RESEARCH ARTICLE Agricultural Reviews, Volume 46 Issue 6: 990-995 (December 2025)

Practices and Challenges of Rural Youths Participation in Agriculture Extension Services Case of Adea Berga Woreda, West Shoa Zone, Oromia Regional State, Ethiopia

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10.18805/ag.RF-331

ABSTRACT

Background: study area is considered among the most regions affected by traditional practices, lack of credit facilities, limited startup capital, poor faming technology and absence of good strategy and policies for rural youths participations in Agriculture extension services in order to provide food security and desirable qualities that can promote for youths in Kalo, sire Berga and kito kebeles levels. The current study aimed to put solution as a recommendation of this province in order to manage and control problems.

Methods: In this exploration Data were collected from Kalo, Sire Berga and Kito kebeles' of Adea Berga district through questionnaires, focus group discussion and interviews and analyzed by the SPSS software model.

Result: Most of the youths were migrate to the urban areas to search for job, employ in industries to work with, good social amenities and access to loans and enjoy high standard of living in the urban areas and Majority of the youths were attracted to invest more in their own farms rather than being employed as labour of rural youths who were participated in Agriculture Extension Service were provided with their socioeconomic needs. Furthermore, Federal and state governments in Ethiopia have not adopted capacity building on agriculture to reduce youth unemployment, restiveness and re-awake agriculture potentials and less attention was given by agriculture stake holders of the study kebeles the roles of youth's participation in providing agriculture extension services, food insecurity and ineffective agriculture productivities were becoming a headache to the society of the study kebeles for several years.

Key words: Agricultural extension service, Challenges, Participation, Practice, Rural youth.

INTRODUCTION

Ethiopia's population is predominantly rural with 80% employed in agriculture. And nationally representative survey shows that the majority of Ethiopia's population is young with the youth accounting for 40.6% the total population in CSA (2012). However, many youths are out of agriculture activities according to different literatures explain. Younger household heads who are engaged in farming believed to derive a higher income from their agricultural activities than older household heads. This was possibly attributed to the younger generation being more open to new crops and technologies that produce higher yields and more involved in post-harvest value addition (storage, processing) or more profitable ways of marketing their produce (Davis *et al.,* 2007). Many young people are choosing not to pursue livelihoods and hope employ in the agriculture sector, especially as farmers (Leavy and Smith, 2010). Youth's people show no concern to be farmers or to be employed in farming after receiving vocational training and graduated due to taking agriculture as unprofitable activities. The attitudes of youths should be changed to consider agriculture sector as viable livelihood, as means of life and profitable activities valued by the society and essential for ensuring the national food security (Anteneh and Asrat, 2020).

Therefore, the objective of this research was to assess the existing practices and challenges of rural youth participation as well as to find out initiated strategies and methods that are used to rejuvenate rural youth's participations in Agricultural Extension Services case of Adea Berga Woreda, West shoa Zone regional state of Oromia, Ethiopia.

Statement of the Problems were

Youths are the next generation of farmers, yet most have declining interests in continuing in agriculture activities (Brooks *et al.,* 2012). Like of studies Akpan (2012) show that the perceptions of poor physical infrastructure, absences of enough rural credit services, small farm lands, in adequate capital, Poor policies coupled with poor performance of the agriculture sector itself have led to

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How to cite this article: Dinka, T.B. and Dinka, D.G. (2025). Practices and Challenges of Rural Youths Participation in Agriculture Extension Services Case of Adea Berga Woreda, West Shoa Zone, Oromia Regional State, Ethiopia. *Agricultural Reviews*. **46(6):** 990-995. doi: 10.18805/ag.RF-331.

Submitted: 08-05-2024 **Accepted:** 17-12-2024 **Online:** 14-06-2025

youth's disinterest in agriculture sector, absences of modernized agricultural activities lack of rural youth incentives ,were not designed and explored by other researchers as well as to identify what types of agricultural practices rural youths of Kalo, Sire Berga and Kito kebeles to agricultural Extension Service and they were believed for providing sustainable food security among family members and employ opportunities for youths in agriculture extension services to reduce unemployment and migrants of youths like Tanzania best practice (Ruta, 2012).

