



**KOT in New Target Provinces & Monitoring of Activities in FU Provinces**

The COBSI Promotion Unit (CPU) and the JICA Project Team completed the Kick-Off Training (KOT) in the New Target Provinces (Copperbelt, North-Western and Central Provinces) in May 2019 and the KOT aimed at transferring the skills and knowledge necessary for smallholder irrigation development. This is a core training of E-COBSI for extension officers to enable farmers to initiate irrigation development. On the other hand, we have conducted field monitoring of E-COBSI activities in the Follow-Up provinces; mainly water management and O&M of irrigation schemes and data processing of nutrition survey, follow-up on the monthly reporting, discussions on collaboration with ETG. This article shares such progress of activities for May 2019.

**•KOT in New Target Provinces**

After completion of ToT in the New Target Provinces, the CPU and the JICA Project team held three sets of KOTs in May 2019. We invited Senior Agriculture Officers (SAO), TSB Irrigation Engineers, Crop Husbandry Officers, and CEOs/BEOs. These participants are expected to teach planning and construction of simple weirs and furrows directly, irrigated agriculture to farmer groups, and this actual works in the field will be OJT for the officers. Thus, the officers in the New Target Provinces should promote community-based smallholder irrigation.

The KOT in the New Target Provinces mainly focused on the construction of small-scale irrigation schemes including four types of simple weirs and their construction method, selection of proper location of water intake and furrow by using simple tools, etc. This training content is different from the one in the FU provinces aiming at comprehensive approach composed on SHEP, water management and O&M of irrigation schemes, nutrition improvement, etc.

Thus, the participants of the KOT in the New Target Provinces were equipped more on skills to promote simple weirs and they practiced the construction during the training session. Additionally, the training included necessary knowledge for irrigated agriculture such as; 1) key points for establishment of water users’ groups, 2) water management and O&M of constructed facilitates, 3) method of irrigated agriculture including gravity irrigation, soil conservation, improvement of soil fertility, compost making and control of pests and diseases

Since the Government of the Republic of Zambia is expected to continue expanding COBSI activities in the other potential areas after JICA completes E-COBSI project, the contents of the KOT should be more concise than that in T-COBSI. Therefore, the project shortened the training days and planned the KOT as a four-day training.

On the final day of the KOT, the participants set a goal/ planned on the number of new small-scale irrigation sites to be constructed and existing sites to be rehabilitated by farmers in their target areas during this dry season. Then, they shared the plan with other participants and the plan set by the respective provinces and districts is following;

**Plan for the number of small-scale irrigation sites to be constructed/rehabilitated in the New Target Provinces (Dry season of 2019)**

Province	New site	Existing site	Total
Copperbelt	137	16	153
North-western	120	21	141
Central	47	13	60
<b>Total</b>	<b>304</b>	<b>50</b>	<b>354</b>

Thus, the officers in the New Target Provinces have started actual implementation of the activities in the field. JICA has also started provision of operational fuels for CEOs, Provincial and District in order to encourage the officers to carry out field activities with farmers and for future effective monitoring of farmers’ activities on E-COBSI since this May.



Demonstration of simple weir construction instructed by the masters of trainer team (left person). After this demonstration, the participants practically constructed the weir on the river nearby (KOT in Copperbelt Province)



Practice of furrow route selection by using simple survey tool (middle of the picture; red simple level). Without using advanced surveying tools, extension officers and farmers can easily select route of furrow (KOT in Central Province)

### ●Monitoring of E-COBSI Activities in FU Provinces

Since Mr. Yoshihiro SAGAWA, a member of JICA E-COBSI team in charge of Water Management/O&M of Irrigation Facilities, started working in the FU Provinces, the CPU and the JICA team mainly conducted monitoring of permanent weir sites established during T-COBSI phase and checked the condition in terms of water management and irrigation facilities in May 2019. We also monitored the progress of E-COBSI activities such as SHEP, farmer organization, cultivation, the number of fishponds in terms of nutrition, etc.

Although 14 sites of permanent weirs were constructed in three provinces during T-COBSI Phase, we monitored 12 sites out of 14 (4 sites in Northern Province, 5 sites in Luapula Province and 3 sites in Muchinga Province) in this period. During the monitoring, the CPU and the JICA team member explained the necessary works for water and irrigation management to the farmer groups by using a training material distributed during the KOT.

The condition of permanent weirs is good and do not have notable cracks. However, we observed weeds growing up over small holes on the facilities in some sites and this would develop large cracks in the surface. Therefore, the CPU and the team advised the farmer groups to remove the weeds and inject mortar to the hole. Thus, we explained that regular maintenance of the facility could prevent serious damage and reduces the total cost of maintenance.

The CPU and the team explained such maintenance works necessary for the facilities based on the checklist distributed during the KOT in the FU Provinces. This checklist is prepared for three types

of facilities, permanent weirs, simple weirs and furrows. From now on, the farmer group will conduct the maintenance works following the items on the checklist such as types of works, months of implementation, frequency and their procedures.

Regarding water management, we categorized as following; i) 3 sites are conducting rotational irrigation, ii) 5 sites conducts rotational irrigation at the end of the dry season or in a drought year, iii) 4 sites do not conduct rotational irrigation because water volume is high in a river. Farmer organization is the most important activity on irrigated agriculture to share irrigation water from the same river with other farmers. Besides, the farmer group should enhance their capacity in order to continue sustainable irrigated farming and O&M works for water use. Now, the farmer groups in five sites are collecting water fees. Therefore, the project further encourages the groups to collect the fee and use it for maintenance works of the facilities. The project will prepare written By-laws about this kind of rules and promote the groups to share the same ideas among them.



Most of the permanent weir sites are well-maintained (Musanza scheme, Nakonde District, Muchinga Province)



While most of the sites apply gravity irrigation, some of them do basin irrigation as the picture shows. Since basin irrigation likely causes waterlogging, the provincial CPU explained importance of furrow irrigation (Munsa site, Nchelenge District, Luapula Province)