

### Acholi Sub-region in Northern Uganda – past, present and future

After driving six hours up north from Uganda’s capital city, Kampala, one arrives in Gulu; the main town in the northern area. The Acholi Sub-region comprises eight districts – Gulu, Agago, Amuru, Kitgum, Lamwo, Nwoya, Pader, and Omoro. The area is a traditional dwelling place of the Acholi people.

What we cannot avoid when we talk about Acholi is the conflict history. From the mid-1980s for 20 years, northern Uganda endured armed conflict between rebels and the government army. Acholi Sub-region is where the worst atrocities were committed by the rebels group. They treated villagers with despicable cruelty. The number of internally displaced person (IDP) was estimated to be 2 to 3 million and they were forced to live in IDP camps with limited freedom. Twenty years from the mid-1980s is from the time I was an elementary school student to my university period. The childhoods of the boys and girls were stolen and they had to spend the precious period of their lives as soldiers or as refugees. How they must have suffered.

Since the cease-fire agreement between the government and the rebel group was made in 2006, the security situation improved and many organizations came in to provide emergency humanitarian support. Infrastructure was developed and people left camps and resettled back in their original areas.

About 10 years since then, the Gulu town was filled with energy. Despite the dark history, or may be people are deliberately trying to but the past behind them, the population in Acholi appeared jovial and it looked as if they are trying to live positively. I also see that children of generations that do not know the armed conflict are growing well. The scene was unexpected as I was anticipating a somewhat dark atmosphere in a town overshadowed by the terrible past.

However, not everything is going well. One of the issue is the limited farm incomes. Over 80 percent of people in Acholi Sub-region are farmers and therefore the agriculture sector is an important industry. Despite that, agricultural products in markets are largely transported from other areas such as Kampala city or Mbale District, except for local leafy vegetables. According to the market vendors, they “do not

like to deal with local produce as the quality is low.”

One reason for this substandard production is the farmers’ lack of sufficient technology and experience. Although people could resettle after the armed conflict, they could not succeed traditional agricultural techniques in IDP camp, and people who knew it were lost by the conflict or long years of life in IDP camp. Cultivation fields I visited were not managed well. It is not because farmers are lazy. It caused that they simply do not know what to do and how to do it.

Agricultural potential in Acholi Sub-region is high. There is still ample farming land and the soil is soft and rich in organic contents. The land is vast and flat and the climate is also favorable. The average highest day temperature is 29 °C and lowest 17 °C, and the precipitation is relatively ample being 1,500 mm annually. In addition, the fact that the local markets are full of products from outside the district means that that if quality product are produced locally, they can sell well. Furthermore, Uganda exports a large amount of vegetables to Juba – the capital of South Sudan. Acholi is located on the main road to Juba and it is possible to develop export marketing as well as for local consumption.

We can say that the period of emergency aid for Acholi Sub-region is now over. Organizations that provided humanitarian support already withdrew. However, there is still a lot to do for the development of Acholi Sub-region and the improvement of peoples’ livelihoods.

I am working in this area from now on. It has a good agricultural environment. The markets can be expected. People are full of energy and smiles. This area has a huge potential. I am looking forward to witnessing Acholi’s future!  
(By Sawada, 2016)



Location of the Acholi Sub-region in Uganda (source: Wikipedia). As it is a pre-2006 map, only Gulu, Kitgum and Pader District are shown. As of 2016, these three districts were divided into eight districts.



Local market full of smiles



Most of the vegetables are from outside the district



Tomato farm; it is well managed but neither fertilizer nor plant training techniques are used.



Neighbors gathered while we were revisiting the farm. People seem to have high interest.

## Improvement of vegetable cultivation course: AAI's effort to link abroad experience and training in Japan <Part 2>

### Local application and extension of useful technologies

This training can be divided into 2 parts and 1st part identified training needs and assembled the information in a table format using the CUDBAS method. The 2nd part involved a range of training using the ‘five senses’ for applying knowledge acquired from field experience, and development of a simple cultivation manual using free software for extension purposes. In our experience, extension workers and researchers in developing countries often conducted extension activities based on the themes indicated by their bosses. For example, they would conduct regular yield surveys, and they would conduct technology extension when new equipment and materials were obtained for farmers to use. However in some cases, they didn't have sufficient capacity to be able to respond to farmers' demands. I also observed laziness, lateness and incompatibility often using lack of equipment as an excuse. Our lectures and practices were designed to introduce technologies that can help participants develop capacity to be able to respond to these issues.

