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Obstacles of Development Agents for Gender Equality in Agricultural Extension Services in Finfine Surrounding Special Zone and East Shewa Zone, Oromia Region, Ethiopia

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Abstract
The present study was designed to find out the barriers which limit the active participation of both the genders (men and women) in agricultural operations and also towards gender disparity in agricultural extension. Agriculture comprises of a number of farming activities, where both men and women are involved in multiple diverse nature of field operations. In spite of their high contribution in farm and non-farm activities, there exist gender disparities with reference to agricultural extension, advisory services. The study was conducted in five districts in east Shewa and Finfine surrounding special zone, Oromia regional state, Ethiopia. Personal interviews were conducted from male and female development agents. The total sample size of the study was 60 (49 male and 11 female). A designed structured questionnaire was prepared for the data collection as the research instrument. The data thus collected were coded on SPSS for analysis and interpretation. Results showed that approximately 87% of men farmers participated at a high rate, whereas the majority of women farmers participated at a medium rate. Female heads were found to be more involved than wives in agriculture and livestock production. It is apparent that women's participation in animal production practices is higher than in crop production. In spite of their participation in crops and livestock activities it was found that compared to female farmers, male farmer heads had access to agricultural extension/advisory and agricultural information services and credit facilities. This is due lack of proper transport facilities for female extension staff, non-availability of female extension staff, Lack of reorganization and appreciation of rural female's work, lack of provision of agricultural credit facilities for women and lack of decision making authority among female workers. The results of the t-test statistics showed that there is highly significant difference in opinion of male and female respondents regarding barriers to gender equality in agricultural extension in Ethiopia.
Keywords: Development agent, Extension service, Gender equality, Obstacles
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Introduction

Agriculture is one of the oldest professions in human history and is a substantial source of income, especially in rural areas (Hanif et al., 2010). A huge number of rural people used to farm, and their livelihoods are heavily reliant on it, either directly or indirectly (Dev, 2011). Agriculture is heavily reliant on rural livelihoods in developing nations, owing to its important role in rural poverty reduction (Ogunlela and Mukhtar, 2009).

Both men and women farmers work in agricultural and livestock production in Ethiopia. Gender imbalance in access to agricultural extension services and control over resources, on the other hand, has a negative impact on production and productivity. Gender relations at the home and community levels limit women's access to and control over resources and extension services, reducing their output. The gender productivity gap in Ethiopia is 23%, which can be attributed in part to a lack of access to extension services customized to women's needs (Aguilar et al., 2014). Gender equality is critical for eliminating poverty and enhancing output and productivity. According to a report by the Food and Agriculture Organization of the United Nations (FAO), addressing gender inequalities in access to productive resources and services might result in a 20% to 30% increase in yields on women's farms (FAO 2011). This demonstrates that if women were given equal access to productive resources that males now hold and advisory services that are solely available to men, their production would improve by 3-4%. This demonstrates why addressing gender capability limits in agricultural extension is important in Ethiopia. Because women contribute significantly to agricultural productivity, it is critical that agricultural planning and delivery are gender responsive and take into consideration the differing information demands and limits of women and men farmers. Gender responsiveness in extension services can improve women's ability to make educated decisions and use suitable agricultural and animal husbandry techniques.

Because the head of a home is male in most parts of the world, particularly in developing nations, practically all agricultural extension and rural development services are aimed solely at men. According to various research studies, pervasive gender imbalance exists in the provision of agricultural extension and consulting services, just as it does in other fields (Lanz et al., 2012; Riaz et al., 2012; Butt et al., 2010). The goal of this article is to analyze

development agents' awareness of gender mainstreaming and gender problems in order to identify the major challenges that development agents experience in engaging women farmers in extension activities.

Methodologies

A well-designed structured questionnaire was produced to be used as the study's instrument for data collection. This questionnaire included both open-ended and closed-ended questions. As development agents, they are regarded as among the most essential stakeholders in agricultural productivity. As a result, a direct face-to-face interview method was used with the use of a prepared questionnaire to better gather development agents' opinions and for future policy implications. Data interpretation and analysis the acquired data were coded and analyzed using the Statistical Package for Social Sciences (SPSS). Both descriptive and inferential statistics were used to interpret the data. The t-test was used to assess the difference in opinion between male and female respondents on barriers to existing gender disparities in the research field.

Results and Discussion

Description of the study areas

This study was carried out in 5 districts of Finfine surrounding special zone and East Shewa zones of Oromia Region during the 2020/21 main planting season. For this study, five districts were selected as study areas. Thus, Adaa, Lume, Gimbichu, and Bora districts were selected from East Shewa zone of Oromia region while Berek district was selected Finfine surrounding special zone of Oromia region. Personal interviews were conducted from male and female development agents (both village and district). The total sample size of the study was 60 (49 male and 11 female). 46 respondents were from Village level and the remaining 14 respondents were from district level.

