

## Starting Support Activities for Farmers in Ushimado, Okayama

We tried to brainstorm on the subject, digging up information and knowledge from agricultural fields in Japan, to explore ways to utilize this knowledge in overseas assistance, and to explore how AAI could support Japanese agriculture.

As part of AAI's effort to support domestic agriculture we have been discussing the issues surrounding the activities of community producer groups and collaboration between regions with farmers in Ushimado, Setouchi City, Okayama. We introduced this in the series. As with many other farming villages, the Ushimado area is facing the challenge of an aging population and a shortage of successors and as a result abandoned farmland is on the increase. This said, some new young farmers have arrived in Ushimado. We visited Ushimado to meet them, experienced farming work with them and discussed and recorded various challenges they face in the local farming scene. Our participation in the symposium "Serious Talk About Agriculture" organized by the Ushimado community organization "Association of Agriculture for the Future" in 2008 and 2009 proved really helpful for our activities.

Symposium-2010 was held on the grounds of the Kouboji Temple and its main theme was "The Succession Problem and Newly Incoming Farmers". It was attended by around 60 people including farmers, students, teachers, extension officers, government officials and people from the private sector. There were presentations made by them followed by question and answer sessions. New farmers explained their motivations for entering farming and talked about the current farming situation. The students made presentations on agricultural policies, community involvement in reservoir utilization, and reported on their research into students' attitudes towards farming as a profession. Researchers made a presentation on current issues related to agricultural policy and the use

of media for the promotion of agriculture. The private sector reported on their efforts to enter into new fields in agriculture, and active discussions took place. In particular, the presentations from the young farmers were very realistic and practical, stating their reasons for becoming farmers, their enthusiasm and also the difficulties they faced. Many of the students had been participating in an on-site training program prior to the symposium, and therefore there were a lot of animated discussions about the hardships and joys of farming and about the future potential for agriculture as a profession.

An ex-AAI employee, engaged in organic vegetable production in Ushimado, supported our efforts to collaborate with the local farming community. As an achievement of our exchanges with him and his colleagues, and as a result of our participation in the symposiums, AAI established a training center called "Ayn" jointly with the association. Ayn has two rooms for over-night stays, a storage room and a meeting room equipped with a computer and projector for presentations. Our intention is that Ayn will offer a place for meetings and informal gatherings for farmers in the area and accommodation for participants on training sessions, as well as to be used as a base for our activities within Japan. We hope to further consolidate the facility and continue to use it in order to promote our exchanges with the community.

The establishment of Ayn marked the start of a new phase of AAI's activities. We also consider it as an achievement of our work to be involved in Japan's agricultural development. For we, who have a limited chance to be involved in actual farming activities on site, the use of this training center provides us with opportunities to stay in touch with the reality of agriculture in Japan. It is also an important place for our own training, our exchanges with farmers and for thinking about the challenges Japan's agriculture faces. It is perhaps a small initiative. However we hope to make it a big step towards the success of our future activities.



The Ushimado Training Center known as "Ayn" (logo top left)



Inside the facility of the training center Ayn



At the "Serious Talk about Agriculture!" symposium

## Close friends from far countries <Part 2>

### AAI's training follow-up program

#### Activities of ex-participants

As discussed in the previous issue of the AAI News, we visited Malawi and Zambia in July to see post-training activities of the participants. We selected the southern African Region, because there are quite a number of ex-participants from our courses in JICA Tsukuba, and we focused our visit on ex-participants who have maintained regular contact with AAI trainers. In this issue and the next issue, as much as page space allows, we would like to explore some future challenges and possible solutions by introducing the current activities of selected participants.

In Zambia, an ex-participant is organizing irrigation groups to teach beneficiary farmers about irrigation systems. After his training, he studied in the Netherlands for a short time, and is now working as a middle-level officer for land use management. He has been actively exchanging e-mails with the AAI trainers, suggesting the idea of starting a project to distribute vegetable seeds through the establishment of a seed bank. Therefore, we were looking forward to seeing him during this visit.