MATERIALS AND METHODS

The study has been conducted focused on of rural youths, heads of households, primary and secondary students, Woreda's Agriculture office, Facilitators of Agriculture Extension Service, migrants of rural youths and DAS of the kebeles. According to the 2018/19, the study was conducted area, population reports of the woreda, the total number of rural households is 18,083 (16933 male headed and 1150 female headed), with a total population of having 154,877 in (2019). (population projection). Out of the total, economically active population (15-45 years of age) was 35,933 identified by DAS of each kebeles.

Research design

Research designs are forms of investigation in qualitative, quantitative and mixed method approach that provides specific guidance for research procedures (Alavi and Hąbek, 2016). For this study a descriptive survey design was employed on the assumption that it would help to gather a larger data related to the problem under the study. Seyoum and Ayalew (1989) expressed that descriptive survey design of research is more appropriate to gather several kinds of data such a broad size, investigator wants to collect opinion and attitude of respondents regarding an issue in the wider areas under considerations. The selection of research design is guided by research objectives and performed research questions (Huynh *et al.,* 2019).

Sample size determination

The sample size determinations for collecting quantitative data for this research is determined by using simplified formula which simplified by Yamane formula (Yamane, 1967). The total population of the study areas that obtained from Kalo, Sire Bega and Kito kebeles' Administration office was 1560, Kebeles' administration office (2013). Why the reason I selected $(0.08)^2$ of Yamane Formula was to avoid the complexity of that were obtained from the mass numbers of the respondents.

$$n= N/1+N\ (e)^2$$

Where,

n= Designates the sample size the research uses.

N = Designates total number of households.

e =Error term.

Therefore; - n= N/ 1+N (e) 2n= 1560/ 1+1560 (0.08)2 =142. Sample size refers to a number of respondents selected for interview from a research given population. It depends on accuracy needed, population size and heterogeneity, whether the sample will be subdivided or not and the level of resources available Kayunze (2000). According to Lenth (2007). Sample size is important for economic reasons.

Therefore, depending on the title of practices challenges of rural youth participations in Agriculture extension services, total sample size is 142 out of this 35 primary and secondary students, 6 employed DAS of the selected kebeles, 2 Facilitators of agriculture extension services, 57 Rural youths farmers, 12 Unemployed and college diploma and above holders rural youths, 12 Migrant of rural youths in each kebeles, 17 heads of households, 1 agriculture office of the Woreda selected respectively.

The sampling technique

Sampling technique is the process of choosing the unit of target population which are to be included in the study Creswell (2014). It enables the researcher to study relatively small number of units to obtain data that are representative of the whole target populations and this thesis employs both probability and non-probability sampling. From probability sampling Random sampling and from non-probability sampling purposive sampling is essentially utilized to select respondents to the interviews.

Method of data collections

Questionnaires

Questionnaire is a simple way of gathering short responses to questions from respondents and are less time consuming as many more respondents will be reached within a short period of time. The 5-point Likert's scale and yes or no used to measure youth attitudes on Agriculture extension services. The respondents were able to choose one option study was "Strongly Disagree, Disagree, neutral, Agree and Strongly Agree".

Key informant interview

The study employed both structured interviews which aim to gather information from a large number of people and open ended interviews which are for more in depth information (Punch, 2005). The reason being that, the researcher not only wanted to gather specific information such as youth education and capacity of agriculture but also want to gain a greater understanding about youths involvement in agricultural activities, regarding perceptions of youths towards agriculture extension services, challenges rural youths were faced in agriculture activities. The interview was taken at their work place and randomly between 40-50 minutes.

Focus group discussion

Focus group discussion has been conducted with planned to consist of minimum nine volunteers from the target population and that contained 17 members of the selected kebeles' residents that took 2:00-3:30 hours for helped the

researcher to get further information about challenges and practices of rural youth participation in agricultural extension services of the kebeles and practices of rural youth participation in agricultural extension services of the kebeles.

Methods of data analysis

Data Analysis and Interpretation by the computer software SPSS and were used in analyzing descriptive gathered data. The SPSS version 20 was used to analyze data and provide frequencies, percentages and numbers while the descriptive statistics used to analyze data qualitatively methods in an attempt to respond to the posed research questions. After analysis, the research findings were put into categories based on the research objectives and presented through the use of tables, and figures.

