



Attitudes of rural youth towards agriculture as an occupation: A case study from Sudan

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Abstract

The present study was designed to identify factors affecting the youth attitudes towards the causes of their leaving agricultural work. It was conducted in Hajar AL-Jawaad Administrative Unit of the Nuba Mountains/South Kordufan State; Sudan. The simple random sampling technique was adopted to select some 67 respondents from the 4 villages selected purposively. Data were collected in the face-to-face interviews by using a pretested questionnaire and making observations. Structured interview schedule and observation were used for primary data collection. A five-point Likert-type scale was used to examine the significant differences. Data were analyzed using descriptive statistics, including percentages, measures of central tendency, and standard deviation plus the independent t-test and ANOVA analysis. The study findings revealed that the cost of production is positively affected the youth attitudes and their decisions towards agriculture (obtained highest mean = 4.05). It was also indicated that lack of agricultural land does not affect the youth decision towards agriculture (obtained the lowest mean 2.28). Variables like: gender, age and marital status did not significantly affect the attitudes of respondents toward the causes of leaving agricultural work, while education level significantly affected the attitudes. The study suggested the empowerment of rural youth in terms of financial and technical support.

Keywords: Rural Youth; Attitudes; Agriculture; Nuba Mountain; Sudan

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1. Introduction

For some time, agriculture has been restricted to the production of essential food crops for the only consumption of humans. At present, agriculture includes *inter alia* farming forestry, dairy, fruit cultivation, poultry, and bee-keeping, mushroom, and arbitrary. However, processing, marketing and distribution of crops and livestock products etc. are all acknowledged as the part of the current agriculture. It is therefore, agriculture could be referred to as the production, processing, promotion and distribution agricultural products (<http://agriculturegoods.com>). Therefore, agriculture plays a critical role in all the components/segments of several economies. In additions to providing food and raw material, agriculture also provides employment opportunities to a very large percentage of population. The World Bank (2013) indicated that most young people in the developing world express a desire to leave farms. This was also reflected by the European Economic and Social Committee (2011), which reported that the number of young farmers in developing countries is falling generally and that farming is being abandoned. To attract young people, there is a need to make agriculture more dynamic and appealing than its present shape, and young people need to be convinced to view the sector more positively than they do now. The World Bank (2009) report on factoids about Sub-Saharan Africa indicated that the rural youth in Africa in general and in the Sub-Saharan African countries in particular have limited access to the educational programs that address their specific situations and needs. The report also stated that as a compounding factor, education can be cost-prohibitive and sometimes viewed as unnecessary in an agricultural society that is dependent upon working on the farms. Therefore, most rural youth remain poor, three out of every four live on less than US \$2 per day, lacking the resources and skills to be competitive (World Bank 2009). To cater this problem, Min-Harris (2009) indicated that national governments should invest in the rural youth for their education, jobs, and health care. To attain such goal public policies and programs should address youth. Such framework can improve youth rural livelihoods through self-sustaining employment prospects, education, health care, and social life. According to the Institute of Development Studies (2012), agriculture in Africa has untapped potentials to create jobs, both directly and indirectly. In terms of average age, Africa is a young continent, various reports and studies reported that about 60-70 percent of its people being under 30 years old. Despite this fact, as indicated by the FAO regional Office for Africa (2013), yet Africa's agriculture is predominantly done by the old.

In Sudan in general and the Nuba Mountains (NMs) region in particular experience the highest poverty, despite the presence of immense human and rich natural resources, with low subsistence earnings and subject to conflicts, instability and disease outbreaks (Suleiman et al., 2008; Bello, 2014). This region hosts some of the most disadvantaged, marginalized yet highly mobile youth in the world due to the ongoing conflicts in different parts of the country including Darfur and the Blue Nile States. The declining standard of living is further constrained by a lack of education, health care facilities and other social services (Bello, 2014). In this context, the country productive human capital represents a major challenge. Relevant policies focusing on youth empowerment maximize their potential when seeking employment in local, regional or global markets. According to Osman (2014), poverty in Sudan is caused by factors such as unequal

distribution of resources between communities. Within communities, there is unequal access to, and control of, resources, and limited participation in political and economic institutions.

1.1. Objectives and purpose of the Study

The main objective of this study was to understand the attitudes of rural youth towards the causes of leaving agricultural work in the study area. The specific objectives are to:

- 1) Investigate the respondents' attitudes towards the agricultural occupation.
- 2) To identify the effect of selected socio-economic variables (gender, age, education and marital status) on the attitudes of the respondents.
- 3) Provide policy recommendations where necessary.

1.2. Hypothesis

There no significant influence the respondents' socio-economic characteristics on their attitudes towards the agricultural occupation.

