Rural Youth and Agriculture 'Problem' in Sudan: A case from the Nuba Mountains

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Abstract: This study is carried out to identify the personal characteristics affecting the rural youth decision towards agricultural work. It was conducted in AL-Kurgul Administrative Unit of the Nuba Mountains/South Kordufan State, Sudan. The random sampling method was adopted to select 100 respondents. Data were collected in the face-to-face interviews by using a pretested questionnaire and observation. Frequency distribution, percentages, correlation and chi-square, were used for data analysis. The study findings indicated that there is significance negative correlation between age and work in agriculture, while there is no significance correlation between education level and agricultural work. It is also revealed that there is no significant difference between both sexes and marital status variables, and work in agriculture. The study proposed some recommendations to encouraging rural youth to work in agricultural sector and to make the rural areas more attractive. These including provision of incentives like subsidies agricultural inputs, banking facilities and extension services, technical education, vocational training, to equip rural youth with agricultural skills and knowledge, both the public and private sectors may establish small rural industries depending on available agricultural products as a raw materials to absorb the rural youth in workforce.

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1.0 Introduction

Rural youth are an important resource; they have a very important role to play in all aspects of life for any society or nation. Apart from being bigger in number vouth are energetic, courageous and often have new ideas that can make a vital contribution to the socio-economic development if they are well organized and involved in development issues in various sectors. There is a very large segment of the world's population who are considered youth (Samuel et.al 2003). As indicated by the World Bank (2013), young people bring energy, vitality and innovation into work force, and when their willingness to contribute is matched with opportunity; they can have a transformative impact on economic growth and social development. It is therefore, young people must be considered as actors, players and partners. Indeed they are strategic catalysts for new ideas contributing to peace and human development, as well as to the renewal of the human society especially in a globalizing world (UNESCO 2002).

For decades, agriculture has been associated with production of essential food crops. At present, agriculture above and beyond farming includes forestry, dairy, fruit cultivation, poultry, bee keeping, mushroom, arbitrary, etc. Today, processing, marketing and distribution of crops and livestock products etc. are all acknowledged as part of current agriculture. Thus, agriculture could be referred to as the production,

processing, promotion and distribution agricultural products. Agriculture plays a critical role in the entire life of a given economy. Agriculture is the backbone of economic system of a given country. In addition to providing food and raw material, agriculture also provides employment opportunities to very large percentage of population. http://agriculturegoods.com (2014). The World Bank (2013) stated that (most young people in the developing world express a desire to leave farms. European Economic and Social Committee (2011) reported that the statistics clearly show that the number of young farmers is falling generally and that farming is being abandoned.

It is clear that the definition of who is included in youth very much depends on which dimension of "youth" takes precedence: demographic (e.g. age); cultural (notions of adulthood); biological (attainment of puberty); social (attainment of maturity or marriageability); or economic (e.g.), ability to sustain oneself (Godfrey et al., 2000). Food and Agricultural Organization (FAO 2013) states that there is no universally accepted definition of youth. For statistical purposes, the United Nations General Assembly in 1985 for the International Youth Year first defined vouth as people between the ages of 15 and 24. Virat (2013) added "Besides statistical definitions, youth have been described in many different ways; sometimes as a particular age group, as a stage of life or as an attitude".

The importance of rural youth in developing their habitats & environment, in bringing changes to their production systems, of introducing new technology, in questioning existing power structures and changing age old inhibitory social beliefs and attitudes has been articulated several times over. Young people are the key to sustaining long-term social and economic development, and are an integral part of rural communities. Thus, rural youth play an important role in shaping a successful future for rural societies the world over. The number of young people globally is about to become the largest in history relative to the adult population. At present, more than 50 percent of the population is under the age of 25, or just over three billion individuals are youth or children. In terms of youth alone (age 15-24), there are over 1.3 billion youth in the world today. This means that approximately one person in five is between the age of 15 and 24 years, or 17 percent of the world's population is "youth". 84% of the world's youth lives in developing countries. This figure is projected to increase to 89 percent by 2025 (United Nations Population Fund. 2009). Virat (2013) stated that the UN General Assembly has defined youth role in society as consisting of following four components (UN A/40/256, 1985: Economic participation, Political participation, Social participation, and Cultural participation. At other instances the role of rural vouth has also been described as 'change agents' and 'bridge between technology and society'. It is expected that rural youth with relatively greater exposure to modern production technologies, institutional forms, linkages within the rural society and outside world and greater propensity for experimentation with new systems can very effectively play these roles and bring dividends for the whole society (Virat 2013).

