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IGNITE & Digital Green DAAS

Exploring Intra-Household Decision-Making
and Best Practice Adoption Outcomes of
Women-Targeted Digital Extension

Phase 1 Brief Report

April 2022

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Photo: Tidiane Sall et al., 2019



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1. Context

Study on video-mediated extension
with women-only groups



Engagement: IGNITE & Digital Green

Laterite led the research, working closely with Digital Green DAAS and Tanager

The research was conducted by the **Impacting Gender and Nutrition through Innovative Technical Exchange in Agriculture (IGNITE) project** on behalf of **Digital Green**.

IGNITE Partners



Tanager: Leading partner on the IGNITE project, providing gender and nutrition technical expertise.



Laterite: Research and learning partner on IGNITE. Laterite is leading the research on this study.



60 Decibels: Research and learning partner on IGNITE.

IGNITE Client



Digital Green: a client under IGNITE, receiving technical assistance, capacity building, and decision-focused research.

Digital Agricultural Advisory Services (DAAS): a project led by Digital Green in partnership with Precision Agriculture for Development (PAD) and International Food Policy Research Institute (IFPRI) and driven by the interests and priorities of the Ethiopian government. DAAS is providing video-mediated extension services in Ethiopia.

Study: Video sessions for women-only groups

IGNITE & DG's study comparing outcomes of mixed-sex and women-only groups

Exploring Intra-Household Decision-Making and Best Practice Adoption Outcomes of Women-Targeted Digital Extension

- The study explores the outcomes of DAAS video-mediated extension when delivered to **women-only** farmer groups compared to **mixed-sex** groups.
 - The study compares women farmers who receive video-mediated extension (in either type of farmer group), and women farmers who reside in households where only a male household member attends.
 - Women farmers include those in both **female-headed households** (FHHs) and **male-headed households** (MHHs)
- The study focuses on the **wheat** value chain and includes two phases:
 - **Phase 1:** video observation sessions and qualitative study
 - **Phase 2:** quantitative study including household surveys
- Key outcomes of interest include **knowledge** of best practices (BPs), **decision-making** around BP adoption, level of **adoption** of BPs, and **access** to extension services.



Photo: Woman uses a metal silo;
Source: AllAfrica

Digital Green



Note: This brief includes findings from Phase 1 of the study. The quantitative component in Phase 2 will commence in August 2022.

Study: Overview

This report pertains to Phase 1 only

Phase 1

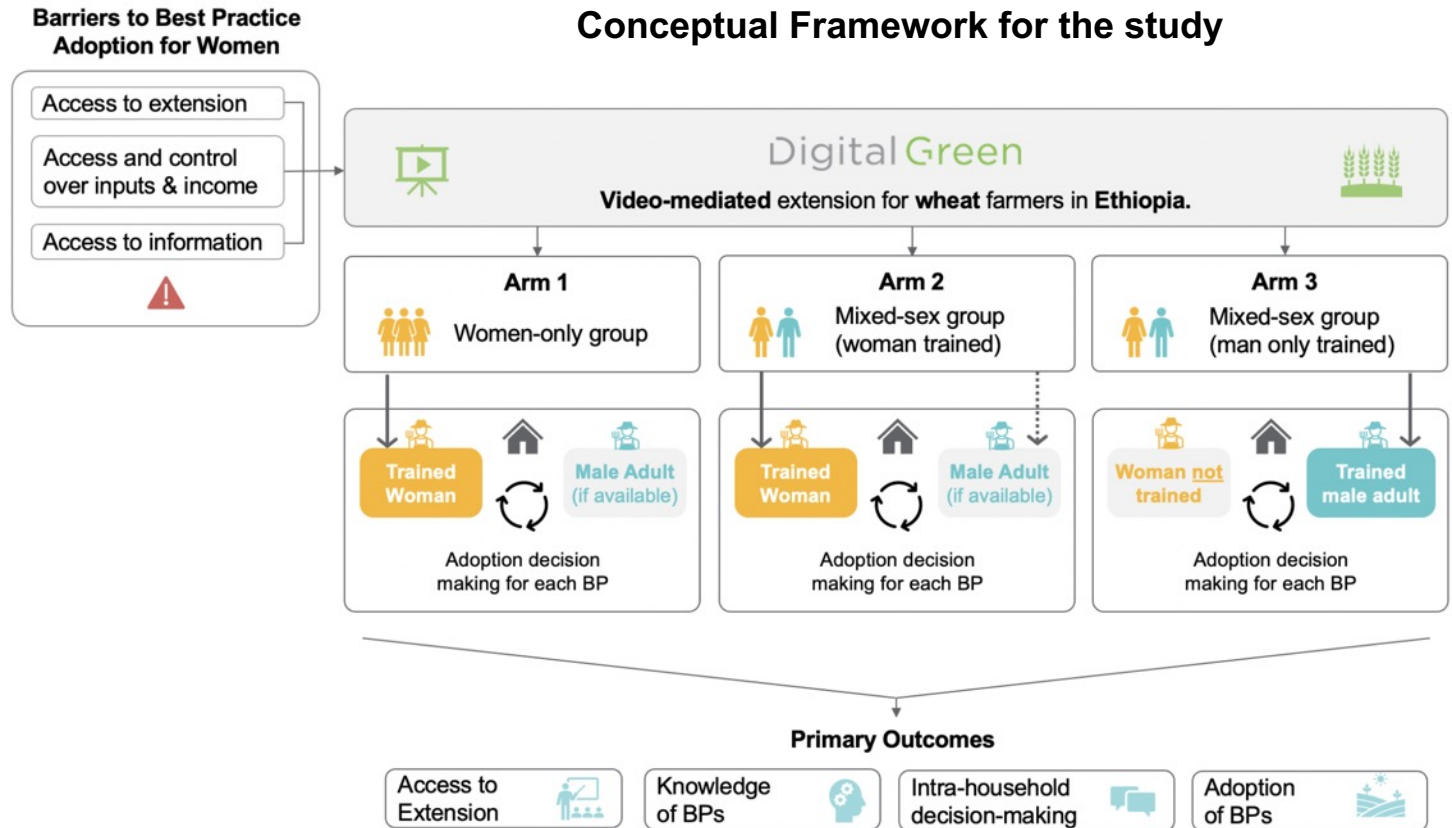
The focus of the brief

- Video observation sessions
- Focus group discussions
- Interviews with DAs

Phase 2

Data collection in August

- Field Preparation Survey
- Household survey (2 Rounds)



Study: Methodology for Phase 1

A mixed methods approach was employed

All data collection for Phase 1 happened in December 2021 in 7 kebeles* of Tijo Digalu woreda in Oromia region.

