

### Exploring Communication Intervention in Enhancing Agricultural Production to Improve the Livelihood of Rural Communities in Ethiopia

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#### Abstract:

The main goal of this research is to explore communication intervention and its application in enhancing agricultural production to improve the livelihoods of rural communities in Ethiopia. This study examines the effectiveness of communication approaches used and the opportunities and problems faced by farmers and development agents. The study used focus groups and in-depth interviews to gather qualitative data. The findings indicate that top-down communication is the prevailing strategy for development agents while planning, and experts made changes as they saw fit without considering the community's voices. Model farmers are better responsive to DAs, so the selective communication strategy focuses on them. DAs are disinterested and do not wish to be DAs for long. DAs participated in nonagricultural activities. The community's propensity to seek aid is growing. Access to and use of the media for disseminating agricultural programs are limited, and the culture of attending agricultural programs is poor. Based on the results, pro-non-model farmers' policy is essential to include the community's excluded group. It is vital to examine the worsening factor that causes DAs to lose interest in their jobs. The Ministry of Agriculture may exploit the findings. Agricultural offices can gain a broad perspective and address issues that prevent effective communication interventions. It also provides stakeholders working in the field of agricultural communication with current interrelated problems. This study stands out because it is comprehensive. It explores a wide range of factors that intertwine and hence prevent development agents from using effective communication. It cautions about the future and continuation of the agricultural practice by the current generation. This study adds to the body of knowledge by providing insight into the pertinent concerns and the interconnected challenges that need to be addressed when thinking about the use of effective communication for agricultural productivity in a country like Ethiopia.

**Keywords:** top-down communication, intervention, livelihood, agricultural production.

探索通信干预提高农业生产以改善埃塞俄比亚农村社区的生计

## 摘要:

本研究的主要目标是探索通信干预及其在提高农业生产以改善埃塞俄比亚农村社区生计方面的应用。本研究探讨了所使用的沟通方法的有效性以及农民和发展机构面临的机遇和问题。该研究通过焦点小组和深度访谈来收集定性数据。研究结果表明，自上而下的沟通是发展机构在规划时的普遍策略，专家们在不考虑社区声音的情况下做出了他们认为合适的改变。模范农民对发展议程的反应更好，因此选择性沟通策略以他们为重点。DA 是无私的，并且不希望长期担任 DA。发展议程参与非农业活动。社区寻求援助的倾向正在增强。传播农业项目的媒体的获取和使用有限，参与农业项目的文化较差。根据研究结果，支持非模范农民的政策对于纳入社区的被排斥群体至关重要。至关重要的是要检查导致 DA 对工作失去兴趣的恶化因素。农业部可能会利用这些调查结果。农业办公室可以获得广阔的视野并解决阻碍有效沟通干预的问题。它还为农业传播领域的利益相关者提供当前相关的问题。这项研究之所以引人注目，是因为它很全面。它探讨了一系列相互交织并因此阻碍开发人员进行有效沟通的因素。它对当代农业实践的未来和延续提出了警告。这项研究丰富了知识体系，深入了解了在埃塞俄比亚这样的国家考虑利用有效通信提高农业生产力时需要解决的相关问题和相互关联的挑战。

**关键词：**自上而下的沟通、干预、民生、农业生产。

## 1. Introduction

Agricultural communication focuses on different target processes and outcomes to support farmers in solving problems and alleviating poverty and advancing community participation in the development process (Nyakuni et al., 2001). Moreover, agricultural services, information, and communication are strategic tools for adapting new farming practices in specific agricultural contexts (Jones & Garforth, 1998). To this day, agricultural information needs to be refined to fit the existing body of knowledge to be promoted and disseminated with the desired effects (Jones & Garforth, 1998; Kurtzo et al., 2016). Therefore, applying appropriate communication approaches is a fundamental requirement for sustainable development to reveal people's underlying attitudes and traditional wisdom, adapt their views, and acquire new knowledge and skills for better achievements (Food and Agriculture Organization of the United Nations, 2005; Servaes, 2002). Better achievements require using planned communication techniques, activities, and media to give people the power to experience changes (Food and Agriculture Organization of the United Nations, 2005; Getahun, 2020). Contextually, communication helps development agents (DAs) and experts identify problems and design the development program (Kaur, 2022). It spreads new social messages to large audiences and improves the exchange of ideas among all sectors of society to lead people to greater involvement in decision-making and legitimacy (Zikargae et al., 2022; Sylvester, 2016). Thus, DAs and agricultural experts must recognize existing knowledge, help incorporate indigenous knowledge into projects, and empower the local community (Food and Agriculture Organization of the United Nations, 2005; Sylvester, 2016; Van Den Ban & Hawkins, 1996). Above all, mobilizing rural society to attain specific development programs is one of the main goals of agricultural activities through genuine participation (Food and Agriculture Organization of the United Nations, 2005; Zikargae et al., 2022; Mefalopulos,

2003).

Legitimate decision-making efforts and intervention elicit crucial issues to enhance its livelihood (Norton & Alwang, 2020). Considering the abovementioned contexts, the study looks into communication strategies that increase the crop production in the Ethiopian farming community. This study seeks to address the following questions:

- (1) How are agricultural and technological advancements communicated and distributed?
- (2) How effective is the communication used by DAs, as evidenced by innovations being adopted?
- (3) What challenges and opportunities did development agents and farmers encounter?

The research topic was selected based on what was learned from reading about how communication would contribute to increase the agricultural production if effectively utilized. The selected region can be considered as one exploitative area that could enable researchers to gain a broad understanding of communication intervention in enhancing the agricultural production. In this area, agricultural production is well below the ever-increasing population. Like others, the rural communities received a subsidy each year because of a shortage of agricultural production. Each district has separate agricultural offices, each with a team of experts and development workers. Exploring the communication intervention utilized and the related problems that affect communication effectiveness is therefore significant.

## 2. Theoretical Framework

Two theories of communication were found to be a lens to frame the current study.

### 2.1. Two-Step Flow Theory and Opinion Leaders

Two-step-flow communication and opinion leaders' theory are well-known concepts in agricultural communication (Kaur, 2022). The media play a key role because they are the fastest and most effective way to spread information about new developments and

technologies. A person can be convinced to accept innovations better through interpersonal channels (Rogers, 2003). DAs and experts facilitate disseminating knowledge to farmers while maintaining the integrity of the material (Melkote & Steeves, 2001). Top-down communication was supposed to be an effective way for less developed citizens (LDC) to easily acquire and adapt information and skills from the West because, as modernization theorists claimed, underdevelopment was a consequence of the LDCs' industrial and technological backwardness (Rogers, 2003).

Field workers have used opinion leader theory in rural areas because interpersonal networks are believed to be important in disseminating innovations (Chandra, 2004). In this process, development agents arrange learning experience sessions to lead people from one stage to the next (Oakley & Garforth, 1985). Opinion leaders are expected to influence others through social connections (Rogers, 2003; Mekonnen et al., 2016), which illustrate how social networks may facilitate knowledge externalities as interactions among network members influence individual behavior. Individuals update their beliefs for their behavior and aspirations, and expectations are shaped not only by their own experience but also by the experiences of others in their network.

The importance of communication channels has been emphasized in the theory. Mainly, mass media channels are the most rapid and efficient means of informing an audience of potential adopters about the existence of innovation and creating awareness about it. In addition to mass media, interpersonal channels have gained considerable recognition for persuading individuals to accept new ideas (Rogers, 2003). In interpersonal channels, individuals exchange information face to face. Communication between individuals or groups such as between opinion leaders and the community would be crucial in affecting audiences' opinions (Rogers, 2003).

The Ethiopian agricultural system paid less attention to the extensionist agenda; targeting opinion leaders has not been utilized effectively (Matouš et al., 2013). Ethiopian agriculture largely ignores the role of social networks in adopting agricultural innovations and improving farm productivity (Mekonnen et al., 2016).

