

THE PLACE OF AGRICULTURE IN YOUNG PEOPLE'S LIVELIHOOD ASPIRATIONS

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Abstract: *This study examines the dynamics of youth aspirations and livelihood choices in agriculture. It focuses on how combined socio-economic, individual, and household characteristics in Bure Zuria Woreda, a rural community in West Gojjam, Northwest Ethiopia, influence youths' livelihood decision-making. In the study, we employed a sample survey, focus group discussions (FGD), in-depth interviews (IDI), and key informant interviews (KII). Using both individual and household-level data, we conducted a multi-stage analysis, specifically descriptive statistics and a multinomial logistic regression model, along with thematic analysis for qualitative data. We contextualize young people in agriculture by exploring how changing access to land, educational levels, gender, the conditions of agriculture, the economic viability of the agricultural sector, and the perceptions of the status of agriculture influence livelihood decision-making. The result shows that youth livelihood choices and aspirations in agriculture affected by socio-demographic factors at the individual, household, and societal levels. Farming land size, educational level, gender, the conditions of agriculture in the locality, the economic viability of agriculture, and nearby family career preferences were found among the factors that determine the aspiration and livelihood of young people in agriculture. The study also found that the status associated with agriculture was not significant in affecting the livelihood choices of youth. The results underscore the importance of understanding the dynamics of young people's individual and household characteristics and socio-economic conditions for sustainable livelihoods. Therefore, targeted interventions are essential to improve youth's sustainable livelihood in agriculture.*

Keywords: Youth aspiration, Livelihood choice, Socio-economic factors, Agriculture
(JEL code: Q01)

INTRODUCTION

Ethiopia, the most populous nations in sub-Saharan Africa with an estimated population of nearly 123 million, has an economy primarily driven by agriculture (UNDP, 2022b). According to the Ethiopian Labor Force Survey of 2021, out of the total youth population of 26 million, approximately 73.6% reside in rural areas, highlighting the significant rural demographic that predominantly depends on agriculture for livelihood and economic activity. Schmidt and Woldeyes (2019) reported that only 23% of Ethiopia's economically active population works mainly in the nonagricultural sector, indicating that the vast majority, including youth, remains engaged in agriculture. This continued reliance underscores the importance of youth participation in agriculture, as their engagement is vital for the sector's future development and holds significant potential for reducing poverty, unemployment, and inequality across Africa (Geza et al., 2022). Engaging youth in agriculture is seen as an important strategy for effective and sustainable food system transformation in developing countries (Babu et al., 2021).

Studies in Ethiopia and many developing countries have shown that rural youth are less interested in agriculture (Bezu & Holden, 2014; Sumberg et al., 2017, 2024). In Ethiopia, Elias et al. (2018) reported that farming is “considered a for those who ‘failed’”, whereas Tadele & Gella (2012) reported that farming is considered “backward, demanding and even demeaning” as a “last resort, and for many not an option at all”. Similarly, Sumberg et al. (2017) in Ghana also reported that young people view farming as a hard job that is unable to be a viable means of livelihood. Studies (Holden & Tilahun, 2021; Tadele & Gella, 2012; Tafere & Woldehanna, 2012) conducted in Ethiopia have noted that individual- and household-level characteristics are strongly linked with the aspirations of rural youth.

Rural households use a variety of tactics to earn the income needed to achieve their livelihood goals (Yobe et al., 2019). In order to achieve their goals, young people can decide to engage in a variety of livelihood strategies, or combinations of these, including farming or non-farming, migration, remittances, wage work, or self-employment (Matita et al., 2022).

Youth farming endeavors are sometimes presented in policy discussions as a “take it or leave it” choice ((LaRue

et al., 2021). Moreover, Moreda (2023) indicated that young people in rural areas are forced to leave in pursuit of alternative means of livelihood due to limited access to land, pulling them away from agricultural livelihoods. At the global level, it has been commonly argued that young people tend to consider agriculture as a non-promising and nonviable means of livelihood.

On the other hand, while youth often aspire to high-status jobs, non-farming jobs but they can adjust their aspirations to attainable livelihoods. While many young people aspire to high-status careers and attaining these goals are often difficult, youth frequently adjust their aspirations based on emerging opportunities and barriers that arise as they navigate through different stages of life reflecting a dynamic and non-linear process of career development (Marzi, 2022). The person's traditional or primary source of income may eventually be replaced by alternative livelihood strategy and, it may lead to the long-term coexistence of alternative and conventional livelihoods and the context and viability of a person's available livelihood options determine the final choice of livelihoods (Ocloo et al., 2025).

A household's combination of income generating activities, which can be determined by changing assets and circumstances, is known as livelihood strategy (Ellis, 2000). It can be described as the pull and push factors that influence the choice of livelihood decisions (Bezu et al., 2014). The decisions of young people livelihood can be reinforced by dominant narratives of the family, belonging, prestige, and material possessions (Korzenevica, 2021). Although socio-economic, institutional, and community factors are widely recognized as major influences on livelihood strategies in the literature (Kangondo et al., 2023; Rahman & Akter, 2014), there is also a common consensus that livelihood choices and their determinants are context-specific and can vary across different local settings (Peralta, 2022).