Video Observation Sessions (VOS)

- Enumerators observed **14 video-mediated extensions sessions** (7 mixed-sex and 7 women-only)
- The same video content was used for both groups in each kebele, with the same DA leading both sessions.
- Checklists were filled out indicating what transpired in the session, including **attendance, participation, DA behavior, video characteristics, and group discussions**
- Sessions pertained to **post-harvest storage** activities for wheat

Focus Group Discussions (FGDs)

- At the end of the VOS, participants were asked to take part in FGDs
- FGDs focused on **perceptions** of video-mediated extension, reactions to the **gender norms and roles** presented in the videos, and experiences of participating in farmer groups.
- In total, **7 mixed-sex** FGDs and **7 women-only** FGDs were conducted, each with **6-8 participants**
- In total, **55 women** and **32 men** participated in the FGDs

Interviews with DAs

- **7 key informant interviews** (KIIs) with DAs or woreda experts
- One KII was conducted in each of the 7 kebeles
- KIIs focused on DA experiences facilitating mixed-sex and women-only groups

* A kebele (ward) is the smallest administrative unit of. It is part of a district, itself usually part of a zone, which in turn are grouped into one of the regions.

Study: Locations

The geographic coverage of Phase 1



Methodology for Analysis

Qualitative insights were generated through thematic analysis using MAXQDA

- All **24 hours** of FGD, IDI, and KII conversations were recorded and transcribed, and then translated into English by a team of native Afan Oromo speakers.
- All transcriptions were **thematically coded** using a software called MAXQDA.
- Participants were interviewed separately, as well as in single-sex and mixed-sex groups, or together with their spouse. This allows for **gender disaggregation** of qualitative findings and analysis of **differences in perceptions between women and men**.
- All coded themes in the data were **summarized** by a team of Laterite researchers, and individual insights were identified for further investigation.



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2. Insights

Findings from Phase 1 video observations sessions, FGDs, and KIIs



Insights: Sections

Insights have been grouped into 2 sections and 7 sub-sections

2.1 Video Extension Insights

- Quantitative findings
- Perceptions on video-mediated extension
- Training attendance and participation
- Suggestions from DAs and farmers

2.2 Gender and wheat insights

- Wheat best practice adoption
- Gender roles in wheat farming
- Household decision-making



Photo: Women in a wheat field; Source: Biodiversity International



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2.1 Video Extension Findings

- Quantitative findings
- Perceptions on video-mediated extension
- Training attendance and participation
- Suggestions from DAs and farmers



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Quantitative Findings



Video Observations: Summary stats (1 of 3)

14 video sessions were observed, 7 mixed-sex and 7 women-only

Mixed-sex groups had more participants, but few women.
Women-only groups were younger and had more participation in the discussions.

 Mixed-sex groups		 Women-only groups
7	Number of sessions observed	7
Men + widowed women or women household heads	Typical participants	Married women and some widowed women
25	Average number of participants	16
3 (12%)	Average number of women	16 (100%)
41 years	Average age of participants	36 years
4.2	Number of farmers who participated in the discussion <u>during</u> video screening	5.2
5.6	Number of farmers who participated in the discussion <u>after</u> video screening	6.7

Video Observations: Summary stats (2 of 2)

14 video sessions were observed, 7 mixed-sex and 7 women-only

DA & Video: All sessions were led by DA and a video was played.

Interruptions: 6 sessions had an interruption of more than 2 minutes, with the most common being technical difficulties while trying to stop the video.

Location: 12 out of 14 sessions occurred at a Farmer Training Centre (FTC) or kebele office. Others occurred in the store house of a cooperative or in a seed multiplication hall.

Discussions:

- In 12 of 14 sessions there was a discussion during the video screening when the video was paused.
- In all sessions there was a discussion held at the end of the video screening.

Not on schedule: Only 1 session started within 15 minutes of the agreed upon time.

Participatory methods: Only 1 DA (Bucho Sillase) used participatory methods (games, songs, activities) besides video and discussion.

Introductions: the DA introduced the video in all but one session (women-only session).

In-person demo: In 3 mixed-gender sessions the DA used an in-person demonstration.

Q&A: In 11 out of 14 sessions the DA answered questions about the video.

Video Observations: Women's Involvement

Women were usually depicted in videos, and often were involved in the discussion



Depiction in Videos

In 5 of 7 kebeles, women were represented in the videos. They explained modern storage practices, their benefits, and the differences between traditional and modern practices.

- Usually there were two women in the video:
 - A farmer who explained the storage practices.
 - A DA who was hosting the video and also explaining storage methods to a husband and wife.


In 2 of 7 kebeles (Jamo and Chefa Gugesa), women were not depicted at all in the videos.



Participation in Discussion

During the sessions, discussions usually happen at two points: 1) during the video and 2) after the video.

- In **5 of 7** mixed-sex groups, a discussion happened during the video.
 - At least one woman participated in **3 of 5** occasions.
- In **all 7** mixed-sex groups, a discussion happened after the video.
 - At least one woman participated in **6 of 7** occasions.
- In women-only groups, the average number of participants in the discussions were greater than in mixed-sex groups. (Note: these were also smaller groups)

 **Note:** The same video content was used for both groups in each kebele, with the same DA leading both sessions.



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Perceptions on video-mediated extension



DA Perception: Efficient, Clear, and Engaging

DAs prefer video sessions, finding them to be an efficient training method

All DAs who participated preferred video demonstrations to in-person demonstrations. The three main reasons were:

More efficient in terms of time



DAs appreciated no longer having to personally demonstrate all practices, or find pictures to illustrate them, saving them time.

