

Report of the second Selka Kebele operational innovation platform meeting, 16 March 2015

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Through action research and development partnerships, Africa RISING will create opportunities for smallholder farm households to move out of hunger and poverty through sustainably intensified farming systems that improve food, nutrition, and income security, particularly for women and children, and conserve or enhance the natural resource base.

The three projects are led by the International Livestock Research Institute (in the Ethiopian Highlands) and the International Institute of Tropical Agriculture (in West Africa and East and Southern Africa). The International Food Policy Research Institute leads an associated project on monitoring, evaluation, and impact assessment.



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Introduction

Africa RISING in the Ethiopian highlands is a research for development project that focuses on system interventions in the crop-and-livestock mixed farming system in four large regions (Amhara, Oromia, Tigray and SNNPR). The project understands the need for engaging various research and development partners in addressing system interventions. In order to do this, the project established and has been supporting innovation platforms at field sites. The platforms are meant to facilitate meaningful and effective cooperation and learning interactions that prioritize, guide, and evaluate the research and development processes that are specific to the sites. The platforms started helping connect farmers to profitable and efficient value chains for the main commodities. The members of the platforms are contributing to designing, implementing, evaluating project activities and disseminating and communicating research findings through regular meetings and farmer field days.

Innovation platforms and farmer research groups in Africa RISING

Innovation platforms (IPs) have been formed at all the research sites and strongly link farming communities, the Africa RISING research teams and other public and private actors working in the areas. They work at three levels:

1. At woreda (district) level, strategic platforms support kebele (sub-district) platforms and farmer research groups. They bring together stakeholders to support wider adoption of innovations.
2. At kebele level, operational platforms oversee local research activities, foster integration among farmer research groups, and promote alignment of local on-farm research with district priorities.
3. Farmer research groups (FRGs) are like *innovation clusters*. They involve all farmers who are active around specific clusters of research activities – such as forage production, water delivery or varietal improvement. The role of these groups is to promote scaling of innovation to wider groups of farmers.

Regular IP meetings are held at strategic and operational level for sharing and communicating research findings. This report aims to share the results of one of the operational IP meetings that was organized in one of the project research sites *Selka* kebele of Sinana woreda, Oromia region.

The second *Selka* kebele operational IP meeting was held on 16 March 2015. The focus of the meeting was to share the findings of action research activities carried out in both kebeles at Sinana by Africa RISING project and its partners in 2014 to local partners for potential scaling up.

Meeting report

Date: 16 March 2015

Venue: Kebele Adminstartion;

Participants from Sinana Woreda Strategic IP Technical Group

Members:

1. Ahmed Aliyi (Madawalabu University) – Facilitator
2. Shure Soboka (Sinana Agricultural Research Centre)
3. Addisu Asfaw – Africa RISING Site coordinator
4. Tesfaye Bekele (local NGO-HUNDEE)
5. Endeshaw Tadesse – Africa RISING Ass Site Coordinator
6. Zelalem Lema (ILRI)
7. Workalegn Assefa (Woreda Office of Agriculture)
8. Zelalem Lema (ILRI)

Selka kebele IP members represent the following

- Kebele office of agriculture
- Women representatives from women association and affair office
- Kebele technical group (TG) and FRG representatives farmers almost from all research protocols
- See list of participants and their role at the end of this report

Facilitator – Amhed Aliyi (Madawalabu University)

Presentations by – Addisu Asfaw, Endeshaw Tadesse and Zelalem Lema

Minute takers: Zelalem Lema, Endeshaw Tadesse, Addisu Asfaw

Agenda

- Welcome and introduction
- Briefing on FRG, kebele and woreda innovation platform concept and function
- Communicating Africa RISING research findings obtained from Selka and Ilu-sanbitu kebeles from 2014 activities
- Opportunity and Challenges from last year interventions
- Way forward for 2015
- Nomination of 5 representative from the kebel IP to be members of Sinana woreda Strategic IP

Welcome and introduction

Welcome and introduction of the Agenda was made by Ahmed Aliyi (Facilitator). He invited elders, as Oromo traditional practice, to open the meeting by pray. Three elders represented as an IP members that includes both Muslim and Christian religious leaders prayed and blessed the day one after the other.

Ahmed also invited all participants to introduce themselves. He mentioned that farmers representing FRGs should tell their name, the local name of their group and their role while introducing themselves.