2. Methodology

2.1. The study area

The Nuba Mountains region in the South Kordofan States Sudan is situated between the Latitudes, The Nuba Mountains region is situated between the Latitudes, The state lies between latitudes 9° and 12 N; longitudes 27° and 32° E., and covering an area of 13.44 million ha. (Ballal et al., 2014). The region spreads over uneven patterns of mountains at many places; constitutes hills and rocky ranges and is separated by broad valleys. Administratively, the region is considered to be the whole area presently known officially as the South Kordofan State and parts of the West Kordofan State, in the Sudan. It is centered on the Nuba Hill. The climate is semi-arid with less than 800 mm of rain per year on average, presenting lush and green landscape compared with most nearby areas (Bello, 2014:50). The plain areas are covered with muddy cracking and/or non-cracking clay soils with some alluvial deposits in the lowlands, while sandy soils are dominant in the northern and western parts of the region. Sandy soils dominate in the western and northern parts of the region (Bello, 2014). The rainy season extends from mid-May to mid-October. The annual rainfall ranges from 400 to 800 millimeters (16.4 to 32.8 in), allowing grazing and seasonal rain-fed agriculture (http://en.wikipedia.org/wiki/Nuba_Mountains). Regarding ethnic composition, the NMs region is dominated by two major tribal groups, the Nuba and the Baggara Arab group. The Nuba are sedentary peasants residing in small traditional villages practicing subsistence cultivation. Very few of them are nomads. The Arab group, which is divided into so many sub-tribes share the same Arabic Language, and have more or less similar cultural traditions (Bello, 2014:51). A considerable number of this group is pastoral

Baggara cattle herders, rearing large herds of cattle, as symbols of prestige and social status. However, this practice was hardly posing any effect on the local environment and is fading due to the increasing circulation of money in the economy and the adoption of modern agricultural technologies (Bello, 2014; Komey, 2008).

2.2. Sample selection and data collection

The study was conducted in July 2014 (beginning of autumn season) in Hajar AL-Jawaad Administrative Unit of the Nuba Mountains/Soth Kordufan State; Sudan. The research population for this study confined in the group of rural youth (boys/girls and young men/women) lies in the age group (15-30) years old and settled at least for the last two years in the study area. The purposive sampling method was adopted to select 4 villages namely: Inqarkoo, Quanaas, AL-Samaseem and AL-Qardood. The random sampling technique was used to select 67 respondents from lists of youth provided by the popular committees of sampled villages. Respondents were selected by using tables or random numbers. Data were collected in the face-to-face interviews by using a pretested questionnaire and observation. A five-point Likert-type scale (1= strongly disagree (SDA), 2 = disagree (DA), 3= Neutral (N), 4= agree (A), 5 = strongly agree (SA) was used to test significant differences. Data were analyzed by using descriptive statistics, including percentages measures of central tendency, and standard deviation, in addition to an ANOVA and t-test.

3. Results and discussion

3.1. Respondents' socio-economic characteristics

Table 1 shows that the majority of the respondents (62.7%) were males, 61.2% and 38.8% were in the age group (15-22) and (23-30) respectively. Data in the table also revealed that some 55.3% of respondents were illiterate or just able to read and write. About 44.7 had education up secondary level. This finding is in line with Bello and Daoud (2014) who indicated that the ongoing war in the NMs resulted *inter alia* in complete damage of social services (education, health care and other social services) and natural resources. Regarding marital status the results showed that 55.2% of respondents were single, whereas some 38.8%, 4.5%, and 1.5% were married, widowed and divorced respectively. Despite the facts that there are various factors contribute to change in early marriage practices (improved methods of media communication, roads education etc.). It could be argued that an early marriage practice is related to type of economic activities prevailed in the rural communities. In the areas where the traditional /subsistence agriculture is practiced early marriage resulted in having more children to contribute to family labor. This argument is in line with Jones et al. (2014) who commented that changes in people's perceptions about the appropriate age for marriage can be attributed to *enter alia* education, legal monitoring and greater awareness of illnesses associated with early pregnancy. In case of the NMs the matter needs more investigations. Why about 55.2% of the respondents (youths under 30 years old were single), provided that the widowed and divorced making only 6% of the respondents.