“Yes I had both video mediated group meeting and traditional extension group meetings. The video mediated session is easy to deliver and disseminate necessary information within short time, but in the demonstration plot it is not as such simple”

– DA

Easier to deliver, with clearer demos



Information is easier to deliver, presented to farmers clearly and uniformly each time, and allows for covering more diverse topics.

“At first, we began to take the training with some reluctance. We noticed that it is good after we used it and saw the benefit. In traditional training mode, our mouth turns dry for we should talk a lot.”

– DA

More engaged participants



DAs noted that farmers were more interested and engaged when using videos, as compared to in-person demonstrations.

“It improved the attendance of the farmers. They are motivated to come if they are told that it is a video session. They may not come if there is no video.”

– DA



Note: Responses are potentially biased as participants were aware the research was commissioned by DG

“I want to thank DG. It has improved the extension works. It has also eased our work. We have become able to quickly succeed in our efforts which otherwise may take 2 or 3 months for example. The coming of DG has contributed to production of the farmers. It has improved our interaction with the farmers.”

– DA

Farmer Perception: Interesting and efficient

Farmers prefer video, finding it more interesting and efficient; easier to engage

All participants in women-only groups, and most participants in mixed sex groups, preferred video demos over in-person demos. Main reasons were:

Video is more interesting



Farmers find video sessions more interesting and engaging to listen to, compared to in-person demos.

"The difference is a lot. Farmers fall asleep on standard training. They get bored, aren't interested to ask a question or give a comment, hurry to finish and go home. On the video mediated training, they never fall asleep. They remain active because they watch with their eyes. They don't get their attention stolen."

– DA

More topics, less time, less tiresome



Farmers noted that video sessions save time as more activities can be covered in the same session. This is less tiresome than in-person.

"You can easily learn more lessons related to the farming activity at once in a single video session."

– Female participant

"On the video, it is great you will watch all the activities clearly. It is not time consuming as well."

– Female participant

Easier to interact with DA



Some farmers noted it was easier to ask questions and engage the DA in the video sessions. This could also be due to smaller groups sizes, particularly for women-only groups.

"We had training on demonstration plots; we were many so that it was hard for us to interact with the trainer. And also it is not so simple to ask for clarity, in addition to that you will go to the plot for a single activity, it is time consuming. But if it is on the video, it is great..."

– Female participant

Key Benefit: Local context and local actors

Both DAs and farmers agreed that the highly localized content was important

Farmers greatly appreciated having local actors – many of whom they recognized – in the videos

- Farmers felt they could relate to the actors in the videos, and felt represented
- Had the videos depicted people from abroad they would have been less easy to understand

“We felt very happy when we saw farmers from our locality on the video.”

– Female participant

“The video is better because it is not something prepared by people from abroad or a far place. Rather it helps us learn something helpful from the people we know in person.”

– Participant, mixed-sex FGD



Photo: Elfresh Bekele in her wheat field; Source: TAAT



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Perceptions on video-mediated extension



Key Benefit: Discussions in the session

An opportunity for farmers to ask questions and get clarifications

Farmers greatly appreciated the discussions before, during, and after the videos, seeing this as an opportunity to ask questions and get clarification on what was shown.

- DAs try to engage with farmers by pausing the video and asking questions, recognizing their role as facilitators.
- Both women and men were grateful for the discussion moments, as they helped deepen their understanding of the video and clear their doubts.
- However, a minority of men farmers would have cut these moments, as they would have preferred to go back to farming.

“It gives us more clarity rather than opening the video and watching till the end because the DA makes things clearer by giving us additional points and asking us questions.”

– Female participant

“Making a pause is good: the DA pauses the video to see if the attendees are really following the education of the video attentively.”

– Participant, mixed-sex FGD

“I stop the video on the point I presume they need further clarification and give the chance to the participants for their reflection. I also ask for two to three participants to forward their ideas then, add tips on points raised”.

– DA

Challenges: Technical difficulties & environment

DAs noted numerous challenges to conducting the video-mediated sessions



Unfavorable environment. Displaying the video requires a dim, indoor location, which may be far from either farmers or DAs, or not accessible when needed.



Faulty projectors. Some DAs noted that projectors were not always working properly.



Lack of power supply. Some DAs noted a lack of electricity or batteries needed to operate the projector.



Lack of knowledge. Some DAs mentioned they didn't have much experience with the projectors, or forgot the training on using the projector, so they struggled to operate them .



Lack of DG technical support. Some DAs complained that little help was provided by DG in terms of technical maintenance.



Photo: DA sets up a makeshift screen for a video screening

Challenges: Technical difficulties & environment

DAs noted numerous challenges to conducting the video-mediated sessions

“The problem is that the pico projector fails to work shortly. Its displaying quality diminished gradually. It failed after I used it for 2 years. We sent it to Addis Ababa to be fixed when the DG staff requested us to do so. I have taken the training. However, we forget the technical running of the projector for it has been almost 8 months since we sent the projector to Addis Ababa for maintenance. Recently, I used a pico from others. That one also failed. And I used the one brought by the woreda DG focal person. That one also doesn’t function properly. I couldn’t pause and explain the lessons as a result.”

– DA

“We couldn’t use videos for the conditions are not favorable to do so. The idir settings are not comfortable to display the video, the setting may be in open space, in field. We teach them orally most of the time. We showed them the video when we get the opportunity to gather farmers in the surrounding school hall if it is near to idir place.”

– DA

“The wall of the FTC is made up of iron sheet which makes it difficult to attach a flip chart for displaying the video on. The kebele administration office isn’t convenient either. We were thinking of showing the video at an individual farmer’s home. We haven’t consulted DG about this. At the beginning, they told us to facilitate it ourselves.”

– DA



Note: Afoosha / Idir are mutual help associations. They are organized with written by-laws and membership registration, require monthly contributions of a fixed amount of money, and hold regular monthly meetings.

Gender-sensitive content: Women represented

Women greatly appreciated the gender-sensitive content in the videos

Women farmers appreciated the presence of women in the video and see them as role models to follow.

- The decision-making processes portrayed in the videos, where spouses discuss before making a decision, are relatable for farmers, especially women.
- Women spent more time than men praising the video sessions, mentioning that they are relevant, timely and give them great motivation to improve as farmers.
- Some men, however, felt that the portrayal of gender roles in the videos did not accurately reflect reality.