In spite of recent development in livelihood studies (Bezu & Holden, 2014) in developing countries and a witnessed growing interest in the study of youth and their livelihood strategies (Kangondo et al., 2023), there is limited literature on the determinants of their livelihood choice and aspirations, especially in the context of rural youth. Policy-making can be enhanced by an awareness of the variables influencing the livelihood options used by rural households (Yobe et al., 2019). Thus, a more nuanced understanding of young people's interest in farming is essential to poverty alleviation-oriented development strategies (Babu et al., 2021).

Thus, it is worthwhile to study the determinants of youth livelihood strategies and aspirations in agriculture to understand the social dynamics of the aspirations of youth in the agricultural sector.

Moreover, the study of youth and their aspirations is limited by conceptual constraints. We have conceptualized youth and aspirations within the context of agricultural livelihoods. In this study, while acknowledging the contestation surrounding the definition of youth, the researchers view youth as rural households and individuals who engage in subsistence agriculture on small plots of land and relying heavily on family labor, with ages ranging from 15-35 years. The study use age

and social category, adopting the Ethiopian age range for the lower limit and the African Union age range for the upper limit. Moreover, aspiration is defined as the desire to engage in agriculture or other means of livelihood. Our conceptualization of aspirations emphasizes their socially constructed nature, creating a fertile ground for understanding the social dynamics influencing youth livelihood choices within the context of agricultural employment. 'Aspirations' are embedded in the material and social context and are made up of young people's embodied and emotional longing (Moensted, 2021) which can guide the livelihood strategies of youth in agriculture. In order to achieve their goals, young people can decide to engage in a variety of livelihood strategies, or combinations of these, including farming or non-farming, migration, remittances, wage work, or self-employment (Matita et al., 2022).

Thus, this study focuses on the factors that influence young people's paths into and out of agriculture, as well as how they view agriculture and rural living as a means of subsistence. It particularly focus on how the combined socio-economic and individual and household characteristics is affecting youths' future-oriented, livelihood decision-making while considering youth are active decision-makers, shaping current and future local food production in Ethiopia, Bure Zuria Woreda, from the perspective of young people sustainable livelihoods

MATERIALS AND METHODS

Study Area

The data for this study were collected from Bure Zuria Woreda in the West Gojjam Zone of the Amhara region, Ethiopia. According to the Ethiopian Statistical Service (CSS), the projected total population of Bure Woreda for 2024 is 209,923. In the Woreda about 68% (142,994) living in rural areas and 66,929 in urban areas, highlighting that the majority of the population in this district resides in rural areas where agriculture serves as the primary livelihood (CSS, 2024). The study area is known for its high agricultural potential and a large number of young laborers who participate both directly and indirectly in agricultural activities. According to the 2022 survey by the Woreda Economic and Plan Bureau, 38% of the Bure Woreda population falls between the ages of 14 and 35 years.

The study area is also one of the major agro-industrial zones in Ethiopia, where the Burea industrial zone is located. Furthermore, the area faces significant challenges, including high youth unemployment, with many young people, including graduates, remaining engaged in agriculture for subsistence amid limited job opportunities. As one of Ethiopia's major agro-industrial hubs, Bure Zuria Woreda provides a vital context for examining the socioeconomic factors influencing youth livelihood choices and their aspirations in agriculture, making it an ideal site for understanding the intersection of youth employment, socioeconomic characteristics, and rural development dynamics.

Study approach and target population

A mixed-methods research design and an explanatory approach were employed. Quantitative and qualitative data were

collected simultaneously during a single visit to the study area. The study focused on two main youth groups: the first includes those working on their own family-based farms, which vary in size and landholding access, ranging from 0.25 acres to 1 hectare, often through renting. The second group consists of youth who graduated from higher educational institutions but did not secure employment outside agriculture; they consider themselves employed and rely on family support or subsistence farming, on either government-accessed farmland or land received as gifts from family members.

Data Source, Sampling procedure and Data collection methods

Both primary and secondary sources of the data were gathered. Questionnaires, key informant interviews (KIIs), and focus group discussions (FGDs) were used to collect primary data, while document review was used to gather secondary data. The sample for qualitative data was selected purposively. The KIIs were identified based on their knowledge, experiences, and professional proximity to youth, agriculture, and related development issues.

Interviews were conducted with experts, government officials, and youth representatives involved in youth, employment, labor, and agriculture sectors. FGDs were held with both non-graduate and graduate young farmers to explore their perspectives on their aspirations and factors affecting their aspirations and livelihood choices. Each FGD included 8-10 participants from different youth categories. All FGDs were voice-recorded, with notes taken upon participants' consent. Likewise, IDIs were conducted with all categories of young people to gather detailed insights into their personal experiences and beliefs regarding the issues studied. Interview guides tailored for KIIs, IDIs, and FGDs were developed.

The survey samples were drawn from youth populations, with lists obtained from government offices. Non-graduate farmers were randomly selected from specific kebeles in Bure Woreda, namely Tiyatiya and Shakua, targeting both individuals and households. Graduate youth samples were taken from all kebeles in the district involved in agriculture. Local administrators and extension workers facilitated the identification of participants. Selected individuals were contacted via mobile phone and local focal persons to confirm their availability and willingness to participate. The survey was conducted through self-administered questionnaires after face-to-face contact with respondents. These questionnaires covered socio-demographic details, aspirations in agriculture, livelihood choices, characteristics of agriculture, and the livelihoods within the agricultural sector. When necessary, the researchers used a replacement method to substitute unavailable or unwilling participants.

