Improvement of vegetable cultivation course: AAI's effort to link abroad experience and training in Japan <Part 1>

Introduction

Training in JICA Tsukuba

As we have previously introduced in AAINews, AAI has been conducting training courses on cultivation technologies including vegetable and other field crops, and upland rice, at the JICA Tsukuba (Tsukuba International Center).



Harvesting cabbage during a vegetable cultivation course

The vegetable cultivation courses are part of the core training courses of JICA Tsukuba, along with irrigation and drainage, rice cultivation, and agricultural machinery courses. The courses are about 9 months in duration, comprising lectures and practices on vegetable cultivation and visits to related organizations and farmers. In recent years, in addition to cultivation technology, emphasis is also placed on extension methods and marketing fields.

Vegetable cultivation and extension / marketing

Typically, participants are agricultural extension staff, researchers, university lecturers and NGO staff. As their vegetable cultivation experience varies and each country has different circumstances and challenges, it is necessary to respond to each participant's needs in an individual fashion.

How participants make use of what they learn during training in their own countries and professions is important. Given this, we are placing an increasing emphasis on the theme, "technology and extension, and experimentation and research".

Furthermore, it is important to consider agriculture in terms of selling products. This requires participants to learn how to understand market needs, commodity distribution and sales systems, and effective marketing, through visits, lectures, and practices.

Utilizing experience abroad in training in Japan

In vegetable cultivation courses, AAI staff members are

in charge of organizing and leading lectures and practices regarding extension and marketing. Our course ensures that AAI staff can use their ground experience in developing countries in training work so as to ensure that participants will be able to utilize their experience during the training sessions in their work in their home countries.

For example, we develop training materials based on our knowledge and experience in extension projects which we have implemented overseas. In this way, we can deliver lectures and practices that can directly help application of training results in their extension work in their own countries. In addition, we can apply the methods for facilitating and conducting lectures and practices which we experience thorough the JICA Tsukuba training in similar work which we may engage in abroad.

Case studies

In this series, we will introduce the following case studies from various lectures and practices led by AAI staff as the lecturer within the JICA Tsukuba vegetable cultivation courses.

Subject (Focal Staff)	Summary
Local application and	Share among participants the capacity that is
extension of useful technologies (Zaitsu)	required for extension staff through the CUDBAS workshop. Conducting lectures and practices aiming to effectively extend useful technologies that meet farmers' needs. This will include information collection methods using the five senses and body, methods for developing extension manuals, and fertilization improvement technologies using locally available resources, among others.
Crop production and irrigation (Nakayama)	Lectures and practices on irrigation technologies that are essential for increasing crop productivity. Conducted various practices on basic knowledge on soil physics and agricultural meteorology, irrigation methods and irrigation efficiency, irrigation schedules and crop water requirements (CWR), irrigation channel water flow estimations etc.
Extension of irrigation technologies and data collection and utilization methods for extension (Koto)	Introduction of impact of irrigation on crop production, challenges caused by irrigation, and introduction to necessity of water saving. Lectures on water saving irrigation technical cooperation projects in Syria, and practices, and planning and implementation modalities for effective extension activities. Lectures and practices on use of basic date for extension and farmer survey methods to collect data, development of survey questionnaires.
Marketing methods (Koga)	Using a case study on marketing training conducted as part of the Sudan and the Palestine technical cooperation projects, conducted a group classification exercise following the marketing tool 4P (Product, Price, Place, and Promotion). In addition, analysis of classification results based on participants' own experience and knowledge was conducted to be able to make suggestions to improve technical cooperation project activities, aiming to nurture participant's implementation and application capacity.