The agriculture sector has negative image by the youth and even by their parents. Some case mentions that parents educated their children precisely to escape agriculture (FAO 2013). The Report also indicated that the rural areas and the agriculture sector (in Africa) in particular are currently not attractive to youths. The hand-operated hole has remained the main farm implement for working the soil and has, for a long time now, rendered agriculture a difficult task Poor farm implements and other and farm inputs, lack of technology in food processing and preservation, lack of good and reliable market for the farm products as well as poor infrastructure cause the youth to lose interest, although it is considered a major employer. There is lack of adequate social and economic facilities in rural areas as compared to those in urban centers. Rural populations often take a decision to move from their lands to cities, this is sometimes because of attraction of a better quality of life in the urban areas or a higher standard of living with more freedom. These factors that 'pull' people away from rural areas could be greater job opportunities, higher wages, better health & educational facilities etc. (FAO 2013). Moreover, there are several instances when rural people are 'pushed' from their villages due to unemployment in agriculture. which results from mechanization, farm consolidation, crop failures, etc. Whereas some of the migration is long term and permanent, a significant amount of seasonal migration takes places. Skeldon (1997). Lubbock (1998) added that the out-migration of rural youth has a grave implication on labor availability and the future of agriculture. Rural youth are an important unlimmitted resource. They have very important role to play in all aspects of life in rural and urban societies. Youth stage charaterized by energetic, courageous and often have new ideas that can make a vital contribution to the socio-economic development if they are well organized and involved in development issues in various sectors. The youth have a greater potential to learn new techniques and are more flexible in adapting to changing conditions (Allajabou 2009).

Agriculture in Africa has untapped potential to create jobs, both directly and indirectly. In order to attract young people, agriculture will need to be more dynamic and appealing than its now, and young people will need to view the sector more positively than they do now (Institute of Development Studies 2012). In terms of average age, Africa is a young continent: reports mention about 60 – 70 percent of its people being under 30 years old. Yet Africa's agriculture is predominantly done by the old (FAO, 2013). Today there are over 1 billion young people aged 15 -24 living in the planet earth- almost 20% of total world population. Youth also represents an essential and dynamic part of the world's human resources (Samuel et.al 2003).

Sudan is a vast agricultural and pastoral country with rich natural resources. with about 1,882,000 km² of land, a total population of well over 33 million, out of which 51% live in rural areas. Agriculture is the dominant sector in the Sudanese economy. It contributes about 31.6% to the Gross Domestic Product (GDP), and about 9% of non perolium exports, and provides the raw materials for agro-industries and employment for over 50.23% of the labour force (Ministery of Information 2011).

1.1 Objective of the study

- 1. To study the relationship between respondent's social characteristics and working in agricultural sector.
- 2. To determine the rate of respondents employed in agricultural sector.
- 3. Provide some policy recommendations based on the findings.

1.2 Hypotheses

Main hypothesis: There is a significance relationship between rural youth's social characteristics and working in agricultural sector.

Sub-hypothesis are:

- 1. There is no significance correlation between sex variable and working in agricultural sector.
- 2. There is no significance correlation between age and working in agricultural sector.
- 3. There is no significance correlation between respondent's education level and working in agricultural sector.
- 4. There is no significance correlation between respondent's marital status and working in agricultural sector.

2. Methodology

The study was conducted in AL-kurgul Administrative Unit, Nuba Mountains region (South Kordufan State), Sudan. The region covers an area of 88,000 sq. km. It lies in-between longitude 29 and 32 East and latitude 9 and 13 North (Allajabou 2009). The region has an annual rainfall ranging from 400mm to 800mm, with the raining season running between May and October. This study was carried out in 2014 to assess the work of rural youth in agricultural sector. A random sampling technique was employed to select 100 respondents. Primary data were collected in the face-to-face interviews by using a pretested questionnaire and observation. The Secondary data was obtained from the relevant sources. The collected data were analyzed in form of percentages, Likert scale, chi-square and correlation. Rural youth is defined in this paper as boys/girls and young men/women from 15 to 30 years of age, settled permanently or at least for the last five years in the rural areas.