In determining the sample size for quantitative data, the following sampling formula has employed, with $p=.50$, $t=1.96$, and a margin of error of 95% considering the nature of the issue under investigation, and the data is categorical,(Lenth, 2001).

The value of t equals the chosen alpha level of 0.025 in each tail, which is 1.96. The alpha level of .05 indicates the level of risk that was taken, where the true margin of error

may exceed the acceptable margin of error. Thus, to compute the sample from the population;

$$n = \frac{(t)^2 * p * q * N}{(d)^2(N - 1) + (t)^2 * p * q}$$

$$n = \frac{(1.96)^2 * 0.5 * .05 * 1800}{(0.06)^2(1800 - 1) + (1.96)^2 * 0.5 * .05}$$

$$n = \frac{1728}{7.43} = 232$$

Where n = number of sample size
 N = total number of population (1800)
 d = acceptable margin of error for proportion being estimated = .06 (error decided to accept)

Thus, 232 young people were selected randomly who were drawn from college graduates and young farmers from Bure Zuria woreda.

Likewise, under the principle of data saturation, 12 FGD, 16 IDI with all categories of youth participants, and 16 KII with the representatives and experts of the study area government offices and local community representatives were interviewed.

Data analysis

The study employed a sequential mixed-methods approach, combining qualitative and quantitative data for comprehensive analysis and interpretation to ensure convergence of findings. Qualitative data were categorized and analyzed contextually using thematic analysis. The data analysis has involved translation, cleaning, reviewing, organizing the data, coding, classifying into themes, identifying links, and interpretation. While quantitative data obtained from questionnaires, the analysis included both descriptive statistics and inferential statistical tests to draw meaningful conclusions from the data, facilitating a robust understanding of the research questions.

Model Specification; Analysis of socio-demographic factors on livelihood choices

For scholars and policymakers alike, categorizing household livelihood choices is crucial (Tran et al., 2020). The literature indicates a significant change in the categorization of livelihood strategies in agriculture. It has been broadly categorizing livelihood activities into farm and non-farm activities. Recently, classification of livelihood activities has extended to specific categories. To comprehend the dynamics of shifts in young people's involvement in various means of livelihood that are typically thought to be accessible to rural residents with farming origins can be categorized as farming through agricultural intensification; livelihood diversification; and out-migration to pursue livelihood opportunities elsewhere (Angelique et al., 2024). Thus, in this paper, we have used a hybrid classification where we broadly group activities as agricultural/farm and non-agricultural/ non-farm and add more

specific activities such as migration and other livelihood strategies in the classification.

Beyond this, when the values of a categorical dependent variable are not sorted, the multinomial logit model can be used. The study in Zambia (Ogunjimi et al., 2023) utilized the model to study factors and actors shaping the aspirations of rural youth. The studies in Ethiopia on livelihood choices, for instance, (Tassie Wegedie, 2018) used the model to analyze determinants of peri-urban households' livelihood strategy choices, and (Alamneh et al., 2023) used it to study the choices of livelihood diversification strategies. This has motivated the researchers to apply the model to estimate the role of socio economic and demographic factors on young people choice of their aspired livelihood strategies and determine the place of agriculture in their livelihood choices.

The data collected through survey were analyzed to understand the socioeconomic and demographic determinants of youth livelihood choices. Agricultural jobs in the locality, nonagricultural jobs, migration in search of alternatives and any other option, are the categories used to estimate a multinomial logit model for the prediction of livelihood probabilities based on various independent variables. The determinants of a young individual's livelihood choice were examined using a multinomial logit model (MLM). Assume that $(j = 1, 2, 3, 4)$ represents the likelihood that young people will select a particular livelihood. If a youth intended to pursue an agricultural livelihood in the area, $j = 1$; if they intended to pursue a non-agricultural livelihood, $j = 2$; if they intended to migrate in search of an alternative livelihood, $j = 3$; and if they intended to search for other livelihood options, $j = 4$. Given a value of x_i for the explanatory variable, $P_{ij} (j=k|X_i)$ is the likelihood that person i belong to category j ; Taking the J category as the baseline, the response probabilities are explained as follows:

$$P_{ij} (j = k|X_i) = \frac{\text{Exp}(\beta_k X_i)}{1 + \sum_{j=1}^4 \text{exp}(\beta_k X_i)} = j = 1, 2, 3, 4 \tag{1}$$

The i , indicates the i th youth population in the sample and β_k are coefficients to be estimated j given the independent variables and $\beta_{(1)}, \beta_2, \dots, \beta_k$ measure percentage changes in youth livelihood options that result from a change in socio-demographic characteristics. Thus, set β_j to zero for one youth livelihood category (say, pursuing agriculture), then the model for each category can be presented as:

$$P_{ij} (j = k|X_i) = \frac{\text{Exp}(\beta_k X_i)}{1 + \sum_{j=1}^4 \text{exp}(\beta_k X_i)} = j = 1, 2, 3, 4 \tag{2}$$

and

$$P_{ij} (j = 1|X_i) = \frac{1}{1 + \sum_{j=1}^4 \text{exp}(\beta_k X_i)}$$

Thus, the following equation (3) was used to predict socio-economic and demographic variables related with young people livelihood choice and the place of agriculture. β_i is the parameter that requires estimation; LandSize represents land size; Edn represents educational level of study participant; Gender represents sex of the youth; MaritalStatus represents the marital status of youth; PCareerPre denotes young people parents career preferences; Agrivability represent economic viability of agriculture; AgriConditions represents the conditions of local agriculture; Liveprestige also represent the status of livelihood in agriculture and e_i is an error term.

