

Scaling of Harmonized Digital Fertilizer Advisory in Ethiopia: Innovation Use Practice

November 2025



Authors:

Gizaw Desta, Gizachew Legesse, Abiro Tigabie, Getachew Agegnehu

Decision-making and capacity building to enable innovation use

Scaling partners platform decision-making events for scaling plan and operations

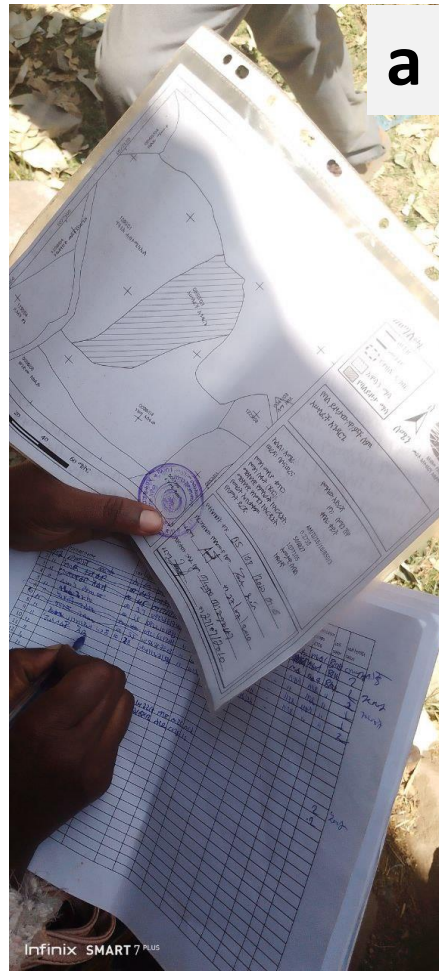


Experts and extension agents get hands-on training on the scaling implementation protocol



Farmers' sensitized and practiced precision fertilizer application


- a) Awareness creation on parcel/site-specific fertilizer use, use the parcel map for registration
- b) Farmers informed about the farmer and crop-specific rates of fertilizer
- c) Measure the right type and quantity of fertilizer per parcel
- d) Field practice for uniform and row application of fertilizer, and Urea top dressing



A large orange circle on the left side of the slide, partially cut off by the edge.

Farmer-to-Farmer Experience Exchange and Learning on Farmer Fields Managed with Localized Agronomy and Fertilizer Advisory Solutions

The scaling activities highlighted several key outcomes.

1. Farmers noted that crops managed using the localized fertilizer advisory demonstrated better growth, vigor, and uniformity with enhanced disease resistance, particularly in wheat.
 2. The site-specific fertilizer application, adjusting quantities according to land conditions and crop needs, offered practical solutions resulting in improved productivity, reduced the production costs and input use.
 3. The technical and institutional support provided by ICRISAT and scaling partner organizations was considered crucial to the success of the scaling.
 4. Farmers, extension agents, and local leaders recognized that sustained digital advisory and extension service support enhances knowledge and skill of practitioners, efficiency, and overall crop agronomy management and soil health.
- 
- Four yellow curved lines of varying lengths and orientations, located in the bottom right corner of the slide.



Farmers' Field Days for Experience Sharing and Learning at Siyadebirnawayu District, North Shewa Zone in Amhara Region

Participants: Total=196 (M=161, F=35)





በአንሌም ወረዳ በ2017/18ምርት ዘመን በአዲሱ የአፈር ማዳባሪያ አጠቃቀም ምክር ሀሳብ መሠረት በምርት ዘመኑ የአርሶ አደር የማሳ ምልከታ የመስክ ቀን በሁለቱም (በስንዴና ጤፍ) ሰብሎች በየአካባቢያቸው ከ11ቀበሌያት የተጠናከረ የአርሶ አደሮች የማሳ ምልከታ መከናወኑ ይታወቃል። ስለሆነም እስካሁን ባለው አፈጻጸም በ11ቀበሌያት የማሳ ምልከታ ተሳታፊ አከላት አሃዛዊ መረጃ በተመለከተ ።አርሶ አደር ወ 598 ሴት 203 ድ 801 ።ወጣቶች ወ 191 ሴት 83 ድ 271 ።በጥቅሉ ለ1072 ተሳታፊዎች የማሳ ምልከታ እንዲያደርጉ ማድረግ ተችሏል።