## 2.2. Multiplicity Theory

Participation in multiplicity theory is a quality of vibrant development communication (Sylvester, 2016). In multiplicity theory, communicators exchange knowledge and share ideas through two-way communication (Sylvester, 2016). In multiplicity theory, a high level of participation is the core; free and open dialog is central (Ilu & Olawale, 2014; Tufte & Mefalopulos, 2009). It focuses on grass-roots communication that begins with the beneficiaries' needs (Finaly, 2008). Structural changes from the bottom-up development communication approach are emphasized (Ilu & Olawale, 2014). The underlined concept here is

that communication for development is an integral process encompassing basic needs, and ultimately, it should empower self-reliance (Ilu & Olawale, 2014). Cultural identity and multidimensionality espouse development (Servaes, 2002). Each community would have to participate in the communication process at each step of progress (Melkote & Steeves, 2001). This approach allows the community to put issues to the front, help interact intensely, and reach a mutual agreement (Servaes, 2002).

Another crucial aspect of the multiplicity approach is providing an opportunity for exchanging indigenous knowledge within the community. Indigenous knowledge is peculiar to and quickly adapts to the requirements of local people and conditions (Food and Agriculture Organization of the United Nations, 2005). Indigenous knowledge empowers the local community, provides valuable input, and promotes local understanding and information systems (Food and Agriculture Organization of the United Nations, 2005). The steps needed in this theory are diagnosis, planning, interventions, and assessment; all steps are undertaken through the participatory development communication model (Sylvester, 2016).

## 2.3. Effectiveness of Communication Intervention in the Ethiopian Agricultural System

The lack of an appropriate communication approach is the main barrier to Ethiopian farmers' adoption of new practices. It contributes to the low productivity of cereals (Matouš et al., 2013; Dufera, 2018). The results obtained from various research projects indicate that the top-down communication approach delayed the adoption of innovations and ideas in the Ethiopian agricultural system (Matouš et al., 2013; Tegene et al., 2023; Tadesse, 2010; Belay, 2003). The same is true: there is poor research-farmer linkage in properly disseminating technologies and new findings to farmers (Sewnet et al., 2016; Kelemework & Kassa, 2006). Inadequate consideration given to farmers' needs and priorities in research agenda setting and extension package development is among the factors mentioned in the strategy (EATE, 2017).

The other most crucial concept about the extension is the medium itself. Agricultural extension is carried out through channels used in communication. Extension services and knowledge can be transmitted through mass media, face to face, and in groups. Mass media can help reach many people with the same information simultaneously and are the most rapid and efficient means of informing an audience of potential adopters about the existence of innovation (Rogers, 2003). Although unidirectional, mass media can influence the audience to think about the issue they see or hear about. Mass media, i.e., newspapers, pamphlets, brochures, posters, radio, television, cinema, and the internet, could accelerate the transmission of a new idea to farmers. Broadcasting is essential in many aspects and interventions (Chandra, 2004). Despite mass media facilitating awareness of new ideas and creating interest

in farming innovations, they cannot do all the jobs that an extension agent can do (Oakley & Garforth, 1985). In addition to mass media, an interpersonal channel is vital in persuading individuals to accept new ideas (Rogers, 2003). Communication between opinion leaders and the masses would become crucial in influencing audiences' opinions (Rogers, 2003).

Extension agents could employ group methods besides individual extension communication methods. Group discussions, demonstrations, field days, and tours are common group extension methods (Oakley & Garforth, 1985). The most appropriate methodologies can be selected and function depending on various factors. The type of message, context, specific goals, knowledge level, and client capacity determine which extension approaches are preferable. The participatory communication model in multiplicity theory has been believed to be the most appropriate one that helps to improve crop production and hence meet the food demand for the fast-growing population of Ethiopia (Sylvester, 2016; EATE, 2017; Abate, 2006).

### 3. Methodology

Qualitative study helps to comprehend people's understanding of their experience in their surroundings, particular social situations, events, roles, groups, or interactions in detail within the context (Creswell, 2007; Henn et al., 2006; Best & Kahn, 2005). It also enables the researcher to identify and analyze issues in depth by talking directly with people and seeing how they behave and act within a particular setting (Creswell & Poth, 2018). Qualitative research views subjects holistically, enables the researcher to understand the complex nature of human and organizational behavior, provides rich insight into human behavior, and is thus best suited to investigate social subjects and their world (Denzin & Lincoln, 1994; Asgedom, 2004; Baxter & Babble, 2004). As Creswell (2007) illustrated, the analytical approach follows case descriptions and case-based themes through detailed and in-depth data collection involving multiple sources of information.

The data were collected through focus group discussions (FGDs) and in-depth interviews (IIs). FGDs and IIs are essential for getting participants' thoughts, feelings, and opinions (Henn et al., 2006). FGD is an open-ended group discussion on a specific topic guided by the researcher (Robson, 2002). FGD is interactive and allows navigating information from participants in detail (Henn et al., 2006). Altogether, FGD enables researchers to understand how people feel the way they do (Bryman, 2004; Deacon et al., 1999). It works best for topics people could talk about in their everyday lives (Macnaghten & Myers, 2004). Similarly, "interviewing can provide rich and highly illuminating material" (Robson, 2002) because II gives respondents the freedom to say what they know about the topic. It enables them to produce retrospective and prospective accounts or versions of their past and future actions, experiences, feelings, and thoughts (Macnaghten &

Myers, 2004). Furthermore, it helps researchers obtain the information they did not get during FGDs (Macnaghten & Myers, 2004). Farmers, agricultural experts, and journalists were chosen for the interviews.

#### 3.1. Sampling Procedure

The data were gathered from two woredas<sup>1</sup> found in the Sidama region. The Sidama region is constituted of 30 rural woredas and seven town administrations. The reason for selecting this area is that it is one of the exploitative areas that could help comprehend the subject of the study. The Sidama region is wide enough to capture the necessary information for the theme of this study.

We selected two woredas, Hawassa Zuria and Dara Woreda, using the cluster random sampling technique. One woreda from food crop growing woredas was chosen using a random sampling technique; another from coffee-growing and food crop-producing areas was selected using the same method. Hawassa Zuria woreda comprises twenty-three kebeles<sup>2</sup>, whereas Dara has twenty kebeles. Three kebeles from each woreda were selected for focus group discussion (FGD) and in-depth interviews using a random sampling technique.

Farmers and development agents were selected from the six identified kebeles for the focus groups. The farmers were chosen by using stratified and the snowball sampling technique. We used this technique to select participants of different ages, genders, and socio-economic groups. With farmers, six focus group discussions were carried out separately, i.e., one focus group discussion from each kebele. One focus group discussion comprised nine individuals; the scholars suggested eight to twelve members in a single FGD (Robson, 2002). In addition, two focus group discussions were undertaken with the DAs. All DAs working in the six designated kebeles were included in the selection process. Each kebele has three DAs. All six kebeles selected for the study would have 18 DAs. We consequently conducted a total of eight focus group discussions (Table 1, Figure 1).

Table 1. Focus group discussion participants

| No. | Name | Where from                                     | Position/title | Number of the participants |
|-----|------|------------------------------------------------|----------------|----------------------------|
| 11  | FGD1 | Farmers from Dara Woreda Aleme Koricha Kebele  | Farmers        | 9                          |
| 22  | FGD2 | Farmers from Dara Woreda Bongode Kebele        | Farmers        | 9                          |
| 33  | FGD3 | Farmers from Dara Woreda Gelo Wacho Kebele     | Farmers        | 9                          |
| 44  | FGD4 | Farmers Hawassa Zuria Woreda Odu Wetate Kebele | Farmers        | 9                          |
| 55  | FGD5 | Farmers from Hawassa Zuria Woreda Lebu         | Farmers        | 9                          |

<sup>1</sup> Woreda is the literary equivalent of a *district* (where most administrative issues are handled and decisions are made).