$$P_{ij} (j = k|X_i) = \beta_0 + \beta_1 \text{LandSize} + \beta_2 \text{Edn} + \beta_3 \text{Gender} + \beta_4 \text{MaritalStatus} + \beta_5 \text{PCareerPre} + \beta_6 \text{Agrivability} + \beta_7 \text{AgriConditions} + \beta_8 \text{Liveprestige} + e_i \tag{3}$$

Pursuing agriculture, or category 2, was selected as the reference category for this study. Coefficients were interpreted in relation to the reference category once it was determined that β_j should be set to zero for one of the categories in order to build the model.

Table 1. Descriptive statistics of youth livelihood choices

Variable Name	Description	Measurement
Dependent Variable		
Livelihood Choices	Categorical	1 if pursuing agriculture, 2 non-agricultural livelihood, 3 migration, 4 otherwise.
Explanatory Variable		
Gender	Sex of young people	The sex of youth is a dummy variable (coded as 1 male, 0 otherwise).
Education	Educational level of youth	The educational level of respondent is a dummy variable (coded as 1 Higher education, 0 otherwise).
MaritalStatus	The marital status of youth	The marital status of youth is a dummy variable (coded as 1 married and, 0 otherwise).
FarmLand	Size of Farm land ownership	The size of farm land is a continuous variable measured per hectare
PCareerPre	Parents career preferences for their family members	Parents career preference is a dummy variable (coded as 1 non-agricultural, 0 otherwise) that describes the youth parents' career preference for them (youth).

Variable Name	Description	Measurement
AgriViability	Views on Viability of agriculture in fulfilling the basic needs	Agricultural viability is a dummy variable (coded as 1 Yes, 0 otherwise) that shows the perceptions of youth whether agriculture is viable means of livelihood or not for them. Here, 'Yes' indicates youth views of agriculture as an economically viable or sufficient means of livelihood, and 'No' refers to the views of youth that indicate agriculture is not a viable or sufficient means of livelihood.
AgriConditions	The conditions of local agriculture	The conditions of local agriculture is a dummy variable (1 improved, 0 otherwise) that shows the views of youth whether there is improvement in the conditions of agriculture or not. For this variable, 'improved' agricultural conditions indicates the views of youth that show their belief that agriculture is advanced and supported by technology. On the other hand, "not improved" refers to youth views indicating their belief that agriculture is not advanced or supported by technology.
Liveprestige	The status of livelihood in agriculture	The status of livelihood in agriculture is a dummy variable (1 Yes, 0 otherwise) that shows the views of young people whether agriculture is prestigious means of livelihood for young people or not. For the status of livelihood in agriculture, 'Yes' represents the views of youth who believe that engaging in agriculture is prestigious and respected. Conversely, 'no' signifies that youth perceive a career in agriculture as lacking in both respect and prestige.

Source: Own elaboration

Defining dependent and independent variables

These independent variables (Table 1) were identified based on the previous literature, which shows the need for comprehensive research on youth livelihood choices and their engagement in agriculture. Access to land (Amare et al., 2024; Holden & Tilahun, 2021; Moreda, 2023), education (Tauzie, 2025), gender roles (Ogunjimi et al., 2023), the economic viability of the sector (Abay et al., 2021), the conditions of agriculture (Sumberg et al., 2024), the parental influences, and the status associated with livelihood in agriculture (Korzenevica, 2021) were identified as a factor that may affect youth aspirations and livelihood in agriculture.

Multinomial logit Assumption Tests

While using this model, the researchers have taken the assumptions of independence of estimators' variables and multicollinearity. Thus, with a maximum VIF of 2.353 for educational status of young people and all VIF values falling below the generally accepted threshold of 10, the VIF result demonstrated that there were no significant multicollinearity issues with the explanatory variables included in the model.

Ethical considerations

Throughout the research process, strict adherence to ethical standards was maintained, including obtaining ethical approval and clearance prior to data collection. Permissions were secured from local administrators at all levels, with clear communication of the study's objectives and participants' rights to withdraw at any time. Special care was taken with minor participants, aged 15 to 17, by obtaining informed consent from their parent, in line with national laws. Throughout all stages, ethical considerations such as informed consent, confidentiality, and voluntary participation were prioritized to ensure the

integrity and ethical soundness of the study.

RESULTS AND DISCUSSION

Results of the Study

Socio-economic characteristics of youth and their livelihood choices

This section presents youth livelihood choices. It presents the comparison of youth livelihood choices with respect to socio-economic and demographic factors. The study participants were asked about their livelihood choices and the place of agriculture in their livelihood choices. The frequency and degree of association between categorical variables and the youth livelihood choices indicated in Table 2. The majority of young people, accounting 30%, have planned to adopt pursuing non-agricultural livelihood.

