## Report of the Humidtropics Ethiopia Diga field site second farmers' field day and fourth innovation platform meeting

## 17–18 October 2015

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Top: Innovation platform meeting participants; Bottom: Field day visit

CGIAR









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#### Farmers field day

First day: 17<sup>th</sup> October 2015

Site: Diga Wereda, Arjo kebele in the morning and Jirata kebele in the afternoon

**Purpose**: Every year Wereda Innovation Platform (IP) organizes a two days event that include farmers' field day on the first day followed by IP evaluation meeting on the next day. The timing of this event is held during the beautiful season when the crops and feeds introduced performance can be seen on farmers' field before harvest.

Field day was conducted during the first day (17<sup>th</sup> Oct 2015) in both Arjo and Jirata Kebele of Diga Wereda. Different research activity farmers' sites were visited by 138 men and women farmers. Around 30 researchers and experts came from national, zonal and Wereda IPs.

- Kidane is a farmer who is using soil bund with Rhodes grass. Soil and water conservation structure were applied. He is also using the grass for cattle's fattening and sell the rest to earn money.
- Getachew is also a farmer using soil bund with Rhodes grass and he is also managing his land very well.
- Nagari is also a farmer who planted Rhodes grass using soil bund and performed very well.
- Wakshum is another farmer in Arjo kebele who cultivated ground nut using soil bund (with and without fertilizer). It was observed that ground nut with soil bund performed well.

#### Discussion with farmers after the field visit

## **Question1.** If this project comes and works at some farmers' field, how can others get this benefit on the ground?

**Answer:** If technologies demonstrated at some farmers' field were effective, other farmers can learn from such model farmers and benefit from it by sharing varieties and seedling of grasses.

- Wakbusho Fufa is a farmer in DJirata Kebele who planted *teff* in row and scattering. *Teff* planted in row performed well.
- DJirata kebele Farmer Training Centre (FTC) was also visited. It is a real research area and hence Development Agent (DAs) working there devoted their time working on different variety trials (crop, livestock feeds and grasses).

#### Humidtropics fourth innovation platform meeting at Jeldu field site

Venue: Diga Wereda Administration office

Date: 18th October 2015

Time started: 10:30 am and completed at 4:30 pm

Facilitated by: Zelalem Lema (ILRI); Photo by: Desalegn Tadesse (IWMI) and Zelalem Lema (ILRI)

Minutes recorded by: Tilahun Geleti (OARI)

**Participant from outside the field site**: Tekilu Erkossa, Kinde Getnet and Desalegn Tadesse (IWMI), Zelalem Lema, Tsehay Regassa and Melkamu Dereseh (ILRI), Hadia Seid (ICRAF), Teha Mumme and Tilahun Geleti (OARI), Tamene Temesgen (Legume CHOICE – ILRI).

#### Agenda of the meeting:

- Welcome, self-Introduction and brief introduction of the Agenda
- Opening remarks by vice-Administration office of the Wereda
- Brief introduction of Innovation platform approach and Humidtropics program cluster 4 projects activities in Jeldu by the following core partners:
  - ILRI IPIP approach as effective and inclusive mechanism by Zelalem Lema
  - IWMI-soil and water conservation related activities by Tekilu Erkossa
  - ILRI Livestock feed and market related activities by Melkamu Deressa
  - ICRAF activities accomplished on testing of multipurpose trees by Hadia Seid
  - Legume CHOICE project activities by Tamene Temesgen
  - General discussions on scaling up and market issues and the way forward

#### Welcome and introduction

After welcome speech, brief introduction of the agenda of the fourth IP meeting and self-introduction facilitated by Wakgari Kaba (Bako Agricultural Research Centre) who is also a technical group member of this IP, opening remarks was given by Samuel (vice-chair off the Wereda agricultural office). Samuel in his speech thanked all the IP members who have contributed to the successful accomplishment of the research activities done in the Wereda. He said he was very much amazed by what he has seen on the field during the farmers' field day and assured that this is development integrated with all aspects of the agricultural sector that complements the government development agenda. He encouraged others to participate actively in the meeting and mentioned that at the end of the meeting a good idea on how to take the best practices to wider scale will emerge.

