

Transforming African agriculture through sustainable intensification

August 2020

Undeterred by COVID-19: Africa RISING Ethiopian Highlands field experiences

When COVID-19 started its punch in Ethiopia back in March 2020, the Africa RISING Ethiopian Highlands project (Africa RISING henceforth) was compiling data, doing analysis of the previous cropping season, and planning for the 2020 main rainy season. Soon after a few COVID-19 cases were reported in the capital Addis Ababa, the Ethiopian government declared a state of emergency to last until end of September 2020. The state of emergency put up some strict regulations on social distancing, public gatherings and wearing face masks in public places. In line with government actions and taking note of recommendations by the World Health Organization (WHO), the International Livestock Research Institute (ILRI) adopted a "work from home" directive and suspended all field travels until July 2020. These measures affected many of the planned field activities of Africa RISING and other ILRI projects.

While enforcing protective measures against the virus, the state of emergency also urged all development actors and research organizations to support farming activities for the main cropping season (Meher). ILRI management also started allowing the resumption of some critical field operations on case by case basis. Africa RISING project implementation is decentralized in four intervention regions and ILRI management allowed the project to run safe and minimum field operation during the state of emergency under the condition that the Africa RISING management team reports to ILRI senior management on regular basis on the status of its operation and the safety of its staff in the field.

This brief aim to share the field work execution approaches and experiences of Africa RISING under COVID-19. In doing so, we also aim to touch up on some lessons in managing disruptions of long-term visions and programs by short-term events such as pandemics.

Impact of the pandemic on Africa RISING activities: site and central level annual planning meetings with various development partners were affected because of travel and meeting restrictions. These restrictions also affected multi-stakeholder engagement platform meetings in different Africa RISING operational sites and regions. Some socioeconomic surveys that were planned to take place on high value fruit trees, mechanization, and assessment of contribution of Africa RISING validated technologies to nutrition and training were also temporarily cancelled. For some of our team members, the "work from home" decision presented an opportunity for them to work on collected data and produce different research products including peer-reviewed journal articles. It also improved the team's skill on virtual communication tools.

Table 1. List of Africa RISING project planned activities affected by COVID-19 pandemic

| Planned activities | Leading institution | Sites where the work is planned to take place | | | | |
|---|------------------------|--|--|--|--|--|
| Multi Stakeholder Innovation Platform meetings and scaling assessment | ILRI | AR four sites | | | | |
| Site level review and planning meetings | ILRI | AR four sites | | | | |
| Survey of lentil viruses in the short cropping season | ICARDA | Basona and Sinana AR sites | | | | |
| Data collection for SIAF | CIAT | N Shewa, W Gojam, Hadiya and E Tigray | | | | |
| Field visit in Ashenghe lake area | CIAT | S Tigray | | | | |
| Training of experts on INRM - Hocheche dam | CIAT | S Wollo | | | | |
| Field visit and discussion with Inter Aide to develop recommendation domain for scaling | CIAT | Hadiya and Kembata zones | | | | |
| Field visit to discuss joint activities on INRM | CIAT | N Shewa, Debre Birhan | | | | |
| Data and field instruments collection - irrigation activities | IWMI | N Shewa | | | | |
| Field visits to see the current status of the high value trees | ICRAF | Basona, Sinana and Endamehon AR sites | | | | |
| Avocado yield data measurements and socio-economic survey | ICRAF | Lemo AR site | | | | |
| Survey on nutrition activities | Bioversity | AR four sites | | | | |
| Survey to assess the influence of mechanization on gender roles | CIMMYT | Selected AR sites | | | | |

Planning under high uncertainty: when the pandemic started in Ethiopia in March 2020, no one was sure what will happen next. There were some panic shutdowns in some parts of the country, while the possibility of further shutdown was imminent almost everywhere. The predictions on the level of infection were also very uncertain, forcing Africa RISING to accommodate these risks and continue with planning activities. One encouraging factor was the commitment of our public/development research and extension partners to continue their operation despite the threat of the pandemic.

