

Report: Africa RISING West Africa and East/Southern Africa scientists cross-learning visit to Africa RISING Ethiopia

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The Africa Research In Sustainable Intensification for the Next Generation (Africa RISING) program comprises three research-for-development projects supported by the United States Agency for International Development as part of the U.S. government's Feed the Future initiative.

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 regional projects are led by the International Institute of Tropical Agriculture (in West Africa and East and Southern Africa) and the International Livestock Research Institute (in the Ethiopian Highlands). The International Food Policy Research Institute leads the program's monitoring, evaluation and impact assessment. http://africa-rising.net/









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Introduction

The Africa Rising project coordinating office of the International Institute of Tropical Agriculture organized a watershed exchange/cross country learning/visit program for scientists in the project to travel to Ethiopia and draw lessons as well as share experiences on watershed management. The exchange visit was focused on three priority areas; integrated crop production, watershed management and livestock production systems. Participants arrived in Addis Ababa on 19 April 2015 and visited various project sites in Ethiopia where they had discussions with colleagues and farmers working in the Africa RISING Ethiopia project. The cross country learning visit ended on 24 April and the visiting team of scientists departed on 25 April. This report summarizes the project related activities executed during the visits and concludes with lessons learnt from the visit that could help in shaping Africa RISING interventions in the other participating countries.

20 April 2015: Briefing of Participants

All participants were welcomed to the ILRI campus by Mr. Aberra Adie and everyone was requested to introduce themselves, mention the country they represented and explain why they were present for the exchange visit. The list of participants during the briefing session is included in the Appendix. The consensus was that this exchange visit is purposely for the cross country learning and exchanging experiences on integrated watershed management. Thereafter, Mr. Adie walked the participants through the week's program and asked the participants to make any suggestions, additions or changes. This was done and the program was adopted after which partners from Ethiopia made presentation on the ongoing project activities within Africa RISING Ethiopia.

A detailed biodata of the participants and program of the visit can be accessed on the Africa RISING wiki page for the cross learning visit at: http://africa-rising.wikispaces.com/AR WA-ESA+Learning+Trip+to+Ethiopia

Highlights of the Introductory Presentations by Africa RISING Ethiopia Team

Kindu Mekonnen, gave a presentations entitled 'Africa Rising Project of the Ethiopian Highlands: An overview on R4D activities'. He presented on the approaches used in initiating interventions as well as the achievements of the Africa Rising Project in Ethiopia so far. Key milestones met by the project so far include conducting 1,315 field days, 562 trainings, 1,998 workshops, and more than 704 surveys. He also highlighted close collaboration with Agricultural Research Institutes, Government Agricultural Extension, Universities, CGIAR partners, and other projects in the region as a success in its won right. The presentation can be accessed at: http://africa-rising.wikispaces.com/file/view/ARprojectEthiopia-20Apr15.pdf

Zenebe Adimassu shared the experiences of 'Watershed management initiatives in Ethiopia' from 1974 to present and highlighted some of the interventions the Africa Rising project is currently pursuing and the lessons learnt. The presentation by Adimassu can be accessed at: http://africa-rising.wikispaces.com/file/view/Zenebe-20Apr15.pdf/549502706/Zenebe-20Apr15.pdf

The third presentation was led by Kifle Woldearegay who described 'Water harvesting and climate adaptation: the experience in Tigray, Northern Ethiopia'. The detailed presentation can be downloaded from: http://africa-

rising.wikispaces.com/file/view/Kifle_20Apr15.pdf/549502640/Kifle_20Apr15.pdf

A joint presentation on *'Processes of managing collaborative model watersheds in Africa Rising sites'* was jointly done by Mekonnen, Tamene and a PhD student, Tsefaye Tesfamichael. The presentation is accessible at: http://africa-

<u>rising.wikispaces.com/file/view/IWMI_ARmodelwatersheds_20Apr15.pdf/549502600/IWMI_ARmodelwatersheds_20Apr15.pdf</u>

The final presentation of the day on 'Africa Rising projects of west, south and east Africa R4D highlights and watershed management research experiences' was done by Kennedy Waweru Ng'ang'a on behalf of participants from Ghana, Mali, Kenya, Zambia and Tanzania. The presentation is available at: http://africa-rising.wikispaces.com/file/view/AREastWestSouth-20Apr15.pdf



Group photo of the participants at ILRI campus in Addis Ababa

21 April 2015: Visit to the Gina Beret Kebele Model Watershed in Basona Warena District

The participants travelled to Debre Birhan. They were were welcomed by the faculty of the University including: Tsigemariam Bashe of the Debre Berhan University, Dean and Lecturer at the College of Agriculture and Natural Resources, Beyene Bitew, Director of the Debre Birhan Agricultural Research Center; Temesgen Alene, Action Site Coordinator for Africa RISING; Shimelis Mengstu, Assistant Action Site Coordinator for Africa RISING; Jema Mohammed, Ministry of Agriculture at Basona Warena District, and Mekonin Mengistu from Extension of the local Kebele (village). A farmer, Tegene, explained the interventions on water harvesting and soil and water conservation being done in the watershed.



