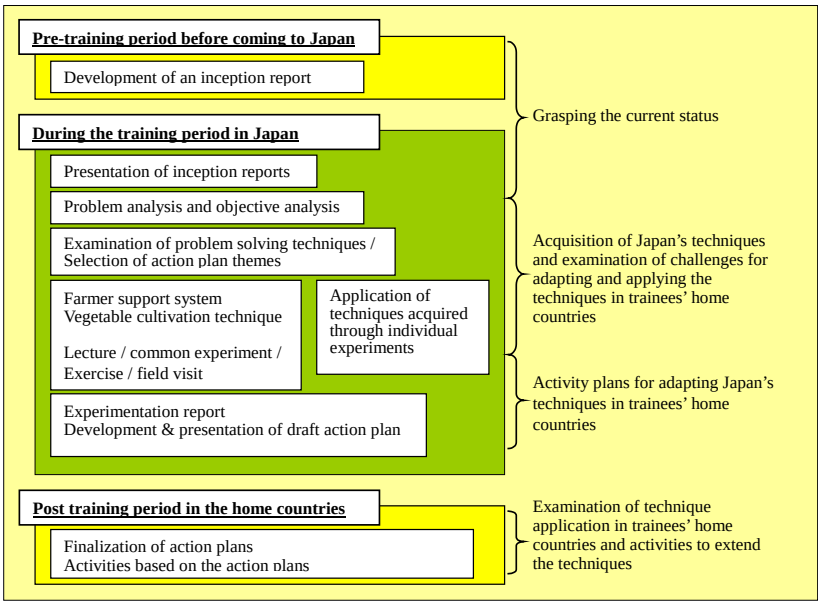
Are Japan's cultivation techniques and the wisdom of creative Japanese farmers applicable?
– Case study of training activities at Tsukuba International Center -

Part 1: Introduction

The objective of the vegetable cultivation technique training course in Tsukuba International Center (TBIC) is to develop human resources that will establish and extend vegetable cultivation techniques in their native countries, acquiring and adapting the comprehensive techniques of vegetable cultivation in Japan. The AAI, through our long years of experience in supporting farming, land use planning and agricultural extension activities in developing countries, believes that experiments and research for appropriate techniques in developing countries and improvement of practical capacity of technicians, who communicate the experiment and research results to farmers at local level, are extremely important. Therefore, we develop training curricula which present Japan's cultivation techniques systematically, including their development processes, and facilitate trainees to be able to acquire as many of the techniques as possible. We also provide many opportunities to be exposed to the techniques of creative farmers, in order for the participants to learn how individual farmers devise and incorporate various techniques in their farming practices in a different environment.

Japan's cultivation techniques, which are the core of the training curriculum, are scientific and rational techniques and skills, as they are results of rigorous research and experimentation at national and prefectural institutions. This means that even though environmental conditions differ from country to country, by appropriately applying basic scientific theories, good results can also be obtained in developing countries. On the other hand, the techniques, wisdom and knowledge of creative farmers are technological systems formed under particular environmental conditions, and they are often dependent on individual skills and capacity. However, it is still hoped that the views and thinking of experienced farmers will provide useful clues for problem solving in developing countries.



Conceptual Diagram of the Vegetable Cultivation Technique Course

If problems in developing countries are merely due to insufficient technology, they can be solved by the transfer of advanced technologies. However, in reality, problems tend to be much more complicated. Issues surrounding agriculture in trainees' home countries differ and therefore one cannot simply apply Japan's techniques and the wisdom thus acquired in the training courses in their own countries. In order to be able to utilise acquired techniques, it is necessary to select techniques that fit in local situations and circumstances and apply and adjust the selected techniques accordingly. In order to make it easier, in our training, we avoid one-way communication about Japan's techniques. Rather, we start with the compilation of an inception report by the trainees, introducing the characteristics of agriculture in their home countries and introducing the structures and activities of their host organisations. The training also includes individual experimentation to find appropriate techniques to solve problems that each trainee's organisations are facing, as well as conducting collective experimentation to enhance trainees' understanding on various cultivation techniques. Furthermore, participants develop action plans to prepare for the application of techniques they have learned in the training in their own countries. Through this series of training, trainees try to acquire techniques and theories that have application in their countries.

We have introduced these efforts several times in AAI News. However, we have not touched upon the details of Japan's techniques that were taught in training courses. JICA's agricultural technique training is provided not only in Japan, but also overseas in the form of development survey projects and technical cooperation projects. From this perspective, it is beneficial to share information from Japan and oversea training activities, likewise the sharing of information between different training activities. Therefore we think that introducing cases in Tsukuba could provide useful clues to various activities overseas. In this series, we will first introduce problems trainees face in their own countries and examples of Japan's techniques that can be applied to tackle and address the problems. In addition, we would also like to introduce local activities by our trainees in their home countries, and examine challenges in extending Japan's techniques overseas.