Table 1. Distribution of respondents according to their ~~some~~ socio-economic characteristics (N=67)

Sex	F	%	Age	F	%
Male	42	62.7	15-18 yrs.	17	25.4
Female	25	37.3	19-22 yrs.	24	35.8
			23-26 yrs.	14	20.9
			27-30 yrs.	12	17.9
Education	F	%	Marital status	F	%
Illiterate	5	07.5	Single	37	55.2
Able to read and write	32	47.8	Married	26	38.8
Basic education	24	35.8	Widowed	3	4.5
Secondary level	6	08.9	Divorced	1	1.5

3.2. Respondents' attitudes towards causes of leaving agricultural work

The respondents were asked to provide their opinions on eight statements regarding their attitudes towards the causes of leaving agricultural work. Table 2 indicates that some 80.6% of respondents were agree and strongly agree with the statement of "High production cost" with mean 4.05 and SD 1.057 which is the highest mean in the table. This result indicates that the high cost of agricultural production considered as a main reason to leave agricultural work (i.e. high cost of inputs). For the statement "Nomads and farmers conflicts" the majority of the respondents (73.1%) commented that they either agreed or strongly agreed with the statement, which represents the second highest mean 3.8 and SD 1.305. This result is in line with Bello (2014) who commented that despite the ongoing war in the NMs which lasted for more than two decades the two groups)the farmers and nomads) are living in harmony. Despite the fact that the war in the region compelled the nomad (in some areas) to resettle, making new mode of life to cope with this situation. In this regards Bello (2014: 52) stats that "The civil war in the Nuba mountains has enforced the nomads to resettle around the urban centers as sedentary population making new mode of production of the pastoral life in the area (i.e. practice agriculture together with their traditional activity), competing with the traditional farmers in the limited resources (i.e. the land), as well as the poor social services in the urban centers".

For the statement "Insecurity situation" The findings indicate that the majority of respondents (70.2%) either agreed or strongly agreed with the statement with the mean 3.58 and SD 1.405 representing the third highest rank in scale. Now the Nuba mountains region suffering from war between the government and rebel movements, which resulted in loss of lives of innocent people, damage of social services to destruction of the natural resources and socio-economic development infrastructure (Bello, 2014; Bello and Daoud, 2014). The finding also shows that a simple majority of respondents (43.3%) either strongly disagreed or disagreed with the statement "High rate of Products taxes", while approximately a half of the respondents (49.2%) either agreed or strongly agreed with this statement which attains fourth position with the mean 3.11 and SD 1.419.

Data in Table 2 also revealed that the respondents' attitudes towards the statement "Low crop productivity; a reason to leaving agricultural work" indicated that some 47.7% respondents stated that they agree or strongly agree with the statement. About 44.8% respondents commented that they are either strongly disagree or disagreed. This statement achieved fifth position with the mean 3.02 and SD 1.392. This result indicates that low agriculture productivity is not the main cause for the rural youth reluctance to agriculture. Regarding the statement "Low products prices", data in Table 2 also revealed that 64.2% of respondents were strongly disagreed and dis agree to this statement, obtained sixth ranking with the mean 2.41 and SD 1.269. The findings of the study indicate that the prices for agricultural products are not the main reasons to leaving work. In other words, agriculture occupation in the study area is economically viable and profitable, provided that agricultural activities is based completely on family labor in there sector uses rural youth as help for the parents as non-paid working force.

Table 2. Respondents' attitudes towards causes of leaving agricultural work (N= 67)

Statement	SA 5		A 4		N 3		DA 2		SDA 1		Mean	SD
	#	%	#	%	#	%	#	%	#	%		
High production cost	27	40.3	2 7	40. 3	5	7.5	6	9.0	2	3.0	4.05	1.05 7
Nomads and farmers conflicts	25	37.3	2 4	35. 8	4	6.0	8	11. 9	6	9.0	3.8	1.30 5
Insecurity situation	20	29.9	2 7	40. 3	1	1,5	1 0	14. 9	9	13.4	3.58	1.40 5
High rate of Products taxes	14	20.8	1 9	28. 4	5	7.5	1 8	28. 4	1 0	14.9	3.11	1.41 9
Low crop productivity	11	16.4	2 1	31. 3	5	7.5	1 9	28. 4	1 1	16.4	3.02	1.39 2
Low products prices	5	7.5	1 2	17. 9	7	10. 4	2 5	37. 3	1 8	26.9	2.41	1.26 9
Rains fluctuation/climate change	7	10.5	1 0	14. 9	4	6.0	2 2	32. 8	2 4	35.8	2.31	1.37 3
Lack of agricultural land	5	7.5	1 1	16. 3	2	3.0	2 9	43. 3	2 0	29.9	2.28	1.26
Grand Mean											3.01	1.33