We at first set a training task and discussed what capacity participants needed to acquire during the training in order for them to be able to successfully complete the task. The task which we set was “What is the required capacity to provide high quality extension services to farmers in vegetable cultivation?” We divided the target group into extension workers and researchers. Then we classified the necessary capacity into three categories: knowledge, ability and attitude. For each category, we encouraged individual participants to provide ideas freely, putting down the kind of ability needed for each on a ‘Post-it’ sheet. The contributions from each group were put together and read in front of everybody. They were categorized per task and per type. Later on the categorization results were put into Excel charts and introduced to everybody.

Group and Region-Focused Training Course on Vegetable Cultivation Technology						
Date : 08 April 2014						
Title : Necessary Ability for <b>Extension worker</b>						
Duty	Ability					
	1-1	A	1-2	A	1-3	B
1 Field Management	Skill of Field Preparation		Can instruct to farmers on field preparation		Ability to measure approximately of farmers field	
2 Irrigation	2-1	A	2-2	A	2-3	A
	Know about irrigation method in field		Have knowledge on micro irrigation system.		Can instruct for user for irrigation of vegetable.	Skill on operation of micro irrigation system.
3 Nursery	3-1	A	3-2	A	3-3	A
	Know process of sowing of vegetable seed		can instruct farmer on raising seedling.		Have knowledge on nursery management	Know the raising seedling in green house.
4 Soil	4-1	A	4-2	A	4-3	A
	Can sample soil by using 5 sense		Know how to soil sample		Know how to improve the soil productivity	Know about the soil condition
					4-4	B
					4-5	C
						Can prepare soil for cultivation

Chart systematically indicating results of discussions

comparing the abilities that need to be acquired as per their own assessment and abilities that are supposed to be acquired through existing training courses. This method should be understood as an approach that allows self-examination of necessary abilities to complete particular given tasks and to deliver training tasks based on farmers' demands, rather than simply enabling people to complete given tasks.

Now, we would also like to introduce a training method that utilizes ‘five senses’, which is the 2nd part of the training. As mentioned earlier, in developing countries, so often one doesn't have access to a kind of equipment that could help extension work. For instance, when asked questions such as “What is the size of this field and how much fertilizer input is necessary?” or “What is the level of sweetness of this watermelon?”, some extension workers may respond with ambiguous answer such as “I cannot tell because I don't have measuring equipment.” or “It is very sweet.”, blaming the lack of equipment. This often results in farmers losing trust in extension workers. We ourselves have experience in recognizing our lack of ability to respond to farmers' demands and receiving a look of no-confidence from farmers.

We had a practice to use ‘five senses’ for measuring in their daily lives. For example we taught how to roughly determine salt concentration, and sugar concentration of various vegetables by tasting. We also taught how to estimate soil texture by touching, how to measure field size using stride length, and how to estimate weight using various containers. We also introduced methods to estimate yields from rice panicle from their drooping level, to judge gradient of slope, and to estimate water volume looking at river flow speed. By having this type of knowledge, extension workers can answer all the aforementioned questions from farmers. This kind of sense-based ability will enable extension workers to garner farmers' trust, and enable them to carry out training of farmers even without equipment.

Simultaneously, many cultivation manuals in developing countries are packed with letters. Guidance is often given with numbers (e.g. 35 kg/ha of synthetic fertilizer), and it is hard for farmers who may be illiterate to use the



Training scene

manuals. In order to deal with this kind of situation, we provide a practice to develop a simple 1-2 page manual which is coated with a water proof sheet, which is picture oriented and with less letters. This manual is produced using extension workers' PC, camera, free software and a simple printer, as well as plastic bags. In this manual, we try to avoid number based expressions as much as possible. Instead we frequently use other ways of measurement such as use of different types of containers (e.g. one bucketful), or expression of lengths using body parts (e.g. arm length and finger width). Through this training, we hope that the participants will enhance their extension capacity based on improved ability to think and judge.