RESULTS AND DISCUSSION

Demographic and socio-economic characteristics of respondents

The area was selected due to highly presence of agricultural challenges to encourage youths towards Agricultural Extension Service and do not pursue their livelihoods, huge movements of rural youth to including Finfine, Holeta town, Burayu town, Mugher town and Enchini cities of the selected areas. Some of youths of the study area were engaged in agricultural activities including red onion cultivation, beans cultivation, potato cultivation and vegetables cultivation, crop production and participating in animal husbandries. The causes of poor agriculture activities and productivity in these kebeles were estimated as the low level of rural youth involvements in agriculture extension services. Most of the productive ages in these kebeles were male violence to take part in agriculture activities as well as were feeling dreadful to participate in agricultural activities and preferred. Finally, there were serious food problems among families' members in the summer seasons and back ward agriculture activities. Majority 85% of the aging farmers of the selected kebeles were not held enough land farms, however, 15% of them obtained very small farm lands as form of gift

Table 1 showed that of the respondents were rural youth farmers more frequency than the others by the accounts (57) 40% because of the study was based on agriculture activities related to rural youths participations. The main reason why majority of the respondents were rural youths farmers, they easily responded the practices and challenges of rural youth participations in Agricultural Extension Service while 35 (25%) were primary and secondary students for the reasons of knowing practices and challenges rural youths participations than urban youths related to their settlement areas. The government employers of agriculture sectors amounted to 9 (6%) while 29% were unemployment who involved in day works in town. Table 2 of the study tried to find out parents of respondents' farm lands size in hectare 86 (60.6%) and 45 (31.7%) of respondents responded as their parents held greater than 0.5-1 and 0.5-3 hectares of farm lands respectively. These implied that these held farm lands were not enough for parents themselves rather than giving for their youths for cultivating. Insignificant numbers 11(7.7%) of respondents responded as their parents held 4-12 hectares of farm lands. So, it gave poor desperate youths' interests to participate in agriculture activities. The study identified getting fertilized farm lands and access to graze land were major challenges for youth's participations in three selected kebeles.

Table 3 showed the distributions of the respondents based on education was revealed that 51 % were able to read and write, while 14% and 10% had primary education and secondary education qualification respectively, Where as 18% and 7% had degree and diploma education qualifications respectively. As able to understand from the table above respondents who table to read and write were accounted more numbers. Out of total number of participants, high school educated, diploma and degree holders respondents responded as they had low interests to involve in Agriculture Extension Service and they highly accounted as unprofitable activities. This implies most of rural youth were not participated in agriculture and aspire to involve in non-agricultural activities.

The results in Table 4 showed that respondents were requested questions regarding what types of agriculture

Table 1: Categorizations of respondents' parents' size of farm lands.

Respondents parent size	Frequency	%
Youth farmers	57	40
Students	35	25
Employed	9	6
Unemployed	41	29
Total	142	100

Source: Own field survey (2022).

Table 2: Categorizations of respondents' size of farm lands occupations.

Size of farm lands by hectare	Frequency	%
>0.5-1	86	60.6
0.5-3	45	31.7
4-12	11	7.7
Total	142	100

Table 3: Categorizations of respondents Academic qualifications

Respondents' academic qualifications	Frequency	%
Reading and writing	72	51
Primary school	20	14
Secondary school	15	10
Degree	25	18
Diploma	10	7
Total	142	100

Table 4: Sex as related to the type of agriculture activities youths participated.

Types of agriculture activities	Sex	Frequency	%
Barley cultivation	Male	15	75
	Female	5	25
Wheat cultivation	Male	17	85
	Female	3	15
Potato cultivation	Male	13	65
	Female	7	35
Vegetable cultivation	Male	8	40
	Female	12	60
Bean cultivation	Male	6	30
	Female	14	70

Own field survey, 2022.

Table 5: Age as related to the type of agriculture activities youths participated.

