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FACTORS AFFECTING ON RURAL YOUTH TEND TO AGRICULTURE (CASE STUDY: AMOL COUNTY)

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ABSTRACT

The purpose of this survey is to examine effective factors on rural youth tend to agriculture in Amol County. Methodology of this study is a descriptive-correlation method. The statistical population is all rural youth of Amol county (N=3562) which according to Cochran formula 350 subjects were selected using stratified sampling. Experts and specialists confirmed the validity of the questionnaire and reliability was also estimated through a pilot test with 30 questionnaires, and Cronbach's alpha coefficients were calculated for different sections between 0.84 to 0.90. Data analysis was performed using SPSS version 19.The results of this study indicate that 30.6% of rural youth tendency to work in agriculture was moderate, and 44.2% of the surveyed youth agree or strongly agree with working in agricultural sector. According to the results of regression analysis, the variable of government support for rural youth had the greatest influence on rural youth tendency to work in agricultural sector. After that, the variable of knowledge about agricultural businesses had the most important effect on their tendency.

Key words: Rural youth, Agriculture, Tend, Amol count

INTRODUCTION

The global population is growing rapidly, and is characterized by differential growth rates between regions. These differential growth rates mean that an increasing share of the world's population will live in developing and emerging economy countries. The world's rural population is expected to reach a maximum of 3.5 billion in 2020 and to decline slowly thereafter, reaching 2.9 billion in 2050. The trend is expected to continue with almost all regions seeing a decline in the proportion of people and the total number of people living in rural areas over the period 2010 to 2050 (Proctor & Lucchesi, 2012).

Throughout the developing and emerging economy countries, a high proportion of the population depends directly on agriculture for their livelihood and wellbeing, i.e. the agricultural population (AP). In 2010 the AP represented 38 percent of the global population. For some of the most populous regions of the developing and emerging economy worlds, this proportion is significantly higher, for example 49 percent for Asia and the Pacific and 55 percent for sub-Saharan Africa. However, it is lower in the Middle East and North Africa, and in Latin America and the Caribbean, at 23 and 16 percent respectively. In Europe and North America the AP makes up only 5 percent of the population (Proctor & Lucchesi, 2012).

In recent decades, the proportion of the population in all regions directly and indirectly dependent upon agriculture has declined and this is set to continue. However, the numbers and trends in AP differ between regions. The wide range of land ownership patterns and methods of production gives rise to numerous types of labor relations and various forms of labor-force participation and employment in the agriculture sector. Those who work directly

in agriculture have been summarized as: wage earners; self-employed; unpaid family members; and others including cooperative workers, people owning land as collective property, child laborers, and those engaged in non-market-based labor exchange (ILO, 2008).

Youth who aspire to farming as a livelihood face many obstacles – some common to all small-scale farmers, others particularly pertinent to their age group. In an East Africa regional youth consultative workshop held in Uganda (East Africa Farmers Federation, 2009) a number of issues were identified that make it difficult to attract young people into agriculture. These are as follows:

- Shortage of production resources – land, finance
- Negative attitude about agriculture
- Limited agricultural knowledge and skills as well as leadership and managerial skills
- Limited youth groups and associations/cooperatives
- Youth involvement in decision-making still low
- Attraction of quick gains especially from white collar jobs
- Lack of youth policies
- Lack of support from elders for youth in agriculture
- Lack of experience and skill sharing
- Lack of market accessibility
- Lack of supportive social services and infrastructure
- Unwillingness of educated youth to engage in agriculture
- Absence of youth departments in national farmer federations (East Africa Farmers Federation, 2009).

Van der Geest (2010), acknowledged the difficulty in isolating rural youth as a distinct demographic group when describing their employment situation, including barriers to employment, vis-à-vis that of urban youth and rural adults. Van der Geest found that the rural youth attend school less often than their urban counterparts, and working rural youth tend to be employed under more vulnerable conditions than urban youth and rural adults.

Evidence from 15 countries (selected from four developing regions – Asia, Africa, Eastern Europe and Latin America), based on Living Standard Measurement Surveys, confirms that young household heads in rural areas are more likely to be involved in non-farm activities than older household heads. He also suggested that younger household heads who are engaged in farming tend to derive a higher income from their agricultural activities than older household heads (Davis et al., 2007).