#### Innovation platform approach as effective and inclusive mechanism (Zelalem Lema) IPs – effective and inclusive mechanism for agricultural transformation by Zelalem Lema (ILRI)

Zelalem presented innovation concepts and their applications in the Humidtropics field sites in Ethiopia. His presentation is summarized as follows:

#### What is innovation?

- **Innovation** is defined as a "process of producing, accessing, diffusing, and most importantly, putting in to use knowledge in socio-economically useful way', Hall et al., 2008.
- It can be technological, organizational, institutional, managerial, and related to service delivery or policy.
- It is knowledge or technology doesn't become an innovation unless it is used.

**An innovation system** is the cluster of individuals and organizations involved in knowledge generation, diffusion, and use (researcher, private sector firms, universities, extension agents, technical experts from line ministries etc.) together with the processes required to turn knowledge in to useful socio-economic benefits.

**Innovation system in agriculture** – system intensification – is very important as agricultural problems are becoming more and more complex. Engaging different actors in the research processes are very important.

**IP** is a space for learning and change. It is a group of individuals (who often represent organizations) with different backgrounds and interests. Local IPs have been established in Diga and Jeldu since 2011 (NBDC project) by ILRI and both IPs are imbedded in Humidtropics activities since 2014.

The main challenges facing the farming communities in Jeldu and Diga is identified during the diagnosis phase of NBDC project and the challenges include:

- Severe soil erosion and land degradation (NRM issue) Nile basin;
- Low productivity;
- Collaboration issue (institutional issue);
- Top down approach less inclusive.

Humidtropics continues to work in these two weredas with existing and functioning IPs capitalizing on NBDC feed intervention achievements:

• These IPs have technical group members – university, research centre, wereda line departments and NGOs to support implementation on the ground.

- Membership is for men and women farmers, local government line departments, researchers, NGOs, University (research and community service) and students.
- Type is not commodity based. It is an IP that deals with the whole system (tree-crop-livestock).
- A year (January December) snapshot research activities of Humidtropics were done in Western Ethiopia step by step.

#### Regular IP meetings and activities are divided in to three seasons each year

- 1. January April (IP planning meeting), an R4D platform planning meeting
- 2. May Aug (IP planting, training and follow-up meeting)
- 3. Sep December (farmers field day and evaluation meeting), an R4D platform field visit and evaluation meeting)
- 1. Innovation platform planning meetings and activities (January to April)
- Facilitate sharing of last year's achievements and challenges
- Lessons learnt from last year and incorporating in the planning
- Men and women farmers are empowered to take the lead on planning (decide on which crop for rotation, time plan, proffered feeds etc.)
- All partners contribute their inputs and own the plan
- Role of farmers, research centre, university, government, local NGO and CGIAR centres shared
- Detail plan will be developed for each research theme

#### How dialogues are facilitated during the regular IP meetings?

# The following principles are used for effective facilitation for creating an environment that best suits for learning and sharing.

- All ideas are treated equally (women and men farmers, local experts, development agents, scientist, local decision makers)
- Language (all members are encouraged to talk in any language they are comfortable with including local language)
- Photo-based PowerPoint presentation with little text, mainly for farmers to understand well
- Flipchart (for sketching and taking notes and group presentations on plenary)
- Research theme based group discussion based on expertise and interest
- Plenary discussion for joint decision on each plan
- Energizer, tea-coffee and lunch together to create more team sprits

For example the following activities were planned during the planning meetings by IPs in both sites (Tables 1 and 2).

Table 1. Jeldu Wereda participating farmers in 2014 and 2015

Wheat based mixed farming system	Barley based mixed farming system	
<ul> <li>20 farmers participated</li> <li>IWMI led activities by planting wheat in 2014 and faba bean in 2015</li> <li>Improved seed, improved management practices and capacity building</li> <li>Soil bund integrated with improved feed and multipurpose trees</li> <li>Feed utilization linked with market (diary processing)</li> </ul>	<ul> <li>20 farmers participated</li> <li>IWMI led activities by planting wheat in 2014 on 20 farmers plots and Legume CHOICE project took over by planting faba bean in 2015 on 30 farmers plots.</li> <li>Improved seed, improved management practices and capacity building</li> <li>Soil bund integrated with improved feed and multi-purpose trees</li> <li>Feed utilization linked with market (diary processing)</li> </ul>	

