## Cooperation in the Training for JOCV Volunteers

The non-profit organization "Nature School Terakoya" has been working enthusiastically on a variety of activities as part of its mission to leave important natural resources globally for future generations based on the principles of coexistence. The supplementary technical training for JOCV volunteers is one of the meaningful activities that the Nature School has been implementing on a continuous basis. There are 6 participants in the training for the rural development volunteers. Their assigned countries range from Uganda and Kenya to Bolivia. All the volunteers are due to be working on water use and management issues in the farming community. The training theme was set as "water management". The 2-week training program took into consideration the reality that many participants never had a chance to experience agriculture or irrigation. Given this, it included a field visit to farmers in the Kanra-tano land improvement district, and practical sessions, with assistance from local people using the Nature School's network.



Trainees are lectured about the land improvement district

AAI took part in the training delivering a lecture on "general issues on irrigation". While preparing for the lecture, we started wondering how we could teach the young people about "irrigation". Irrigation is said to have triggered the rise of ancient civilizations and it has been an important technology for our livelihood for millennia, however, it does not really catch our attention. We struggled to see how we could best communicate the overview of irrigation and current issues surrounding the technology.

Irrigation is a series of artificial actions for supplying additional water when crops need. However, it is not very helpful to just start explaining further about irrigation by saying "the necessity of irrigation is obvious." We then thought it would be good to start with the major premise of nature that "crops cannot survive without water." The basic source of water for crops is rainfall. Humankind grew crops by rain-fed agriculture in a particular region. Irrigation started from the pressing demand for increased precipitation. This desire started the idea for irrigation. We decided to place emphasis on the course of the development of irrigation.

In order to maintain stable irrigation, one needs some kind of physical device to control water (an irrigation system). We advised the trainees to imagine that they were farmers who needed to start irrigation and think how they can solve the problem. Then they can actually go through the process of planning and making decisions on the establishment of an irrigation system. Therefore, we decided to explain the "economics of irrigation", touching upon factors for decision making such as irrigation size and maintenance standards of an irrigation system, considering convenience, benefits and costs.

The reality is that even existing irrigation systems, which were developed as being economically viable, are facing a number of problems related to administration and maintenance. We cited some of these lessons and explained that an irrigation system does not only have to be economically viable but also socially sensitive. When considering socially sound irrigation administration, small irrigation systems have an advantage as it is easier to ensure cohesion among the farmer users. We mentioned that small scale irrigation systems have been attracting attention in recent years. In addition, we also touched upon the recently predominant opinion that the participatory approach is a useful method for the management of irrigation systems.

Along these lines, we conducted the lecture on irrigation. Our 2.5-hour lecture ended without problems, and maintained the participants' interest. As the target trainees had a wide range of backgrounds including social sciences, the training made us realize the importance of discussing the holistic the picture of irrigation. We feel that we, too, gained a lot from this training course. (By Matsushima)