<sup>2</sup> Kebele is situated at the bottom of all levels of the Ethiopian administrative system.

|    |      |                                                                             |                       |   |
|----|------|-----------------------------------------------------------------------------|-----------------------|---|
| 66 | FGD6 | Koromo Kebele<br>Farmers from Hawassa<br>Zuria Woreda Galo<br>Arkesa Kebele | Farmers               | 9 |
| 77 | FGD7 | Development agents<br>from three kebeles of<br>Dara Woreda                  | Development<br>Agents | 9 |
| 88 | FGD8 | Development agents<br>from three kebeles of<br>Hawassa Zuria<br>Woreda      | Development<br>Agents | 9 |

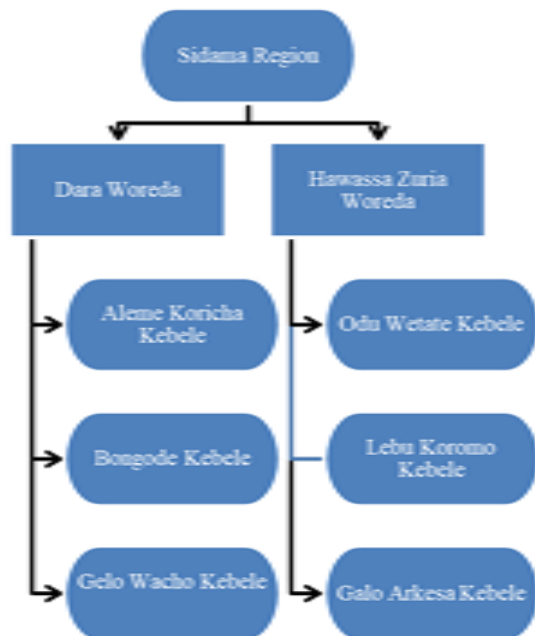


Figure 1. Flowchart of focus group discussions

Farmers, agricultural experts, and journalists were chosen for in-depth interviews (II1-II22). Four experts from two woredas were carefully chosen for the interview. They were chosen based on their direct

relevance to the study's issues. Each woreda has one agronomist and an extension communication specialist. Four agriculture specialists from two woredas were therefore included in II.

Farmers for II were chosen by randomly drawing three kebeles from each woreda. Two farmers were chosen from each kebele. In this instance, the snowball method was used to choose the farmers. Twelve farmers were therefore included in II. The chosen farmers vary in age, sex, and wealth. Two senior agricultural experts were chosen from the regional office using a purposive sampling method.

A crop production specialist was the first interviewee, and an extension communication expert was the second. Both respondents had extensive professional backgrounds, and their knowledge relates to the study's central question.

Four journalists from three different media were included in the interview. These media were specifically chosen since they were easily accessible. The first was Bensa FM radio, which broadcast in Amharic and Sidama. The other was South Radio and Television Agency, which aired a program about agriculture called "Geberenachen." The Ethiopian Broadcast Corporation's "Massa" agricultural television program and "Awdegeter" agricultural radio program were chosen as the final two. All selected interviewees were program editors with many years of experience.

Twenty-two in-depth interviews were conducted through semi-structured and open-ended questions (Table 2, Figure 2).

Table 2. In-depth interviews with the participants

| Name | Where from                                                    | Position/title                 |
|------|---------------------------------------------------------------|--------------------------------|
| I 1  | Sidama Region Agricultural Bureau                             | Extension Communication Expert |
| I 2  | Sidama Region Agricultural Bureau                             | Crop Production Expert         |
| I 3  | Dara Woreda Agricultural Office                               | Extension Communication Expert |
| I 4  | Dara Woreda Agricultural Office                               | Agronomist                     |
| I 5  | Hawassa Zuria Woreda Agricultural Office                      | Extension Communication Expert |
| I 6  | Hawassa Zuria Woreda Agricultural Office                      | Crop Production Expert         |
| I 7  | Dara Woreda Aleme Koricha Kebele                              | Farmer                         |
| I 8  | Dara Woreda Aleme Koricha Kebele                              | Farmer                         |
| I 9  | Dara Woreda Bongode Kebele                                    | Farmer                         |
| I 10 | Dara Woreda Bongode Kebele                                    | Farmer                         |
| I 11 | Dara Woreda Gelo Wacho Kebele                                 | Farmer                         |
| I 12 | Dara Woreda Gelo Wacho Kebele                                 | Farmer                         |
| I 13 | Hawassa Zuria Woreda Odu Wetate Kebele                        | Farmer                         |
| I 14 | Hawassa Zuria Woreda Odu Wetate Kebele                        | Farmer                         |
| I 15 | Hawassa Zuria Woreda Lebo Koromo Kebele                       | Farmer                         |
| I 16 | Hawassa Zuria Woreda Lebo Koromo Kebele                       | Farmer                         |
| I 17 | Hawassa Zuria Woreda Galo Arkesa Kebele                       | Farmer                         |
| I 18 | Hawassa Zuria Woreda Galo Arkesa Kebele                       | Farmer                         |
| I 19 | Bensa FM radio 91.6                                           | Journalist                     |
| I 20 | South Radio and Television Agency                             | Journalist                     |
| I 21 | Ethiopian Broadcast Corporation "Massa" television program    | Journalist                     |
| I 22 | The Ethiopian Broadcast Corporation "Awdegeter" radio program | Journalist                     |

Note: I - the interviewee

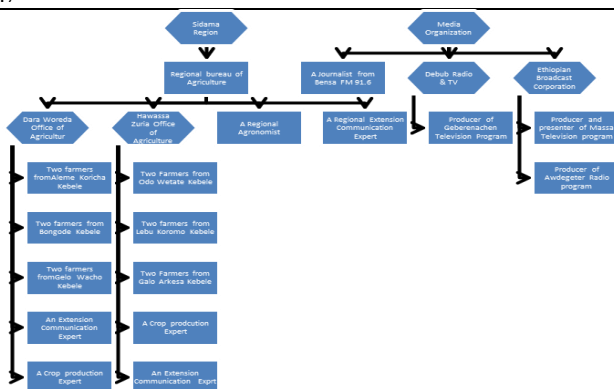


Figure 2. An in-depth interview flowchart

Farmers who took part in focus groups were identified as FGD1, FGD2, FGD3, FGD4, FGD5, and FGD6, while development agents were identified as FGD7 and FGD8. Regional and woreda experts who participated in the interviews are represented as I1, I2, I3, I4, I5, and I6; the farmers are represented as I7, I8, I9, I10, I11, I12, I13, I14, I15, I16, I17, and I18; the journalists are represented as I19, I20, I21, and I22.

## 4. Results and Discussion

### 4.1. Communication Perspective in the Current Trends of Agriculture

Scholars assert that communication is an indispensable part of agriculture since it provides information to the farmer and equips them with the necessary skills for attaining sustainable improvement in farming (Kaur, 2022; Sylvester, 2016). However, as Matouš et al. (2013) described, the malfunction of communication intervention in the Ethiopian agricultural system is the main barrier to adopting new practices. It also affects productivity (Ayalew & Abebe, 2018).

Participants confirmed that agricultural activities were neglected. They indicate that many current generations do not want to lead their future life with farming. Youths try to earn money through other means than actively engaging in agriculture (FGD7 & 8). As confirmed by another participant (I2), even parents do not encourage their sons and daughters to pass through the same path as they did. The young generation leads its life through small business, such as selling in small kiosks in front of their houses and labor. However, the participants said that the parents' farmland is almost entirely covered by weeds and attacked by pests, while several working forces refrain from helping their parents (FGD7 & 8).

As participants in FGD2 described, these very small-scale businesses yield insignificant profit and do not yet fulfill the daily demand. While agricultural production has declined due to technical problems, most family members have engaged in very unsatisfactory and unsustainable business. It is a challenge currently seen in the farming community. The youth mostly care about how to earn immediate income with a compromising effect on their farmland. Parents emphasize letting their

sons and daughters make money through business means other than agriculture.