Participants brainstorming at the Gina Beret Watershed regarding soil and water conservation structures instrumentation for measuring run-off



Tegene, explaining some of the interventions including trenches and stone bunds adopted and used for controlling erosion and minimizing runoff

22 April 2015: Visit to Upper Gana research Kebele in Lemo District

Participants were welcomed by 2 MSc students, Feleke Tadesse and Tamene Tadesse, of Hawassa University; Tamirat Erjino, a crop expert from Lemo District Office of Agriculture; Workneh Dubale, the Africa RISING Site Coordinator; Fikadu Tessema, the Africa RISING Assistant Site Coordinator; Demeke Beyene, the Kebele Office of Agriculture; and the host farmer Ayele Ababa, of the Upper Gana Kebele.

The farmer, Ayele Ababa is managing a research trial with 3 practices of faba bean-forage oats, faba bean-wheat, and sole faba bean. He is closely monitoring the experiment and says he will make final judgment on the best practice and best faba bean variety towards the end of the growing season when he will measure final yield. The team also visited a second farmer, Tefera Anito, who is growing Tree Lucerne and Teff for animal fodder. He has also planted avocado trees which will be ready in two years.



Tefera Anito (extreme right), a farmer in Upper Gana Kebele, explaining to researchers how he draws water for irrigation of fodder and avocado in his homestead

The team also visited, another farmer, Tadelech Lechamo who is practicing improved potato production in collaboration with CIP. She realized more than USD 1,500 in potato sales last year and she is able to support her 7 member household from this income.



Tadelech Lechamo shows her potato storage unit to the visiting Africa RISING researchers in Upper Gana Kebele in Lemo District of Ethiopia

23 April 2015: Visit to Jawe Research Kebele in Lemo District

In this visit to Jawe research Kebele, the team met with farmers; Adenew Ayele (Kebele chairman), and members Alenitu Aleyo, Abebe Jala, Beyene Handiso, and Abera Mekengo. The Kebele Office of Agriculture was represented by Andualem Bezabin.

Tamirat Erjino, a crop expert from Lemo District Office of Agriculture, Workneh Dubale, the Africa RISING Site Coordinator, Fikadu Tessema, the Assistant Site Coordinator and Getamun Abirwam (data collector for the project) were also part of the visiting team.

Farmers showed the visitors interventions on soil and water conservation including trenches and conservation agriculture. Some of the activities were kick started by other projects but did not succeed and the Africa RISING project has stepped in with new innovations in hydrology, improved crop production, soil and water conservation in the Jawe Kebele.



Jawe Kebele Chairman, Adenew Ayele, explaining to the visiting researchers the ongoing intervention within the Kebele on soil and water conservation, water harvesting and conservation agriculture

The team also visited another farmer, Bekelch Belachew. She is practicing irrigation using a shallow well, together with her husband, Atobachew. They use the shallow well for irrigating fruit trees and vegetables and plan to start using rooftop water harvesting to capture more

water for irrigation. The Africa RISING project has been supporting farmers, such as Bekelech with training on fruit tree production, propagation, and nursery preparation. Such farmers started the initiatives after they participated in a visit to Africa RISING sites in northern Ethiopia together with district agricultural officials, agricultural researchers from the national research system, university researchers and agricultural extension officers. The exchange visit triggered a great change in the mindset of the farmers who immediately realized what an opportunity was presented to them if they ventured in irrigated horticultural production.



Bekelch Belachew describes her success story with use of a shallow well for irrigating pepper and avocado in her homestead

The team of visiting scientists rounded up the field visits by holding a meeting where they discussed their observations and lessons from the visit. Each of the visiting scientists were also requested to submit a list of main observation, lessons and recommendations to Dr. Kindu Mekonnen who will compile a report for the entire visit.

