



Assessment of rural and peri-urban youths' participation in micro and small agricultural enterprises in South Omo Zone, Southern Ethiopia

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ABSTRACT

The Ethiopian government has a package of encouraging youths to participate in small and micro agricultural enterprises by giving legal certificate for youths who were organized in-group to start the business by providing financial supports in terms of credit. However, youths are less willing to participate in agricultural enterprises. Even after being organized into groups and having supports from government, some of them were not starting the business and some were interrupting the business they have been organized. Due to these, huge amount of money from the government, which was allocated for this purpose, is not being used as expected. Therefore, this study was intended to assess factors affecting rural and peri-urban youth participation in agricultural enterprises in Bena-Tsemay and Debubi Ari woreda of south omo zone. Two-stage sampling technique was used to select 155 sample households. Logit model was used to analyze determinants of youth's participation in agricultural enterprises. The result of this study indicated that 32.3% respondents were participated and 67.7% were not participated in enterprises. Econometric results revealed that variables such as farm size, institutional capacity building, and weather road significantly affected youths' participation in agricultural enterprises at 1% and 5% significance level. The study recommends that the provision of land for the agricultural enterprises should consider the size/type of the enterprises that youth are willingness to participate. The government should specify the institution/sector to enterprise type and consideration of all-weather roads for each enterprise type during organizing youth in different agricultural enterprises is important.

Keywords: Agricultural enterprises, Youth participation

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Introduction

Agricultural sector has a potential of being huge and thriving business to entrepreneurs if there is full and active government backstopping (Silva, 2010). The sector can generate higher income if it is also operated in the scientifically recommended way (Man, 2007). It is known that agriculture is a labor-intensive economic sector. Youths are also the main suppliers of labor for agriculture in countries like Ethiopia where most of the people are youths; more than 80% of the people are agrarian and most of the economy depends on agriculture. Knowing this potential, the government of Ethiopia provided various agricultural enterprises for youths to participate and play their major roles in the economy in general and to create income for themselves in particular. In doing that, the government is aimed to reduce the current unemployment rate

across country in one hand and to enhance agricultural production and productivity on the other hand. The National Youth Policy indicated the significance of participating youths in the process of building a democratic system, good governance and development endeavors, and how they can be benefited fairly from the outcomes.

The Ethiopian government has a package of encouraging youths to participate in small and micro agricultural enterprises by giving legal backup/certificate for those youths who were organized in-group to start the business; by giving trainings and by providing financial supports in terms of credit. Based on approach of Ethiopian government, youths who want to participate in small and micro-agricultural enterprises are highly encouraged to be organized



in groups and association in order to access different supports such as technical, financial, equipment and working place supports. However, in most parts of the country in general and in SNNPR in particular, youths are less willing to participate in micro and small agricultural enterprises. Even after being organized into groups and associations, and having different support from government, some of them are not totally starting the business and some are interrupting the business they have been organized. Due to these, huge amount of money from the government, which was allocated for this purpose, is not being used as expected. The reason behind low participation of youths, withdrawal and interruption from the business was not studied so far in the SNNPR of Ethiopia. Therefore, this study is intended to study and assess factors affecting rural and peri-urban youth participation in micro and small agricultural enterprises in selected areas of Southern Nation Nationalities and Peoples of Ethiopia.

Therefore, this study is aimed to identify the different agricultural enterprises available and the needs of youths, to identify determinants of rural and peri-urban youths participation in micro and small agricultural enterprises, to analyze determinants of effectiveness of enterprises they were participated and to identify constraints and opportunities in their involvement in micro and small agricultural enterprises in the study area.

Research Methodology

Sample size determination and sampling technique

The formula of Yamane (1967) was employed to determine sample size for this particular study. This is because there is homogeneity in the types of enterprises available for youths in all woredas. The formula of Yamane is described as follows:

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

Where, n = the sample size (155), N = total number of youths in the woreda (156478), and e = error term (0.08). Two-stage sampling technique was used to select sample households for this particular study. In the first stage, two woredas (Bena-Tsemay and Debub Ari) from each zone was selected purposively based on high percentage of groups and associations of youths participated in micro and small agricultural enterprises. In the second stage, one rural and one peri-urban kebele (Dumma, Enchet, Ayikamer and Gazer) were selected from each woreda based on the number of groups and associations participated in micro and small agricultural enterprises.

