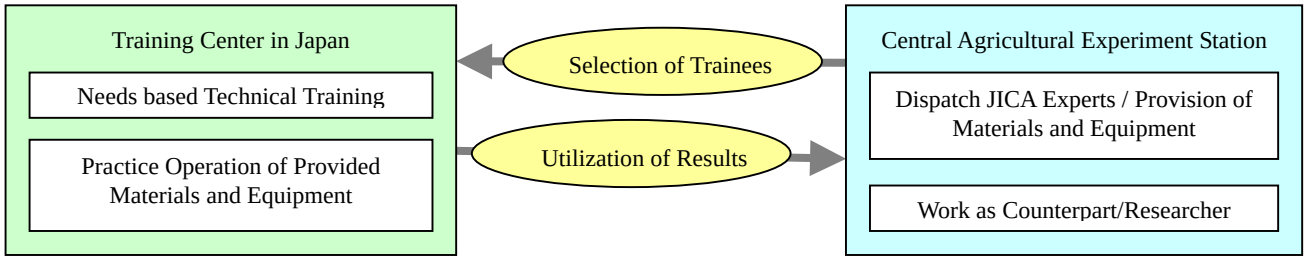
Central Agricultural Experiment Station

In this article, we would like to examine a case in Afghanistan, as a tentative suggestion for ensuring coordination between technical cooperation and training activities in Japan. Afghanistan used to be an agricultural nation with approximately 80% of the country's labor engaged in the agricultural sector. However, due to drought and the destruction of irrigation facilities during the civil war, agricultural production declined sharply, and the country is currently dependent on foreign food aid. The Japan International Cooperation Agency (JICA) began its assistance in Afghanistan with urgent support for the emergency recovery of agriculture in Kandahar. JICA then implemented programs focusing on the reconstruction of irrigation systems, farming and livestock husbandry, as well as on environmental improvement in farming areas. As part of the JICA supported program to strengthen agricultural research in Afghanistan, work is on-going to consolidate the basic programs of the Central Agricultural Experiment Station in Kabul. As there were no technicians for many years due to the closure of research organizations and the termination of their activities, there is a total lack of technicians in the country. Therefore, it is essential to improve capacity of researchers and technical instructors who will lead the experiment center in future.

With this background, we examined the possibility of linking this technical cooperation project and the JICA training programs in Japan. At present, JICA is dispatching specialists as part of the technical cooperation program and providing equipment to the center. In addition, if this assistance can be combined with capacity development of specialist technicians as part of the training program in Japan (e.g. country-focused special training), the objective of the rehabilitation of the Experiment Station will be achieved more quickly and effectively.

Staff of the Central Agricultural Experiment Station in Kabul have already participated in training courses in Japan. By linking technical cooperation projects abroad and training programs, it makes JICA's cooperation activities more consistent. This coordination also has the following concrete benefits, and it will definitely lead to a speedy increase in, and stabilization of, agricultural production in Afghanistan.

- Under the technical cooperation project for the Central Agricultural Experiment Station in Kabul, it is possible for Japanese experts and the counterpart team to formulate a basic program to strengthen comprehensive agricultural experiment and research, as well as to strengthen extension programs.
- Based on the formulated programs, it is possible to examine the details of necessary training contents, and to select appropriate training subjects and target trainees for the needs.
- In the country-focused special training sessions in Japan, it is possible to provide focused training on different experiment methods for cultivation and water saving irrigation, as well as extension methods, which the participants are expected to use after returning to their country.
- It is possible to provide training in Japan on the operation of equipment that is procured under the technical cooperation project, promoting responsible and professional utilization, and maintenance of provided extension materials and equipment.
- When the participants go back to work under technical cooperation projects, they can fully utilize what they acquired during the training. In other words, follow up activities of training programs are automatically implemented under technical cooperation programs.



As mentioned in AAI News Vol. 48 in which we summed up our training series, we consider that it is extremely important, in JICA's training programs, to select the right participants and to determine the needs-based training contents. This coordination with technical cooperation projects also assists training program organizers in securing appropriate participants and in slim-lining training contents. In addition, the coordination benefits technical cooperation projects, as it is possible to suggest appropriate training subjects that are needed for counterparts in projects. This in turn leads to the enhancement of necessary techniques and skills by counterparts, and many other ripple effects are expected through participants returning to their countries after gaining an understanding and affection for Japan through their stay there. The technical cooperation project in Afghanistan introduced here is only one of many projects. The coordination between technical cooperation projects and training activities would increase the effectiveness of many other projects and training programs. I hope that this example in Afghanistan will make a good case for the complementary functions of technical cooperation projects and training programs in Japan.