24 April 2015: Travel back to Addis Ababa and Wrap-up Session

Key lessons learnt

In Addis Ababa, the visiting scientists shared some of the key lessons learnt during the visit. They highlighted the lessons listed below:

- Seeing is believing: Farmers learned so much from fellow farmers through exchange
 visits organized by the Africa RISING Ethiopia Project. It is important to let farmers draw
 from the experiences of fellow farmers and compliment their own ingenuity in
 implementing agricultural interventions.
- 2. Collaboration within and across packages is critical: The Africa RISING team in Ethiopia enjoys strong and close partnerships with other CGIAR centers (including CMMYT, CIP, ICRISAT, CIAT, IWMI and IFPRI), universities, agricultural research institutes, government district and Kebele (village) agricultural officials. This is important in ensuring that the interventions introduced to the communities are sustainable in the long-term.
- 3. Capacity building of students and farmers: There are so many students pursuing graduate programs supported through the Africa RISING Ethiopia project. The farmers also acknowledge change in knowledge and attitudes due to the training provided by the project. This is important because it will ensure continuity of interventions by farmers beyond the lifespan of the project and production of a new generation of researchers in integrated crop-livestock-water management production systems.
- 4. **Interventions are demand driven:** Farmers expressed interest in the interventions before Africa RISING mobilized support to help them. Thus, a demand driven intervention will ensure that farmers own and share among themselves. This makes upand out-scaling very easy to achieve within a short span of the project.

Annexes

Annex 1: List of Participants

- 1. Kindu Mekonnen (ILRI)
- 2. Gift Ndengu (CIAT Malawi)
- 3. Job Kihara Maguta (CIAT Kenya)
- 4. Swai Elirehema (Tanzania)
- 5. Mulundu Mwila (ZARI-Zambia)
- 6. Festo Ngulu (Tanzania)
- 7. Khalifa Traore (Mali)
- 8. Gilbert Botha (SIMLEZA-Zambia)
- 9. Edward Mzumara (LUANAR-Malawi)
- 10. Zenebe Adimassu (IWMI-Ethiopia)
- 11. Melkamu Derseh (ILRI-Ethiopia)
- 12. Aberra Adie (ILRI)
- 13. Lulseged Tamene (CIAT)
- 14. Birhanu Zemanim (ICRISAT Mali))
- 15. Davie Kadyampakeni (IWMI-Ghana)
- 16. Kifle Woldearegay (Mekele University)
- 17. Tesfaye Tesfamichael (CIAT-PhD student)
- 18. Kennedy Waweru Ng'ang'a (CIAT-Kenya)
- 19. Simret Yemane (ILRI)

Annex 2: Program

Date	Time	Activities
19-Apr-15		Arrival in Addis Ababa
20-Apr-15	9:00 - 9:10	Introduction of participants
	9:10-9:30	Africa RISING project of the Ethiopian highlands R4D highlights
	9:30- 10:30	Watershed management initiative in Ethiopia
	10:30-11:00	Coffee break
	11:00 - 12:00	Water harvesting and climate adaptation experience in Tigray, Northern Ethiopia
	12:00 - 12:30	Discussion
	12:30-14:00	Lunch break
	14:00-15:00	Processes of managing collaborative model watersheds in Africa RISING sites
	15:00-15:30	Africa RISING projects of west Africa, and south and east Africa R4D highlights and watershed management research experiences
	15:30-16:00	Coffee break

	16:00-16:45	General discussion
	18:00- 20:00	Reception at at ILRI campus
21-Apr-15	7:00	Depart to Debre Birhan
	9:00	Arrival in Debre Birhan
	9:00-9:45	Coffee break
	9:45-10:00	Travel to Gudo Beret (Gina Beret)
	10:00-10:10	Meet local partners and Introduction of visitors
	10:10-14:00	Visit model watersheds and discussion
	14:00-14:30	Travel back to Debre Birhan
	14:30-15:30	Lunch break
	15:30	Back to Addis
	17:30	Arrive in Addis
22-Apr-15	7:00	Depart to Hossana
	12:00	Arrive in Hossana
	12:00- 13:30	Lunch break
	13:30-14:00	Travel to Upper Gana Africa RISING research kebele
	14:00-16:30	Visit some of AR research activities and discussion with AR farmers
	16:30-17:00	Back to Hossan
23-Apr-15	8:00	Travel to Jawe AR kebele
	8:00-8:10	Introduction of the visitors to the local partners
	8:10-12:00	Visit the collaborative model watershed site
	12:00-12:30	Back to Hossana
	12:30-13:30	Lunch break
	13:30-17:00	Visit watershed sites managed by SOS Sahel
	17:00-17:30	Back to Hossana
	18:30-20:00	Reception in Hossana Lema International Hotel
24-Apr-15	7:30	Depart to Addis Ababa
	13:00	Arrival in Addis Ababa
	13:00- 18:00	Free time for interaction with CG centers and shopping
25-Apr-15		Departure of visitors to their respective destinations

END.