From selected kebele's both participant and non-participant youths was identified. The systematic sampling technique was employed to draw samples from both participants and non-participant youths. The number of sample from each kebele was determined based non-

proportion of youths participated in each kebele. Accordingly, a total of 155 samples respondent was selected and interviewed.

Type of data and method of data collection

Both primary and secondary data was collected for this particular study. Primary data to be collected include availability of land, access to credit, information and perception, type of small agricultural enterprises, early problem for business initialization, training to enhance skill and knowledge, product type, time of initiation and completion, role of institution, market access, socio-economic, political, and cultural constraints and opportunities on participation in micro and small agricultural enterprises was collected. Semi-structured questionnaire and PRA tools such as observation and FGD were used to collect primary data for this particular study. During FGD, a group of 8 to 12 people was selected and the groups in FGD were youths participated in MSE, Kebele chairpersons, youth representatives from kebeles, youth organizers in Woredas and Kebeles, and non-participant youths. Two FGDs per each Woreda was conducted at two kebele's (Dumma and Gazer). Secondary data was collected from different published and unpublished sources.

Method of data analysis

Both descriptive and econometric analysis methods were used. Descriptive statistics such as frequency tables, percentage, standard deviations and means were used to analyze agricultural enterprises available and the needs of youths, and constraints and opportunities of involvement in micro and small agricultural enterprises in the study area.

Econometric model (Logit model) was used to analyze determinants of youth's participation in agricultural enterprises and determinants of effectiveness in enterprises they have been involved. Effectiveness of enterprises were measured based on their plan and achievements. If they achieved what they planned at the beginning, they were regarded as effective. Credit access, level of education, market access (distance, product demand, linkage), sex of respondent, availability to land, access to information, attitude/perception towards participation, training to enhance skill and knowledge, type of enterprise, payback period, institutional factors (political and bureaucratic issues, initial capital), and cultural and religious taboos are supposed to be determinant factors of youths participation in MSE and their effectiveness.

Data analysis

Both descriptive statistics and appropriate econometric model (Logit model) were used to analyze the data with the help of SPSS Version 23 software.

Results and Discussion

Descriptive analysis

Demographic characteristics of sample youth

The result in table 1 revealed that 87.7%, of respondent youth was male. The remaining 12.3% of respondent youth were female. In terms of marital status, 76.1% of youth were married, 21.9% were single and 1.9% was divorced. A larger percentage of respondents (76.2%) were married this implies that married youths are more likely to participate in agricultural activities than unmarried ones. This is because married persons have more family obligations than unmarried persons. The educational background of the youth is believed to be an important feature that

determines the readiness of youth to accept new ideas and innovations. More educated youths are expected to adopt new technologies to increase their land and labor productivity. Based on education categories the data indicated that 36.1% of the sample respondents were illiterate, 37.5% attained elementary education, and 21.9% of the respondents had high school and the remaining 4.5% of the sample respondent's attained college and above. From the total respondents 65.2% of them had their own land and 34.8% respondents have no their own land. As from sample respondent 60%, 39%, and 1% acquire the land from government, as gift (from relatives or friends) and via rent, respectively.

Table 1. Demographic characteristic of sample youth.

Attributes		Frequency	Percent
Sex	Male	136	87.7
	Female	19	12.3
Marital status	Single	34	21.9
	Married	118	76.2
	Divorced	3	1.9
Education	Illiterate	56	36.1
	Elementary	58	37.5
	High school	34	21.9
	College and above	7	4.5
Own land	No	54	34.8
	Yes	101	65.2
Land acquired	Rent	1	1.0
	Relatives or friends	40	40.0
	Government	60	60.0

Source: Own survey, 2020.

As depicted in table 2, the age of the respondents we ranged between 18.00 and 38.00 years, with a mean of 26.29 years. The average family size of

sample farm households was estimated to be 3.84. The minimum and maximum family size was found to be 1.00 and 13.00, respectively.

Table 2. Attributes of sample youth.

Attributes	N	Min	Max	Mean	Std. Dev
Age (year)	155	18.00	38.00	26.29	4.44
Household size	155	1.00	13.00	3.84	2.29

Source: Own survey, 2020.