He was working on the organization of irrigation groups and the development of a water distribution plan; a model project to achieve stable vegetable production through the introduction of irrigation technology. He was also providing technical support aiming to increase the cash income of farmers, making full use of various seedling production and vegetable cultivation techniques that he learned in JICA Tsukuba. He indicated that the biggest future challenge facing him was ensuring the supply of high quality vegetable cultivars and seed distribution. The ex-participant seems to be looking for financial, rather than technical, support.

The next visit was to an ex-participant who is working on NERICA extension. We have introduced our NERICA related work in a series in this newsletter entitled Rice Cultivation in Africa. NERICA has been one of the foci of the series. Naturally, situations surrounding agriculture differ greatly from country to country in Africa. In Malawi and Zambia which we visited this time, NERICA has been attracting much attention.

Although Malawi is not a Coalition for African Rice Development (CARD) priority country, traditional paddy rice cultivation prevails in lowland wetlands along the shore of Lake Malawi which are known as the "dimba". However, as even the dimba is occasionally hit by drought, development of a new drought-resistant strain of NERICA has been trialed using the variety selection tests conducted by the ex-participant, and several new varieties have been examined as possible

candidates for extension. What is very interesting, talking to the ex-participant, is that NERICA is considered as a possible variety for crop development for the intermediate zone between dimba and munda (farmland) which is currently underutilized.

Malawi's staple is maize which is the top crop in terms of both production and consumption. However, from the viewpoint of dispersing risks, departure from the maize based monoculture farming system and crop diversification has been an important policy issue. NERICA seems to be expected to be considered not only for dimba but is also expected to become a niche crop that can be grown in the currently un-utilized or under-utilized intermediate zone in the future. The ex-participant was a researcher in the breeding field, and said that propagation and establishment of a stable supply of NERICA seeds is the immediate challenge. However, the cultivation techniques of the upland variety in the un-utilized and under-utilized intermediate area have not been established. Neither has the crop rotation system, including the upland rice variety. In order to develop these techniques, critical challenges remain such as the establishment of a crop rotation system and establishment of sustainable farming techniques underpinned by organic material circulation based on cooperation with livestock farming. We are thinking that our company may be able to provide technical support for the development of these farming techniques as NERICA's extension continues.



An ex-participant (Upland rice course) from Malawi: He is promoting superior variety selection of NERICA in his country.

An ex-participant organizing farmers' groups and teaching them vegetable cultivation.



Stable vegetable production using an irrigation system: Products are collectively shipped to nearby markets.

## Rice Cultivation in Africa <Part 5>

### Training course on Upland Rice Variety Selection Techniques for Africa

The training need in this field has increased dramatically, with a vision to double the rice production in Africa being agreed at the TICAD IV, and with the formation of the Coalition for African Rice Development (CARD). This led to JICA's decision to continue the training course for a further three years from 2009. The AAI has been commissioned to conduct the training courses. In October 2010, eight participants from eight African countries were being trained and a total of five training sessions have been conducted.



This course aims to promote cultivation of the upland NERICA rice cultivar developed by the Africa Rice Center. To promote NERICA it is necessary to advance different techniques

for variety selection test, seed production and variety dissemination. In this course, practical sessions are incorporated in the curriculum particularly focusing on the variety selection test. When participants arrive in Japan in late July, it is the time for heading for early upland varieties. Therefore, the practical sessions start with the examination of heading. After that, participants complete practical sessions on examination of the maturation and yields. In the latter part of the training, participants learn methods to calculate yields from raw data (yield components) and statistical analysis. Although August is out of season, using another training plot, participants learn planting field design, seeding methods and examination of germination. In addition, they learn about seed production, through lectures and field visits. Furthermore, we prepare a test field that contains different varieties to teach, through roguing practice, techniques to remove off-types. There are only a few experts on upland rice varieties in Africa. It is important to develop human resources that can put these basic techniques into practice in planting fields.