#### Table 2. Diga weredaparticipating farmers in 2014 and 2015

Maize based mixed farming system	Teff based mixed farming system	Grazing land management	
<ul> <li>30 farmers participated</li> <li>Planted maize (2014) and groundnut (2015)</li> <li>Improved seed, improved management practices and capacity building</li> <li>Soil bund integrated with improved feed and multi-purpose trees</li> <li>Feed utilization linked with market (diary processing)</li> </ul>	<ul> <li>20 farmers participated</li> <li>Planted <i>teff</i> (2014) and faba bean (2015) and potato (2016)</li> <li>Improved seed, improved management practices and capacity building</li> <li>Soil bund integrated with improved feed and multi-purpose trees</li> <li>Re-introduction of potato (2015 seed multiplication and DLS construction)</li> </ul>	<ul> <li>integrated with SWC</li> <li>40 farmers are participated in improving their free grazing land using Rhodes, Chomo, Desho and Elephant grasses for feed and seed</li> <li>Improved Silage making</li> <li>Improved feeding trough and hay storage facilities</li> </ul>	

#### 2. IPIP follow up meetings and activities (May-August)

Before the IP follow up meeting the following were done jointly

- Mobilizing resources and input from IP members as per the role identified
- Provide practical trainings to farmers on planting (land preparation, raw planting of crops, weeding, soil)
- Organize follow up meeting (checking if the implementation is according to the joint plan developed)

#### 3. IPIP evaluation meetings and farmers field days (September – December)

- Every year during this season all IP members go to farmers field during farmers field day to visit the progress of each research activities accomplished on farmers field during the first day and hold their regular innovation platform meeting the next day.
- The IPs are expected to evaluate activities accomplished in the year and take lessons for next year planning through sharing of roles and responsibilities.
- New farmers are also invited to the farmers' field day to promote learning and scaling up through creating farmers to farmers linkage.
- Media is also invited for wider sharing of the activities accomplished through the innovation platform approaches, mainly Oromia Radio and TV.

#### **General outcomes of IP activities**

- Managed to bring effective joint work among the core-CGIAR partners (IWMI, CIP, ILRI and ICRAF) and national partner (OARI) to integrate their specialization and expertise on the same farmer's field.
- Resource utilization was efficient shared roles among farmers, local partners and core partners input supplies (improved seed, transport, technical advice, community mobilization and empowering farmers were done well.)
- Hundreds of farmers increased their crop and livestock productivity while maintaining their soil fertility.
- Sold seed and seedling for feed to government projects like AGP and SLM. During the year under review, Jeldu farmers sold Desho grass seedling worth ETB1.5 million.
- Six MSc students have been supported to do their research in the field sites (IWMI employed staff for four months in the field to collect soil sample and other agronomic and economic data)

# IWMI integrated soil and water conservation activities on crop lands and grazing land (Keberku and Bona- IWMI MSc students)

Two MSc students are working their research on the crop and grazing land intervention that IWMI is leading to improve productivity through soil and water conservation as well as integrated activities of improved technologies and management practices. The presentations made by the two students are summarized as follows:

#### **Crop land interventions**

Keberku Endashaw, an MSc student from Ambo University, is currently working on integrated soil and water conservation and crop management effect on crop performance and soil quality of the maize based farming system at Arjo Kebele, in the lowland areas of Diga district. He presented his preliminary findings by introducing the overall objectives of the Humidtropics project in western Ethiopia and the

site. He mentioned reversing land degradation and increasing productivity and income and improving nutrition as the main objectives to improve livelihood of the small holder farmers. He has described the major challenges faced by agriculture in the district including deforestation, nutrient depletion, soil erosion, and moisture stress and termite infestation. He acknowledged his work is part of a long term study lead by IWMI and that the current year's activities are building on those of the previous year. In this connection, he mentioned that the soil bunds from the previous year were maintained as the main plot treatment while the crop was changed from maize to groundnut, and the subplot treatments were changed from intercropping of maize with haricot bean to groundnut with fertilizer, while the control was no bund for the main plot and no fertilizer for the subplot. His preliminary results showed that the use of soil bund increased water infiltration, and thereby reduced termite damage, increased crop vigour and the effect on the later seems even higher with the use of fertilizer.

#### **Grazing land interventions**

The ongoing study on improvement of grazing land was presented by Bona Tadesse, another MSc student, also from Ambo University. Bona mentioned the existence of extensive grazing land that is either nearly bare due to land degradation, and termite infestation or infested by invasive unpalatable weeds. Runoff due to soil compaction and depletion of the soil seed bank, over grazing and the cultural practice of crop residues burning, when the area was under cultivation, may be responsible for the poor performance of the grazing land. Bona is assessing the effects of infiltration trench and Rhodes grass over sowing on soil quality and fodder productivity. His preliminary results depicts that infiltration trenches increased soil moisture content, reduced termite infestation and increased feed biomass yield. He has illustrated a stark contrast between the plots with infiltration trenches on which the grasses are vigorously growing against the control which are devoured by termites. This was witnessed during the field visits held ahead of the meeting.