According to a participant, "youths' hearts do not embrace agriculture as a livelihood; they do not need to be farmers" (I1). What matters here is not about choosing to be a farmer or not; what is essential here is what makes life better. If the young generation gets a better life with activities other than farming, no one can force them to stick to farming activities. However, they do not reach a better life by engaging in non-agricultural activities; therefore, as a communicator, this issue must be addressed and discussed with the farming community and the concerned body. As mentioned by many scholars, communication is central in helping communicators see and understand problems clearly and evaluate them from their advantage points (Acunzo et al., 2016). Therefore, how to reach a better life by actively engaging in agriculture rather than spending time in tiny and unsustainable businesses should be addressed well by DAs and experts. Not only this but also the farming community needs to get an opportunity to discuss how to run agricultural activities and small businesses simultaneously without affecting agricultural activities. A response obtained from the interviewees reveals that DAs and agricultural experts do not well attempt to unearth this issue on the floor and discuss it with the farming community. Through dialog, the community will see the problem and be able to think about it. For farming communities, inclusive communication models are essential for openly discussing challenges that prevail in society (Sylvester, 2016; Mefalopulos, 2003; Tufte & Mefalopulos, 2009; Acunzo et al., 2016; Tacchi & Lennie, 2014).

The participants in FGD7 and 8 revealed that DAs believe that participatory communication is essential to accomplish agricultural activities. However, they mostly use a top-down communication approach. I1 also pointed out that their communication strategy is not completely inclusive. However, they largely follow the directive from the top officials and pass it down. He stated that there is not much room to include suggestions from the bottom. Even in the middle of the working year, all top-down initiatives must be carried out. Woreda experts find it difficult to disobey. According to I3, there is strict conformity to the interests promoted by the senior officials. I2 stated his position as follows: "We feel that anything that comes from the top is good and valuable; that is why we give more attention to the idea that comes from the top. We do not thoroughly and properly assess the conditions on the ground."

What makes farmers more productive is another big issue that experts do not examine cautiously. Farmers spend their time attending meetings called for political purposes in several circumstances. It is not unusual to see farmers repeatedly called to political meetings during the sowing, weeding, and harvesting seasons.

The issue of agriculture is a big concern for the government; however, as I4 noted, more space and time

are given to political issues. His remark on the current trend read: “I can conclude that we practically tend to follow a top-down communication approach. When administrators call farmers to a meeting, the farmers come on time. However, as usual, farmers are not keen to talk with us when we reach out.”

In this regard, the prospect of agricultural communication needs to be scrutinized. How to proceed in the future would be an assignment for DAs and experts. They would become more alert and use a defined communication approach to help the agricultural community be more productive. Regarding the future of agriculture, I1 made the following notice: “As experts have suggested, we do not improve our agricultural system; political decisions are frequently made in our agricultural extension system. Somebody comes today as the head office, and they leave tomorrow. When something goes wrong in the agriculture sector, nobody is held responsible. We frequently fall short because we do not critically evaluate our degree of success. No one is held responsible for the failures in our agricultural system.”

I2 described the entire situation as follows: “Nowadays, youths are not helping their parents; they do not want to be farmers. Fathers engage in agricultural activities alone. Traditionally, youths, particularly males, helped their fathers. I fear these young generations will lose the practical knowledge of agriculture in the future. Many youths flee to towns and cities; hundreds travel to Addis Ababa daily. They do not want to pursue life-based agriculture. We cannot force them to stay in agriculture.”

To achieve high productivity, young age, a productive workforce, and those with new enthusiasm must return to agriculture; they will transform it. Agricultural activities such as building irrigation channels and water reservoirs, plowing, weeding, and harvesting require a labor force. The youth are unquestionably the productive forces of the future in Ethiopia's agriculture sector. Holding community forums and effectively addressing the problem will be extremely beneficial. Most respondents in FGDs and II agreed that although communication is essential for bringing up concerns in an open way for conversation, these issues and themes were not given enough attention.

#### **4.2. Development Agent-Farmer Interaction: Exclusive Communication Approach**

One of the issues in agricultural activities is the interaction between farmers and DAs. Positive interaction leads to a positive outlook and common interest – achieving shared goals (Del Castello & Braun, 2006). Communicators in good interaction can easily understand each other on the issues they are dealing with. Therefore, DAs' interactions with farmers are crucial (Asmelash et al., 2021). DAs should communicate with the same temper and courage when they reach out to all farmers without making a difference. However, what is obtained from the

respondents is quite different. DAs do not approach all farmers (both model and non-model farmers) frequently and interact with the same temper and courage as they do with model farmers. I10 said DAs visit model farmers more regularly; they focus on farmers who do better. DAs mostly select model farmers for field visits and experience sharing. DAs who participated in FGD7 and 8 pointed out that they frequently contact model farmers. The reason is model farmers are keen to do what they have been told and are hard workers; they said it is easy for them to deal with model farmers. A respondent in I3 said, “Model farmers are cooperative, easy adopters, and positive in responding to new ideas. Due to this reason, he noted, DAs usually prefer to visit model farmers' farmland than non-model farmers. Therefore, the communication between DAs and model farmers is much better than between DAs and non-model farmers in many aspects. I8 said DAs frequently visit her farmland and house because she is a model farmer. On the contrary, I10 said she did not receive improved vegetable seeds last year because she was not a model farmer. The responses obtained from all participants show that DAs-farmers' connection is not the same for all farmers. A communication approach that champions model farmers only would ultimately ignore the larger segment of the farming community, i.e., non-model farmers. To develop the right attitude in development projects, genuine participation of the whole community is essential (Servaes, 2002). The exclusive nature of communication does not stop here between DAs-farmers interaction, but woreda experts do the same.

Whenever experts from Wereda visit farmers' farmland, they visit model farmers' farmland more often than non-model farmers' farmland. The success of agricultural activities is evaluated from the status of model farmers' achievements. As illustrated by participants in FGD7 and 8, when higher officials and guests from regional and federal government offices come to visit the areas, DAs and woreda experts take them to the best model farmer's farmland. Their visits are mostly used for evaluating the overall achievement of DAs, experts, and farmers. Therefore, the higher officials' feedback does not depict the entire community's accomplishments. It excludes non-model farmers.

#### **4.3. Development Agent Engagement in Serving Non-Extension Activities and Its Impact**

The duties and activities of development agents are to engage in day-to-day activities with farmers to improve the agricultural production (Oakley & Garforth, 1985; EATE, 2017). In the Ethiopian context, development agents are experts who are most commonly trained in crop production, animal husbandry, or natural resource management. Three DAs are assigned to serve the farming community in each kebele (EATE, 2017). Their primary responsibility is to help farmers based on the knowledge and skills they acquired in college, on-job training, and lived

experience. They are not assigned to engage in activities other than agriculture.

As part of the community, it may not make sense to inhibit DAs from participating in activities other than agriculture. As far as DAs' participation in non-agricultural activities does not affect their responsibilities, there will be no problem working and helping farmers in various activities. In turn, their support may help develop more intimacy and interaction. On the contrary, DAs' primary responsibility will be affected if they engage more in nonagricultural activities. As participants confirmed in FGD7 and 8, DAs engaged in activities other than agriculture. As participants in FGD1 and 2 revealed, DAs usually participate in nonfarm activities like health issues and other politically oriented topics. DAs should move from one farmland to another regularly and frequently to communicate with farmers about agriculture (Oakley & Garforth, 1985). This task by itself is arduous.

#### **4.4. The Working Environment Impact on Agricultural Activities and the Interest of DAs in Serving Farmers**

Despite working environments varying across all organizations, having and working with good interest contributes to realizing goals set by the organization. When we see Ethiopian governmental agricultural offices, they have peculiar features that differentiate them from other organizations. Working as DAs in Ethiopian agricultural offices demands a strong motive (EATE, 2017). DAs are crucial bodies for delivering agricultural information, knowledge, and services to farmers.