CUDBAS stands for a method of Curriculum Development Based on Ability Structure. It aims to develop effective curricula by writing down the capability of people who are nurtured in vocational training and by conducting structural analysis based on the information. This method can be applied for many other purposes. It enables us to sort out vague concepts, ways of thinking and ideas and systematically structure them. (Source: Laboratory of Skill & Technology Education - Kazuo Mori)

We could only go as far as sorting the information about elements of capacity to be obtained in charts. However individual participants could self-examine which parts of individual capacity need to be strengthened, through



## Reports on activities of ex-participants from Nepal <Part 4>

### Building and strengthening the network between 4 parties

In this series, we have been reporting on the results of our visit to Nepalese ex-participants in December 2014 as part of the follow up activities for the “Vegetable cultivation technology and marketing method for small scale farmers” course.

#### Change in attitude towards their work

We received interesting feedback from ex-participants, one saying “Through the training in Japan, my attitude towards my work has changed.” Other comments included “I started having more positive attitudes towards my work”, “I learned how to learn what I don’t know.”, and “I come to think about how to deal with even facing to difficult situations.” We collected these comments through a questionnaire and confirmed them through interviews. They were feeling that they had acquired new enthusiasm, confidence and commitment which they didn’t have prior to the training courses in Japan. One ex-participant said, “In addition to technologies, knowledge and experience, the training course in Japan taught me the meaning of ‘work’. I think I could acquire this because of the time spent with Japanese instructors.” This type of feedback is very interesting for us and made us feel proud as Japanese.

#### Future tasks for the vegetable cultivation technology training course

We observed that ex-participants definitely grew as technicians, however, when it comes to providing appropriate advises on farming activities from a multilateral perspective, it was felt that there is still room for improvement. In order to provide advice on farming plans that sufficiently consider annual income estimates and price fluctuation risks, addition to have cultivation knowledge. Extension workers need to be able to provide advice which considers agricultural economics and farming styles of individual farmers. Therefore in future training curricula, it is necessary to strengthen extension officers’ capacity for farming advice, increasing lectures on farming plan and incorporating crop budget thinking in practice.

In addition, ex-participants expressed their request for opportunities to refresh knowledge and technology after the end of training sessions. Ex-participants are very interested in varied individual/common experiments that are carried out in the vegetable cultivation course, even though their social backgrounds, and the crops that are dealt with, may be different. Therefore, it would be worthwhile for willing ex-participants to provide newsletters with selected experiment results from annual results, which may be useful for ex-participants, or to establish a system to be able to download such information. At the same time, such a system would contribute to increasing the enthusiasm of current participants.

#### Conclusion

During this visit, we could confirm results of training in Japan to some extent. Firstly, it was confirmed that it is important to include in the scope of training courses “acquisition of

knowledge and technologies for the future” in addition to “technologies that is immediately adaptable in their countries.” Moreover, it was very useful to be able to confirm the more internal training impact on the minds of participants such as improved overall capacity as extension workers and a change in attitude towards work. In the training in Japan, witnessing the earnest attitude of Japanese towards work, the participants seem to have been able to grow internally as extension professionals. This was also nurtured through working hard on individual experiment. These training results are value added of training courses in Japan which are hard to obtain in training courses carried out in other countries.

During the visit, we couldn’t make an objective evaluation of training impact comparing participants’ work before and after the training in Japan through interviews with their seniors as the units which ex-participants belong to have changed in most cases. As a result, we had to produce a report summarizing subjective opinions and it is possible that the comments we received might have been biased favorably. However, we believe that we could obtain meaningful information which can be utilized for our future work to develop individual capacity. This is because we could confirm from concrete examples that many ex-participants were indeed feeling positive impacts of training.

These ex-participants who experienced training in Japan are considered precious human resources for JICA projects and Japanese companies in their countries. According to the results of the questionnaire, all the ex-participants responded saying that their interest in Japan had increased and they would like to actively collaborate with Japan-supported projects and activities of Japanese companies. However, in reality there are insufficient opportunities for them to be able to forge partnerships with JICA or Japanese companies, which is a pity. The largest benefits from training in Japan should be to be able course participants to utilize the human resources nurtured through training in Japan, in their own country.

For this, it is important to build and strengthen the network between JICA Tsukuba (and headquarters), JICA overseas offices, companies engaged in training and ex-participants themselves.