Age	Frequency	%
15-19	25	18
15-29	77	54
31-35	40	28
Total	142	100

activities youths would like to involve in their kebeles were, 75% and (25%) were male and female participated in Barley cultivation. This indicates that in barley cultivation women are less (25%) involved, where by male respondents were have more interest noted with high participation than women which are difficult to most of women. Also results in Table 4 shows that (85%) respondents were males and (15%) females who participated in wheat cultivation. This justified that more numbers of youths females culturally do not get permission to far away from the house to participate in the selected kebeles. This assured that sustainability of food security in the study areas did not realize by only the participations of male youths. Similar to the above points, the Table 4 showed that (65%) were male and (35%) females who participated in potato cultivation in the selected kebeles. As the result of Table 4 showed that (40%) were male and (60%) female who participated in vegetable cultivation where by female respondents were noted with high participation than male. The study found that female of the study kebeles are more energetic which is essential in vegetable cultivation which are not requires going far away from homeland. Therefore, youth females can easily involve in vegetable cultivations in the study kebeles. These findings are consistency with the study by Agwu (2012) that males are fully engaged in bush clearing which is the exclusive type of operation reserved for the male gender in the study area. Also in kebeles making operations males were also engaged more in stamp collection, bush burning, harvesting and participates more than female youths.

Generally, based on the above analyzed data, majority of male youths were involved in agriculture extension services than female youths and seriously suggested their ideas as the improvement of needs both the participations of male youths and females equally.

Table 5 also showed that 77 (54%) of the respondents' ages predominately participated found were 15-29 and the gathered data indicated that most of the youths of the study kebeles were found in productive ages, however, as the gathered identified that most of them were out of agriculture extension services. 40 (28%) of the study respondents' ages were found 15-35 and 25 (18%) of the respondents ages were 15-19.

Challenges of the respondents of agriculture activities youths participated in the selected kebeles

Table 6 tried to explain challenges that heavily excruciating rural youths in agriculture extension services. Table 6 of item 1 made question whether inaccessibility of financial support of government and rural credit services were be challenges of rural youths' participations in agriculture extension services of the study kebeles. Based on this, significant numbers 10 (67%) and 2 (13%) of the respondents responded strongly agree and agree respectively. Mean that more of the youths were suffered by inaccessibility of financial support from government. Contrary to this, small numbers 2 (13%) and 1(7%) of the respondents responded their answer as neutral land strongly disagree respectively. It justified that very small youths of the study kebeles were not suffered by problems of financial support and rural credit services to involve in agriculture extension services in their locality. Table 6 of item 2 requested questions regarding poor harvestings in the study kebeles backwards rural youth participations in agriculture extension services activities or not. In response this, 2 (13%) and 12 (80%) respondents replied their responses as agree and strongly agree respectively. It indicated that poor harvestings was believed as it highly backwards rural youths interest they have to participate in agriculture extension services of the study kebeles. Insignificant number 1 (7%) of respondents responded as disagree. Mean that respondents raised their suggestions as poor harvestings have no roles in degrading rural youth's participations in AES of the study areas.

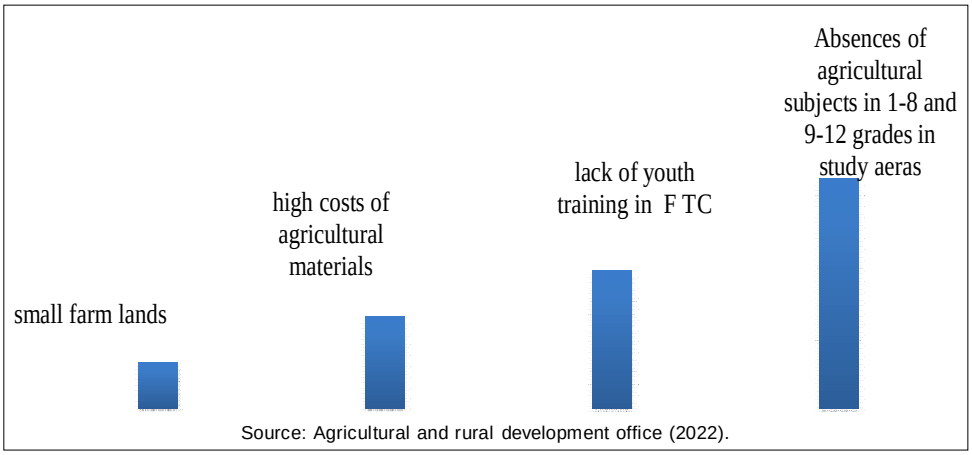
Table 6 Item 3 raised question regarding high costs off arm inputs and presence of crop diseases harm rural youths' participations of the study kebeles. In responding this, significant numbers 1 (7%) and 11(73%) of respondents responded their agreement as agree and strongly agree respectively. Mean that majority respondents gree on as high costs of farm inputs and presence of crop diseases were marginalizing youths. Insignificant numbers 2 (13%) and 1 (7%) of respondents responded their agreement as strongly disagree and neutral. Conveyed small respondents took that buying farm inputs by high costs and presences of crop diseases as were not major cause to recede youth