DAs are supposed to serve rural communities staying with them. One of the challenges here will be the availability of infrastructure compared to urban areas. There is almost no transportation during the rainy season, and the topographic natures are up and down, which demands DAs to move from place to place on foot. DAs ought to travel many kilometers each day to visit farmlands. They do not have a motorcycle or other means of transporting services. The job is tedious and requires more energy. In this regard, participants in FGD7 and 8 confirmed that DAS could not contact each farmer regularly and repeatedly. Instead, they prefer getting farmers in a group or meeting. A participant in FGDW8 said, "In my kebele, there are 840 households; the question is how I can visit each farmer's land all the time. Therefore, I only visit nearby and model farmers most of the time." Due to these factors, DAs prefer to contact farmers selectively, as noted by 15.

Another noteworthy finding from this study was that DAs lack the desire to serve as DAs for an extended time. The turnover of the personnel in the agricultural offices is common (FGD 8). Several factors have contributed to the instability of DAs. Working in rural areas is hard; no urban style of life. DAs are not satisfied with the salary and incentives they receive.

Working as DA in a rural area is challenging (I6). In general, as respondents in all FGDs confirmed, frequent contact and continuous communication between DAs and farmers are less. The workers' motives or interest in their duty usually affect the success. One issue in the DAs-farmers relationship is the frequency of contact in-between. To have good communication, DAs should first visit farmers repeatedly with interest. However, one of the participants in FGD7 and 8 said that DAs have little interest in contacting farmers by traveling from home to home regularly. DAs prefer to meet farmers at the group's 'got/hiwas'<sup>3</sup> or 'kebele' level. Without continuous contact, it is obvious that the communication between farmers and DAs would be intermittent.

Due to lesser interest in working as development agents, as the recent phenomenon depicts, DAs do not want to stay long working as development agents. There is high turnover. Recently, many DAs have shifted their profession to other fields of study (I1, I2, and I4). Many factors contribute to the lack of motive to work as DAs. Scholars explain that "DAs are detached from urban lifestyle and forced to work in harsh environments" (Nigussie, 2020). He noted that DAs are working with a lack of infrastructure like transportation and hence travel long distances by foot every time (Nigussie, 2020).

Moreover, DAs are working with a lack of basic office facilities and fewer educational opportunities. The pitfalls mentioned here and other factors, as Nigussie (2020) noted, "left them with little incentive to aspire and work toward a better future through changing the livelihood of the smallholder farmers." The issues brought up in FGDs 7 and 8 were consistent with those identified by Nigussie (2020). DAs are not very interested in long working as DAs; they either want to change their profession or look for other alternatives.

#### **4.5. Incentives for DAs' Engagement in Visiting Farmers Frequently and Mobilizing the Community**

The relationship between incentives and proper accomplishment of duties and tasks might not be easy to define. In this research work, DAs were asked about the impeding factors in communicating with farmers properly. As the response obtained from FGD7 and 8, DAs are not satisfied with their work. The salary is meager. There is no additional income. Moreover, as a participant in FGD7 noted, DAs become more unsatisfactory as farmers fail to demonstrate change in their lives quickly.

A participant in FGD7 said, "Working as a development agent is one of the most laborious work, as I think we deserve better salary and additional incentives." The other respondent in FGD8 said that due to a lack of incentives, DAs lost interest in eagerly accomplishing their duties and activities on time and as required. As stated by some respondents in FGD7,

<sup>3</sup> Got/hiwas refers to a sub-division under kebele.

some DAs do their activities only with easily accessible farmers. DAs want the easiest way to work with farmers; the nearest farmers are usually contacted. When higher officials visit, DAs take them to the model farmer's farmland only; this deceives the overall success of the farming community. Higher officials feel that agricultural work is good so far in the area. An elderly participant in FGD8 said, "You know, this time is all about paperwork; we report to Woreda; they do the same as I assume."

The interest to keep working as DAs is dwindling; there are indications; I3 revealed, "In my experience, I have seen many DAs change their profession and enter another field of work. Still, many DAs take courses in the weekend program from the nearest university to change their profession and later quit their work."

The above expression clearly shows that DAs are not interested in their job. The factors they mentioned are not something that can be neglected. The first job activity in the world of DAs is to contact farmers and discuss agriculture with them. In the process, DAs' courage to work helps them to communicate well and interact with farmers. However, they have less interest in working as DAs. If DAs are not in a good working temperament, there will be little contact with farmers and less communication.

#### **4.6. Professional Integrity as a Communicator**

The central theme in the Ethiopian agricultural extension system is the crop production. The purpose of all efforts is to increase the crop production and feed its people sufficiently (EATE, 2017). Whenever farmers and development agents are asked what they know about the word "extension," they quickly associate it with "crop development." I12 explains that extension means "improved seed and fertilizer." I14 replied the same. I9 said "extension" means "using seed and fertilizer for better production."

During the rainy season, DAs and experts contact farmers more frequently than at any time in the working year. The participants in FGD7 said that the routine undertaken every year makes the community understand "extension" as "fertilizer and seed." Repetitive talk on seed and fertilizer among DAs and farmers limits the understanding of the roles and purposes of "agricultural extension" to the concept of "seed and fertilizer" only.

Agricultural extension is a broad concept that incorporates crop production, animal husbandry, natural resource management, and other rural development activities. The improvement of one aspect of agricultural activity has a positive impact on the progress of another. For example, the effort to rehabilitate degraded land would increase the production. If once degraded land recovers, it will ultimately support vegetable growth. Therefore, the communication between DAs and farmers as an extension agent must be comprehensive and incorporate many issues pertinent to the rural community.

The other issue about communication in extension is

its temporariness. The response from all FGDs and IIs revealed a high frequency of DAs-farmers contact during the plowing season. As I18 said, the frequency of communication is shallow and irregular before and after the cultivating season. In agricultural development activities, the interaction and overt discussion between farmers and DAs should begin early; that includes identifying issues or concerns before planning, planning, executing, evaluating, and engaging in follow-up actions continuously. According to I2, a high frequency of contact with farmers during cultivation time is typical; however, soon after this season, their contact will decline. Similarly, the physical connection between DAs and woreda experts will decrease. The communication between DAs and woreda experts will be carried out mainly through monthly reports; thus, the above responses indicate that communication between DAs, farmers, and woreda experts is limited and primarily undertaken based on circumstances. Regular contact and communication with farmers are less; thus, professional integrity is limited to the working year's cultivation season, mainly the rainy season.

#### **4.7. Effect from Deploying Participatory Communication Approach**

The undeniable advantage of the participatory communication approach is that communicators participate equally in the communication process (Acunzo et al., 2016). The idea behind participatory communication is ultimately to enable communicators to reach mutual understanding and common sharing regarding the issue they are dealing with (Servaes, 2002). In the participatory school of thought, the two-way communication style is democratic (Chandra, 2004); individuals can accept or reject what they hear from the other side. Nonetheless, if one communicator incorrectly exercises it, their interaction and communication will not be successful. In this regard, the response obtained from FGD7 revealed that sometimes the communication between farmers and DAs becomes poor and unsatisfactory because some farmers ignore DAs' advice and do whatever they want to do on their farmland unresponsively. One participant expresses the situation as follows: "Last year, we advised some farmers to replace eucalyptus seedlings and trees with vegetables and crops. Almost all farmers agreed to do as we told them in the discussion. Later, when we visited farmers' land, many covered the land with eucalyptus trees. When we met with them again, they told us that it is their right to do whatever they want on their land."

The other participant in FGD 8 said, "Some farmers refuse our advice entirely, and when we remind them repeatedly, they usually tell us it is their right and democracy to decide on their land." Indeed, there is no room to force the community to do as they are expected. One of the disadvantages of participatory communication is that it gives full rights to community members to disagree with what is needed or suggested by experts.