Coordination between Technical Cooperation and Training Activities

Part 4 – Emphasising third country training (A case study in the field of agriculture of arid areas)

In this article, we focus on co-operation activities that involve "third country training" whereby activities are conducted in a country that has a similar environment in terms of nature, agriculture, culture and/or language to those of the trainees. The strength of this training modality is that it is easier for trainees to apply the knowledge and technology they learn from the training, on their return to their home country. In particular, we would like to make suggestions with examples of courses that target arid and semi-arid areas. Farming areas have been expanding in the world to feed an ever increasing global population. It is a critical challenge to produce sufficient food in areas with severe environmental constraints. One third of the world's land surface is arid or semi-arid. Although, in these areas, it is possible to utilize abundant solar energy, there are many environmental limiting factors such as extremely high temperatures and dryness, as well as highly limited water resources. Farming in arid and semi-arid areas constantly holds problems such as over exploitation of ground water and soil salinization. Therefore, it is necessary to ensure sustainable resource management; e.g. appropriate land use to ensure a good balance between farming and livestock husbandry, effective water resource use through introduction of water harvesting agriculture and other appropriate methods, and the crop production through the introduction of water saving technologies. It is also essential to consider the effective use of local resources including water, soil and biomass. Given this situation it is expected that the need to train people who can lead future agriculture development in arid and semi-arid areas will become increasingly important. It is crucial to ensure that the human resources in this field have a good understanding of basic cultivation techniques, as well as acquired application technologies for resource management in arid environments and for the effective utilization of local resources.

Presently, AAI is participating in a third country training program on water management techniques in irrigated farm lands that targets trainees from Iraq. This training program includes training sessions provided by counterparts in the water saving irrigation technology project currently implemented in neighboring Syria as part of the framework to promote regional co-operation. This has enabled Iraqi trainees to effectively learn, in Arabic, the irrigation technologies operating in similar environmental conditions in a different country. Moreover, through teaching, the Syrian counterparts can also enhance their understanding about the technologies. This benefits both Syrian and Iraqi participants. From our experiences, we would like to suggest the following training program.

Suggested coordination with third country training programs in arid agriculture field

Identification of arid area research and training institutions, Mutual support, Identification of good projects

Training in Japan	Mutual support	Third country training
Learning basic cultivation technique	⇒	Understanding of limiting factors in arid environments
Learning problem solving methods	⇐	Selection and application of adaptable techniques

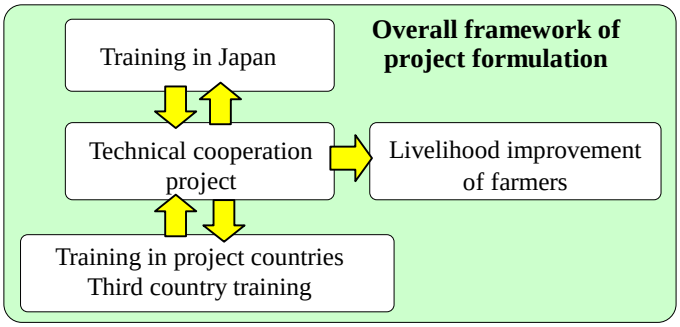
Although it is difficult to re-create arid environment for the training courses held in Japan, these types of courses serve as an effective means for trainees to acquire general cultivation techniques, for them to be exposed to contents of research, and to visit and experience organizational activities such as those practiced by agricultural co-operatives. Possible training subjects include acquiring basic knowledge of cultivation techniques in irrigation agriculture in arid areas, details of drip and sprinkler irrigation methods for water saving, and learning calculation methods for crop water requirement. In addition to various lectures based on our experience in vegetable cultivation courses, irrigation courses and country or region specific training courses, we can introduce issues related to arid agriculture research in Japan and vegetable cultivation in sandy soil. On the other hand, in third country training programs, it is possible to conduct training under similar climatic conditions. Therefore, it is possible for trainees to understand the reality and problems of crop cultivation under arid conditions and to select and apply adaptable techniques to solve these problems. Hence it is expected that third country training courses can enhance the basic abilities acquired during training courses in Japan.