“Farmers compare themselves with actors in the video. While women actors motivate both women and men, videos dominated by men actors give a message that farming belongs to men with the result that women give less attention.”

– DA

“The woman in the video proved herself to be a strong worker. What she has done / executed is an activity that is normally undertaken by men. It was an activity that was supposed to be carried out by men, but she did it effectively!”

– Male participant



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Training attendance & participation



Attendance: Barriers for Women

Numerous reasons were raised for why women attend less

Women's attendance to training is far lower than men. Generally, one person per household attends training and it is usually the husband.

Culture – not seen as a woman's role



It is culturally accepted that men participate in trainings, as traditionally men are seen as farmers. This leads to a lack of motivation for women to participate.

“[Women] haven't been able to participate for a long time. It hasn't been a culture. The deep culture hasn't changed. They have less perception that they will make changes for it is the husbands that take on farming responsibilities. They feel the mandate goes to husbands and they think it is enough if men attend the training.”

– DA

Time constraints due to other roles



Women have less available time to dedicate to farming training, as they are responsible for most household like child care, food preparation, and cleaning.

“[Women] are overwhelmed with household tasks. They have less attendance as a result.”

– DA

Lack of DA effort to recruit women



Women farmers shared that **some DAs are not investing much effort in trying to gather people**, and they do so only when they know an official or someone external will participate.

“Women come to the kebele office less often. They have weak interaction with workers in the kebele. The tradition also invites men over women to learn about farming. It is preferred for women to stay at home handling household chores and the men to come and hear about farming. Women come and attend if the topic relates to indoor stuff.”

– DA

Attendance: Recruitment, timing, and location

Factors that influence attendance, particularly for women

According to DAs, these factors influence attendance should be an area of focus for encouraging more women to participate:

Recruitment and reaching women



DAs shared that they use different public gatherings as an opportunity to bring farmers together. The most frequent is afoosha / idir, which allows them to invite both men and women. In order to increase women's attendance, DAs suggested providing incentives to women to participate. DAs suggest empowering women to attract other women by tapping into existing structures, such as the Women's Development Army.

"Some widowed women have afoosha with men. That is the way we reached out to the mixed group."

– DA

Timing & location of training



DAs suggested that the timing and location of the training was a factor particularly for women's attendance. They suggested scheduling trainings at time when women are able to attend, and near the place of residence.

"Once women are enrolled in any training, they are fast learners. So, to bring more women attendee to the training, arranging appropriate time and facilitating the training place around their residence is the best mechanism."

– DA

Note: Afoosha / Idir are mutual help associations. They are organized with written by-laws and membership registration, require monthly contributions of a fixed amount of money, and hold regular monthly meetings.

Participation: Women in the presence of men

Women participated less in the discussions when in the presence of men

Although women did participate in the observed discussions for both mixed-sex and women-only groups, they were more likely to participate in the women-only sessions.

DAs and farmers expressed some theories for this:

Women are not comfortable sharing in front of men



According to respondents, in the local culture, women feel less comfortable asking questions or sharing ideas when men are present.

Men don't leave room for women to speak



In mixed-sex groups, men still greatly outnumber women. Men often dominated the conversations and did not leave room for women to speak.

Women are less involved in farming, so fewer questions



Some DAs remarked that women are typically less involved in farming, and therefore have less experience to draw upon in the trainings in order to ask questions.

Women are preoccupied and fatigued due to their household roles



One DA theorized that women are too mentally fatigued and preoccupied with their household duties (e.g., children, livestock) to pay attention to the training.

Participation: Women in the presence of men

Participants explain why women might be participating less

“There is a possibility that women are suppressed by the culture to express their feelings and ask questions boldly in the presence of men. In mixed sex group, women could not share their ideas or point of view due to fear of men/cultural influences.”

– DA

“Women sometimes may not follow the education attentively for they may worry about their home activities. They may be preoccupied with babies or livestock they left at home when they came.”

– DA

“I have confusion about PICS bags; even if I pack dry cereal to the plastic layered, I assume it would create moisture by itself; but I didn’t ask and I kept my confusion to myself.”

– Female participant

“In this kebele, the video session is being given by male DA and women are afraid to explain their ideas freely due to cultural influences.”

– DA

Women-only groups: Appreciated by women

The introduction of women-only groups has been very well received by women

**Across the board, women saw the value in women-only groups.
DAs and farmers mentioned the following:**



Safe environment. Women felt free to express their opinions and were more comfortable asking questions when not in the presence of men.



Timing and location. Women are commonly busy in the early morning hours and can't travel far from the household. Women-only groups were scheduled for preferred times and locations so that women could attend.



Focus on women. DAs must prioritize women's attendance to these groups. In mixed-sex groups, less attention is paid to recruiting women.



It is better if the DA is also a woman! Participants mentioned it would be best if women-only groups were also led by a woman DA, otherwise the cultural barriers might persist.

“Imagine that we are here talking to each other, women to women. We are the ones who can easily understand each other. This is not a simple thing!”

– Female participant

“It’s good to encourage women to be together and to learn from each other.”

– Female participant

Knowledge Sharing: Neighbors, Friends, Family

Most farmers say they share knowledge; some DAs disagree

Farmers report sharing what they learned during training with other household members, friends, and neighbors.



When does sharing take place? Sometimes farmers proactively share, but often knowledge is shared in social gatherings like development groups or idir, or when going to the market.



Women share more. According to DAs, women farmers are better at sharing knowledge and express great willingness to discuss with their husbands and neighbors. They were particularly interested in sharing knowledge with other women.



Not everyone shares! Despite what most farmers said, some DAs noted that they felt only a minority of farmers *actually* share information in their social circles.

“We share with our neighbors by telling them what we learned from the video by comparing it to their traditional practices. We do that when we meet them, maybe in the village or on the way somewhere or just at home. We do it along the courses of life, not by moving round the houses just for this purpose. It may be when we come together for having coffee.”

– Female participant

Role of a DA: According to DAs

Teaching best practices and assistance with implementation

DAs see their primary role as teaching BPs to farmers and providing assistance when they implement them.