Socio-economic characteristics

The results in Table 3 showed that the minimum and maximum land holdings were found to be 0.5 timad and 12 timad, respectively. The average income of respondent from crop production,

livestock production, off farm activities and on-farm activities are 4190.18, 5130.65, 3910 and 9965.23, birr respectively (2009-2010).

Table 3. Sources of income for youth.

Sources of income	N	Min	Max	Mean	Std. Dev
Crop income (Birr)	84	300	45000	4190.18	7839.3
Livestock income (Birr)	62	500	13210	5130.65	3739.6
Off-farm income (Birr)	3	630	10400	3910.00	5620.6
On-farm income (Birr)	65	500	120000	9965.23	16165.6

Source: own survey, 2020.

Youths' participation in micro and small agricultural enterprises

The result in table 4 show that about 32.3% participate in micro and small agricultural enterprises, while 67.7% did not participate. Types of enterprises under which youth organized in groups were dairy farm (18%), small-scale irrigation (14%), fattening of oxen (20%), fattening of shoat (24%) and poultry (24%). About 92% of sample respondent youth was indicted that the enterprises that has been incorporated in the program was participatory where as 8% those who said did not participatory. About 83% of sample respondent youth privilege to choose from available bundles of enterprises, while 17% did not choose because organizing body

chooses for them (100%). From total sample respondent youth they choices types of enterprises at that time is dairy farm (13.6%), small scale irrigation (18.2%), fattening of oxen (45.5%), fattening of shoat (18.2), and poultry (4.5%). Kebele youth's job opportunity experts (96%) prepare business plan for micro and small agricultural enterprises group and only 4% prepared by the group. From total sample respondent youth (67.7%), does not participate in micro and small agricultural enterprises because of lack of awareness or information (31.4%), shortage or lack of land (11.4%), lack of initial capital (33.3%), Absence of trust for group (17.1%), work Bad administration (2.9%), and Lack of business skills (3.8%).

Table 4. Youths' participation in micro and small agricultural enterprises.

Participation		Frequency	Percent
Participate in enterprises	No	105	67.7
	Yes	50	32.3
Types of enterprises	Dairy farm	9	18.0
	Small scale irrigation	7	14.0
	Fattening of oxen	10	20.0
	Fattening of Shoat	12	24.0
	Poultry	12	24.0
Participatory decision in enterprises	No	4	8.0
	Yes	46	92.0
Privilege to choose enterprises type	No	8	17.0
	Yes	39	83.0
Business plan preparation	Group member	2	4.0
	Youth's job opportunity experts	48	96.0
Reason of not participate	Lack of awareness	33	31.4
	Shortage of land	12	11.4
	Lack of initial capital	35	33.3
	Absence of trust for group work	18	17.1
	Weak administration	3	2.9
	Lack of business skills	4	3.8

Source: own survey, 2020.

The result in table 5 show that in micro and small agricultural enterprises acquire different support from government and NGOs for their business, like additional capital, land, agricultural inputs and training. They acquire support from

government (81%) and from NGOs (19%), in additional capital, land, agricultural inputs and training, 23.8%, 9.5%, 14.5% and 52.4%, respectively.

Table 5. Business support in micro and small agricultural enterprises.

Business support		Frequency	Percent
Acquire support	Yes	21	42
	No	29	58
Sources of support	Government	17	81.0
	NGOs	4	19.0
Type of support	Additional capital	5	23.8
	Land	2	9.5
	Agricultural inputs	3	14.3
	Training	11	52.4

Source: own survey, 2020

Access to credit service

Access to credit is one way of improving youth production and productivity. Youth ability to purchase inputs such as improved seed and fertilizer is tied with access to credit. Youths with access to credit can minimize their financial constraints and buy inputs more readily than those with no access to credit. The result in table 6 show that about 93.9 percent get credit while 6.1 percent of the sample households did not take credit. The results in table 6 also show that the credit amount depends on the enterprises type. The criteria to get credit were kebele's administration card, free from any crime and jobless. Micro finance institute and government

(youth job creation opportunity) were the important sources of credit in study area. About 85.7% of sample respondent get credit to purchase livestock and 14.3% get credit to purchase agricultural input. About 73.5% of sample respondent said that credit cost to loan is affordable and 26.5% said expensive. From sample respondent 93.9% said that interest rate to get credit is affordable and 6.1% said expensive. From the total participant 61.2% youth said that the credit amount they received is sufficient for their business. The payback period depends on the enterprises type as seen table 6 below.