Purpose of the meeting

To communicate research results that was conducted on farmers plot in order to make the farmers aware of what they selected during the mid and end season evaluation and yield result. This is important to them because it made them earlier informed to which technology they plan to participate in the coming cropping season. In addition to this, to strength the FRG representative as they are becoming the member of kebele operational IP and make the door open for internal information flow among and within the farmers and TG for building better and strong bond.

Innovation platform concept and function

Zelalem briefly shared the concept of the innovation platform and its practical implementation in Africa RISING project. He introduced who is a member of the woreda IP and who are the TG members and also their role and function at woreda level. He introduced the TG members who participated in this meeting to try to show that the members of the woreda are from research centre, university, woreda and NGO level who come together to support the kebele IP meetings and also R4D activities with farmers. He also shared the illustration on a flipchart that shows how the woreda innovation platform is connected with the kebele and also with the FRGs and explained how information is flowing both ways from farmers to experts and from experts to farmers.

Communicating action research findings of 2014 activities

Endeshaw presented the major Africa RISING research activities in the two kebeles of Sinana woreda. The total number of farmers participated in the different project activities was 207 which is a sum of 84 from Selka and 127 from Ilu-sanbitu kebeles. He presented the research activities in the areas of main crops, livestock feed, soil and high value crops that include research on wheat, potato, faba bean, barely, oat and vetch, tree Lucerne, and apple. He also presented the results of participatory mid-season evaluation on different crops and end-season yield results of different varieties of crop under research. The results of the two kebele were presented so that the members of the platform can have a chance to compare the results of similar research activities accomplished in both kebeles. See the following Table 1 and Table 2) which was presented by Endeshaw which shows the results of the two kebeles research activities.

Table 1: Ilu-sanbitu Field crop trials and their results

Type of crop	Varieties	Mid-season evaluation result	End season evaluation	Yield	Rank based on yield
Wheat	Hidase	2	-	45	1
	Honkolo	3		40	2
	Bika	1		38	3
Food Barley	EH1307	2		38	2
	Dafo	4		30	3
	Abdane	1		33	1
	Harbu	3		29	4
Malt Barley	Bahati	2		31	2
	Miscal21	3		28.5	4
	Bokoji	1		31.5	1
	Holkar	3		30	3
Faba Bean	Moti	2		41	4
	Tumsa	2		65	1
	Dosha	3		60	2
	Gebelcho	1		51	3
Potato	Belete	1	1	374	1
	Gudane	2	3	328	2
	Jalane	3	2	185	3

Table 2: Selka Field crop trials and their results

Type of crop	Varieties	Mid-season evaluation result	End season evaluation	Yield /ha	Rank based on yield
Wheat	Hidase	1		62	1
	Honkolo			36	3
	Bika			39	2
	Mandoyu	2			
	Sanate	2			
Food Barley	Abdane	1		67	1
	Dafo	2		62	2
	EH1493	3		67	1
	Harbu	4		59	3
Malt Barley	Traviller	4		58	3
	Bokoji	3		59	2
	Miscal-21	2		58	3
	Bahati	1		65	1
Faba Bean	Moti	2		47.5	4
	Tumsa	3		59	2
	Dosha	3		61	1
	Gebelcho	1		56.5	3
Potato	Belete	1	1	455	1
	Gudane	2	3	377	2
	Jalane	3	2	305.5	3

In addition to these, in relation to the potato research activities with CIP 3 big Diffused Light Storage (DLS) with the capacity to store 40-60 quintals of potato seed at once and 5 small DLS with storage capacity of 15 – 20 quintals were constructed. With research on high value crops with ICRAF 140 apple seedlings were planted and more than 75% it survived. With livestock feed research activities about 1500 – 2000 tree Lucerne seedlings were distributed to farmers and planted with trainings on how to manage and use if for multiple-purposes. With ICARDA training was organized on post-harvest management for faba bean seed producer farmers and about 10 triple bags were distributed for faba bean seed producer farmers for storing.