- **Timing & tailoring.** DAs tailor training to match the current season and increase frequency during the “meher” season; usually they have training twice per quarter. DAs collaborate to cover different topics based on their personal knowledge. DAs also mentioned tailoring topics differently for women-only groups to focus on smaller scale activities and roles where women are more active.
- **Plot visits.** DAs visit farmers’ plots once or twice a month or on request, to observe the implementation of training. The frequency of visits can vary substantially depending on individual DAs and the season of the year. Some DAs reduced the amount of field visits due to the pandemic.
- **Tenure.** DAs usually spend 4-5 years in one kebele, with a minimum of 3 years in one location before moving to another one, conditional on their performance and preferences.
- **Inputs.** There appears to be a misunderstanding regarding DA’s role in input procurement. Several farmers of both genders expected DAs to facilitate access to inputs or directly provide them. Farmers report that some DAs promised them to procure inputs such as PICS bags. However, DAs don’t currently provide inputs; this role has been taken over by farmers’ unions (which some farmers criticize as not very effective) or by going to markets (e.g. to buy improved seeds).

“Our focus in training given to women-only groups is the case of small-scale agricultural activities, fruits and vegetables, cereal storage and the like. These topics go to them mostly. And other training is given to both women and men. It depends on who does what.”

– DA on adapting training topics in women-only groups

DAs & Farmers: Relationship

A close relationship; some good experiences, some bad experiences

The majority of farmers recognize the important role of Development Agents and are very grateful to them, as farmers can notice the increased productivity of their own plots throughout the years.

- **Engagement & Motivation.** Farmers gave several examples of brilliant DAs and less committed ones. DAs' commitment to their job can vary, and farmers appreciate it when DAs invest their time and effort to follow them closely and consistently.
- **Women DAs.** Women-only participants feel extremely grateful and encouraged by their female DAs to participate in training and adopt BP.
- **Interaction with farmers.** The best performing farmers are closely observed by DAs as they will be used as examples for other farmers. DAs also interact with farmers through the "development neighbors" composed by 5 farmers.
- **Turnover is a problem.** DA turnover may be low or high depending on the area, which was noted by participants. One group of women farmers (Chefa Gugesa) in particular recommended limiting turnover.
- **Past experience.** Men have more previous experience participating in other trainings, covering a variety of topics from land preparation to harvest. Women have less experience with training.

DAs & Farmers: Relationship

Farmer quotes on experiences working with DAs

“The DAs are different in their performance. Anyway, working with DAs closely is helpful. I used to obtain 10-13 quintals of yield from 2 tind of land (1 tind= ¼ hectare). Now, I have become able to obtain 30 quintals of wheat from the same size of land by working with the DA closely.”

– Participant in mixed-sex FGD

“We participated in the discussion as DA strongly encourages women to participate in everything. She gives good attention to women and resents when participation of women is low.”

– Female participant

“We share similar concerns about the turnover of DA in the kebele, we wished if DA was settled at the kebele.”

– Female participant



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Suggestions from DAs & Farmers



Farmer Suggestions (1 of 2)

Farmers made numerous suggestions to improve the training

- **Timing of training.** Farmers have different opinions on the timing in the year of the training. Some prefer outside of the busy farming period so they can participate without rush, others prefer times close to the application of BP so they can directly apply them. Farmers also felt the trainings should be continuous and not occasional.
- **Increase audience for videos.** All farmers agree to increase the audience of the videos. They recognize the utility of the video content and see the persuasion potential of video-mediated training. The majority of women advocate for men to watch the videos, and some men advocated for women and youth to watch the videos.
- **Quality of screen and audio.** Men stress that it's important to increase the quality of screening in terms of brightness and audio.
- **Video duration.** Farmers share divergent opinions on the duration of the video; the majority are content with the current duration while a minority recommend to expand the duration to be able to cover the same topics at a slower pace and allow everyone to internalize the messages.
- **Scheduling & notification.** Farmers stated they would appreciate if they could be notified in advance about the training timing as some are recruited while they are at the FTC. This notice time will allow them to organize for the training for instance bringing material to take notes.

Farmer Suggestions (2 of 2)

Farmers made numerous suggestions to improve the training

- **More topics.** The vast majority of farmers recommended including more topics in the videos, the most common ones were pesticides and land preparation.
- **Representation of household.** Videos should include all the participants of the activity/topic that is covered. Other family members should be involved in the video to show the various roles everyone has in performing such activity.
- **More women and women DAs.** Women recommended to include more women in the video, possibly from their kebele. They also recommend having a woman DA participating in the production of the video.
- **Brochures.** Some farmers suggested to have brochures to facilitate the learning process.
- **Access to Inputs and Finance.** Farmers suggested improving access to inputs displayed in training (e.g., improved seeds, modern storage) or have financial support to access these inputs.



Photo: Elfnesh Bekele and a co-farmer in their wheat field;
Source: TAAT

DA Suggestions

DAs also made numerous suggestions to improve the training



Photo: Farmers attending a mixed-sex video screening

- **Refreshments.** Add refreshments during training to incentivize farmers and reduce the effort required from DAs to motivate farmers.
- **Women DAs for women-only groups.** Associate female DAs with women-only groups so that women can feel more at ease expressing their minds
- **Women's attendance needs to increase.** It is important to increase women's attendance. In order to do so it's important to:
 1. Work at the community level with volunteers to mobilize women
 2. Choose a training location which facilitates women attendance
 3. Create awareness on the benefits of training
 4. Use women to mobilize women
 5. Give women organizational power over the sessions



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2.2 Gender & Wheat Insights

- Wheat best practice adoption
- Gender roles in wheat farming
- Household decision-making



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Wheat Best Practice Adoption



Best Practices: Wheat Farming

An overview of the best practices mentioned for wheat farming

Wheat BPs apply to the entire wheat growing cycle. The observed video sessions pertained to post-harvest practices and storage, but participants spoke of other best practices for other phases of the growing cycle as well.



Pesticide & fertilizer

The proper use of pesticides and fertilizers, particularly urea, were discussed. Identifying rust on the crops must be addressed with chemicals. Apply fertilizer after weeding, 21 days after sowing.



Improved seeds

The use of improved seeds over traditional seeds was discussed, and can result in yield improvements.