The study revealed that the highest number of youth (62.1 percent) aspired to means of livelihood other than agriculture. Table 2 show that only 37.9 percent of youth considered agriculture as a means of their livelihood

Table 2. Descriptive statistics of youth livelihood choices

Independent variables		Youth livelihood choices			Association		
		Livelihood options in percent			X^2 Value	P Value	
		Agriculture	Non-agriculture	Migration			
Gender	Male	31.4	8.1	26.7	0.8	16.195	0.012**
	Female	18.1	6.3	7.7	0.8		
Education	No higher education	42.2	2.5	6	-	108.179	000***
	Higher Education	7.3	11.6	28.4	1.7		
FarmLand	00	7.7	8.2	18.1	0.4	59.088	000***
	.25-.50	28.8	5.6	13.7	1.2		
PCareerPre	1.00 and more	12.9	0.4	2.5	-	46.395	0000***
	Agricultural	38.3	11.2	12.5	0.4		
MaritalStatus	Non-agricultural	3.8	10.3	21.9	1.2	33.326	000***
	Not Married	14.2	9.9	21.1	1.7		
Agriability	Married	35.3	4.3	13.3	0	7.890	.045**
	No (Not sufficient)	16.3	10.7	25.8			
AgriConditions	Yes (Sufficient/ viable)	33.2	3.4	8.6	0.4	8.690	.0033**
	Not improved	29.5	9.4	20.6	0.4		
Liveprestige	Improved	20	4.7	13.7	1.2	6.195	.103
	No (Not prestigious)	28.8	9	25.8	0.8		
	Yes (Prestigious)	20.6	5.1	8.6	0.8		

Notes: *, **, *** mean statistically significant at 10%, 5%, and 1% respectively

Source: Own Survey, 2023

As shown in Table 2, compared with male youth (31.4%), less percentage of female youth, 18.1%, respectively, have plans to pursue agriculture in their locality. Compared to male youth, very low percentage of females have low migration plan to migrate into other areas in search of better livelihoods.

Moreover, youth with higher education were inclined to look to nonagricultural employment and/or migration in search of better means of livelihood than youth with no higher education where higher percentage of them (42.2%) preferred pursuing agriculture in the locality. For the majority of young male and female respondents, farming and related livelihoods were viewed as less desirable than jobs outside the sector. Educated youth (graduates or those with higher education) who want to work in the formal sector or migrate (to cities or overseas) were especially supportive of this viewpoint.

Higher numbers of youth (more than 40%) with comparatively with better land holdings have planned to pursue agriculture, whereas very few youths with no landholding have planned to do agriculture as a means of their livelihood. On the other hand, for youth with their parental career preference is agriculture significant numbers of youth have planned to

use agricultural career as a means of livelihood. This may show the role of family influence on the livelihood choice of young people. Regarding the relationship between marital status and youth livelihood choice, significant percentage of married youth (35.3) planned to pursue agriculture as a means of livelihood compared to unmarried youth in the locality. Additionally, on the views of youth on the economic viability of agriculture in fulfilling their basic needs, significant numbers of youth who view agriculture is sufficient in fulfilling their basic needs have planned to join agriculture as a means of livelihood. On the contrary, most youth who view agriculture as insufficient in fulfilling economic demand planned to either migrating to other place in search of better livelihood or they have a plan to find no-agricultural livelihood. Moreover, significant percentage of youth who have positive view on the conditions of agriculture has planned to pursue agriculture as a means of livelihood compared to who have negative view on the conditions of local agriculture.

Thus, there is a strong and statistically significant relationship between youth livelihood choice and individual characteristics such as gender, parental career preference, marital

status, educational level, perception of the economic viability of agriculture, and the view on current conditions of agriculture, as indicated by the chi-square statistic of 22.42 (Table 2). This finding supports the view that the individual characteristics and socio-economic conditions of agriculture greatly influence youth life aspirations and their decision on agricultural livelihood, with graduate youth being more likely to choose agriculture and less educated young people being more likely to choose non-agricultural livelihood and migration as alternative means of livelihood. In Table 2, the chi-square value indicates an association between the categorical variables being analyzed, while the p-value shows whether frequencies differ significantly from what would be expected.

Model testing and its robustness

To determine the influence of socio-economic and demographic variables on livelihood options, a multivariate logistic regression analysis was conducted. A multinomial logistic regression was performed to model the relationship between youth livelihood options and socioeconomic and demographic characteristics. According to the independence of irrelevant alternative(IIA) assumption, the existence of more options has no bearing on the relative probability of selecting any two options(Vijverberg, 2011).

Thus, compared to the null hypothesis, $X^2 (df = 24; N = 232) = 255.152, p < 0.001$ the predictor variables in the model that just included the intercept fits the data better. Furthermore, with respect to the goodness-of-fit result of a multinomial logistic regression, it is widely noted that a statistically significant result ($p < 0.05$) is suggestive that the model is a poor fit for the data (Hair, 2011). The model, however, is a good fit for the data since the p-value for the Pearson chi-square is 0.998. The “goodness of fit” shows that the Pearson’s

chi-square test shows that the model fits the data well [$X^2(411) = 332.778, P = .998$]. Similarly, the deviation chi-square does indicate a good fit [$X^2 (411) = 211.192, P=1.000$].

Determinants of rural youth livelihood Choices

Researchers have employed the relative risk ratio to elucidate the results of the multinomial logit model due to its superior comprehensibility regarding risk or probability (Cumings, 2009). Relative risk is commonly described as the ratio of the probability of an outcome occurring in one group compared to the probability of the outcome in a baseline category (Doi et al., 2022).