3. Results and discussion Socio-economic characteristics of respondents

Table 1 indicates that the majority of the respondents (64%) were males, while the female are (36%). Females in the study area have great contribution in agricultural activities. Besides performing the domestic chores, they are assigned to cultivate the family farms locally known the Jubraka to produce vegetables for family consumption. In this regards Bello(2014), commented that The house farm or the near farm is locally known as the Jubraka and usually run exclusively by women to grow vegetables such as okra, chilies, pepper, pea, and others, for home consumption, and is located by the farmers homes. The hill farm (Jebel farm), and the far farms are usually run by men, children in collaboration with women to grow sorghum, millet, sesame, cotton, groundnuts and other crops.

The table also shows that 85% of respondents

were in the (15-26) age group. Education is the process of developing knowledge, wisdom and other desirable qualities of mind, character, and general competencies, especially by source of formal instruction (Evanson and Mwabu1988). However, as cited by Butt et al., (2011) from Husssein et al., (2003), it is visualized that more the percentage of educated people more will be the rate of development. Data in the table indicated high rate of illiteracy among respondents. Only 19% have completed the basic education level of school, 10% and 7 % are either attended or completed secondary school respectively. It is observed that the curriculum of education system provided is very poor and not related or addressing issues of local environment and at the time youths complete their basic or secondary education they do not have adequate skills that they can rely on to start self-employment activities. Godfrey et al., (2012) reported that when young people are not in contact with the education system or the labor market, they cannot develop key skills for meaningful employment. This finding is in line with the FAO (2011), stated that the rural youth contribute less to the national economy for various reasons including inadequacies in the education system, which hinders innovations and does not create sufficient exposure to carrier options and obligation to contribute to national sustainable development. The results presented in the table also showed that 42% of respondents were marriage, 54% were single, and the low rate of divorced due to community solidarity in study area, as rural communities has strong tight to customs and traditions.

Table 1. Distribution of respondents according to their sex, age, educational level & marital status (N=100)

Sex	F	%	Age	F	%
Male	64	64	15-18 yrs.	25	25
Female	36	36	19-22 yrs.	41	41
			23-26 yrs.	19	19
			27-30 yrs.	15	15
Education	F	%	Marital	F	%
			status		
Illiterate	22	22	Married	42	42
Not completed	42	42	Single	54	54
basic education					
Basic education	19	19	Widowed	3	3
Not completed	10	10	Divorced	1	1
secondary level					
secondary level	7	7			

The table 2 shows that more than 33% respondents work in agriculture either for sometimes or always as their main economic activity. About 41% work some times and they have other main economic activity(s). Other economic or off farm economic activities in the NMs region as by Bello (2014) include

all the various forms of income generation activities that farmers or other groups of the inhabitants adopt to supplement the income generated by their own farms. Such activities include dry season migration for wage labor in/or outside the area. Non-farm occupations such as blacksmithing handicrafts, tailoring as well as government occupations (e.g. guards, school employees, and other jobs in the government circles), forestry production and trade in building materials. Services charged for crop and water hauling, as well as income generated from capital intensive enterprises (i.e. oil presses, flour mills, bakeries ... etc.), and the services delivered by the animal traction implements), also are considered another off-farm activities in the NMs.