# The economic and nutrition impact of alternative land management practices at Diga (Kinde Getnet- IWMI)

The yield impact of physical soil and water conservation structures is well-established. Studies using observational data from farm households show that maize yield at Diga increases by about 340kg ha<sup>-1</sup> on lands with soil bunds, compared to lands without soil bunds. Moreover, farm level experimental results show an increase in maize yield from 5609kg ha<sup>-1</sup> under cultivation without soil bunds to 7178kg ha<sup>-1</sup> under cultivation with soil bunds. Yet, the economic and nutritional benefits of maize production under the implementation of physical soil and water conservation structures are not quantified to inform decision making and assure investments.

The economic and nutritional impacts of maize production under soil bunds can be stochastically simulated and quantified to inform farm decisions and policy interventions. Preliminary simulation results on the economic benefits of maize production at Diga show that farm income from 2014/15 to

2018/19 can increase on average from ETB 41,611 (cultivation without soil bunds) to ETB 41,661 (cultivation with soil bunds), for 15 farm households considered in the analysis. The simulation is made without considering the additional benefits farmers may get from Desho grass production on the soil bunds to use it as an additional income source. While the income difference is marginal, it is expected that minimizing labor cost for bund construction and considering the non-tangible environmental benefits increases net farm income as a result of soil bund construction on farm lands.

### Activities undertaken by Legume CHOICE - ILRI Project Diga field site (Tamene

#### Temesgen)

Lack of access to improved legume seeds, soil fertility degradation, and lack of knowledge and skill on legume production were the major problems identified up on discussion with farmers. To solve the issue of legume seed shortage, the project has started cluster seed production using group of 60 farmers (30 each on haricot bean and soybean improved seed) in lowland kebele, Lalisa-Dimtu and a group of 20 farmers were participated on highland legume (10 each on faba bean and field pea) cluster seed production in Formosa. Moreover, perennial forage legumes including pigeon pea, leuceana, and lablab seeds were distributed for about 143 farmers in Lalisa-Dimtu and Fromsa, and were planted in hedgerows around homestead. For this activity 17.5 quintals of haricot bean, soybean, field pea and faba bean seeds have been distributed for participant farmers. Adequate trainings on legume production and management (land preparation, planting methods, weeding and harvesting) were given two times, before planting and on field after planting, for participant farmers (Table 3).

Field site	Implementa tion site	Improved crop varieties given	Intervention package	No. of participated farmers	Area planted
		Haricot bean (Nassir)	Improved seed, training, bio-fertilizer	30	0.25 ha each
	Lalisa-Dimtu	Soya bean (Dhidhessa)	Improved seed, training, bio-fertilizer	30	0.25 ha each
		Pigeon pea	Seeds and training	67	Hedgerow
		Leuceana	Seeds and training	45	Hedgerow
Diga		Lablab	Seeds and training	26	Hedgerow
	Fromsa	Faba bean (Dosha)	Improved seed, training, bio-fertilizer	10	0.25 ha each
		Field pea (Burkitu & Billalo)	Improved seed, training, bio-fertilizer	10	0.25 ha each
		Pigeon pea, Leuceana, Lablab	Seeds and training	5	Hedgerow
Total				223	20 hectares

Table 3: Legume CHOICE activities,	number of farmers	narticinated and area coverage
Table 5. Leguine Choice activities,	number of farmers	participated and area coverage

#### Livestock feed and marketing research activities (Melkamu Derseh – ILRI)

In the Diga action sites testing of Desho vs Chomo grass for both reinforcing soil bunds and producing forage biomass has been conducted. Half of the soil bunds of participant farmers were planted with Desho grass, and the remaining half with seed of Chomo grass to evaluate and compare the performance of the two grass species on soil bunds. Due to late planting and insufficient rain, the Chomo grass didn't germinate well, but the Desho grass established well on the trial plots. It is planned to repeat the experiment in the next growing season and also generate research data on the biomass yield and quality of the cultivated grasses in different growing niches. After a group discussion with farmers about feeding troughs and feed storage sheds, interested farmers were identified, construction of model troughs have been done.