Based on the multinomial regression results, with pursuing of agricultural livelihood as the reference, the study estimates factors like farmland size, educational level, gender, local agricultural conditions, the economic viability of the sector, parental career preferences and perceptions of agricultural career associated status influence youth preferences among nonagricultural jobs, migration and other means of livelihood. It compares the likelihoods of youth choosing agricultural career, nonagricultural employment, migrating as alternative livelihoods or other means of livelihood. Thus, estimating the place of agriculture in young people's envisioned futures of livelihood was the main goal of this study; pursuing agricultural livelihood was utilized as the reference category for the parameter estimates.

Under the assumption of ceteris paribus, multivariate logistic regression analysis (Table 3) indicated that youth's likelihood of pursuing agriculture, nonagricultural jobs, migration as a livelihood strategy and other livelihood choices are significantly influenced by gender, landholding size, educational level, economic viability and the conditions of agriculture in Bure Zuria Woreda. The details of the analysis are described as follow;

Table 3. Results of the multinomial logit model for determinants of youth livelihood aspirations

	Non –agriculture		Migration		Other	
	B	p-value	B	p- value	B	p-value
Intercept	-2.487	.010	-3.483	.000	-21.455	.000
Gender	1.117	.054	2.139	.000**	1.209	.305
Marital Status	.104	.885	.562	.384	-17.656	.998
Education	2.908	.000**	3.752	.000**	19.310	.
Agriability	-1.419	.020*	-1.459	.004**	-1.893	.146
AgriConditions	-1.32	.024*	-1.202	.049*	-1.003	.427
Liveprestige	.251	.637	-.472	.298	.418	.709
FarmLand	-2.772	.005**	-1.670	.009**	-1.637	.425
PCareerPre	1.188	.039*	.895	.059	.925	.466

Notes: Reference category: pursuing agriculture.

Model Fitting Information: Log Likelihood = 255.152; chi-square = 177.213; df = 24; p-value < 0.001

Goodness of fit: Pearson’s chi-square 332.778 =; df = 411; p-value = 0.998

Deviance chi-square = 211.192; df = 411; p-value = 1.000

Pseudo R-Square: McFadden = 0.359; Nagelkerke = 0. 607; Cox and Snell = 0.534

*, **, *** mean statistically significant at 10%, 5%, and 1% respectively

Source: Own Survey, 2023

Farmland: For land size, the likelihood of youth considering nonagricultural jobs decreases as land size increases; specifically, landowners are 2.772 times less likely to consider nonagricultural jobs compared to pursuing agriculture as land size increases by one hectare.

Moreover, the likelihood of migration in search of better opportunities decreases as land size increases. Specifically, youth with land access increase by one point, and migrating to seek alternative livelihoods decreases 1.67 times, making them less likely to migrate in search of better alternatives compared to pursuing agriculture. If youth respondents with land are limited to choosing between pursuing agriculture and migration in alternative livelihoods, the probability of migrating in search of better opportunities is approximately 62.5% ($1.67 / (1 + 1.67)$), while the probability of pursuing agriculture is 74.66%.

The finding shows that land holdings increase the likelihood choosing agriculture as a sustainable means of livelihood. Consistent with this finding interview participants pointed that size of land ownership influences young people's willingness to remain in agriculture, with those having better land access often viewing farming as a temporary livelihood rather than a long-term career. For example, during interviews with young farmers in Tiyatiya, one of the participant stated:

I have inherited more than two hectares of land from my family. In this area, this amount of land is uncommon among young farmers, who often own larger plots. My land can produce enough to meet my household's basic needs, but I am not interested in remaining here and have plans to pursue a livelihood different from agriculture (Male Farmer Tiyatiya Kebele, January 2023).

Education Status: The relative risk ratio for non-agricultural livelihood, which is 3.908, indicates that the likelihood of selecting non-agricultural livelihood as opposed to pursuing agriculture increases by a factor of 3.908 when young people's level of education increases, *ceteris paribus*. The study suggests that young people with better levels of education significantly affect their livelihood choices, increasing their likelihood of abandoning agriculture and preferring to find non-agricultural jobs as a means of livelihood.

The value of the relative risk ratio for migration looking for alternative livelihood, which is 3.752, implies that when the level of education increases, the odds of choosing migration as a livelihood strategy in Bure Zuria Woreda, relative to joining agriculture as a means of livelihood, increase by a factor of 3.752 as other variables remain constant.

The multinomial logistic regression result of the survey shows that level of education was a strong predictor of youth engagement in agriculture. Young people without formal education or only basic education are more likely to rely on farming for their livelihoods compared to those with better formal education. The latter group tends to seek nonagricultural jobs locally or consider migration. The regression results indicate that, all things remaining constant, a higher level of formal education among youth tends to reduce their employment in agriculture as a viable livelihood option. The qualitative data further support this, indicating a substantial disparity between

youth groups in their livelihood choices. For many, farming appears to be the primary livelihood for individuals with lower levels of education. FGD with female farmers at Shakua one of the participant mentioned:

I only completed basic education and have no aspirations beyond agriculture. My main goal is to improve my income through agricultural activities, such as fattening oxen and engaging in other related pursuits (FGD with female farmers at Shakua, January 2023).

Another participant also added:

Since I have very limited education, I have confined myself to agriculture and related activities, such as herding animals and fattening livestock, as my primary livelihood (FGD with female farmers at Shakua, January 2023).