Increasing the use of online communication technologies: in normal times, planning a planting season would require a number of field and project level meetings before the cropping season starts. However, since this is not possible under COVID-19, the program management relied on online communication tools to run its meetings. Among CGIAR partners and Africa RISING site coordinators, the use of Microsoft Teams, Skype and Zoom video communication tools proved to be invaluable. For local partners with limited internet connectivity, phone calls and teleconferencing were of paramount importance. Africa RISING also created one program and four site level Telegram groups for quick sharing of updates and field activities. These experiences sharpened our skills on the use of online communication tools for research and development.

Easing bureaucratic requirements: one of the major preparatory activities for the planting season was securing planting materials of field and forage crop seeds. The seeds (early generation and certified seeds) were purchased from partner public research institutes, seed enterprises and farmer unions via email and telephone conversations. This required the goodwill and flexibility of our research/seed enterprise partners to take our verbal request and send us their invoices via email, and from ILRI management side to accept invoices in soft copy. The whole effort paid off eventually.

Table 2. Scaling achievements in 2020 summer production season

| | Tigray Region Amhara Region | | | SNNP Region | | | Oromia Region | | | Grand Total By Technology | | | | | | |
|----------------------------------|-------------------------------|------------------------------|-------------------------------------|------------------------------------|------------------------------|---------------------------|------------------------------------|------------------------------|------------------------------|------------------------------------|---------------------------------|---------------------------|--|------------------------------|---------------------------|------------------------------------|
| Technologi es/innovatio ns | Technologies | Quant ity- quinta I | Are a cov ered in ha | Numb er of Benefi ciaries | Quantit y Quintal s | Area covere d in ha | Numbe r of Benefic iaries | Quant ity Quint als | Area cover ed in ha | Numb er of Benefi ciaries | Quan tity in Quint als | Area covere d in ha | Numb er of Benef iciarie s | Quanti ty Quinta Is | Area covere d in ha | Numbe r of Benefi ciaries |
| wheat | Wane | 13 | 13 | 56 | 278 | 222.4 | 278 | | | | 308 | 208.8 3 | 144 | 599 | 444.23 | 478 |
| | King bird | 84 | 67.5 | 187 | | | | | | | | | | 84 | 67.5 | 187 |
| | Lemu | | | | | | | 481 | 481 | 333 | 7 | 8.75 | 6 | 488 | 489.75 | 339 |
| | Bullala | | | | 82.5 | 66 | 83 | | | | 105 | 69.83 | 50 | 187.5 | 135.83 | 133 |
| | Utuba | | | | | | | | | | 161 | 107.3 | 104 | 161 | 107.3 | 104 |
| | Fetan | | | | 131 | 104.8 | 105 | | | | | | | 131 | 104.8 | 105 |
| | Deka | | | | 7 | 5.6 | 7 | | | | 7 | 8.75 | 6 | 14 | 14.35 | 13 |
| Fabva bean | Gora | 19 | 9.5 | 41 | 16 | 8 | 10 | 16 | 7.5 | 32 | 132 | 66 | 132 | 183 | 91 | 215 |
| | Gebelicho | | | | | | | 286 | 143 | 393 | | | | 286 | 143 | 393 |
| Field pea | Bilalo | 6 | 4 | 15 | | | | | | | | | | 6 | 4 | 15 |
| Field pea | Bilalo | 12 | 8 | 29 | | | | | | | | | | 12 | 8 | 29 |
| Malt Barley | Ibon174 | 40 | 20 | 80 | | | | | | | | | | 40 | 20 | 80 |
| , | HB1964 | | | | 11.5 | 9.2 | 12 | | | | 6 | 4 | 8 | 17.5 | 13.2 | 20 |
| Food barley | Abdane | | | | | | | | | | 2 | 1.3 | 2 | 2 | 1.3 | 2 |
| Feed technologie s | Oat-vetch | 17.4 | 15.3 75 | 596 | | | | 16 | 16 | 780 | 13.4 | 15 | 268 | 46.8 | 46.375 | 1644 |
| | Vetch | | | | | | | | | | 0.174 | 0.6 | 20 | 0.174 | 0.6 | 20 |
| | Oat | | | | | | | 10 | 10 | 500 | 58.12 | 66.5 | 729 | 68.12 | 76.5 | 1229 |
| | Fodder beet Demonstration | 0.05 | 0.5 | 32 | | | 35 | | | | | | | 0.05 | 0.5 | 67 |
| | | 0.03 | 0.3 | 37 | | | | | | | | | | 0.03 | 0.3 | 37 |
| | Sub total | 0.1 | 0.8 | 69 | | | | | | | | | | 0.1 | 0.8 | 69 |
| | Alfalafa Demonstartion | 0.01 | 0.1 | 10 | | | 10 | 0.05 | 5 | 250 | 0.05 | 0.5 | 20 | 0.11 | 5.6 | 290 |
| | | 0.03 | 0.3 | 55 | | | | | | | | | | 0.03 | 0.3 | 55 |
| | Desho grass (Splits) | 43945 0 | 3.8 | 145 | | | | | | | | | | 43945 0 | 3.8 | 145 |
| High value fruit | Apple (Anana and prencisa) | 150 | 0.13 5 | 15 | | | 10 | | | | | | | 150 | 0.135 | 25 |
| Potato | | 0 | 0 | 0 | 30 | 1.5 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 1.5 | 19 |
| Regional Grand Totals | | 341.6 2 | 143 | 1367 | 556 | 417.5 | 569 | 809.0 5 | 662.5 | 2288 | 800.7 5 | 557.3 6 | 1489 | 2506.3 7 | 1780.6 7 | 5713 |