Cost-benefit analysis of wheat versus potato production

Addisu Asfaw presented simple cost-benefit analysis result of producing wheat against potato. In his presentation he was interested in the results and income gained by the farmers from the potato production. He tried to estimate potato and wheat production costs and yields gained from last year production using the same size of land. Farmers agreed on the unit cost of seed, fertilizers, agrochemicals, labor and others and also the unit farm gate selling price of wheat grains and potato tuber yields. The net profit obtained from potato production is by far greater (more than threefold) than that of wheat. See the table below that shows the cost and benefits of potato versus wheat production:

Table 3: Participatory cost estimation of potato versus wheat production in the case of Ilu-sanbitu and Selka Kebeles

S / N	Production inputs and its price estimates	Fertilizers and seed rates/0.2 ha		Total Input prices (ETB)/0.2ha	
		Wheat	Potato	Wheat	Potato
1	Fertilizers: DAP (1,600 ETB/Qt) UREA (1,400 ETB/Qt)	DAP 20 kg UREA 5kg	DAP – 39 kg UREA – 33 kg	390	1,086
2	Quality Seed: Hidase (1,250ETB/Qt) Gudane (400 ETB/Qt)	25 kg	700 kg	250	2,800
3	Agrochemicals (Herbicides and fungicides)- 450 ETB/0.5 lit of rexudo, 150 ETB/1kg of mancozeb	0.5 lit/ha of rexudo, different herbicides	1kg/ha of mancozeb	480	60
4	Combine harvester rent (40 ETB/Quintal) and labor cost (50 ETB/person/day)		10 workers/day: - Planting, - 1 st weeding and fertilizer application - Earthing-up - Harvesting	360	2,000
Total				1,480	5,946

Table 4: Cost benefit analysis of potato versus wheat production in the case of Ilu-sanbitu and Selka Kebeles

Crop Type & variety	Gross income (ETB)	Production costs (ETB)	Net profit (ETB/2000m ²)	Net profit (ETB/ha)
Wheat- <i>Hidase</i>	6,750	1,480	5,270	26,350
Potato- <i>Gudane</i>	26,250	5,946	20,304	101,520

In addition to the net income ($101,520 - 26,350 = 75,170$ ETB), Addisu also presented the benefits of potato production for Bale farmers, who are known by mono-cropping (wheat production area), includes soil fertility, reducing weed infestation, minimize wheat rust, improve nutritional values and also market access. Based on this, he also tried to advise them that rotating wheat with crops like legumes, potato, barley and others can improve soil fertility, crops yield, nutrition and income.

Challenges and pressing opportunities

Endeshaw presented the challenges and opportunities identified from last year research activities.

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Table 5: Challenges and opportunities

Challenges	Opportunities
<ul style="list-style-type: none"> - Farmers provide inappropriate land - Poor management by some farmers - Trial harvesting prior to researcher discussion/communication - Less participation on training and field day - Farmers participate with high expectation of getting technologies for free and this results in farmers participate in farm trials that doesn't fit the technologies requirement in terms of land, water and labou - Since faba bean for example is produced less in sinana it results in farmers crossing faba bean farm have been cutting and eating the fresh (impact on yield) - Due to mechanization, difficult to implement trial on farmers field - Failure in DLS constriction on the time line 	<ul style="list-style-type: none"> - Farmers interested in protocol implementation - Strong local partner collaboration in implementing the farm trials - Production diversification - Planned research activities fully implemented - Farmers become owners of improved seed and seed store - Favorable environment for growing crops

Discussion and dialogue session

Three facilitators were nominated to run the discussion and these include woreda, kebele and sinana agricultural research center representatives:

Farmers / kebele IP members raised the following issues as discussion points:

- One of the problems is that we farmers didn't take the initiation of participating the whole family members in our research activities rather loading all activities on hired laborers by Africa RISING, so we need to do all the activities by ourselves from now onwards.
- As human being is not eating only one type of crop throughout their life our farm land should only not produce wheat we need to use crop rotation and diversify our production,
- Our common problem is that we all are interested in mechanization to produce wheat year after year as it doesn't require us much labor
- Unless we manage our farm well with technical support from the researchers and the development agents we won't harvest good yield – we should weed, harvest and do other activities on timely and based on researchers advice
- Why the project focus on farmers those who have lands accessible to read. Why? What about farmers having land at far distance?
- There is always a thing done in a hurry by researchers which is difficult to carefully implement the research work on the ground. They should have adequate time to do it well
- Farmers are disappointed by the project focus on accessible lands why?
- Representatives of FRGs agreed that they are not coming together and discussing on each protocol's challenges and strengths. They promised to follow up activities of the group members in the future so that strengths and problems will be identified and shared on the IP meetings.