An interview with the key informants mentioned that the youth have not been trained that the agriculture sector is promising for youth livelihood; rather, it has been considered a job for less successful people in their formal education. The KII with Bure Woreda Labor and Skill Office representative stated:

The education system and curriculum tend to de-emphasize agriculture-related learning in schools. As a result, we have trained our youth to aspire to urban white-collar jobs, a goal that is often incompatible with the current availability of employment opportunities (KII with Woreda Labor and Skill Office, January 2023).

The conditions of agriculture: The conditions of agriculture in this study were contextualized as the degree in which the sector of agriculture integrated an improved methods and technology in local agricultural productions. The condition of agriculture in Bure Zuria woreda was found to be significant in affecting the livelihood choices of young people. The coefficient in terms of the relative risk ratio for non-agricultural livelihood and migration implies that when young people access better conditions in agriculture, the odds of choosing non-agricultural livelihood and migration as livelihood strategies as opposed to pursuing agriculture decrease by 56.82% and 54.58%, respectively. The result suggests that an improvement in the conditions of agriculture can increase the likelihood of young people engaging in agriculture as a means of livelihood. Similarly, one of the interview participant Kuch locality pointed that ‘the condition agriculture at its current state is not attractive for most youth. There is very limited access for improved production and use of technology in agriculture.’

Economic Viability of agriculture: The economic viability of agriculture affects the livelihood choice of young people. The coefficients for non-agricultural livelihood and migration in the multinomial logit model are -1.419 and -1.459, respectively, which are statistically significant at less than 5%. The value of -1.419 and -1.459 means that, when all other factors remain constant, the probability of selecting non-agricultural livelihood and migration over pursuing agriculture decreases by a factor of 1.419 and 1.459 for every unit increase in the log of initial capital expenditure. This finding indicates that young people are approximately 1.419 and 1.459 times more likely to engage in non-agricultural livelihoods and migration

than to pursue agriculture if they perceive that agriculture is less viable to cover the basic costs of their livelihood, which is detrimental to their aspirations.

During the interviews, the study also identified that older youths often face challenges related to household food security and income expenditures. For example, during FGD, the young male farmer in Tiya-tiya mentioned, "We are here because we have no options. This [agriculture] sector is not appealing. However, if circumstances permitted, we would prefer to find promising jobs outside of agriculture."

Gender: The relative risk ratio for migration for searching alternative livelihood, which is 2.139, indicates that the likelihood of migrating for searching alternative livelihood as opposed to pursuing agriculture increases by a factor of 2.139 for males. The study suggests that gender significantly affects youth livelihood choices; males are more likely to migrate than females looking for other livelihood alternatives in the study area. During the interviews, participants in IDIs and FGDs mentioned gender-related constraints. For example, one IDI participant noted, "migration to find livelihood in a neighboring region is difficult for females. The conflict and ethnic-related problems expose us to gender-based abuse, and I prefer to stay here rather than expose myself to danger."

Nearby family Career Preferences: The nearby family, like parents, affects livelihood decisions of young people. The relative risk ratio for non-agricultural livelihood, which is 1.188, indicates that the likelihood of selecting non-agricultural livelihood as opposed to pursuing agriculture increases by a factor of 1.188 when young people's parents prefer non-agricultural livelihood. The study suggests that young people nearby family members' livelihood choices for non-agricultural jobs increase youth likelihood of abandoning agriculture as a means of livelihood.

Discussion of the Findings

Socio-demographic variables shaping youth aspiration and livelihood choice

The study revealed that sociodemographic factors have influenced youth livelihood choice. The result of quantitative and qualitative data align with a study indicating that youth livelihood choices are associated with gender, age, parental career preferences and education level play role in shaping youth livelihood strategies (Endris et al., 2022; Mukwedeya & Mudhara, 2023). The study found that a significant difference was observed between youth groups regarding their livelihood options, with youth possessing higher education levels showing a greater inclination toward non-agricultural jobs and migration in search of better opportunities.

Based on the quantitative and qualitative data, the educational level has caused the youth to have an aspirational orientation away from rural, agrarian livelihoods, where most youth with higher education. The study found that male youth with higher education primarily prefer migration while young farmers primarily focus on diversification of livelihood on on-farm and non-farm activities highly dependent on the resources of father farmer as their primary livelihood. A study by Holden and Tilahun (2021) showed that education influ-

ences young people's occupational choices and the rural youth are shifting away from agriculture and preferring nonagricultural occupations.

Moreover, increased education level appears to drive youth to migrate to other locations in pursuit of better opportunities. As reported by Ankrah Twumasi et al. (2019) a study by in Ghana indicated that increased levels of education and attendance at tertiary institutions have a negative effect on young people's decision and intensity to engage in farming. Thus, the study found that for the better educated youth, the rural areas have only little options for their aspired dreams and aspirations expected from their formal educations. The study shows that for graduates looking for "wider" alternatives where the rural areas have only little options for their aspired dreams and aspirations expected from their formal educations. Thus, engaging in agriculture as a means of livelihood is not an attractive for many young people in rural areas (Sumberg et al., 2017) especially for youth with higher education, though farmers without formal education find agriculture a means of sustaining their livelihood. As pointed by Ghosh and Roy (2022) individual educational attainment has an inverse relationship with agricultural activities and that education enables local youth to gather more information and to move outward. Sharma and Bhaduri (2009) also reported that skilled youth with nonfarm skills are more likely to leave agriculture and pursue nonagricultural careers.

