

Construction of simple weirs has started in New Target Provinces

By Mid of May, E-COBSI completed Training of Trainers (TOT) and Kick-Off Training (KOT) targeting field officers in the New Target Provinces (NTPs: Copperbelt province, Central province, and North-Western province). The main contents explained were the scheme of E-COBSI project and the method of constructing simple weirs and furrows. After the Trainings, development of irrigation schemes using simple weirs has started as OJT (on-the-job training) by the officers who participated in the said training and COBSI farmers. JICA E-COBSI Team, this time, carried out a visit to the simple weir irrigation sites constructed so far and monitored the implementation. This article shares the result of those with readers.

• Details of the Site Visits

The site visits and interviews were carried out from 18th to 21st of June, 2019 for 8 sites in the Copperbelt province. The members consisted of District officers, CEOs, and JICA E-COBSI Team. The team visited the newly constructed simple weirs and discussed with the farmers about construction, cultivation, marketing, and so on.

The main objective of the site visits for the newly constructed simple weirs and furrows was to collect data of the type of simple weir, the number of participants, and the challenges the farmers encountered during the construction. On the other hand, interviews on farming were made to collect information about the present situation of irrigation methods, cultivation technics, and marketing knowledge which are being applied by the farmers.

After the construction of simple weirs and furrows, SHEP (Smallholder Horticulture Empowerment and Promotion) approach, which is one of the main pillars of the E-COBSI project, is going to be introduced to NTPs. SHEP promotes market-oriented agriculture. So, hearing about the present ways to transport and sell agricultural produce and some challenges faced by the target farmers is much important.



Fig. Site Visits camps and market places

•Result of the Site Visits

1)Construction of weirs and furrows

Most of the sites have so far developed simple weirs elaborately, and the weirs rise the water level up at upstream side enough to divert the river/ stream water. According to implementing officers, a suitable type of weir was selected for each site's ground condition, and materials farmers could obtain. Farmers said that they selected the weir site by walking along the river/stream, and many farmers participated in the construction, and they constructed it in a few hours.

After this, each site has started the excavation furrows heading to their target fields. So, they will decide the furrow alignment appropriately by E-COBSI method which considers the ground altitude, keeps the water level in furrows properly, and enables to save labor.

2)Cultivation

The main crops the farmers cultivate are almost same to each site. At present, they bring water and irrigate with human power by using a bucket, but it is labor demanding.

On the other hand, the challenges for cultivation are labor shortage, and difficulty to get the latest information about cultivation, fertilization, and plant disease.

3)Marketing

The farmers sell their agricultural produce at the local markets or some of the town's markets in the Kitwe. Some farmers sell their produce at the nearby border which is the *Democratic Republic of the Congo*.

One of challenge for marketing is that they couldn't get income stably because of price fluctuation in the market. But, some farmers conduct the market survey by themselves and find out which crops are valuable in the market, and then, they decide the cropping pattern. So, it could be said that some of them are already familiar with market-oriented agriculture naturally.

Next activities

In this site visits, the JICA E-COBSI Team looked at the good quality of weirs in each camp. So, it is desirable to be constructed more weirs in the same quality. And furrows with appreciate alignment will be constructed by farmers. Constructing weirs and furrows which suit each site by E-COBSI technics enable farmers to irrigate by low labor and to harvest more.

In addition, the team knows the challenge for marketing. As a countermeasure of it, the SHEP approach will be carried out to the NTPs by conducting training in the same way as Follow-up Provinces.



At Kafubu-2 camp in Ndola, Mr. leizumi, team leader of E-COBSI, explained outline of the project. And he interviewed about construction, cultivation, marketing and so on from farmers.



The constructed simple weir at Mufuchani camp(2). This is the *trigonal type* weir which is selected to suit the site's ground condition. After that, Farmaers will dig the furrows to their target fields.

| District | Camp | Weir | Furrow | Participants |
|------------|----------------------|--------------------|---------------------------|--------------|
| Luanshya | LuanshyaWest phase-1 | New (10m) | Under construction | 25 |
| | Twashuka | New (10m) | Under construction | 12 |
| Ndola | Kafubu-2 | Improvement (20m) | Existing (to be extended) | 50 |
| Mufulira | Mufuchani(1) | New (15m) | Under construction | 35 |
| | Mufuchani(2) | New (10m) | Under construction | 25 |
| Kitwe | Kokolo-B | New (10m) | Under construction | 35 |
| Kalulushi | Chapula | Improvement (5.5m) | Existing (to be extended) | 26 |
| Lufwanyama | Мроро | New (26m) | Under construction | 17 |