Generally, farmers were happy with the design of the troughs and a good feedback was collected. By incorporating the comments of farmers and experts, scaling activity will be conducted in the next two months. It is also planned to generate research data on the contribution of feeding troughs and improved storage sheds in saving livestock feeds for use during the dry period. Feed conservation in the farm of hay and silage is believed to contribute towards solving the feed shortage problem. In this regard, demonstration of pit silo was conducted in one of the farmer field in Arjo. More than 17 farmers participated in the training and silage making demonstration. Through this demonstration, the host farmer was able to produce good quality silage, as observed during the field day, and he plans to use it during the dry period. Training and technical support on hay making from Rhodes grass and creating market link with dairy producers in Nekemte town and seed companies elsewhere is work in progress with Wollega University leading the work.

#### Research activities to integrate multi-purpose trees in Diga (Hidia Seid- ICRAF)

ICRAF's ongoing research activities progress update was presented to IP members which includes integrating multipurpose tree seedlings planted on soil bund structure in Arjo and Djirata kebele.Fifteen farmer's from Djirata and 27 farmers from Arjo kebele were benefited and most of seedlings were established well and the next planned activities such as data collection and training will be performed. Challenge encountered was presented. After holding an open discussion on key challenges pre and post IP technique committees were established. The committee will responsible to all management and supervision of planted seedlings. For smooth coordination ICRAF will submit its upcoming activity check list to national partners in advance.

#### General discussion through question and answer on all presentations

Question1: As this is the initial investment, do you consider the next income for consecutive years?

**Answer:** (Teklu) and the beneficiary farmers responded that in the long run there will be no cost of construction of bunds, so it will be profitable to use soil bund and hence the initial investment is obviously incurring more costs.

#### Question 2: How can we make soil bund effective within a short period of time?

**Answer:** The only challenging is during the initial investment, after three to five years farmers will start using the soil bund with high marginal return.

**Question3**: Is there any significant change in soil moisture between land with soil bund and without soil bund?

**Answer:** Soil sample was taken from all farmers field and will be analysed. The general data will be analysed as a cumulative.

**Question4**: After the current students finished their study, do the project will continue and what do you think about this?

**Answer:** (Teklu); Student data are consecutive and it is long term. i.e. different student will work in different years. So, after long run the cumulative result will be known and the project will be continued even after the study through responsible offices at Wereda level.

#### The way forward on scaling up and market issues

#### **Collaborative work**

It was raised that every research and development activities planned to be conducted in the Wereda needed to pass through the agricultural office. The intention was to ease and help the facilitation of the activities beforehand. Hence, the idea was accepted by respected research Institutes to follow the procedure when going to Diga field site. In addition, different organizational collaboration will be crucial in order to help farmers to be food self-sufficient in short period of time and agreed on the issue.

Technical committee re-established to handle market and scaling up issues and the name of the committee is also changed to "technical, post-harvest and market committee'. (Table 4)

No	Name	Organization Roles and responsibilit	
1	Wakgari Keba	Bako Agriculture Research centre	Researcher
2	Dereje Duressa	Wollega University	Community services
3	Samuel Tamene	Diga WWereda Agriculture Office	Head
4	Zanebach Teshome	Diga WWWereda Women's and Children's	Head
		Association	
5	Beyene Gebissa	Diga WLWereda Livestock Agency	Head
6	Temesgen Bodena	Diga WCOWereda Cooperative Office	Head
7	Debela Kenea	Mekana Yesus (EECMYCS)- NGO	Coordinator
8	Temesgen Tulema	Diga wereda IMX Office	Head
9		Diga WWereda Tread and MDO Market	
		Development Office	
10	Yadeta Alamirew	Diga WIO Wereda Irrigation Office	Head

Table 4: Diga IP technical, post-harvest and market committee members

#### Agreed roles of the committees

- Technical committee and the project must work together. In this regard, the system approach from the head office must be in line with the Wereda and farmers perceptions and needs. This will help to identify the gaps and encourages the best practices.
- The committee need to be considered also budget wise in order to make the gatherings effective and productive. This will make the committee to be functional.
- Technical and marketing committee must have plan and regular meetings.
- Technical and marketing committee must be ready to start the planning and implementation of its activity but it is needed that the *guideline (checklist)* must be given from ILRI and other offices from Addis Ababa. Zelalam took the assignment to compile and send the checklists to the technical and marketing committee very soon.