The anticipation behind the theory of participatory communication is that through dialog and continuous conversation, the community will understand time by time and begin to engage in activities later (Mefalopulos, 2003). A participant in FGD8 compared the current phenomena with the Derg regime. He appreciated the power given to DAs in the previous regime. There was a coffee development program primarily led by the “Coffee Improvement Program (CIP).” The purpose of the CIP was to spread productive and stable coffee seed varieties to coffee-producing areas. One DA might be assigned to more than two kebeles at that time. His responsibility was to mobilize the community to participate in the coffee development program. Every farmer was expected to take responsibility and accomplish as advised by the DAs. DAs and other officials evaluated farmers based on the activities they achieved. Anything that deviated from the scientific recommendation would be considered anti-development and anti-government. Therefore, farmers never say no. If a farmer had kept disobeying, he would have been punished. Another respondent in FGD 8 also said that the respect DAs had at that time was not comparable with today. He noted, “DAs’ saying today is not respected at all.” I1 and 2 also confirmed that the absence of professional power impedes progress; they indicated that DAs and experts have less power. I4 remarked, “farmers give attention to the speech given by political officials.”

The result from the discussion with development agents reflects the undesirable scenario resulting from the participatory communication approach. Many of them felt that there was a misconception about “democracy.” Some farmers associate “democracy” with a full-fledged path that gives them the untouchable right to do whatever they want.

The result is quite opposite regarding farmers’ presence at the discussion when called by agricultural experts rather than political leaders. The communities do not hesitate to avail themselves whenever called for a meeting by woreda or kebele administrators. On the contrary, few farmers usually show up when called to training at the Farmer Training Center (FTC) or nearby by DAs. In FGD7 and 8, participants noted that today, farmers listen and obey the sayings of politicians much more than agricultural experts. I3 also substantiated the above statement: “farmers become reluctant when called for a meeting by experts, although they never miss a single call if it is from the political position of the administering chair.”

#### **4.8. The Undesired Consequence of Aid-Approach Agricultural Activities**

In Ethiopia, aid approach development programs have lasted for many years. One of the popular programs that still continue is the Safety Net Program. The support functions in two ways. First, the direct support program will include farmers identified as the most impoverished and unable to participate in rural

development activities. These farmers are physically incapable of participating in community activities; in this category, farmers receive a monthly payment. The second category comprises farmers who face a food gap for some months in a year but can be able to participate in various public works. The beneficiaries are poor and selected based on their level of income. Farmers chosen for the Safety Net Program must actively participate in natural resource development activities such as soil and water conservation, afforestation, cut-off drain, terracing, and other similar activities. One of the aims of the program is to rehabilitate degraded lands and make them fertile and suitable for plant growth. In addition, beneficiaries would receive loans to buy cattle based on particular preferences and measurements, which are expected to ultimately increase their assets. The program will last for five years. At the end of five years, the beneficiaries are expected to graduate and become independent.

Beneficiaries are evaluated based on specific benchmarks to determine whether they are ready for graduation. The first criterion is to check whether beneficiaries improve their lives or not. The criteria include self-feeding; having additional assets such as cows, oxen, sheep, goats, and hens; starting small-scale businesses, changing the house from thatched to corrugated roof type. Based on these criteria, evaluators inspect the whole situation of the beneficiaries to determine who is going to graduate and who will continue receiving support from the Safety Net Program for the coming five years. The challenge in this regard is that beneficiaries never tell the truth. They hide their progress and strongly claim they are poor and unable to feed their families. They seek to be included in the program. They want to get aid every year because they develop dependency. In this regard, the response obtained from all FGDs and IIs revealed that farmers want to get aid continuously. I3 said, “Aid-seeking behavior has increased, including those with a better income. Farmers who are getting aid seek to stay in the program unconditionally.” The same response is obtained from I1: “All farming communities seek to be included in the aid program. Farmers generating higher income and kebele administrators are also at the front line to be included in aid programs. The dependent state of mind is widespread. The Safety Net Program is designed to help only poor, old, and physically impaired people, not farmers with higher incomes. Farmers expect aid and anticipate something from the government for every problem they face rather than searching for a solution.”

Concerning the aid and the mind set-up of the rural community, I2 remarked: “Farmers who stayed for five years and graduated from the Safety-net program reappear next year and reapply to be included in the program again. Farmers’ seek to be embraced by the Safety-net or another aid program seems to be an endless drive.”

Public work sustainability is the other issue with the

Safety Net Program. Farmers participate in public works by constructing cut-off drains, terraces, planting seedlings, and other related tasks; they receive payments for all of these tasks. As explained by I1 and 5, farmers do public work activities loosely to keep receiving aid year and year after. The terrace they built does not last long because they make it loose deliberately; they also plant seedlings improperly, which causes them to wilt quickly; the cut-off drains they constructed will be destroyed soon or later by themselves or by allowing livestock to enter. According to I1, the cause for the above-mentioned problem is that farmers must constantly get assistance, which makes them feel insecure and dependent.

The Safety Net program helps poor farmers reach a better life. Payment in this program is not permanent; instead, it is temporal to fill the food gap that beneficiaries face in a given time, help them accumulate wealth/assets, and rehabilitate degraded land. The assumption is to attain a significant level of change in the life of poor farmers. What is happening in reality is very different; farmers believe that aid will never be stopped, and as a result, they develop dependency. I9 said, "Who hates receiving aid?" He also mentioned that farmers who are better in income also need aid. The participants in FGD7 revealed that farmers are developing a feeling of being dependent rather than becoming independent.

The other issues raised regarding dependency are the shared narratives about associating anything "bad happens in the community" with the "government's responsibility," as expressed by one participant during FGD8. He mentioned that farmers, DAs, and other officials feel that the government is responsible for feeding the community when they face food shortages or hunger.

In emergencies, the government must take action for an immediate remedy; however, in the long term, all responsible bodies must take care of their part. Taking own responsibility might not be simple; however, unless otherwise all stakeholders share and exert their efforts, they might not be able to sustain the development. The spirit of dependency spread over the souls of farmers and other stakeholders. For all problems, people expect remedies from the government. In this regard, farmers should know that they are the ones who entice development. They must discuss and have a dialog to evaluate their status. They must discuss issues of aid, how long they should continue receiving support. This is because the support that lasts for decades may ruin the capacity to find a remedy for the problem, ultimately putting the human brain dormant. In relation to this situation, as confirmed by I1 and I6, DAs and experts did not provide a conversation session that targeted the undesired effect of aid-oriented development programs.

If the human brain feels okay in its state of the comfortable zone on leading life by receiving aid, that might deceive the potential of human power to have the vision to change their life by working hard. In this

regard, the expression obtained from a participant in FGD8 appeared: "farmers who receive aid once wait for aid always." The other participant in FGD7 expressed the scenario: "Farmers are losing hope. They feel they do not have the potential to overcome their problems. They push themselves to the status of neediness. Only a few farmers are hard workers. Because the number of farmers whose lives have changed is less, the overall result of extension work is unsatisfactory. Generally, aid makes farmers feel dependent, and in turn, farmers keep expecting aid."

The other issue raised by the participants in FGD7 and 8 was the consequence of "the spirit of expecting aid." The spirit of expecting aid makes society inactive and hence persistently poor. In addition, I1 said, "The poor sustain their poorness by getting and expecting aid until today."

#### ***4.9. Access to Mass Media for Delivering Agricultural Information***

In this particular topic, access to mass media and delivering agricultural information refers to the presence of agricultural mass media in the area and the utilization of media by the community. The presence of mass media here means the transmission of agricultural programs in broadcast, print, and through the internet. The use of mass media refers to whether the farming communities have a culture of listening to agricultural radio programs, watching agricultural television programs, reading about agriculture in print media, and getting agriculture issues through the internet. The program language, clarity, timing, and relevance are other central points.

Results from IIs and FGDs revealed that most farmers have radio access. In addition, they feel that radio has a more significant impact on making them aware of various issues in agriculture and other fields than other media. Most respondents who participated in FGD1-6 acknowledged that they listened to radio programs, but they could not name one exclusively focused on agriculture. Because they did not know the existence of agricultural radio programs, it did not make sense to ask respondents about content convenience, timing, the language utilized, clarity, and related issues. I9 has the following: "The utilization of mass media is less; we listen to radio programs on mobile phones. Nonetheless, the number of people who listen to radio programs is small. I do not know a farmer who has a television in his house."