Table 6. Access to credit service.

Credit service		Frequency	Percent
Credit get	No	3	6.1
	Yes	47	93.9
Credit source	Government	36	73.5
	Micro-finance	13	26.5
Credit Purpose	Agricultural inputs purchase	7	14.3
	Livestock purchase	42	85.7
Cost to get loan	Expensive	13	26.5
	Affordable	36	73.5
Payback period (in year)	1	12	24.5
	2	10	20.4
	3	27	55.1
Sufficient to carry out business	No	19	38.8
	Yes	30	61.2

Source: own survey, 2020.

Access to credit services

Access to agricultural extension services is expected to have direct influence on the production and marketing behavior of the agricultural enterprises. The higher access to extension service, the more likely that youth adopt new technology and innovation. This study indicates that out of the total respondents of enterprises participate youth; about 82% had access to extension services provided by development agents of the kebele (government). The remaining 18% of enterprises participant youth responded that they did not receive any extension services from government. The result

in table 7 show that sample respondent's got extension services almost all from government (100%). The extension services providers were office of agriculture experts, DAs and innovative farmers. The extension service provided were training (48.8%), technical support (4.9%) and advisory or moral building (46.3%). According to the participant 31.7%, 43.9%, 19.5%, and 4.9% said that they get extension services once per month, once in 3 month, once in 6 month, and once in year, respectively. The frequency of extension services provided for producing youths is indicated in Table 7.

Table 7. Access to extension services.

Extension service		Frequency	Percent
Get extension service	No	9	18.0
	Yes	41	82.0
Extension services type	Training	20	48.8
	Technical support	2	4.9
	Advisory or moral building	19	46.3
Delivers of extension services	Once per month	13	31.7
	Once in 3 months	18	43.9
	Once in 6 months	8	19.5
	Once in a year	2	4.9

Source: own survey, 2020.

Access to market

The result in table 8 show that about 92%, respondent said that there is a market in their locality for their product and inputs while 8%, said that no market in their locality. About the 96% of sample respondent said that there is demand for their products in the local market. Also 90% of sample respondent said that there

are no any organizations or investors that directly supply their products. The product price was set by seller (20%), buyer (58%), government (16%), and market (6%). 84% of respondent youth said that price fluctuate in different seasons. Almost all participant youth (100%) harvest their products traditionally.

Table 8. Access to Market.

Market access		Frequency	Percent
Market for inputs	No	4	8.0
	Yes	46	92.0
Demand for products	No	2	4.0
	Yes	48	96.0
Supply of products to organizations	No	45	90.0
	Yes	5	10.0
Prices setting	Seller	10	20.0
	Buyer	29	58.0
	Government	8	16.0
	Market	3	6.0
Price fluctuation	No	8	16.0
	Yes	42	84.0
Post-harvest handling	Traditional	50	100.0

Source: own survey, 2020

Regarding the distance taken to travel from business center to the nearest market place where they sold their product, farmers reported that they had to travel an average distance of 95

minutes. The maximum and minimum distances that respondents travelled to access nearest market centers were 240 and 5 minutes respectively (table 9).

Table 9. Distance to Market.

	N	Minimum	Maximum	Mean	Std. Deviation
Distance to nearest market (min)	49	5.00	240	95	74.65

Source: own survey, 2020.

Access to infrastructure

The result in table 10 show that about 92% respondent said that there is a weather road in their business area and 8% said did not .About 71.4% of sample respondent said that they had access to water and 28.6% respondent said they

had no access to water. The type of water in the business area is river (48.6%), pond (5.4%), and pipe water (45.9%). According to the sample respondent 54% said that there is no electricity access in their business area.

Table 10. Access to infrastructure.

Infrastructure		Frequency	Percent
Road in business area	No	4	8.0
	Yes	46	92.0
Access to water	No	14	28.6
	Yes	35	71.4
Type of water	River	18	48.6
	Pond	2	5.4
	Pipe water	17	45.9
Access to electricity	No	27	54.0
	Yes	23	46.0

Source: own survey, 2020.