Participation level of male and female farmers in agricultural activities

Both men and women are heavily active in various agricultural operations. Male and female participation rates Male and female participation levels were graded on a three-point Likert scale (1=Low, 2=Medium, and 3=High). Approximately 87% of men farmers participated at a high rate, whereas the majority of women farmers participated at a medium rate. Female heads were found to be more involved than wives in agriculture and livestock production. It is apparent that women's participation in animal production practices is higher than in crop production. In support of these findings, Shafiq (2008) and Luqman (2018) concluded that women are heavily active in livestock-related activities.

Table 1: Participation on crop and livestock production

Level of participation	Participants on crop production			Participants on livestock production		
	Male household heads	Female household heads	Wives	Male household heads	Female household heads	Wives
High	86.7	13.3	0	63.3	78.3	45.0
Medium	13.3	78.3	38.3	36.7	13.3	41.7
Low	0	8.3	61.7	0	8.3	13.3
Total	100	100	100	100	100	100

Access to agricultural extension and rural advisory services

It was clear from the data presented above that in the research area women along with men were widely engage in crops and livestock production practices. The major aim of agricultural extension in Ethiopia is to provide agricultural extension and rural advisory services to all the community members without discrimination based on social class, income, gender etc. at their door steps. With this notion, access to agricultural extension and rural advisory services by the respondents (extension agents) were determined and the data in this regard is presented in Table 2. The data indicates that in the research area majority of the agricultural extension and rural advisory services are being targeted to men. In spite of higher participation of female gender in some cases, they have very limited access to crops and livestock advisory and extension services which limits their productivity level. In rural Ethiopia in general rural women farmers in the study areas in particular have limited participation in agricultural extension services (Quisumbing et al. 2014). That is why, traditionally women are not considered as “farmers” which is a predominant problem in many developing countries (World Bank, 2010; Cohen and Lemma, 2011). Women farmers in Ethiopia are principally disadvantaged since they have limited access to productive assets including irrigation water, credit, extension services, and rural institutions putting them in difficult situations to implement innovations (Mulema et al., 2016). The study also reveals that women in female headed household has better access to agricultural extension and rural advisory services than wives. Similar study by Mulugeta Alemayehu and Tilaye Teklewolde (2021) also reported that FHHs were treated better than married women. Married women were receiving technologies and inputs through their husbands while FHHs did by themselves like that of their male counterparts. Compared to FHHs, only small proportions of married women used agricultural

extension services and utilized them less frequently, mainly due to socio-cultural reasons, illiteracy, lack of confidence and self-worth, DAs, and SMSs (experts) biases towards male farmers. Similarly (Huria, 2014) reported the wives contact to agricultural extension agent was significantly lower than the percentage distribution of husbands and female headed households.

Table 2: Percentage distribution of male and female gender regarding access to agricultural extension services

Level of access to extension services	Participants on crop production		
	Male household heads	Female household heads	Wives
High access	43.3	23.3	10.0
Medium access	51.7	63.3	53.3
Low access	5.0	13.3	33.3
No access	0	0	3.3
Total	100	100	100

Barriers to gender equality in agricultural extension

As discussed earlier in detail that there is big gap and inequality regarding access to agricultural extension services by rural women. A number of factors/barriers are involved in this practice. The major objective of this paper was to identify to factors and barriers which hinders gender equality in agricultural extension and rural development services in Ethiopia.

The barriers were assessed on three point likert type scale. The data in this regard is presented in Table 3. The data shows that the first barrier to gender equality in agricultural extension as perceived by development agents were Lack of recognition and appreciation of rural female's work. This result is further confirmed by Drucza and Mulunesh Tsegaye (2018) and Mamush Lemma et al. (2018) that due to their gender bias and/or limited gender capacity, male extension agents often fail to invite women in MHHs to discussions during home visits. Husbands also do not invite their wives to discussions when DAs visit their homes.