Among the three rice cultivation related training courses offered at JICA Tsukuba, this is the only course that deals with upland rice varieties. However, there is a limit on how much one can master within the three months of training. There are many useful techniques that would be beneficial for African technicians. These include upland rice variety cultivation techniques used by farmers in Ibaraki Prefecture and methods

for trial cultivation to determine the optimal amount of fertilizer application and planting densities.

In AAI News No. 65, we reported that the majority of the participants between 2006 and 2008 were from eastern and southern African countries and that there was a discrepancy between the participants' home countries and countries targeted by the CARD. To rectify this, in the training courses conducted from 2009, participants were mainly drawn from the CARD target countries and the number of participants from West Africa increased. We pointed out that most of the CARD target countries are Francophone. However, the participants from the five Francophone countries who were accepted in the training courses so far had sufficient understanding of English and there have been no major language issues. There are still many CARD target countries that have not been part of the training courses. It is recommended to actively take participants from new countries in particular in the West Africa Group 1, if English speaking participants can be identified (table 1).

In the training follow-up activities introduced in the article entitled "Close Friends from Far Countries" in AAI News No. 70, we could confirm that the ex-participants from the country were working on rice variety selection techniques using the knowledge and skills gained in the training course. Their activities were supported by the local JICA office. We also received a report that the action plan developed by ex-participants from Cameroon during the 2009 training course has been officially approved at their workplace and is to be implemented from 2011. Since the establishment of the CARD, support for rice production in Africa has become active and many countries have finalized national strategies for increasing rice production. As these projects get implemented, it is expected that there will be more opportunities for the participants to actually use what they learn on the JICA training course in the field in their own countries.

Table 1 Nationality of participants for the upland rice variety selection techniques for Africa

| Region  | CARD category | Country         | Number of |           | Region  | CARD category | Country           | Number of |           |
|---------|---------------|-----------------|-----------|-----------|---|---------------|-------------------|-----------|-----------|
|         |               |                 | 2006-2008 | 2009-2010 |   |               |                   | 2006-2008 | 2009-2010 |
| West    | Group 1       | Ghana           | 1         | 2         | East  | Group 1       | Kenya             | 2         | 0         |
|         |               | Guinea          | 0         | 0         |   |               | Tanzania          | 6         | 1         |
|         |               | Mali            | 0         | 0         |   |               | Uganda            | 3         | 2         |
|         |               | Nigeria         | 2         | 1         |   | Group 2       | Ethiopia          | 2         | 0         |
|         |               | Senegal         | 0         | 0         |   |               | Sub total         | 13        | 3         |
|         |               | Sierra Leone    | 1         | 2         |   |               |                   |           |           |
|         | Group 2       | Benin           | 2         | 2         | South   | Group 1       | Madagascar        | 0         | 1         |
|         |               | Burkina Faso    | 0         | 2         |   |               | Mozambique        | 2         | 0         |
|         |               | Cote d'Ivoire   | 0         | 2         |   | Group 2       | Zambia            | 0         | 1         |
|         |               | Gambia          | 1         | 1         |   |               | Non-CARD priority | 4         | 0         |
|         |               | Liberia         | 0         | 0         |   | Zimbabwe      | 4                 | 1         |           |
|         |               | Togo            | 0         | 0         |   |               | Sub total         | 10        | 3         |
|         |               | Grand total     |           |           |   |               | 30                | 20        |           |
|         |               | Sub total       |           | 7         | 12  |               |                   |           |           |
| Central | Group 1       | Cameroon        | 0         | 2         | Note: All the four participants from Benin were from the JICA expert's at the Africa Rice Center (formally WARDA). One out of the four participants was a Benin national. |               |                   |           |           |
|         | Group 2       | D R Congo       | 0         | 0         |   |               |                   |           |           |
|         |               | Cetral Africa R | 0         | 0         |   |               |                   |           |           |
|         |               | Rwanda          | 0         | 0         |   |               |                   |           |           |
|         | Sub total     |                 | 0         | 2         |   |               |                   |           |           |