The response obtained from FGDs and IIs depicted that the utilization of mass media is poor. In general, the mass media were not effectively used to disseminate agricultural information to the public. Results from FGD7 and 8 also revealed that DAs and agricultural experts did not highly value media consumption, particularly for outlets that broadcast agricultural programming. When asked about community radio that transmits in the Sidama language, all the participants in FGD7 and 8 hesitated to confirm. They even began to ask each other, and later, one participant told us that a

program called “Geberenake” is transmitted every Wednesday. Nevertheless, they did not know the details of the program, how long it has been on the air, what issues have been emphasized, what is the time of transmission, and other issues that are not known. The response given above shows how little media have been used to convey information about agriculture.

According to I19, the agricultural program has been transmitted from Bensa FM 91.9 since 2009. It is called ‘Tini Geberini Kitaweti’ and is transmitted in Sidama language every Thursday and Saturday for 15 to 20 min at noon.

I19 noted that *Tini Geberini Kitaweti* reached out to most of the Sidama region and limited neighboring areas. The program is not transmitted regularly and not well organized in content. According to I19, the station did not conduct audience research for the program's significance, convenient timing, and other related issues of the farming community. I3, I4, I5, and I6 said they did not know that Bensa FM 91.9 had been transmitting an agricultural program. I3 said: “I did not pay attention to radio programs.”

Another one-hour agricultural program, hosted by South Radio and Television Agency (SRTA), aired on television and radio twice a week. The name of the program is called “Yearso Ader Mender.” The broadcasting medium is Amharic. The content of the program has three parts. The first is agricultural news. The second portion of the program is a presentation of an experienced farmer who scored the best performance. The third part of the program is a conversation with farmers; in this part, a journalist places a platform to talk about agriculture. In the second and third parts, the journalist allows farmers to explain and describe the subject matter they are dealing with. The program invites researchers and experts and gives them sufficient time to deliver their knowledge. The “Yearso Ader Mender” program presenters are responsible for choosing a story and searching for information from farmers, agricultural bureaus, and research centers. I20 noted that the overall process of producing the content is mainly on the shoulders of the journalists. It is up to the journalist to make the program appealing to the audience.

Although the agricultural programs aired in SRTA for many years, the station did not conduct audience analysis. I20 confirmed that she never knows to what extent farmers across the region have attended and listened to the program. Regarding the scope of the media, SRTA reaches out to all parts of the Sidama region. However, all farmers who participated in FGDs and IIs said that they did not know about “Yearso Ader Mender” agricultural program aired by SRTA. I3 and I4 confirmed that they knew about “Yearso Ader Mender” but did not attend the program regularly. They mentioned that they did not have a habit of attending agricultural programs transmitted through the mass media. One participant in FGD7 confirmed that he sometimes listened to the radio program aired by

SRTA. He also noted that most DAs did not attend agricultural programs and did not encourage farmers to listen to agricultural radio programs.

“Awedegeter,” an agriculture program in Amharic, is broadcast on EBC (Ethiopian Broadcasting Corporation). Despite the fact that Awdegeter” is a long-lived program (Anley, 2011), most participants in FGDs and IIs said they had never attended the “Awdegeter” program. Some of them confirmed the existence of the program but did not attend it (I1-6). As I21 noted, radio's potential for disseminating agricultural programs is not used well. He noted that government-owned media give more attention to propagating political points than rural and farming issues. In reality, the country's overall development is mainly traced to small agricultural activities; however, the time allotted to agriculture and rural issue coverage is inadequate. Media, especially radio, can be taken as the best source of information in a country like Ethiopia, where most of the population lives in rural areas. In this regard, agricultural development inevitably needs media involvement to provide information to the rural community. The program should be accessible to the community and convenient in content. Above all, the program has to be known by the community. Unfortunately, no one among the FGD 1-6 participants was able to confirm the broadcast of the “Awdegeter” radio program from EBC.

The other agricultural television program aired by EBC is called “Masa,” an Amharic term that can be understood as “farmland.” The program started in April 2017; its life span is shorter than “Awedegeter.” “Masa” is broadcasted every Saturday at 6:00 pm before the fall of night. The same program is rebroadcast on Sunday morning and Friday afternoon. Regarding the transmission time, “Masa” aired on three different days at different times. Retransmitting three times a week will allow the audience to attend the program on one of the three days. However, I7-18 did not recognize the presence of the program. The big challenge regarding this particular program is that most farmers do not have TV sets. Moreover, electricity is not accessible in most parts of rural areas. I1 noted that the presence or absence of agricultural television programs is not given much attention not only in rural communities but also in their bureau of agriculture at the regional level.

Concerning the medium language, as I22 said, “Masa” agricultural television program is currently transmitted in Amharic. Therefore, for people living in rural areas such as Sidama region, it would be hard to confirm the importance of “Masa” agricultural television program. Language barriers are an issue in disseminating agricultural information to the target audience.

“Masa” television agricultural program is accessible throughout the country. Moreover, it will be uploaded on the internet after it has been broadcast from the mainstream; therefore, it is available on YouTube.

However, several farmers do not know how to get it from YouTube; unfortunately, they do not know much about the Internet. According to I22, the effectiveness of the program is not assessed yet. However, it has many spectators on YouTube. As he mentioned, the audiences who view “Masa” on YouTube are not farmers. It does not need a rigorous study to identify how many farmers have watched a television program on YouTube in Ethiopia; it is much less in number. In this regard, ICT in Ethiopia is characterized as poor in technology utilization and inaccessible to improve agricultural knowledge, information, and technologies (EATE, 2017; May et al., 2007; Ajani, 2014).

Access to mass media can be seen from three perspectives. The first concerns the availability of the transmission of agricultural programs. Today’s media do not produce agricultural programs and air equally as they do on other programs. The second issue is the accessibility of the media; due to different factors, media are not as accessible in rural areas as they are in urban areas. The third issue is regarding the use of media by farmers. Whatever agricultural programs are transmitted, there must be an audience in the first place. Developing a culture of attending mass media is an important aspect. Regarding media use, responses indicated that farmers do not develop attending media in their day-to-day life (FGD 1-6).

Another aspect concerning the mass media is awakening and encouraging farmers to attend broadcasting programs. The participants in FGDs 7 and 8 confirmed that no efforts were made to entice farmers to watch agricultural programs broadcast by the media. A participant in FGD8 noted the following: “we do not encourage farmers to attend mass media in general. If <sup>4</sup>we are asked how many of us know the existence of agricultural radio programs in our surroundings, we do not answer it confidently.” Another participant in FGD 7 confirmed that DAs themselves do not have a culture of attending agricultural radio programs. Today’s new habit in most rural communities is listening to spiritual songs or music through the phone (using memory cards) rather than listening to other radio programs (I1 and 2).

Regarding television, only rural areas near Kebado and Dore towns have access to electricity; therefore, very few farmers have access to television. TV through satellite reaches all corners of the country. However, due to the lack of electricity in rural areas, farmers are deprived of access to television. In addition, many farmers do not have TV sets; therefore, television for agriculture is not functioning.

Regarding the availability of mass media for agricultural programs, I1 discredited the existence. I1 said, “I do not know agricultural radio programs transmitted in Sidama language. EBC has a television agricultural program called ‘masa’ transmitted in Amharic, but I do not know the details.” The same

response was obtained from I2 concerning the existence of Bensa FM radio, and he replied: “I do not know about Bensa FM 91.9 radio program, and I am not sure whether the station transmits various programs in Sidama language or not.” It may be inferred that the media received far less attention or has been neglected.

In the 21st century, the Internet is believed to be crucial in disseminating agricultural information. However, its utilization for agricultural purposes is poor in a less developed country like Ethiopia. I9, I10, and I11 indicated they did not know about the Internet. A response from FGD7 and 8 showed that let alone farmers, development agents did not use the Internet for agricultural purposes. One participant in FGD7 noted that he sometimes googled to read about diseases and pests that affect crops.