It is worth to mention that some respondents cultivated own land, but in some cases serve as agricultural wage labor. It is observed that in last years a considerable number of rural youth migrated from their traditional villages to work in traditional gold mining areas in and or outside the NMs region as a new rewarding off farm economic activity. Therefore, this new economic (traditional gold mining) activity contributed to the causes for the rural youth to abandon agricultural work in the study area. World Bank (2013) reported that (worldwide and historically, farming as profession has rarely carried high prestige. Colloquial terms of farmer in English, such as "hayseed" and "cold-hopper", reflect the low status of the profession even where it yields incomes higher than the national average. Table 3 showed that 38.8% of respondents are engaged in trade in forest products (i.e. collect & selling grasses & wood as local building materials, fuel wood, Arabic gum, Grewia Tennax Gudeim (Arabic name), Balanites aegyptiac locally named Laloob and Ziziphus nummularia locally named Napaq or Seder. while 11.9% working as animal breeders, and 22.4% works in field of charcoal manufacturing (by cutting forest trees), only 8% works as local merchants buying and selling agricultural crops to local consumers and producers, while 17.9% works as agricultural workers.

Spearman Correlation:

Table 4 revealed that significant and negative relationship have been observed between the level of education and work in agricultural sector (r = (-) 0.395 significant at 0.01) (i.e. less educated respondents have more tendency to work in agricultural sector). That is mainly because they have no wide work opportunities or options due to the lacking of skills and qualifications required to hunt formal sector jobs(public or/and private sectors). The findings also indicate that the age was not significantly correlated to work in agricultural sector (r = 0.012).

Table 2. Distribution of respondents according to

working in agricultural sector (N=100).

Classification	F	%
Not at all	26	26
Sometimes	41	41
Always	3	33

Table 3. Distribution of respondents according to their occupation in case of totally not-work in agricultural sector or work sometimes (N=67)*

Occupation	F	%
Forest products merchants	26	38.8
Animals breeder	8	11.9
Ambushes Charcoal	15	22.4
Crops merchant	6	9
Agricultural workers	12	17.9

^{*} Respondents work in agriculture not included

Table 4. Correlation matrix showing relationships between independent variables (age & education level) and dependent variable (working in agriculture sector)

Independent variables	Work in agric., sector
Age	- 0.012
Education level	-0.395(**)

^{**}Correlation is significance at the 0.01 level (2-tailed)

Chi-square test for relationship between sex and work in agriculture:

The chi-square value is $(x^2 = 0.286)$ while the tabulated (critical) value is $(x^2 = 5.991)$ at 2 degree of freedom and 0.05 probability level, this indicates that there is no significant difference between sex variable and work in agriculture, i.e. accepted the statistical hypothesis: there is no significance correlated relationship between sex variable and working in agricultural sector. Chi-square test for relationship between marital status and work in agriculture: The chi-square value is $(x^2 = 5.155)$ while the tabulated (critical) value is $(x^2 = 12.592)$, at 6 degree of freedom and 0.05 probability level, this indicates that there is no significant difference between marital status variable and work in agriculture, i.e. accepted the statistical hypothesis: there is no significance correlated relationship between marital variable and working in agricultural sector.

4. CONCLUSION

Agriculture is the backbone of Sudan's economy, particularly following the July 2011 secession of South Sudan. The new born country share in the oil sector estimated to about three-fourths of the former Sudan's total oil production, the matter that hardly affected the country national economy. The NMs is one of the main rain-fed agriculture (mechanized and subsistence /traditional) in the country. Agriculture is the main profession followed by the traditional animal breeding

^{*} Correlation is significance at the 0.05 level

as the second economic activity in the region. Attempts to modernize these patterns of production should consider the rural youths' efforts to play their vital role in agriculture and other off-farm economic activities to participate effectively in the process of their community's development. This study identified some of the factors affecting the work of rural youth in agricultural sector and suggested practical encouraging rural youth to work in agricultural sector and to make the rural areas more attractive. The results indicated that there is significance negative correlation between age and work in agriculture, there is no significance correlation between education level and agricultural work. It is also revealed that there is no significant difference between both sexes and marital status variables, and work in agriculture.

5. Recommendations

- Providing incentives like subsidies agricultural inputs, banking facilities, and relevant social services to make the rural areas attractive.
- Government and non-governmental organizations (NGOs) should focused on technical education especially agricultural extension and vocational training to equip rural youth with basic agricultural skills and knowledge to enable them handling the new technologies and technical packages.
- 3. Governments and private sectors should establish small rural industries depending on available agricultural products (raw materials) to absorb the rural youth in workforce.

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