ADB (2008) suggests that over the past 15 years, youth employment has in general shifted from agriculture towards manufacturing and services. As incomes rise, it is natural to expect a decrease in the contribution of agriculture to GDP and hence to employment. ADB presents data on four countries in the South and South-Eastern Asia region, noting that despite the retreat from agriculture the sector remains a significant employer of young workers. This study notes that slow agricultural productivity growth contributes to the problems faced by young workers.

According to Proctor and Lucchesi (2012), education and the media must play a role in

improving agriculture's image. Young people are never praised on the television for being farmers. Only employment in areas such as business process outsourcing and banking is encouraged. Farming does not enjoy a favorable image in the media.

Work by Anríquez and Stloukal (2008) explores key driving factors in rural demographic change including the ratio of youth to the aged, the ratio of males to females, fertility levels and migration.

Ahaibwe et al. (2013) in their study about youth engagement in agriculture found that the youth are disenfranchised in the ownership and management of critical assets in agricultural production, especially land. Also the in-depth analysis results seem to suggest that the youth with at least secondary education, males (both married and unmarried) and those youth residing in households with a large share of adults are less likely to engage in agriculture.

The main purpose of this research is considering the factors affecting on rural youth tend to agriculture in Amol County. Based on this objective some goals are mentioned as:

- Description of rural youth demographic characteristics in Amol County;
- Ranking of challenges and barriers to employment in agricultural sector;
- Correlation between rural youth tendency to work in agriculture research independent variables.

MATERIALS AND METHODS

This study is an applied and a non-experimental research. The method of this study is descriptive-correlation. The statistical population of present research included all rural youth of Amol county (N=3562), and using Cochran formula 350 people were chosen via appropriate stratified sampling method as a statistical sampling.

In the current research, dependent variable rural youth tendency to work in agriculture and independent variables are included personal characteristics of studied rural youth (age, marriage status, education, etc.), knowledge about agricultural businesses, impact of government support, attitude towards working in agriculture and government support for rural youth. The tool of gathering research's data is a questionnaire consists of five sections. The validity of questionnaire determined based on the views of professors, experts of agricultural and training and after receiving their comments, requirement corrections done and ensured that questions have ability to measure desired variables in this research. To examine the

reliability of questionnaire via pilot test 30 questionnaires was filled in homogenous community with statistical population, then Cronbach's Alfa examined that it is value for different questionnaire sections and obtains between %84 to %90 and lead in to reliability of research's tool. For analysis data, descriptive statistics (Mean, median and mode) and inferential statistics (correlation coefficients and regression analysis) were used.

FINDINGS

According to the results; the age average of rural youth was 21.7 and the most respondents with 33.4% were in the age group of 21 to 22. Results show that %80 of rural youth were single and haven't married. The education level of most of respondents with 28.6% was diploma and nearly 80% of them were educated in non-agricultural fields. Other descriptive results were shown in table 1.

Table 1- Demographic profile and personal characteristics of studied rural youth

Variable	Mean	SD	Percent level				
			1	2	3	4	5
Age	21.7	4.2	-	-	-	-	-
Marriage status	-	-	80.0	20.0	-	-	-
Education	-	-	12.3	18.3	28.6	19.7	21.1
Number of household members	5.3	1.4	-	-	-	-	-
Farming experience in family	19.3	7.3	-	-	-	-	-
Farmland per family	9.4	3.2	-	-	-	-	-

Education scale: (1=reading and writing, 2=guidance, 3=diploma, 4=associate degree, 5=bachelor and higher)

In this study, 7 different statements were used to assess the knowledge of rural youth about fields of agricultural businesses. The results of table 2 indicated that according to 50.9% of the surveyed people, the knowledge of rural youth about fields of agricultural businesses was low or very low, and 30.8% of respondents had much or very much knowledge about agricultural businesses.

