

Coordination between Technical Cooperation and Training Activities

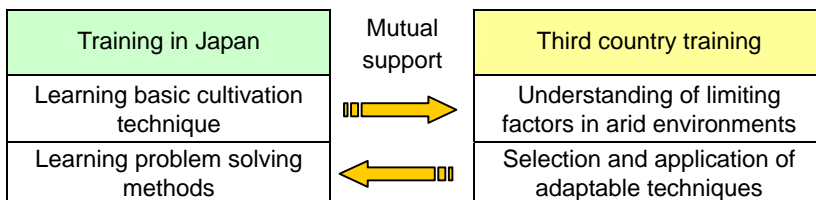
Part 4 – Emphasising third country training (A case study in the field of agriculture of arid areas)

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



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.