Culture barriers for female farmers, Low farm wages for rural female, Lack of provision of agricultural credit facilities for women and lack of social security for rural female were also reported as major barriers that limit women's participation in extension and advisory services. This finding agrees with the results of Cohen and Mamush Lemma (2011), which states that elsewhere, DAs face cultural barriers in advising women farmers since local customs may prevent married women from interacting with men other than their husbands. Cohen and Mamush Lemma (2011), also affirms that many rural women are illiterate and unused to expressing ideas publicly in a male-dominated society, and husbands often discourage their wives from participating in public meetings. Lack of gender awareness (80%) was found the major barrier of women access of agricultural extension and advisory services from extension agents' side. Male and female development agents and extension officers should be exposed to intensive gender sensitization and training on improving outreach to female farmers which should be supported by comprehensive practical training. The extension agents should develop a mechanism of female contact farmers in order to increase outreach to women farmers. This finding agrees with the results of Azanaw and Tassew 2017.

Barriers from extension agent side	**Disagree**	**Undecided**	**Agree**
Lack of proper transport facilities for female extension staff	38.3	36.7	25.0
Non availability of female extension staff	51.7	23.3	25.0
Lack of social security for female extension staff	73.3	13.3	13.3
Lack of decision making authority among female workers	55.0	6.7	38.3
Lack of awareness on Gender	6.3	13	80.7
Barriers from farmers side			
Lack of recognition and appreciation of rural female's work	20.0	8.3	71.7
Lack of agricultural land rights for rural female	61.7	18.3	20.0
Lack of access to agriculture extension services for rural female	30.0	31.7	38.3
Low farm wages for rural female	11.7	40.0	48.3
Lack of provision of agricultural credit facilities for women	40.0	13.3	46.7
Lack of social security for female farmer	53.3	1.7	45
Culture barriers for female farmers	23.3	21.7	55.0

As data were collected from both the male and female development agents, therefore in order to find out the difference in opinion of both the categories of respondents regarding barriers to gender equality in agricultural extension paired t-test was applied. Results regarding t-test statistics showed that there is highly significant (P>0.05) difference in opinion of male and female respondents about barriers to gender equality.

Table 4: Ranking to barriers to gender equality in agricultural extension.

Barriers from extension agent side	Male		Female		t-test
	Mean	SD	Mean	SD	
Lack of proper transport facilities for female extension staff	1.80	0.84	2.18	0.40	-2.254***
Non availability of female extension staff	1.65	0.78	2.09	1.05	-1.311***
Lack of social security for female farmer	1.88	0.99	2.09	1.05	-.618
Lack of reorganization and appreciation of rural female's work	2.65	0.69	1.91	1.05	2.253***
Lack of agricultural land rights for rural female	1.43	0.79	2.27	0.47	-4.676
Lack of social security for female extension staff	1.25	0.63	2.09	0.70	-3.684
Lack of access to agriculture extension services for rural female	2.00	0.87	2.45	0.52	-2.270
Low farm wages for rural female	2.35	0.72	2.45	0.52	-.571
Lack of provision of agricultural credit facilities for women	2.25	0.93	1.27	0.47	5.034***
Lack of decision making authority among female workers	1.96	1.00	1.27	0.47	3.423***
Culture barriers for female farmers	2.49	0.79	1.55	0.52	4.867

Scale: 1 = Disagree, 2 = Undecided, 3 = Agree P>0.05

Involvement of development agents on gender trainings

More than half of respondents have not get and gender training. Even though 48% of the respondents were respond that they participated on gender training the frequency and intensity of training was too low. Only 10% of respondents were participated about 3 and more than 3 times in gender training. Development agents face many constraints and have limited soft skills competency to facilitate demand-driven and gender-responsive knowledge exchange and advisory services for diversified extension users including women and youth (Belay and Abebaw 2004). The national extension service has still a narrow livestock focus (MoA and ATA 2017) and livestock and animal health extension services are not yet mainstream services.

Table 5: Involvement of development agents on gender trainings

		Frequency	Percent
Have you ever participated in gender training?	Yes	29	48.3
	No	31	51.7
	Total	60	100.0
If yes, how many times?	1	11	18.3
	2	12	20.0
	3	3	5.0
	4	3	5.0
	Total	29	48.3

Conclusions and Recommendations

Both men and women are heavily active in various agricultural operations. Most of men women farmers participated at high and medium rate. Female heads were found to be more involved than wives in agriculture and livestock production. It is apparent that women's participation in animal production practices is higher than in crop production. In spite of their participation in crops and livestock activities it was found that compared to female respondents, male family heads had access to agricultural extension/advisory & agricultural information services and credit facilities. This is due to the existing social and cultural norms in the society. The results of the t-test statistics showed that there is highly significant difference in opinion of male and female respondents regarding barriers to gender equality in agricultural extension. In the light of findings of present research, authors suggest policy guidelines related to enhancement educational as well as skill level of rural women as well as development agents in the community through education and training to narrow the gender gap/inequality in agricultural extension/information in order to achieve the targets of women empowerment at national level.

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