Location of third country training programs is secured in partnership with organizations that have the capacity to co-operate with JICA. Working with these organizations, supplementary training courses will be organized in third countries. The courses will include reconfirmation of knowledge and techniques acquired in a related training course in Japan. Candidate organizations include the ICARDA and the ICRISAT under the umbrella of the CGIAR, and the ACSAD, a research organization in the Arab regions. Moreover, government agencies in various countries and research centers established by JICA as part of its technical co-operation activities in countries such as UAE, Oman and Turkey would also be strong candidates. Other promising candidates are NGOs such as the permaculture organization FAMBIDZANAI and ACHRM (Africa Centre for Holistic Resource Management), both of which offer training courses in Zimbabwe. It is important to contribute to training of agricultural development personnel in arid and semi arid areas, in co-operation with these groups. As Japan is not really on the cutting edge of arid region research, third country training programs in collaboration with arid agricultural related organizations in third countries can not only train technicians in those countries but also play a role in nurturing Japanese researchers in arid area studies.

Coordination between Technical Cooperation and Training Activities

Part 5 – Compound Program Type

Examples we have introduced so far in this series, such as follow-up type coordination, coordination with technical cooperation project and third country training, are based on the improvement or combination of existing schemes. However, in practice, it is recommendable to promote project development based on local needs. Such project development should not be constrained by existing schemes and should promote a comprehensive approach encompassing various types of technical assistance and training activities. In the past, development studies and counterpart trainings as part of technical cooperation projects were add-on activities with a separate budget. In recent years, these activities are programmed from the on-set as part of planned projects. It proves that the importance of coordination between technical cooperation and training activities are increasingly being recognized.



Here, we would like to propose a form of compound program type cooperation, which is a technical cooperation project which integrates training activities in its plan from the project formulation stage. As a case study, I would like to look at a livelihood improvement program through improved fruit cultivation techniques in Central Asia. According to the report from the Agricultural and Rural Development, Training Needs Assessment for Tajikistan and Uzbekistan, fruit cultivation is suggested as one of the possible appropriate training courses for these areas. Under the climatic conditions in Central Asia, there is indeed good potential for production of high quality fruits. Grapes produced in Tajikistan fetch higher prices than the average grapes, and saplings of deciduous fruit trees are exported to neighbouring countries. Therefore, it is extremely important for the area's agricultural development to increase productivity and stabilize production of fruits by improving cultivation techniques through identifying limiting factors in fruit cultivation.


Greenhouse fruit cultivation (Tajikistan)

With this background, implementation of a program in Central Asia is considered to be highly promising, aiming to improve livelihood of fruit producers through improving product quality and stabilizing production. This would be possible by promoting appropriate soil management for fruit production and achieving sound quality management through introduction of pest control, pruning and thinning out of fruits. In this case, during the project formulation stage, a situation analysis would be undertaken and a cooperation field would be confirmed. For implementation, consideration should be given to the possibility of integrating training activities aimed at acquiring basic techniques of fruit cultivation into the technical cooperation project. By promoting various schemes efficiently and holistically, more effective cooperation programs can be implemented. In addition, when promoting this kind of integrated program, the following considerations should be born in mind.

- Efforts should be made to identify training needs during the project formulation stage;
- Position of training and its role should be clarified in project implementation;
- A clear demarcation should be made between training activities in Japan and in the project countries;
- What is expected of training activities in Japan should be clarified and a necessary system should be set up to be able to offer what is needed.

In short, during the project formulation phase, one should not only conduct fruit cultivation situation and needs analysis, but also should explore a concrete development plan, in collaboration with relevant government institutions in project countries, which would play a central role in improving fruit cultivation techniques in the country concerned. Moreover, there is a need to investigate a human resource development plan which would be necessary for implementing a development plan. Then, after a full examination of what types of technical training targeting which fruits can yield desired results, a cooperation program for achieving these results should be suggested and agreed upon. The program design would place a technical cooperation project and training activities in Japan and in third countries as required. In particular, in implementation of training courses in Japan, we would explore the possibility of running a "Fruit cultivation course for the Central Asia Region". For this, cooperation needs to be consolidated for organic collaboration between various institutions such as the JICA training centers, universities and fruits experimentation center.

Coordination between Technical Cooperation and Training Activities

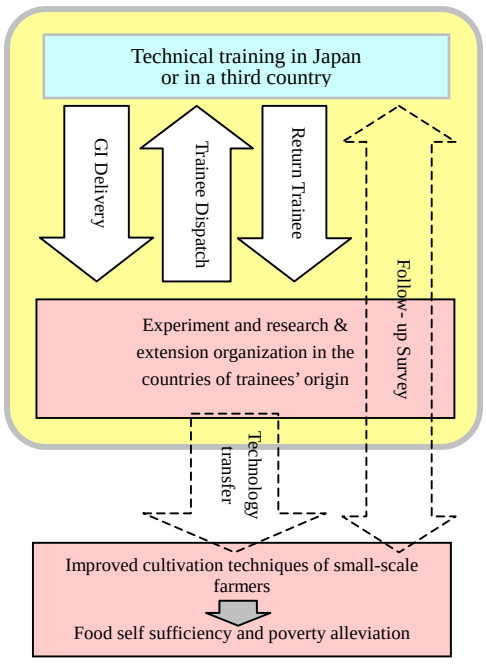
Part 6 – Future Development (Last in the Series)