Farmers' Field Days at AneLemo District, Hadya zone in Central Ethiopia

Farmer field day event at AneLemo District, Hadya zone in Central Ethiopia
(Total=1072: Adult=801 (Female=203, Male=598); youth=271 (Female=83, Male=191))



Farmers' Field Days and experience sharing at Lemo District, Hadya zone in Central Ethiopia

**Farmer field day event at Lemo District, Hadya zone
in Central Ethiopia (Total=901: Adult=797
(Female=166, Male=631); youth=104 (Female=28,
Male=76)**

Farmers' field day events at Silte Zone, Central Ethiopia region

- East Silte District: (Total=265: Male=224 (Female=41) ,
- Wulbarag District: (Total=126: Farmers=46, Experts=30, Leaders=50)
- Zonal Field day: (Total=97: Experts and leaders=37 (M= 33, F= 4), Farmers=60 (M= 54, F=6)





Farmers' Field Days and Experience Sharing Event at Kachabirra District, Kambata Zone in Central Ethiopia

Participants Total 192 Adult 174,
(Female=27, Male=147) Youth 18
(Female=6, Male=12)





Farmers Experience Sharing and Learning Field Days at Doyogena District, Kambata zone in Central Ethiopia

Farmer field day event Participants:

Total= 214 (Male 166, Female 48): Adult= 175 (Female=37, Male=138); Youth=39 (Female=11, Male=28)

**Experience Sharing and
Learning Field Days at
Demboya District, Kamb
ata zone in Central
Ethiopia**

Field day event Participants

**Total=214 (Male= 166, Female=
48); Adult=175(Female=37,
Male=138); Youth=39 (Female=11,
Male=28)**



Farmer's Field Days at Damot Gale District, Woliata zone in South Ethiopia

Farmer's field day event participants:
(Total=242 (Female=55, Male=187))





ምዕራብ በለሳ በቃላይ ቀበሌ በኢክርሳት የተሰሩ ስራዎች የተገኘ ወ 35
 ሴ 6 ድምር 41 ከዚህ ውስጥ ወጣቶች 12 የወረዳ ባለሙያ አስተያየት
 1 ተሞክሮው በጣም ጥሩ ነው የተሰራው ስራ ለሌሎች አገልግሎት
 2 በትንሽ መሬት ብዙ መሬት ማግኘታችን እና አራሳችን ብሎ ዋስትናችን ያረጋግጥልናል።
 3 ሌላው ከሚመለከታቸው አካላት ጋር የግብዓት ችግር ቢለመስራት

Farmers' Field Days in West Belesa District, Central Gondar Zone Amhara Region

Participants: Total= 88 (Female=7, Male=81)

Melkamu Wodajie

በምዕ/በለሳ ወረዳ በዲቋና ቀበሌ በመስክ ቀኑ
 1.አድሻይዘረው ለስራ ከቀላልና ምቹ መሆኑ
 2.የሚበክን ግብአት አለመኖሩ
 3.በምክረ ሃሳቡ ለመፈፀም የግብዓት በበቂ ሁኔታ
 4.ለቀጣይ በሰፊው ለመስራት ግብዓት ከሚመጣ
 5.የግንዛቤ ይፈጠራ ለሁሉም ተጠቃሚ አ/አ. እንገልጻለን።

MW



Farmers' Experience Sharing and Learning Field Days at Basona Werana District and Debre Berhan City Administration, North Shewa Zone in Amhara Region

Participants: Total=539 (Male= 341,
Female=198)

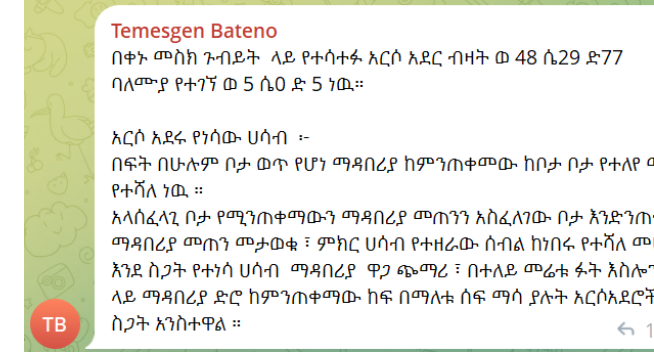
Adults: Male=231, Female=125

Youths: Male=110, Female=73



Farmers' Experience Sharing and Learning Field Days at Adilo District, Kambata zone in Central Ethiopia

Participants: Total=338, (M=226, F= 112) Adult=316 (Female=102, Male=214); Youth=22 (Female=10, Male=12).