Effectiveness of enterprises

There are different small and micro agricultural enterprises in the study area like poultry, fattening of shoat, fattening of oxen, small-scale irrigation and dairy farm enterprises. From the total participant 24% was participating in poultry and get good income but they haven't properly recorded income report, 24% in fattening of shoat and 20% in fattening of oxen and have been not getting return, 14% in small scale irrigation and 18% dairy farm agricultural

enterprises have newly getting return during survey time. Moreover, to know how the enterprise are effective or not depends on getting return from business they are participating. Most of enterprises were not covered their initial cost and some of them said if we finish the initial cost we are effective. In addition, due to no consistent cost and return records checking, they are effective or not were calculated.

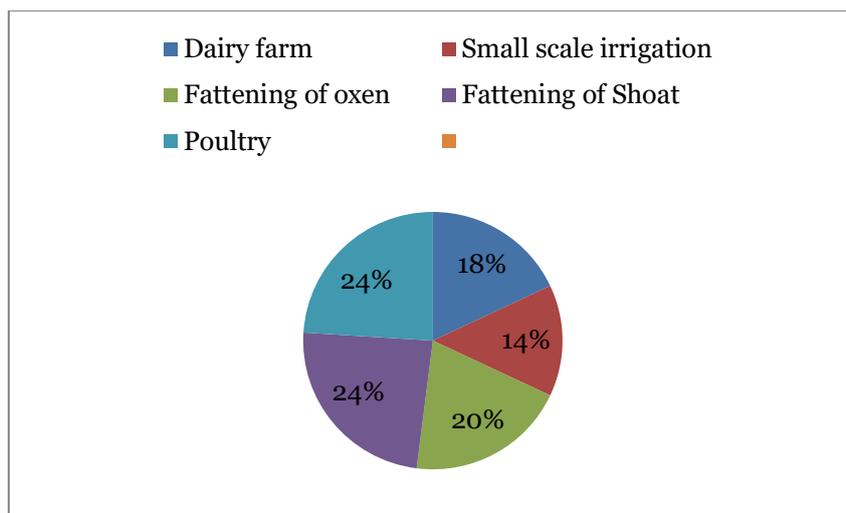


Figure 1. Effectiveness of enterprises.

The result in table 11 revealed the factors of unexpected results of micro and agricultural enterprises were weak extensional support (79.5%), disagreement in group members

(38.5%), credit service system (51.3%), loan repayment interval (53.8%), payback period (76.9%), and lack of infrastructure (61.5%).

Table 11. Benefit from enterprise.

Benefit from enterprise		Frequency	Percent
Benefit from enterprise is as expected	No	39	79.5
Reason for not getting benefit as expected	Yes	1	20.5
Weak extension support	No	8	20.5
	Yes	31	79.5
Disagreement in group members	no	24	61.5
	Yes	15	38.5
Credit service system	No	19	48.7
	Yes	20	51.3
Loan repayment intervals	No	18	46.2
	Yes	21	53.8
Payback period	No	9	23.1
	Yes	30	76.9
Lack of infrastructure	No	15	38.5
	Yes	24	61.5

Source: own survey, 2020

The result in table 12 show that 50% of the sample respondent youth was attending training on their business. About 58.3% of sample respondent youth was attend training during working, 25% before starting the business, and

16.7% attend after starting the business. According to sample respondent, 86% did not visit any other enterprise to experience sharing and 14% visit other good performing enterprise to experience sharing.

Table 12. Training of respondent.

Training		Frequency	Percent
Attended training	No	25	50.0
	Yes	25	50.0
Training time	Before starting the business	6	24.0
	During working	14	56.0
	After starting	5	20.0
Visited other enterprise	No	43	86.0
	Yes	7	14.0

Source: own survey, 2020.

As revealed in survey result 77.6% of the sample respondent said that the enterprises on the hand is their choice because of its profitable than others (85.7%), it needs few capital (8.6%), previous experience (2.9%), and no other enterprises to choose (2.9%), and 22.4% of the participant youth said that the enterprises on their hand is not their interest because of lack of privilege/ freedom to choose (50%), lack of an

enterprises they need (25%), shortage of credit available (25%). The challenges that affect the participant youth in the enterprises were low productivity (86.4%), disagreement in-group members (4.5%), fail to succeed as expected (9.1%). According to the sample respondent, youth there is no agricultural insurance in the study area.