Selka Kebele representatives selected for sinana woreda IP members

Participatory selection of representatives was done to nominate 5 selka kebele IP members to be a member of the woreda strategic innovation platform. The criteria for selecting the representatives were as follows:

- A minimum of two women representatives
- Two from the woreda administration and agriculture office while three farmers from FRGs
- They should read and write and communicative
- Those farmers who participate in more than 2/3 on-farm research activities
- A model farmer in a way that he/she is a role model for the other farmers

Based on the above criteria the following were selected:

1. Selka Kebele Adminstartor – Taju Abdulkadir (Male)
2. Kebele office of agriculture representative – Awol Mohamed (Male)
3. Haji Hussen Haji Adam (Male Farmer)
4. Uργο Merga (Female Farmer)
5. Mako Abdulmajid (Female Farmer)

Ways forward

Addisu informed the IP members on the next season activities of Africa RISING and the points are summarized as follows:

- Registration of interested farmers who can afford to buy apple seedlings to plant in the coming main season need to be registered with Mubarek Shamil and DAs. We need to get the list as soon as possible to order the required amount of seedlings early.
- Animal feed – Napier grass plantation will be implemented soon with SARC
- Rope and washer pump will be introduced with certain farmers from Apple and irrigated fodder FRGs.
- Crop residue management: feeding trough will be constructed for 5-6 farmers
- Hand driven tractor and motor pump will be introduced by clustering 2-8 farmers who have who have irrigable land adjacent to river shaya with the objective to relay potato with wheat.
- Apple Nursery establishment discussing with woreda office of agriculture

Annex 1: Participants

SN.	Name	Gender	Responsibility
1	Hussen Ebrahim	M	Potato FRG Secretary
2	Muhammed Kadir	M	Oat-Vetch FRG Secretary
3	M/Misganew Mokonen	M	Christian religious leader and kebele IP member
4	Jeyilan Dawud	M	Oat and Vetch FRG Chairman
5	H/Said Tola	M	Tree Lucerne FRG
6	Kiyar/Sh/Abdumajid	M	Wheat FRG
7	Dabale Tadesse	M	Safisa seed producer cooperative & Kebele IP member
8	Galane Tufa	F	Kebele Manager & Kebele IP member
9	Fayye Goshu	M	respected leader(Christian) & IP member
10	Seifudin Hussen	M	Apple FRG secretary
11	H/Hussen H/Adem	M	Wheat FRG Chairman
12	Kemal Abda	M	Barley FRG chairman
13	Roba Gobena	M	Tree Lucerne FRG -Chairman
14	Aliyi Ebrahim	M	Faba Bean FRG
15	Urgo Merga	F	Tree Lucerne FRG -Secretary
16	Adanech Mulata	F	Barley FRG member
17	Mariama Abda	F	Tree Lucerne FRG
18	Makko Klil	F	Potato FRG Head
19	Tashome Alemu	M	Tree Lucerne FRG
20	Hailu Fikadu	M	Selka kebele IP member
21	Mubarek Shamil	M	AR Data collector
22	Awel Muhammed	M	DA
23	Esayas Aklilu	M	kebele Livestock Agency& IP member
24	Roba Gobena	F	Wheat FRG
25	Makko Abdulmajid	F	Apple FRG -Chairman

Annex 2: Jawe FRGs

S. N	Protocols-Treatment Types	Local Name of FRG	FRG members			FRG representatives			
			M	F	T	Name	Responsibility	Sex	Total
1	Tree Lucerne	Sokore (a known local dairy cow breed name)	18	5	23	Urigo Merga	Secretary	F	2
						Roba Gobana	Leader	M	
2	Apple	Ture Badada (apple makes to wait but rewarding)	11	3	14	Seyfudin Hussein	Secretary	M	3
						Mako Abdulmejid	Leader	F	
						Tagine Tadessa	Member	M	
3	Wheat (PVS -2 , CSP - 2 and Soil Fertility Treatment - 17)	Abdi Waak (Hope with God)	19	2	21	Kedir Muhammed	Secretary	M	4
						H/Husein H/Adam	Leader	M	
						Maryama Abdu	Member	F	
						Taju Abdulkadir	Member	M	
4	Faba been (PVS-2 and CSP-2)	Siko-Mando (Bale and Arsi Oromo ancestor's name)	3	1	4	Aliyi Ebrahim	Secretary	M	2
						Warku Damisse	Leader	M	
5	Potato (PVS-2 and CSP-2)	Ararsa (negotiator)	3	1	4	Meko Kelil	Leader	F	2
						Husein Ebrahim	Secretary	M	
6	Food and Malt Barley	Hangafa Midani (Elder of all crops)	4	0	4	Kemal Abda	Leader	M	2
						Mokonin H/Wold	Secretary	M	
7	Oat & vetch	Kenani (rewarding)	13	0	13	Jeylan Dawud	Leader	M	2
						Muhammed Kedir	Secretary	M	