Preliminary assessments showed that while operating under the pandemic, the project was able to reach 5,700 farmers and provided 23 tons of crop and forage seeds/seedlings on a revolving seed system, covering 1,700 ha of land in four of its operational regions. Some of the seeds are breeder, pre-basic and basic seeds of farmer selected varieties in the Africa RISING sites in past seasons provided by the project as a starter seed multiplication kit by community seed growers for next season. The majority of the seeds are certified and community seeds produced by model male and female farmer unions and cooperatives in the 2019/20 cropping season. Thousands of other beneficiaries that project development partners reached through scaling of Africa RISING validated innovations will be documented and reported before the end of the year (2020). The Africa RISING project in the Ethiopian highlands targeted to reach 195,190 beneficiaries in the year 2020.

Tapping on partners trust and contribution: Africa

RISING works with local level focal persons within our scaling partners. The focal persons, most of whom are zonal and district level crop and livestock experts, have been essential in handling most of the field level activities during the pandemic. In normal years, Africa RISING site coordinators would have done most of the field activities including farmer selection and delivery of inputs for research for development initiatives. During the pandemic, the project re-channeled the coordination costs towards supporting local partners to handle the coordination role.

Ensuring safe operation under the pandemic: the program management team developed safe field operation guidelines and urged site coordinators and scaling/research partners to adhere to them. Weekly report is required from site coordinators to show commitment and practice of safe operation. Some of the provisions in the operation guide are:

- Africa RISING site coordinators can make only necessary travels within their scaling sites and conduct unavoidable meetings with scaling partners.
- All Africa RISING related meetings, both at field and office levels, should have less than four participants.
- In all Africa RISING organized meetings, participants should wear masks and wash their hands before entering meeting rooms, and when it is not possible to get handwashing facilities, sanitizers should be available during all meetings.
- During all Africa RISING related interactions with partners, the social distancing code of a minimum of two metres should be observed.
- Africa RISING related travels will observe the restrictions put in place on transport vehicles that requires vehicles to carry not more than half their regular capacity. This applies for both Africa RISING and partner vehicles.

Photo 1. Apple pest management training in Africa RISING site in Tigray (photo credit: ILRI/Mohammed Ebrahim)



Looking forward: major disruptions like COVID-19 may not come very often but when they do, they have the potential to disorient research and development activities, leaving project managers in limbo. The key lesson we learned during the COVID-19 pandemic is not to allow disruptive situations to completely paralyze project activities. Finding ways of managing uncertainties, capitalizing on the potential of online communication and other ICT tools, taking pragmatic measures to reduce bureaucratic hurdles, asking for assistance from trusted partners, taking safety precautions and taking some calculated risks could help in moving forward and maintaining long term visions in the face of serious disruptions.



Photo 2. Oat variety trial planting in Africa RISING site in Amhara (photo credit: ILRI/Temesgen Alene)



| 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. | The three 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 an associated project on monitoring, evaluation and impact assessment. |
|---|---|
| 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. | Prepared by: Million Getnet (ILRI), Kindu Mekonnen (ILRI) and Seid Ahmed (ICARDA) africa-rising.net |

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