The results of the study show that the promise of education in securing the formal employment that young men and women seek is rarely fulfilled, and they largely continue to farm in their family's production (Elias et al., 2018). Classical and modern sociologists such as Durkhiem (Worsley, 1956) and Parsons (Parsons, 1964) have long argued that modern education is an agency of socialization though which, in addition to learning knowledge and skills, children are considered particular norms and attitudes toward work and society. Moreover, education has inflated the aspirations and expectations of youth for the future, creating a gap between young people's professionals and the opportunities that are available to them in rural areas (Sumberg et al. 2014). This is why youths who have received tertiary education are less likely to engage in agricultural activities (Agwu, Nwankwo, and Anyanwu 2014).

Gender was also found to affect aspiration and livelihood in agriculture. Consistent with findings from other developing countries—where girls face significant constraints in pursuing agricultural activities and gender disparities often restrict women's roles as farmers (Ogunjimi et al., 2023)—the survey and interview results indicate that women encounter more barriers in agricultural livelihoods than men.

This study has also captured the role of parents' career preference influence youth livelihood choices in agriculture, aligning with (Ogunjimi et al., 2023) who found that parents' own aspirations and farm characteristics correlate with youth livelihood aspirations in agriculture. The study found correlation between parents' livelihood aspiration for their children and their propensity to envision farming, as well as between fathers general aspirations and children's aspirations toward farming. Adolescents absorb expectations from significant others, particularly family members and family-related role

models, through adaptation and adoption processes motivated by status attainment thinking which may shape expectations for work employment (Esche & Böhnke, 2024).

Rural Youth Livelihood Choices and Opportunity Space

Access to land is key factors that shape young people's opportunities. The study found that likelihood of exploring nonagricultural jobs in the locality instead of pursuing agriculture decreases as land size increases. This finding is consistent with a study in Nigeria, which reported that the larger the expected land inheritance, the lower the likelihood that a young person will engage in nonagricultural activities, and the greater their chances of remaining in agriculture (Amare et al., 2024). The current study strengthens the report that limited access to agricultural land forces youth to abandon agricultural employment in search of other sound sources of income (Bezu & Holden, 2014). It is argued that land inheritance significantly lowers the likelihood of leaving agriculture, which increases employment in agriculture and reduces rural-to-urban permanent migration (Kosec et al., 2018).

The study found that a scarcity of land, and a scarcity of employment opportunities in rural areas forced youth to leave agriculture as a means of their livelihood. In contrast, the likelihood of migration in search of better alternatives instead of pursuing agriculture decreases as land size increases. As the prospect of gaining access to land has become more challenging, young people are increasingly engaging in labor migration to find work elsewhere. Thus, as to the previous study (Bezu & Holden, 2014) access to land is very important for young people sustainable livelihood in agriculture.

The study also showed that young people in the study area have viewed agriculture as a means of livelihood is not only economically viability and sustainable and the conditions is less attractive. The interviews also witnessed the labor burden in agriculture and their views of low agricultural mechanization contributed for their satisfaction on agriculture. Thus, youth view and satisfaction on agricultural livelihood were affected their occupational aspiration in agriculture compared to a non-farm livelihood (Ogunjimi et al., 2023).

Thus, youth aspirations and choice of livelihood in the study area were the result of both constrained options to limited opportunities and economic viability of livelihood in rural areas, and individual and household factors. Aspirations and livelihood are never simply individual (Appadurai et al., 2004) which can be facilitated or constrained by the opportunity structures (Abay et al., 2021) and youth frequently adjust their aspirations based on emerging opportunities and barriers that arise as they navigate through different stages of life (Marzi, 2022).

Finally, contrary to the previous studies (Ankrah Twumasi et al., 2019) related to the status of agriculture the effect was not significant in the study area in determining the participation of the youth population in farming.

CONCLUSION

Youth aspirations and choice of livelihood were the result of both constrained options to limited opportunities and eco-

nomics viability of livelihood in rural areas, and individual and household factors. The study reveals that youth without land ownership are more likely to leave their localities in search of better livelihoods. The findings suggest that aspirations for non-agricultural jobs and migration are driven not only by land scarcity but also by education levels, the economic viability, and conditions of agriculture. Thus, efforts to foster agricultural employment should consider the complex social, educational, gender, and household factors influencing youth decisions. The conceptualization of youth livelihood choices needs to be revisited to develop sustainable employment strategies based on the actual realities faced by youth. Youth livelihood choices may have local contexts and the study was limited to Ethiopia's specific district to understand the role of socio-economic, individual, and household characteristics in shaping young people aspiration and their livelihood choices. Thus, further study should be conducted that incorporate different research methods, geographic locations, economic, social and development contexts.

This study is limited to a specific district in Ethiopia, which may affect the generalizability of the findings regarding youth aspirations and livelihood choices across different geographic and youth contexts. This paper is part of a PhD dissertation, and the data analysis and report writing took more than two years after the data collection stage. The result of the report shows the facts during the time of the data collection. Finally, despite the limitations, the findings can serve as a valuable reference for researchers and policymakers working on youth employment and sustainable livelihood in agriculture.

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DATA AVAILABILITY STATEMENT

The authors confirm that the data gathered are included in this manuscript, and any additional data supporting the findings of this study are available from the corresponding author upon request.

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