The technical post-harvest and marketing committee will be chaired by Samuel and assisted by Alemu (both are from Agricultural office).

Committee members



NO	Name	Gender	Organization	Role
1	Dula Abebe	Μ	Djirata Kebele	Development Agent (DA) –Livestock
2	Adisu Dugasa	М	Djirata Kebele	Development Agent (DA)- Crop
3	Chali Mitiku	М	Djirata Kebele	Development Agent (DA)- Natural resources
4	Yosef Kledajo	М	Djirata Kebele	Farmer
5	Badasa Mosisa	М	Djirata Kebele	Farmer
6	Shumate Debela	М	Djirata Kebele	Farmer
7	Wabusho Fufa	М	Djirata Kebele	Farmer
8	Misganu Abetu	М	Arjo Kebele	Development Agent- Livestock
9	Takele Ulfina	М	Arjo Kebele	Development Agent- Crop
10	Mezgebu Asfa	М	Arjo Kebele	Development Agent- Natura resources
11	Alemu Jaleta	М	Arjo Kebele	Farmer
12	Hana Babu	F	Arjo Kebele	Farmer
13	Wendimu Tadesa	М	Arjo Kebele	Farmer
14	Alemayhu Babo	М	Arjo Kebele	Farmer
15	Gode Kidane	F	Arjo Kebele	Farmer
16	Egigayhu Tefera	F	Arjo Kebele	Farmer
17	Biratu Zewude	М	Firomssa Kebele	Development Agent
18	Alemayehu Lemma	М	Firomssa Kebele	Development Agent
19	Zanebach Teshome	F	Diga wereda women affair	Head
20	Yadeta Alamirew	М	Diga wereda irrigation office	Head
21	Alemu Biratu	М	Diga wereda extension office	Head
22	Tsedale Birhanu	F	Diga wereda input supply	Expert
23	Samule Tamene	М	Diga wereda agriculture office	Head
24	Belina Geneti	М	Diga wereda livestock office	Expert
25	Temesgen Bodena	М	Diga wereda cooperatives office	Head
26	Gutu Merga	М	Diga wereda land administration and use	Head
27	Desalegn Amsalu	М	EECMYCS (Mekana Yesus)	Representative
28	Tsegaye Mitiku	М	Diga wereda planning office	Expert
29	Beyene Gebissa	М	Diga wereda livestock agency	Head
30	Zelalem Desta	М	Diga wereda agriculture office	Natural resource- Expert
31	Samuel Mulugeta	М	Diga wereda administration	Representative

## Annex: List of Diga wereda fourth IP meeting participants

NO	Name	Gender	Organization	Role
32	Teshome Bogale	М	Bako Agricultural Research Centre	Head
33	Dereje Duressa	М	Wollega University	Community serves Director
34	Effa Welteji	М	Bako Agricultural Research Centre	Researcher
35	Tadesse Birhanu	М	Bako Agricultural Research Centre	Researcher
36	Bikila Akassa	М	Bako Agricultural Research Centre	Researcher
37	Wakgari Keba	М	Bako Agricultural Research Centre	Researcher
38	Wondimu Kebede	М	TV Oromia	Communication Expert
39	Gamechu Borbcho	М	TV Oromia	Communication Expert
40	Tilahun Geleti	М	Oromia Agricultural Research Institute	Socio-economic & extension researcher
41	Taha Mume	М	Oromia Agricultural Research Institute	Director at OARI and Action Site Facilitator for Cluster 4 project
42	Keberkun Endeshaw	М	IWMI MSc student	Research on crops
43	Bona Tadesse	М	IWMI MSc student	Research on grazing land
44	Teklu Erkossa	М	IWMI	Soil Researcher
45	Kindie Getnet	М	IWMI	Researcher
46	Zelalem Lema	М	ILRI	Researcher officer
47	Melkamu Derseh	М	ILRI	Post Doc Researcher – feed
48	Tsehay Regassa	F	ILRI	Consultant
49	Tamene Temesgen	М	ILRI - Legume Choice	Coordinator & Researcher
50	Hadia Seid	F	ICRAF	Agro-forestry Researcher
51	Tilahun Geleti	М	Oromia Agricultural Research Institute	Socio-economic & extension researcher
52	Desalegn Tadesse	М	IWMI	Communication Officer