Weed management

Managing weeds, either manually or with herbicides, has an impact on yield. DAs mentioned removing weeds for the first time 21 days after sowing.



Timing of harvest

Harvesting should happen when the crop is dry and ripe enough. This is traditionally checked by biting the crop with your teeth.



Cluster farming

The practice of planting the same crop on adjacent plots was common. DAs reported this resulting in increased yields.



Technologies

Plowing by tractor, harvesting by combiner, use of broad bed maker (BBM), using metal silos, and using PICS bags to store their cereals. These were the areas farmers were most interested.

Technologies: Frequently mentioned

Mechanization and technologies were of great interest to farmers



Broad bed maker (BBM)

Used at planting time in order to drain excess water away from crops and conserve moisture in dry areas.

Photo: Broad bed maker, Oromia; ILRI Report by Arlene S Rutherford. Photo by S. Gebreselassie.



Purdue Improved Crop Storage (PICS) bag

Triple-layer hermetic storage bag which permits farmers to store their grains without the use of insecticide.

Photo: PICS Network



Combine Harvester

Mechanized harvesting with a combine harvester can save farmers time and minimize crop waste.

Photo: CLAAS Dominator combine harvester; ICS-Agri



Metal Silos

Storing wheat in metal silos helps reduce post-harvest losses.

Photo: Metal silos for grain; Gitonga et al. 2015

Adoption Challenges

Farmers face numerous challenges in adopting best practices

According to DAs, farmers (both women and men) consider their time, energy, and labor force, as well as price and affordability when deciding whether to adopt BPs or not.

DAs noted numerous challenges that farmers are faced with when adopting BPs:



Row planting & compost – most difficult. These two best practices are seen as more time consuming and requiring more labor force. Therefore, DAs believe they are the most difficult to adopt.



Urea fertilizer – not enough. Farmers often don't apply enough urea, as it is expensive.



Broad bed maker (BBM). BBM is used at planting time in order to drain excess water away from crops and conserve moisture in dry areas. DAs note that access to this technology is often expensive.



Predatory practices. At harvest, combine operators require bribes and extra tips to not waste the harvest.



Poor watershed practices. Due to the kebele administration's land use and water management practices, based on agro-ecological errors.



Lack of availability. PICS bags are not readily available on the market and are currently only being provided by GIZ.

“[Farmers] consider the cost it requires to get the introduced input. Their first question is, ‘what is the price of the input?’ After considering the results, they also consider if it has been implemented practically in some area. They see into the practical implementation. They look into the changes that it will bring in productivity.”

– DA

Adoption Factors: To Adopt or Not Adopt

Farmer's considerations when deciding whether to adopt a BP

Farmers mentioned the following factors affecting their decision on whether or not to adopt a best practice:



Time, cost, and labor requirements. Some BPs are costly and require lots of time and labor to adopt.



Reluctance & skepticism. Numerous participants are reluctant to accept the new practices and tend to wait until they can imitate early adopters. As a result, they miss out on many chances. Several discussants stated that they refused to adopt new technologies even for free or at subsidized prices, only to regret it once they realized other farmers benefited from the practice.



Agreement with household members. According to the participants, at least the husband and wife should agree to accept the new practice, otherwise it is impossible to be successful if one party tried to adopt the practice alone.



Soil suitability. Discussants stated they consider the type and status of their particular plot of land to make the decision of accepting/not accepting the newly introduced practice/input.



Yield improvement, from the newly introduced input in relation to the previous/traditional practice/input.



Accessibility. The participants stated that if the new practice is easily accessible, they would adopt it. Regarding this, participants indicated that improved seeds are usually not accessible on time for farmers, and they are forced to buy them from merchants for a high price.

“[Farmers] resist best practice adoption till they practically witness the benefits of certain input. For example, they resisted applying urea fertilizer at the beginning. They resisted it fiercely even provided for free. Time in time out, they learned the benefits and are currently applying it widely. They want it very much after learning about it through time.”

– DA

Women: More willing to adopt?

DAs claim women are more open to some new best practices than men

According to some DAs, women are more willing to accept BPs and are more active than men in applying what they have learned.

- Some examples DAs mentioned are PICS bag adoption, compost preparation, and savings management.
- Women farmers also appear to be more motivated than men in the application of new best practices.
- Nonetheless, one impediment that women face is the opinion of their husbands, as men usually have the final say on whether the BP is adopted or not.

“In terms of understanding, it is 50-50; but women are more active than men in applying what they have learned. For example, we got 10 PICS bags last year. Among the receivers, four were female headed households. They used the bags properly and proceeded to buy ten PICS bags every year.”

– DA

“Compared to men, women are faster learners and easily adopt new practices than men. The best example is the way they prepare compost. The key best practice is the change of the family as a result of those internalized training and put it in practice.”

– DA

“In my assessment women are the first learners and adopt new practices more easily than men.”

– DA

“There is a model woman in our kebele who received the “Development Hero Award” from the late Prime Minister Meles Zenawi. At a time BBM was introduced for the first time and most of the kebele’s farmers rejected to adopt it. In contrast the woman adopted for the first time in the kebele. As a result, she became successful and became a model for the kebele’s farmers. The next year the majority of the kebele’s farmers started using BBM after they got experiences from the model woman.”

– Female participant

Women: Modern storage methods

Women are particularly interested, but also have concerns

Modern storage methods (e.g., PICS bags, metal silos) are of particular interest to women, likely due to the fact that post-harvest storage is commonly a women's role.

- Some women expressed great interest in modern storage methods like PICS bags and metal silos, mentioning that they wanted to acquire them.
- However, some women from female-headed households believe metal silos are not safe for them as they do not have husbands to protect the stored grain from thieves (see quote).
- Others expressed concerns over the affordability of PICS bags and modern granaries.

"I have learned about the PICS bag. I plan to go to the house of the woman who played on the video and ask her about where I can find the bag. I want to get and use the bag".

– Female participant

"Female-headed households particularly dislike metal silo storage for they think that they don't have a husband to protect the storage place outside home. Presence of husbands is crucial, people think, for having a strong fence and keeping the grain; husbands wake up at night and round the compound to make sure the grain is safe."