Table 13. Choose of enterprise.

Current enterprise on your hand		Frequency	Percent
Preferred enterprise	No	11	22.4
	Yes	38	77.6
Reason for preference	No option	1	2.9
	Profitable than others	30	85.7
	It needs few capital	3	8.6
	Previous experience	1	2.9
	Reasons to be organized in the not interested enterprise	Lack of freedom	4
Reasons to be organized in the not interested enterprise	Lack of an enterprise we need	2	25.0
	Shortage of credit available	2	25.0
	Challenges facing because of participating in not interested enterprise	Low productivity	19
Challenges facing because of participating in not interested enterprise	Disagreement in group members	1	4.5
	Fail to succeed as expected	2	9.1
	Agricultural risk insurance	No	50

Source: own survey, 2020.

Opportunity of participation in small and micro agricultural enterprises

As shown in figure 14 below, the main opportunity of participation in small and micro agricultural enterprises are almost all respondents were know each other before the

formation of the group (100), Conducive government policy for the group (80), Ambition/eagerness of youths to work together in the business (92), Abiding the rules and regulations (72).

Table 14. Opportunity of participation in small and micro agricultural enterprises.

Opportunity of participation		Frequency	Percent
Know each other before the formation of the group	Yes	50	100.0
Conducive government policy for the group	No	10	20.0
	Yes	40	80.0
Ambition/eagerness of youths to work together in the business	No	4	8.0
	Yes	46	92.0
Abiding the rules and regulations	No	14	28.0
	Yes	36	72.0

Source: own survey, 2020.

Challenges that hinder participation and success of enterprises

According to the sample respondent there are different challenges that hinder participation on small and micro agricultural enterprises like

bureaucracy, weak institutional capacity, lack of commitment by officials, delay on loan provision, livestock and crop diseases, lack of electricity, market linkage and low product price in the market.

Table 15. Challenges that hinder participation and success of enterprises.

Challenges that hinder participation and success of enterprises		Frequency	Percent
Bureaucracy in participation	No	14	28.0
	Yes	36	72.0
Weak institutional capacity	No	8	16.0
	Yes	42	84.0
Lack of commitment by officials	No	10	20.0
	Yes	40	80.0
Cultural or religious prohibits of credit	No	46	92.0
	Yes	4	8.0
Delay on loan	No	19	38.0
	Yes	31	62.0
Livestock or crop diseases	No	7	14.0
	Yes	43	86.0
Lack/Shortage of electricity	No	13	26.0
	Yes	37	74.0
Market linkage problem	No	13	26.0
	Yes	37	74.0
Low product price t	No	4	8.0
	Yes	46	92.0

Source: own survey, 2020.

Analysis of econometric results

Econometric analysis was used to investigate factors affecting youth participation in micro and small agricultural enterprises. In this study the variables that have relationship with the youth participation in micro and small agricultural enterprises are sex of youth, age of youth, educational level, family size, total income, bureaucracy, institutional capacity, land size, marital status, weather road and credit system. The relationships of these variables with youth participation in micro and small agricultural enterprises were discussed as follows. The logistic regression model analysis result indicates that farm size (FAR SIZE) exerted positive influence on the youth participation in micro and small agricultural enterprises at less than 5% significant level. If farm size can be increased by one hectare, the probability of youth participation in micro and small agricultural enterprises would increase by 3.3%. This result implies that participant with large farm size are more likely to participate in micro and small agricultural enterprises than those participant who have small land size. The model result also indicated

that institutional capacity building (INETCB) affects positively and significantly the probability of participating in micro and small agricultural enterprises at less than 1% significant level. This result shows that even though there is different institution that supports the micro and agricultural enterprises such as woreda natural and agricultural office, woreda livestock and fishery office, woreda youth and sport office, woreda food security and entrepreneurship office, micro finance, and kebeles youth's job opportunity expert, the relationships between these institutions were weak according to the result. The result hints that as an institution gets strong the probability of youth participation on micro and small agricultural enterprises is increasing by 31.3%. Weather road (WETHR) had also a positive and significant influence on the probability of youth participation in micro and small agricultural enterprises at less than 1% significant level. The result indicates that, as all-weather roads is available in the area the probability of youth participation in micro and small agricultural enterprises increasing by 26.2%.