Table 6: Challenges hamper rural youths' participations in agriculture extension services

Challenges that encumber youths in agriculture extension services	Options									
	SA	%	A	%	N	%	DA	%	SDA	%
Unable to provide credit services in agriculture extension services	10	67	2	13	2	13	-	-	1	7
Acquiring Poor harvestings from agriculture extension services	12	80	2	13	-		1	7	-	-
Incapable of youths to buy farming inputs.	11	73	1	7	1	7	1	7	1	7
Lack of accessibility of markets	12	80	1	7	-	-	2	13	-	-

Source: Own field survey (2022).

Key: SA= Strongly agree, A= Agree, N= Neutral, DA= Disagree, SA= Strongly disagree.



Source: Agricultural and rural development office (2022).

Fig 1: Rankly identified challenges of youth's involvements in AES of the study kebeles.

involvements in agriculture extension services of the study kebeles. In item 4 showed lack of accessibility of markets, as majority numbers 12 (80%) of respondents responded on above carefully that high costs of farm inputs and presences of crop diseases were the major challenges that rearward rural youths participations in the study areas. Generally, the study found out challenges there were lack of adequate capital, poor road, rural credited services and poor access to farm lands un able to incentivize rural youths in agriculture extension services by giving crops and instituting rural credit services were accounted as challenges that obstruct youth in order to be effective participants in agriculture extension services of kalo, sire Berga and Kito kebeles concluded.

Identified challenges of youth's involvement in agriculture extension services

The below refers Fig 1, sourced from the Agricultural and Rural Development Office (2022), presents the rankly identified challenges limiting rural youth participation in Agricultural Extension Services (AES) within the study kebeles, where the absence of agricultural subjects in primary (grades 1-8) and secondary (grades 9-12) education ranks highest, followed by lack of youth training in Farmers Training Centers (FTCs), high costs of agricultural materials, and limited access to farmland.

Generally, the study found out challenges that weaken youths' participations in agriculture extension services of the study kebeles concluded as figure below according to their difficultness.

RECOMMANDATIONS

Based on the finding of the study, the researcher suggested the following recommendations.

In order to alleviate these listed challenges of youths participations in agriculture in Kalo, Sire Berga and Kito kebeles of Adea Berga Woreda the governments, non-governmental organizations and all others stake holders of agriculture extension services should give attentions to challenges of exhilarate youths participations towards agriculture extension services, facilitate and provide ways youths obtain agricultural technologies, gain access to markets fertilizers, incentives, rural credit services, agricultural insurances and knowledge of using agricultural technologies to highly involve in agriculture extension services.

Generally, the government should layout agricultural extension services development strategies and structures in kebeles which are in indulgence and incorporate rural youth participations towards agriculture extension services. It is hoped that this study could act as standing manual for future researchers to conduct studies on practices and challenges of rural youth's participations in agriculture extension services in kebele levels. So, youths should understand as agricultural activities play a main role in leading youths to school by providing food and others requirements.

CONCLUSION

The study findings revealed that for the youths to be gainfully employed in the agriculture sector, likely to remain on the family land holdings. The inability by the youth to strengthen their investment position in the agricultural production processes could be a catalyst to the push factors of the youths out of agriculture and inspire them to migrate to town or Urban and were not encouraging youths to farm as well as it was not played its in producing youths farmers in their respective localities due to less attentions were given youths.

In short, Based on the findings of this study, it is concluded that the causes decline in rural youths participation in agricultural empowerment program are inherent in the ineffective motivational strategies that will attract the youth to agriculture business. The inconsistent empowerment packages since inception of the program create doubts in the minds of the youth over commitment of the government to facilitate start-up capital after the training.

Conflict of interest

Conflict of interest statements were absences of farming lands and rural credit services, inadequate finance to buy materials and incentives for youths.

The study identified challenges of rural youth participations in Agricultural extension services which ranging from input supply to processing and marketing, demanding immediate technical support, poor harvestings, sensitive to climate change, absences of youth training in FTC and inviting youths in discussions, technological response and timely information.

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