– Female participant

“Learning about modern storage methods is very useful. I consider it so good. I have learned a lot, for example, I learned the steps of packing the cereal crop to the PICS bag and metal silo and compared to the traditional storage mechanism and how the modern one is better. I am impressed and thinking over how to change this into practice and change my life.”

– Female participant



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Gender roles in wheat farming



Division of Farm Labor: Women and Men

Farmers agreed that women and men have distinct gender roles in wheat farming

Note: The roles displayed are community normative roles for women and men, as expressed by the farmers in the FGDs. However, these differ at an individual household basis, and may especially differ for female-headed households.

When farming wheat:



Men's roles


































Women's roles



Support from
hired manual labor
(usually men)



Support from
children

Land Preparation	  	Majority men + hired support
Sowing	  	Majority men + women + children
Purchasing inputs	 	Majority men
Fetching water for farming	  	Majority women + child support
Monitor leaves for rust	 	Majority women
Applying chemicals	 	Majority men
Fertilizer application	 	Majority men + women support
Weeding by hand	  	Both men + women + child support
Harvesting	  	Both men + women + child support
Threshing	 	Majority men + women support
Storage	 	Majority women
Marketing / Selling	 	Majority men + women support
Food for laborers	 	Majority women

Division of Farm Labor: Women and Men

Farmers agreed that women and men have distinct gender roles in wheat farming

Traditionally, men lead on several farming activities like land preparation and sowing, but women and children provide essential support for these activities, while women also lead on others.

Summary of men's roles



Men tend to dominate land preparation, sowing, purchasing inputs such as fertilizer or herbicide, and selling the crop. Men are also heavily involved in harvesting and threshing (with support from women and children) and contribute to weeding (also with support). Men are rarely involved in support activities like fetching water or preparing food.

Summary of women's roles



Women play a supporting role in almost all farming activities and take the lead in some. Crucial supporting roles, like fetching water for chemicals and fertilizer, monitoring leaves for rust, clearing land of debris, availing fertilizer, and preparing food for all laborers are led by women. Women also take lead on post-harvest storage of wheat. Together with men and children, women harvest and weed as well, and prepare the threshing floor.

“The farm benefits all members in the household. The plot of land supports all your family. After satisfying the family consumption, it will help to feed other people in other areas sold in the market. The entire family thus engages in different responsibilities including weeding, harvesting and others according to the need.”

– Female participant

Division of Farm Labor: Women and Men

Participant views on the roles of women and men in wheat farming

“Women do not plow land with their husbands. Similar to the tradition, they are more bound to the household chores instead of engaging in farming activities unless she is a single mother, or has no household member who will manage the farming activity for her. If there is a labor shortage, they participate in applying seeds and fertilizers and even plowing although the number is insignificant.”

– DA

“We go to the crop field, look into the crop leaf, identify if it is affected by rust and tell our husbands that chemicals should be applied to the crop to rescue it from the rust.”

– Female participant

“Men plow and sow. We, other family members, support them in weeding. We fetch and avail water when men apply chemicals to crops. We push men if chemical isn’t applied to our crop.”

– Female participant

“My husband is not alive. My sons plow the land. They sow seeds. I bring and avail fertilizers and seeds.”

– Female participant

Role of women: Norms and traditions

Women are not traditionally seen as farmers, but contributions are noticed

The cultural perception is that women support men in all farming activities, but have less knowledge than men, and although they may be equally involved in farm work, they are not equal to men.

- In general, **men are seen as dominating outdoor activities**, such as farming, while **women dominate the domestic sphere** (household activities, childcare, but also decisions related to nutrition, such as what food to prepare and when, or which crops to grow for the household to eat).
- However, although men are typically the plot managers, women's involvement is high, and their contributions as farmers are sometimes **acknowledged in the community**.
- It is also considered an **act of laziness** for women to not follow what is happening on their plots.



Photo: Women scoring wheat varieties in a field trial in the Tigray Region, Ethiopia. Credit: Bioversity International / J.V.Gevel

Role of women: Norms and traditions

Traditional perceptions are shifting, and women are increasingly involved

Despite cultural norms which dictate that farming is a man's activity, the perception on women's involvement in farming was generally positive among respondents. Some noted a shift in culture towards more women's involvement in farming and decision-making.

"Wives who have been confined indoors should come out of the home and support their husbands. They should take the lesson from the video that they should come out of the homestead and work along with their husbands in farming activity."


– Female participant

"Indeed, women participation in outdoor activities is very good currently. In our locality currently, women are undertaking outdoor activities even more than the men."

– Female participant

"Our kebele women are strong and work harder than men; but they are few in number. The community says nii mooti (she is the one who manages and superior over him). From a community perspective, some men can be offended, while others adore their strength. Most of the time the husband's reaction to such a woman is positive, because she never lets him and her family down."

– Female participant



“Both men and women have contributions in the production of wheat. Although women engage mainly in the household activities, she also has a stake in planning what to produce, where to produce, and how much land is needed for the production. Even a woman has an involvement in the selling of wheat although it is a man who brings the product to the market. Generally, without involvement of both sexes, it is impossible to increase productivity.”

– Participant, mixed-sex FGD



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Household decision-making



Land ownership & plot management

Land is owned jointly; but men tend to manage plots

Land ownership affects decision-making patterns. Nearly all participants agree that land belongs to the household as a whole and is not owned by any individual.

- In Ethiopia, land is legally jointly owned by the household
- In a minority of cases, wives indicated their husbands own the land.
- There were also women who own wheat plots independently, such as households headed by single mothers or widows.
- Although women-managed plots are a minority, they exist, and these women hold higher decision-making power.
- They are also perceived to work just as hard as men and are involved in the decision-making process on BP adoption.



Photo: Wheat field in Ethiopia; Source: Shutterstock

“Concerning women and their rights and their decision-making power; they have access to their plot. Still, it is dominated by men. Yet, there are a few women who take the upper hand and work like men or more than men. They do manage. Good number of women do.”

– DA

Decisions: Planting

Decisions on wheat and where to plant are commonly made jointly

Men and women discuss the crops they are going to plant and how to use the land, the type of seed that is going to be sowed, the type and size of land on which the seed is sowed, and what to sell in order to purchase the seed.

