

SLMP-ETHIOPIA

Introduction and background

Some NPCU team members of SLMP have moved to SNNPR with the aim of conducting field level works on three major themes namely:

- Developing case story on best practices on at least three SLMP efforts
- Testing the new below Woreda data collection and reporting guideline at community, kebele and Woreda levels
- Assessment of monitoring and Evaluation systems at Community/kebele, Woreda and regional levels.

To address all the above issues, we first discuss on our issues and approaches with the regional level PCU and GIZ SLM staff.



Picture 2. During our discussion with RPCU and GIZ SLMP key staff (chairperson: *Ato Akae, SLMP Coordinator for SNNPR*)

From this discussion we have got valuable tips (short action plan) on how to accomplish our works at all levels and made the Woreda level staff to get ready for our mission. On top of this, two M&E specialists from RPCU and GIZ-SLMP joined our missions.

Just after the above discussion, we moved to the Arbegona Woreda and we have got all the necessary staff. With the facilitation of Ato Tsega Abate (the Woreda vice head for Agriculture and Natural Resources), our team briefed the mission objectives and the subsequent activities to be undertaken in the coming 4-5 days with them. After having a brief discussion on the activities, we refined our action plan on how to select the micro-watersheds for case story assessment and development. Here, the Woreda focal person (Ato Abraham) and his multidisciplinary team took

a responsibility for selecting 2-3 micro-watersheds under Gallana Critical Watershed for the assessments of best performances and testing of the below Woreda data collection guideline.



Picture 1 During our discussion with Arbegona woreda key staff (chairperson: Ato Tsega Abate, ANRs head)

Furthermore, we briefly discussed and planned on how to test the below Woreda level data collection guideline. And still for this, together we have developed a specific action plan on how to reach the KWT, CWT, CF, DA, Farmers' group etc... to discuss and test the suitability and capability of the below Woreda data collection guideline on capturing and reporting the necessary information on interventions and their results. Finally, we briefed on the checklist for monitoring, evaluation and reporting challenges rose on the last JISM and have an appointment to discuss on it.

On the next day, as per our previous appointment with the Woreda team, we meet at their office and the team briefed us what they planned for the case story development and testing of the below Woreda data collection guideline. Accordingly, the team have selected the following three most important issues to be considered in the case story development:

1. Bench terrace technology combined with CSA activities
2. Bamboo seedling production and management
3. Land administration and land use planning

CASE STORY 1: Bench terrace technology combined with CSA practices

I. Background and problem analysis

Arbegona Woreda is characterized by rough and steep slope landscape. Its agro-ecological zone belongs to 58 % of high and 42 % of low land with average annual rainfall is 1500 mm and with an altitude ranges from 2200 to 3360 masl. Barley and wheat are the dominant cereals or annual crops while Bamboo, Habesha Tid and Koso are the major tree species in the area.

However, with its landscape and climatic condition, it is very difficult to have additional cultivable land for crop production in the Woreda and the hillside farming was highly exposed to soil erosion and acidity. With this condition, it is unthinkable to have a uniform crop production on hillsides. Moreover, the land holding size per HH is very small to get sufficient production out of it.

II. The SLMP intervention and technology

To tackle the above problem and increase production and productivity in the Woreda, the SLMP came with a new technology for Arbegona Woreda through bench terrace construction and improvement of soil fertility. Since Bench construction was a new idea and technology for the Arbegona farmers, a number of awareness creation and trainings have been conducted. These programs include the Woreda administration staff and Experts, DAs, Kebele administrators and farmers. Moreover, several experience sharing programs have been organized to see the practices of bench terrace's benefit on decreasing erosion and improve productivity.

After having all these processes, the bench terrace construction started at FTC and government office compounds as part of the method/result demonstration and experience sharing sites.



Picture 4. Barley production on the bench terrace at FTC of Wene MWS, Dume Goth, Toshine Kebele of Arbegona Woreda (SLMP demonstration site)

After the construction of bench terrace on the steep slope areas, certain soil fertility improvement and agronomic efforts were exerted to have better production and productivity on the bench terraces. The technology applied in combination with lime treatment, row planting and fertilizer application for decreasing acidity and improving productivity, respectively.



Picture 3. Barley production on the bench terrace at the compound of Toshine Health Center of Arbegona Woreda (demonstration site)

In addition on FTCs and other government office compounds, some model farmers have been started to apply the bench terrace technology of SLMP and obtained a significant results in terms of run-off reduction, obtaining additional cultivable land and high production of barley. The following figure is taken from Ato Frew's farm land. According to our observation and interview, we found that Ato Frew is an innovative farmer who experiment the application of full package of the technology by having different experimental and **control plot (lime and fertilizer applied but no row planting)**.



Picture 5. Barley production on the bench terrace at the farm land of XXXXXX of Wene MWS of Toshine kebele, Arbegona (a plot with full package)

As we can observe in the figure below, the control plot without lime treatment and fertilizer have a much lesser crop biomass than the experimental plots (fig.2) which received full packages of the technology (Bench terrace, lime treatment and fertilizer application).



Picture 6. Barley production on the bench terrace at the farm land of Ato Frew of Wene MWS of Toshine kebele (a plot without the package)

III. The effects of the Bench terrace

According to the farmers who adopt the bench terrace technology, they are enjoying a multiple benefits like decreasing of soil erosion, water and soil conservation, increment of crop productivity and fodder production (like Desho grass, fruit trees like Apple). moreover, farmers started to get 20Kg of barley from 30m² (*i.e. x quintal/hectare*) and the technology helped to have additional uncultivated land. Consequently, it increases the awareness of many more farmers in the watershed and the adoption of the technology is started to be scaled up to other farmers.



Picture 7. Barley crop on Bench terrace, (with full package-lime treatment, row planting, and fertilizer)