Table 2- The knowledge of studied rural youth about fields of agricultural businesses

Knowledge about agricultural businesses	Frequency	Percent	Cumulative Percent
Very low	87	24.9	24.9
Low	91	26.0	50.9
Moderate	64	18.3	69.2
High	67	19.1	88.3
Very high	41	11.7	100

Total	**350**	**100**	**—**

Mode: low, Scale: (7-12= very low, 13-18= low, 19-24= moderate, 25-30= high, 31-35= very high)

Also 9 questions were used to assess the impact of government support for rural youth tendency to work in agricultural sector. The findings showed that according to 60% of the surveyed people, the impact of government support for rural youth tendency to work in agriculture was high or very high (table3).

Table 3- The impact of government support for rural youth tendency to work in agriculture

Impact of government support	Frequency	Percent	Cumulative Percent
Very low	38	10.8	10.8
Low	42	12.0	22.8
Moderate	58	16.6	39.4
High	80	22.9	62.3
Very high	132	37.7	100
Total	350	100	—

Mode: very high, Scale: (9-15= very low, 16-22= low, 23-29= moderate, 30-37= high, 38-45= very high)

In this study, 15 different statements were used to assess rural youth tendency to work in agricultural sector. The results of table 4 indicates that according to 30.6% of the surveyed people, the rural youth tendency to work in agriculture was moderate, and 43.7% of youth had low or very low tendency to work in agricultural sector.

Table 4- The rural youth tendency to work in agricultural sector

Rural youth tendency to work in agriculture	Frequency	Percent	Cumulative Percent
Very low	74	21.1	21.1
Low	79	22.6	43.7
Moderate	107	30.6	74.3
High	53	15.1	89.4
Very high	37	10.6	100
Total	350	100	—

Mode: moderate, Scale: (15-26= very low, 27-38= low, 39-50= moderate, 51-62= high, 63-75= very high)

Also 12 questions were used to assess therural youth attitude towards working in agriculture. The findings showed that 44.2% of the surveyed youth agree or strongly agree with working in agricultural sector,

and 30% of respondents disagree or strongly disagree with working in agriculture (table5)

Table 5- The rural youth attitude towards working in agricultural sector

Attitude towards working in agriculture	Frequency	Percent	Cumulative Percent
Strongly disagree	47	13.4	13.4
Disagree	58	16.6	30.0
Neutral	90	25.7	55.7
Agree	81	23.1	78.8
Strongly agree	74	21.1	100
Total	350	100	—

Mode: moderate, Scale: (12-20= strongly disagree, 21-30= disagree, 31-40= moderate, 41-50= agree, 51-60= strongly agree)

The results of this study indicate that the most important challenges of employment in agricultural sector are"inadequate facilities for agricultural activities", "difficulty of work in agriculture compared to other professions" and "lack of suitable agricultural lands in the village". While challenges such as "aattractiveness of non-agricultural jobs in terms of status and income" and "traditional methods of farming and animal husbandry in villages" are the less important challenges (table 6).

Table 6- Ranking of challenges and barriers to employment in agriculture

Challenges and barriers to employment in agriculture	Mean	SD	CV(%)	Rank
Inadequate facilities for agricultural activities	4.12	0.92	22.33	1
Difficulty of work in agriculture compared to other professions	4.21	0.95	22.56	2
Lack of suitable agricultural lands in the village	4.16	0..95	22.84	3
Risks of agriculture as a profession	4.06	1.00	24.63	4
Numerous drought and damage to crops	3.78	1.01	26.72	5
Lack of of educational and health centers in rural areas	3.78	1.01	26.72	6
Uncertain future about employment in agriculture	4.01	1.18	29.43	7
Low income in agriculture compared to other professions	4.07	1.21	29.73	8
Aattractiveness of non-agricultural jobs in terms of status and income	3.69	1.11	30.08	9
Traditional methods of farming and animal husbandry in villages	3.56	1.24	34.83	10

Scale: 1=very low, 2=low, 3= average, 4=high and 5=very high

The results of correlation analysis showed that there is a positive and significant relation at 0.01 level between knowledge about agricultural businesses, farmland per family, attitude towards working in agriculture and government support with rural youth

tendency to work in agricultural sector. Also there is a negative and significant relation at 0.05 level between barriers to employment in agriculture with rural youth tendency but there is no significant relation between age, education and farming experience with dependent variable (Table 7).