- Discussions also cover lessons learned from training. The decision of which crop to grow is reached jointly, although sometimes it is the husband who has the final say.
- As wheat is a diet staple and relevant for household consumption, women also have a say on whether or not to grow wheat, or which seed is best to use for baking injera.



Injera is a sour fermented flatbread with a spongy texture, and is staple food in Ethiopia

“It is the wife's influence to grow wheat because it is grown for household consumption. Wives are concerned about their household consumption and that is why. They discuss with husbands and it will be grown. It is the wife that brings the idea to the table. Yet, husbands may convince their wives not to grow it by explaining that they don't have a plot of land suitable for it and it is better to purchase from the market”.

– Female participant

Decisions: BP Adoption

Men lead on best practice adoption decisions, but women are involved

“Women in our kebele don’t own the whole farming process; because their role is supporting and assisting. The decision making for best practice is dominated by men. But that doesn’t mean it is the sole decision of the family head, the other family members including the wife know and give feedback and finally they all decide.”

– DA

Men lead the decision-making process on best practice adoption but are expected to discuss with their wives beforehand.

- Decisions on best practice adoption are often preceded by a discussion between spouses, but the men tend to have the final say. Women also prefer to discuss with their husbands before making decisions.
- As women’s decision-making power is more limited, they are considered to have less potential to adopt best practices.
- Culturally, men are perceived as more knowledgeable with respect to farming than women, who are mainly engaged in domestic activities.
- However, although men typically have the final say, they are increasingly expected to convince their wives before making the decision.

Decisions: Selling & Income

Deciding to sell is done jointly, but men often control the income

Selling – Joint decision. The decision to sell the harvest is typically made jointly, although in some cases, husbands alone can make the decision to sell the crop.

Control of income – Usually men. Men tend to control the income generated by crop sales, and may not report the full amount to their spouse.

Use of income – Joint decision. Decisions on how to use the income from crop sales are typically discussed together with the spouse in order to reach an agreement. However, men are ultimately in control.

“Mostly, it is the men that keep the income generated from selling the grain. Yet, men may take some amount of the money for themselves and tell their wives less money. Some men may be genuine and give all the income generated. Some men may spend some amount of money for personal use when they mobilize money for buying agricultural inputs.”

– DA

“Mainly they take action through discussion between the spouses. Men don’t manipulate it. Domination has been abandoned. They use the yield for both consumption and sale. They have good awareness in using the yields for seeds, for consumption, for covering costs of their clothes. They make the decisions jointly.”

– DA

Decisions: Hiring Labor

Hiring decisions are initiated by men, but women are involved

“The hire takes place with the joint decision of the husband and his wife. The husband cannot do it alone forcefully because it is the wife who feeds and engages the laborer on a daily basis. It is the voice of the wife that influences the decision. The laborer cannot stay in the household even for 2 days if the wife shows him a bad face. It is for this reason that the spouses make the decision with the agreement of both spouses. Even having ‘dabo’ [bread] needs the approval of wives. The dabo will be ineffective if wives don’t serve the attendants warmly.”

– Participant, mixed-sex FGD

The decision on hiring labor is led by men, but involves women. The husband may initiate the discussion by explaining the importance of additional labor, which will be hired only if wives agree.

- Since cultural norms require the household to provide food and drinks for hired laborers, the wife’s refusal to provide this determines whether labor can be hired or not.



Photo: Men gather in a wheat field in Ethiopia. Credit: Bioversity International/J.van de Gevel

Intra-household agreement

Community structures in place to resolve disagreements

Discussion and intra-household agreement are greatly valued by respondents, and community structures are in place to resolve disagreements.

- When household members cannot reach an agreement, for example on adopting agricultural practices, others (neighbors, children, friends or the DA) sometimes intervene and attempt to mediate, or convince one side or the other.
- If the case goes beyond neighbors and relatives, there are structures like “gare”, “zone” and “1-5” to settle the issue.
- Reaching agreement is considered important to ensure the stability of one’s family

“When we [husband and wife] discuss farming activities, our older children participate in the discussion. Sometimes my husband may refuse my idea; at this time my children interfere and explain the benefit of my idea to their father and then, we will decide jointly. Unless he became crazy, a husband should not pass alone a regrettable decision”

– Female participant

Cultural shift: women's decision-making

Women are increasingly involved in decision-making

Participants report a cultural shift, with women increasingly involved in both wheat farming and decision-making.

- Traditionally, men are seen as the primary decision makers, but women's influence is increasing, and joint decision making is becoming more common.
- Women participate in decision making on the timing of sowing, purchasing inputs such as seeds or fertilizer, managing, harvesting and selling crops, and can also indirectly influence the decision-making process in various ways.
- In general, participants report a cultural shift: while previously, all decisions were made by men without any involvement from women, women nowadays actively participate in discussions, although husbands still lead the decision-making process.
- However, some women participants feel that men do not react positively to women's empowerment. Individual experiences vary, and some women report no difference.



Photo: Women in a wheat field in Ethiopia.
Credit: Bioversity International/S. Collins


Cultural shift – mixed opinions

“In this time, men don’t have that much dominance. The era of men's dominance has gone. It has been changed. They control and manage it jointly. Even in selling the grain, they do it by discussing with their spouses. There are times when wives take the grain to market and sell it. if you make an observation, you can see women selling 2 or 3 or more quintals of grain.”

- KII with DA, Chefa Gugesa, on the shift in culture

“The way we live and the behavior of our husbands are not similar; some of them are dictators who beat those who challenge them. The involvement of women is only hypothetical. For example, you come here to teach us about the involvement of women in decisions alongside men. However, men are always refusing the involvement of women; they don’t want to hear women’s advice.”

- Female participant, on the negative reaction of men to women’s empowerment

A photograph of two women standing in a field of tall, golden-brown grass. The woman in the foreground is wearing a light-colored long-sleeved shirt and a patterned skirt, and is holding a small plant in her hands. The woman behind her is also wearing a light-colored shirt and a patterned skirt. They are both looking down at the plant. The background is a blurred landscape with trees and a clear sky.

“Now women play a bigger role than men. It is the women that play the roles of managing the fate of farming. It is with her plan and participation that household livelihood will be run including selling their yields. The household plan is led by women.”

- Female participant



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Thank you!