Farmers' Experience Sharing and Learning Field Days at Asagirt District, North Shewa Zone Amhara Region

Participants:
Total=1427 (Male 1272, Female 155)
Adults= 962 (Male=854, Female =108)
Youths= 393 (Male=366, Female =27)
**Leaders and experts =72 (Male =52,
Female=20)**



Citation:

Desta, G., Legesse, G., Tigabie, A., and Agegnehu, G. 2025. Scaling of Harmonized Digital Fertilizer Advisory in Ethiopia: Innovation Use Practice

Acknowledgements

The CGIAR Sustainable Science Program forms a part of CGIAR's new Research Portfolio, addressing key challenges in agri-food systems by fostering efficient production of nutritious foods and safeguarding the environment to create fair employment opportunities, as we simultaneously tackle climate change, soil degradation, pests, diseases, and desertification. Its research is being implemented by CGIAR researchers from ICRISAT and ALLIANCE Bioversity International CIAT in close partnership with the Ministry of Agriculture, Ethiopian Institute of Agricultural Research, Regional Agricultural Research Institutes (Amhara, Oromia, South, Central, South West), Self Help Africa (SHA), Catholic Church South Synod, Sasakawa Africa Association (SAA), People in Need, Enhanced Rural Self Help Association (ERSHA), Precision Development (PxD), and Digital Green.

We would like to thank all funders who supported this research through their contributions to the CGIAR Trust Fund: <https://www.cgiar.org/funders/>

About CGIAR Sustainable Science Program Report

This research was conducted as part of the CGIAR Sustainable Farming Science Program. This research is being implemented by CGIAR researchers from ICRISAT and ALLIANCE Bioversity International CIAT in close partnership with the Ministry of Agriculture, Ethiopian Institute of Agricultural Research, Regional Agricultural Research Institutes (Amhara, Oromia, South, Central, South West), Self Help Africa (SHA), Catholic Church South Synod, Sasakawa Africa Association (SAA), People in Need, Enhanced Rural Self Help Association (ERSHA), Precision Development (PxD), and Digital Green. CGIAR is a global research partnership for a food-secure future. Its science is carried out by 15 Research Centers in close collaboration with hundreds of global partners. www.cgiar.org

Disclaimer

This working paper has not been peer reviewed. Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies or opinions of ICRISAT, donors, or partners.

This publication is copyrighted by the ICRISAT

It is licensed under a Creative Commons Attribution–NonCommercial 4.0 International License. To view this license, visit <https://creativecommons.org/licenses/by/4.0>. Unless otherwise noted, you are free to share (copy and redistribute the material in any medium or format), adapt (remix, transform, and build upon the material) for any purpose, even commercially, under the following conditions:

ATTRIBUTION: The work must be attributed, but not in any way that suggests endorsement by ICRISAT or the author(s).

For any reuse or distribution, the license terms of this work must be made clear to others. Any of the above conditions can be waived if permission is obtained from the copyright holder. Nothing in this license impairs or author's moral rights. Fair dealing and other rights are in no way affected by the above. The parts used must not misrepresent the meaning of the publication. (insert names of CGIAR Centers involved) would appreciate being sent a copy of any materials in which text, photos, etc., have been used.

©2025 ICRISAT

Key Words:

Scaling partnership, capacity building, Farmer-to-farmer exchange events, Innovation use practice, Ethiopia

Partners

Ministry of Agriculture, Self Help Africa (SHA), Catholic Church South Synod, Sasakawa Africa Association (SAA), People in Need, Enhanced Rural Self Help Association (ERSHA), Ethiopian Institute of Agricultural Research, Precision Development (PxD), Digital Green

About CGIAR Sustainable Farming Science Program

The CGIAR Sustainable Farming Science Program will address key challenges in agrifood systems by fostering efficient production of nutritious foods and safeguarding the environment to create fair employment opportunities, as we simultaneously tackle climate change, soil degradation, pests, diseases, and desertification.




About CGIAR Sustainable Farming Science Program

The CGIAR Sustainable Farming Science Program will address key challenges in agri food systems by fostering efficient production of nutritious foods and safeguarding the environment to create fair employment opportunities, as we simultaneously tackle climate change, soil degradation, pests, diseases, and desertification.

 sfp.cgiar.org

 sfp@cgiar.org

 [@CgiarFarming](https://twitter.com/CgiarFarming)