In this series, we have introduced various cooperation types, which can be summarized as follows. In actual training and technical cooperation activities, coordination is promoted making use of different types of features and exploring the potential for combining these different types. However, the most important point here is to keep in mind our perspective of farmers' lives and the places of production in developing countries. In other words, it is not enough to only provide training activities in order to enhance trainees' technical capacity. Cooperation activities have to include an element which looks beyond the training activities to create a conducive environment for the trainees to utilize the techniques they acquire through a training program. We would like to have a closer look at this point, using the example of the Training Course on Vegetable and Upland Crops Cultivation Technique for Southern African Countries that AAI organized in the past.

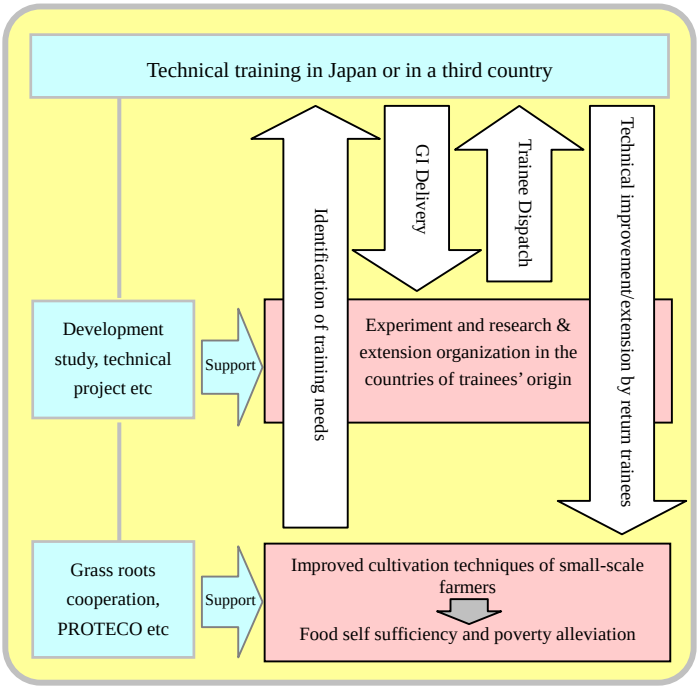
Coordination Type	Features
Follow-up Type	Increases the effectiveness of training and capacity building program, and contributes to formulation of a project that addresses the needs of the beneficiaries.
Coordination with Technical Cooperation Project	With the complementary functions of the technical cooperation project and training activities, it is possible to implement activities that are beneficial to both.
Third Country Training	As training is conducted in an environment similar to that of trainees' home countries, it is easier for them to apply the knowledge and techniques acquired in a training program in their own countries.
Compound Program Type	By promoting various schemes in a comprehensive manner from the project formulation stage onwards, effectiveness of support can be enhanced.

The ultimate objectives of the Training Course mentioned above were the improvement in food self-sufficiency and poverty alleviation. These were to be achieved by supporting small-scale farmers in running a commercially viable farming business through improvement in their vegetable and upland crop cultivation techniques. In order for the trainees to be able to adapt the techniques which they learnt in the training program, it was essential to improve techniques and ensure sustainable extension of the improved techniques. At this stage, implementation of improvement and extension activities were the responsibility of individual trainees. Although their action plans showed their eagerness to put what they learnt into action, further support for the trainees' activities in their countries was not part of the whole program. Even if a follow-up survey might emphasize the importance of technical extension on the ground by the trainees, any support targeting farmers has to be developed as a new and different project.

On the other hand, if it is designed from the beginning in a way that a technical cooperation project or a grass-roots cooperation project forms part of the training program, it must make it easier to identify real training needs on the ground, and to implement technical improvement and extension activities responding directly to local situations, by trainees in their home countries after a training program. In summary, considering the effectiveness of conducting training and technical cooperation in a comprehensive manner, it is clear that, ideally, training activities and technical cooperation activities on the ground should be implemented with an organic coordination between them as described in the following diagram.



Current organization of technical training



Desirable coordination between technical training and technical cooperation