Table 7- Relationship between independent variables with rural youth tendency to work in agriculture

Independent Variables	Dependent Variable	Correlation Coefficient	r	p
Age	Rural youth tendency to work in agricultural sector	Pearson	0.543	0.231
Knowledge about agricultural businesses		Pearson	0.643**	0.005
Education		Spearman	0.178	0.352
Farmland per family		Pearson	0.675**	0.001
Farming experience		Pearson	0.543	0.239
Attitude towards working in agriculture		Pearson	0.667**	0.002
Barriers to employment in agriculture		Pearson	0.680*	0.011
Government support for rural youth		Pearson	0.732**	0.003

** $P \leq 0.01$ * $P \leq 0.05$

According to the purpose of study, a regression model showing predictors for the rural youth tendency to work in agricultural sector as the dependent variable was detailed in table 8. It also included the independent variables "knowledge about agricultural businesses", "government support for rural youth", "attitude towards working in agricultural sector". The model was developed using the stepwise method of model building, where the variables are put in one by one, and those that do not contribute significantly to the outcome are not entered.

The results of this analysis showed that the variable "knowledge about agricultural businesses" was entered in the equation in the first step. Multiple correlation coefficients (R) were 0.840 and coefficient determination (R^2) was 0.644. It means that 64.4% of the changes in dependent variables are explained by the above mentioned variable.

In the second step, the variable "government support for rural youth" was entered in the

equation. The variable increased R and R^2 to 0.824 and 0.678, respectively, which describes 3.4% of the changes in dependent variable.

"Attitude towards working in agricultural sector" was entered in the equation in the third step. This variable increased R and R^2 to 0.837 and 0.701%, respectively. Thus, 5.9% of the changes in the dependent variable were described by the "attitude towards working in agricultural sector". The other results are viewed in table 8.

Table 8- The results of multiple regression analysis

Independent variable	R square	Adjusted R Square	B	Beta	t	Sig
Constant	---	---	12.654	---	8.540**	0.000
Knowledge about agricultural businesses (X_1)	0.644	0.571	0.610	0.321	3.543**	0.001
Government support for rural youth (X_2)	0.678	0.610	0.641	0.357	4.671**	0.000
Attitude towards working in agricultural sector (X_3)	0.701	0.642	0.680	0.290	4.877**	0.000

Taking the above results and those in table 8 into account, linear equation resulted from regression analysis is as follows:

$Y= 12.654+ 0.610X_1+ 0.641X_2+ 0.680X_3$

According to the results shown in table 8, the variable "government support for rural youth" (*Beta*=0.357) had the greatest influence on rural youth tendency to work in agricultural sector. After that, the variable "knowledge about agricultural businesses" (*Beta*=0.321) had the most important effect on their tendency.

CONCLUSION

A rising number of rural youth in developing and emerging economies are turning their back on small-scale agriculture. Limited access to markets, assets, finance and infrastructure in rural areas, coupled with perceived employment opportunities in urban areas increasingly makes cities the preferred choice in the search for a better life. Yet small-scale farming remains a key source of livelihood and employment and will be critical to future food security. Engaging rural youth in agriculture is key in an era of rapid rural change.

Agriculture is and will continue to be a major source of employment into the medium and longer term in many regions even if its relative share in comparison with other sectors is in decline. Thus, development in the sector and the manner in

which farming is structured and rural labor markets function will have major impacts on rural household welfare and livelihoods throughout much of the developing and emerging economy worlds.

The results of this study indicate that 30.6% of rural youth tendency to work in agriculture was moderate, and 43.7% of youth had low or very low tendency to work in agricultural sector. Also the results showed that 44.2% of the surveyed youth agree or strongly agree with working in agricultural sector.

According to the results of regression analysis, the variable of government support for rural youth had the greatest influence on rural youth tendency to work in agricultural sector. After that, the variable of knowledge about agricultural businesses had the most important effect on their tendency.

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