## Bridging training and extension activities <Part 4> Implementing training courses that are useful for extension activities

When we started the virtual technique extension meeting preparation process, we provided the following explanation to the participants to begin with, in relation to the objectives of the training and proceedings of the meeting; the scene set in the virtual meeting is: a new technique ready for extension has been developed at an experimental station in prefecture A. Through the technique extension meeting, the new technique is to be transferred to extension officers in different areas so that they can start actual extension activities.

In this training, the participants are divided into two groups. One group aims to transfer established techniques to extension officers. The other group's job is to extend the technique to farmers. The objective of the virtual meeting is to learn about extension activities through presentations and questions and answers in role playing.

The first group dealt with a new training method for watermelon. At the meeting venue, tea and sweets were provided. Information materials with presentation summary and an easy explanation of the new training method with diagrams were distributed. The presentation was made using a power point projector. Possible questions from farmers were also considered and dealt with including relevant items in the presentation evaluation sheet. These included questions such as notable characteristics of the technique, the difference between the new technique and the existing techniques, and the economic advantages. The second group used an imaginary technique related to the planting density of potatoes. In this group, no information materials were provided. The presentation was done using large paper sheets showing in large letters the presentation summary and the results of the use of new techniques, which were put up on the blackboard. A diagram showing the changing distribution of sizes of crops resulting from differing planting densities was very easy to understand using different colors in a tactical manner, and full consideration was given to supporting the easy understanding of the audience.

In this training course, we teach that verification work for improvement and introduction of appropriate techniques should be done through experimentation and research. However, extension activities of improved techniques are left to individual participants. Our concern has always been how the participants can be supported to perform their extension tasks given that we cannot directly assist participants' work in their countries after the courses. Many of the participants are extension officers. If we can create opportunities for sharing their knowledge and ideas pertaining to extension activities, it would help their work after returning home. Therefore, we trialed the virtual

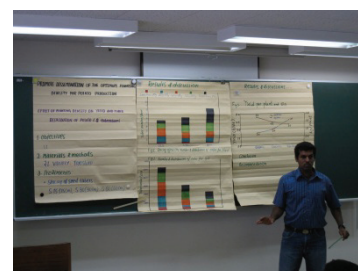
technique extension meeting, using role play and preparatory meetings in small groups, as part of the training program. In implementing this training program, in order to ensure that those participants can clearly picture the process in the program and role play for the presentation part, it was essential to enhance the participants' understanding on the purposes of the training and procedures for implementation. Fortunately, the process went smoothly due to the participants' prior experiences in similar extension activities.

In order to bring out individual participants' knowledge and experience and to promote effective sharing with other participants, the following points were important for us, as the trainers: (i) to be a good listener, (ii) to create the atmosphere and opportunities for every member of the group to speak in the meetings without hesitation, and iii) not to limit the time in the initial meeting and ensure mutual respect and listening to one another's opinions. From the 2nd meeting, a leader naturally emerged in each group who could facilitate subsequent meetings. However, it was also important for the instructors to observe the discussions and steer the discussions to an agreement supported by the majority rather than influenced unduly by opinions of group members with loud voices. It was also felt that the instructors need to provide resourceful judgment based on varied professional experiences in order to nurture participants' ability to devise their own presentation methods and make concrete preparations in the program.

In the training involving small group meetings, a sense of unity emerged among the participants through mutual support. Small group discussions fostered understanding between different group members. During the preparation of supporting documents for presentations, group members explained technical expressions to those who had insufficient understanding and provided active support to those who were lagging behind in their preparation. It was suggested that this kind of training method is effective for training that targets people with field experience, rather than the lecture-type method which predominantly involves only one-way communication.



Distributing presentation materials



Second presentation