Most of the respondents (68.6%) either strongly disagreed or disagreed to the statement "Rains fluctuation/climate change" whereas about one third of the respondents (31.4%) either strongly agreed or agreed to the same statement. This statement got the 2nd lowest mean 2.31 and SD 1.373 (i.e. the respondents have negative attitudes towards above-mentioned statement). This indicates that rains fluctuation is not a reason to leaving agricultural work, because the study area lies in rich Savanah zone which characterized by high rates of rainfall. Data in Table 2 also revealed that that majority of the respondents (73.2%) either strongly disagreed or disagreed to the statement "Lack of agricultural land", while 23.8% of the respondents either agree or strongly agree to aforementioned. This statement has

obtained mean 2.28 and SD 1.26 which considered as the lowest mean, (i.e. the respondents have negative attitude towards above-mentioned statement". This finding indicates that the majority respondents do not have face any no difficulty in accessing land, this due to fact that the huge acreages are lying uncultivated in study area . The table also explained that the overall attitude towards the causes of leaving agricultural work was 3.01 out of 5 and SD 1.33, this mean is higher than the midpoint 3. This indicates that the respondents, to some extent have relatively positive attitudes towards above-mentioned statements considering the causes of leaving agricultural work.

3.3. The effect of gender on respondents' attitudes toward causes of leaving agricultural work

The independent t-test was used to determine whether or not the gender variable has a statistically significant effect on their attitudes toward causes of leaving agricultural work. However, statistically non-significant differences in the respondents' attitudes were observed at the 0.05 percent significance level as depicted in Table 3.

Table 3. Independent T-Test for comparisons of means for gender and respondents' attitudes towards causes of leaving agricultural work

Gender	Number	Mean	SD	T	Significance
Male	42	3.12	1.285	0.448	0.316
Female	25	2.99	1.313		

3.4. The effect of age, education level and marital status on the respondents' attitudes

Table 4. ANOVA for significance variances in respondents' attitudes according to age, education and marital status variables

Variables	Source of Variation	Sum of Squares	df	Mean Squares	F	Sig.
Age	Between Groups	5.3545	3	1.784875	1.0583	0.441
	Within Groups	108.876	63	1.72825		
	Total	114.231	66			
Education level	Between Groups	6.525375	4	1.631125	0.1741	0.0308
	Within Groups	107.7061	62	1.73725		
	Total	114.231	66			
Marital status	Between Groups	5.05125	3	1.68375	0.9726	0.4755
	Within Groups	109.18	63	1.733		
	Total	114.2315	66			

Table 4, a one-way analysis of variance (ANOVA) showed that age and marital status variables do not significantly affect the attitudes of respondents toward causes of leaving agricultural work ($F= 1.058$ and 0.972 , respectively, $\alpha = 0.05$). As depicted in Table 4, the education level causes a difference in the attitudes of rural youths towards causes of leaving agricultural work, ($F= 0.174$, $\alpha = 0.05$). Respondents with high level of education were more likely to have negative attitudes towards agricultural work. That could be due to fact that the education improves awareness levels, the way of thinking; and elevates ability of the peoples to confront, solve local problems and hunt other job opportunities. In other words the most educated respondents have more chances than others to secure better jobs in the formal sector or at the local community level.

4. Conclusions

Rural youth is important unlimitted and un-appreciated resource for both rural and urban societies. They make up a significant portion of the workforce in both rural and urban communities. The importance of the youths to the community and national development is without doubt because the various programs directed at them by the government at various times gives credence to this goal. Youths generally need proper harnessing so that they could maintain reliable and acceptable status in their locality. This study concluded that youths are the major clientele group needed for agricultural transformation in the country. Understanding attitudes of rural youths towards agricultural occupation and providing relevant recommendations is expected to solve labor bottlenecks in agriculture in the Sudan in general and in the NMs in particular. Such recommendations may encourage the rural youths to stay at their hometown (the NMs) to practice agriculture i.e. the main economic activity in the study area. The study investigated the factors affecting the youths' attitudes towards agricultural work in the study area and proposed practical and policy commendations to make agricultural occupation more productive and attractive to rural youths.

5. Recommendations

Based on the findings, the study provides the following recommendations:

- 1) The government, NGOs, community development organizations, UNs agencies concerned with agriculture (e.g. FAO, IFAD), and youths organizations should provide some incentives such as banking facilities, subsidized agricultural inputs and extension services to keep youth in the farming profession.
- 2) Government should place stronger emphasis on the technical education especially agricultural extension and vocational training.
- 3) Empowering rural youth especially girls and young women by equipping them with the improved agricultural skills and innovative knowledge to enable them to adopt new technologies, technical packages and to create viable options for those who remain.
- 4) Young people should have access to the legal recruiting systems, health services.

- 5) Measures are needed to provide social protection to the youth, and also their rights as human beings must be respected.

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