The other big concern about mass media is access to printed media. All respondents confirmed that there is no access to printed media. Regarding posters, a response obtained from FGD7 and 8 indicated that DAs and kebele personnel sometimes posted on the wall of kebele’s or DAs’ offices; the information they deliver would be any issues related to agriculture or not. The responses obtained from I7-18 asserted that no newspaper, magazines, flyers, or other printed material about agriculture has been seen so far; the participants in FGD 1-6 also confirmed the same result. In conclusion, the important role of print media in improving the agricultural production is practically nonexistent unless DAs receive written documents during the training.

#### **4.10. Gender-Responsive Communication**

The contribution of females in the life of rural communities is exceptionally high (The SOFA Team & Doss, 2011; Steeves, 2010). From taking care of children to the extent of executing and accomplishing, all in-home activities are on the shoulders of the females. Moreover, their contribution to on-farm activities is also outstanding. In general, females work for many hours throughout the day. Therefore, what communication intervention has been undertaken in this regard is crucial. Communication is strongly related to empowerment because it helps people demand equal access to and control over resources. It also helps to develop confidence and negotiation abilities (UNICEF, 2018). Though females are the core element in many aspects of development, in most cases, they do not gain equal status and consideration as given to males (Steeves, 2010). For example, in FGD7, one participant said, “We do not discuss all agricultural issues with a female as equally as we do with males. When we visit farmland, we tend to talk more with a husband than with a wife in many cases. Even when we need farmers for a meeting, we usually tell or send a message to the husband unless a householder is a widow.”

The aforementioned participant illustrates how women are underrepresented in agricultural work compared with men. DAs typically work with men rather than women. I10 yields an identical result. I14

<sup>4</sup> We refer to development agents participating in the focus group discussions.

said that DAs only speak to women about agriculture on a selective basis.

The primary responsibilities of female farmers in terms of agriculture are to look after the production of vegetables and poultry. A participant in FGD8 pointed out that DAs limit their interaction with female farmers and do not discuss all aspects of agriculture with females. DAs and experts who like to speak about agricultural production and land management are husbands. Females are being kept quiet in this situation. In a widowed household, there will not be any other options. I15 stated, "DAs encourage a widowed woman to engage in different agricultural activities. In contrast to most respondents, I6 stated that "we are attempting to engage all ladies in all kinds of agricultural activities; we have found that certain widows are productive in agriculture. We also have model farmers that are women."

Regarding female-specific communication techniques, I1 observed that widowed women are viewed as householders like husbands rather than having a special method of communication. Wives and young women are given special treatment in some packages, such as helping to grow vegetables in the garden. The regional bureau does not provide any special assistance, but DAs typically choose females and urge them to engage in the production of vegetables or chicken.

A participant (I2) provided the following explanation of the circumstance for females: "Females are not permitted to engage in any form of farming. Women typically stay home and take care of their domestic duties. It is common to observe more male participation than female participation even during training. We do not have a specific kind of communication that we have created to encourage women to engage in all aspects of farming. Culturally speaking, women are expected to perform specific tasks. For example, married women are expected to take care of household chores and participate sporadically in agricultural activities such as backyard gardening and poultry. A woman who lost her husband can still engage in all activities."

In many situations, females in rural areas have little participation in agriculture, even though their contribution to the family life is irreplaceable. The fact that few women participate in agriculture in rural areas is evident in several circumstances (I1 & 2). DAs must interact with female farmers in the same way they do with male farmers. However, as the majority of participants in FGDs demonstrated, DAs mostly continue to communicate with male farmers and do not make an effort to develop communication interventions that focus on female farmers.

## 5. Conclusion

Top-down communication is the major strategy for rural agricultural practices in the region. The level of farmers' participation in preparing the annual plan is

low. DAs and experts are the major actors in formulating and developing annual plans. Lack of extensive contact and communication and not giving farmers enough time are another signs of broken communication. There is no regular, scheduled, and continuous communication between farmers and DAs. The selective communication technique, which is preferred by DAs, primarily targets model farmers; DAs concentrate on active farmers who readily take their recommendations. Whenever officials or specialists come to the area, DAs accompany them to a model farmer's farm. The accomplishments of model farmers are used to measure the success of agricultural undertakings in general. There is no legal requirement for farmers to complete their tasks and obligations on time and to the best of their abilities. Meetings were mostly used for information exchange. Farmer-DA communication is frequent during the plow season. Contact is relatively sporadic and low frequency before and after the plow season. The youth do not want to be farmers; they look for alternative sources of income, most often by starting small businesses; DAs do not try to bring up this issue for community discussion.

DAs engage in other communication-related activities, such as politics and health. Due to lack of motivation, DAs are uninterested and do not want to continue working as DAs for very long. The community's propensity to seek assistance is often growing; farmers develop dependency. Access to mass media and the utilization of mass media for disseminating agricultural issues is minimal. Regular agricultural programming is not available in all media. The culture of attending media is weak. The community makes virtually little use of the Internet. The availability and use of print media are equally poor. As a result, the utilization of communication in agricultural production is both inadequate and ineffective. The fact that this study examines broad concerns regarding the communication interventions used in the sector of agriculture by development agents and experts sets it apart from others. It illustrates the extent to which communication is used properly and effectively to raise agricultural production. The difficulties that farmers and development agents faced in their interaction have been identified and explained. One of the issues this study shows is that no one is held responsible for the poor results achieved in agricultural endeavors. For development plans to be successful, the communication component must include responsibilities.

Experts, researchers, and practitioners in agriculture would greatly benefit from this finding. It displays the gap that exists on the ground. If used appropriately, communication can be of utmost importance in sustaining development. With this in mind, the research in this article examines problems that prevent communication from being used effectively.

This research has revealed a number of issues, one of which is the unintended consequences of aid approach development initiatives. The community

typically develops dependency because of the aid approach development, and this study does not additionally explore the community's misconception of aid approach development activities.

We recommend that interested parties carefully examine the overall situation and implement solutions to lessen the issue. DAs and experts must adopt a participatory communication strategy and refrain from using a selective communication strategy that segregates less engaged farmers. The communication approach should be designed in favor of pro-non-model farmers. To help people comprehend the consequences of seeking help at all times, DAs must host a community talk session. In addition to carefully examining the problem, the government should encourage DAs to develop their interest in working with the rural population. It is necessary to increase the use of media for agricultural goals; the government media should take the lead in this effort.

Researchers who are interested in this topic may conduct extensive research on the barriers that inhibit experts and development agents from using communication effectively. By doing this, academicians and practitioners will probably get a deeper comprehension of both the theoretical and practical uses of development communication, particularly in the context of agricultural activities undertaken in less developed countries.

## 6. Limitations of the Study

Bulks of data were obtained from focus group discussions and in-depth interviews; which put the burden on the researchers in processing the analysis part. It was challenging to organize the data based on a separate theme. The study was conducted in the Sidama region and concentrated solely on the communication component, which might have limited the study's capacity to thoroughly examine all the associated agricultural activities carried out by agricultural offices. Research on communication interventions for improving agricultural production should take into account cross-disciplinary aspects such as the prospect of rural markets, farmers' cooperatives, and other interconnected issues with rural development.

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## Informed Consent

The authors obtained oral informed consent from all the participants. An agreement was reached with each individual to voluntarily participate in the study.

Written permission was obtained from the Sidama Regional Bureau of Agriculture.

## Data Availability Statement

The data underlying this article will be shared upon reasonable request from the corresponding author.

## Ethical Considerations

This study was conducted as per the principles of the Declaration of Helsinki. It did not require ethical approval because the participants willingly shared their prior lived experiences in the public sphere, such as published biographical notes and newspaper articles. Also, proper anonymization of the study participants was provided, and informed consent was sought at the time of the first data collection. Furthermore, the study was carried out in accordance with the policies of the institution.

## Authors' Contributions

*Hailemeskel Zewdie Gebeyehu*: conceptualization, methodology; gathering, organizing, and analyzing the data; writing - original draft.

*Yohannes Shiferaw Jira*: investigation, supervision, review, and editing.

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