



# Socioeconomic Determinants Influencing the Willingness of Agriculture Undergraduates to Participate in Agripreneurship in Northwest Nigeria

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## Abstract

The study analyzed the socioeconomic determinants influencing the willingness of the agriculture undergraduates to participate in agripreneurship in Northwest, Nigeria. The study employed a questionnaire to obtain primary data. A multistage sampling technique was used to select 150 respondents from the universities under study. Both descriptive and inferential statistics were used for data analysis. Results show that a majority of the participants were male (68.7%), single (90%), within 21-25 years of age (52.6%), and had no any other tangible occupation (57.3%) besides study. Willingness to participate in agripreneurship was found to be positive among the respondents but not as primary occupation. Family economic status (ranked first) was the major socioeconomic determinants influencing the willingness of agriculture undergraduates to participate in agripreneurship. Examination of the relationship between selected socioeconomic determinants and willingness to participate in agripreneurship revealed a positive significant relationship with gender, community background, family background, family economic status, as well as with ethnicity. This clearly suggests that a number of socioeconomic determinants have considerable influence over willingness of agriculture undergraduates to participate in agripreneurship. The study, then, carries the implication that university agriculture training should be streamlined with today's realities so as to stimulate the willingness for agripreneurship.

**Keywords:**  
*agripreneurship, agriculture and socioeconomic determinants, undergraduates, willingness*

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## INTRODUCTION

Agriculture is one of the sectors in Nigeria that plays a significant role in the economy and holds great potentials. Out of the 923,768 square kilometers of total land area in Nigeria, 35.1% is said to be arable (World Bank, 2009). Yet, less than 50% of the country's agricultural land is put under cultivation (Manyong et al., 2005). Agriculture has the advantage of providing employment at a bearable cost compared to other sectors of the economy such as industry, which is capital intensive, and when adequately utilized, it provides huge returns in the form of financial independence, foreign exchange, and economic viability in addition to its primary functions.

In Nigeria, the perceived opportunities in entrepreneurship are as high as 84.7 percent, while the perceived capabilities are up to 87 percent; however, only about 46.8 percent of Nigerians aged between 18 and 64 have entrepreneurial intentions (Global Entrepreneurship Monitor, 2013). This low level of intention cannot be separated from environmental and socioeconomic constraints common to the nation's citizens and over reliance on government limited employment opportunities. As regard agripreneurship; government neglect and people's perception toward agricultural sector, its dwindling nature and poor technological advancement could be the reasons behind limited involvement in it. But, the good part of it is that agricultural sector has the potential for providing high income provided it is carried out in the right way (Man, 2007).

Agricultural entrepreneurship presents far more opportunities for entrepreneurial development in the sense that it is a breeding ground for micro-business. All the same, the role of the entrepreneur as an agent of economic growth and employment generation in the society has gained considerable attention both in the literature and the policy thrust of well-developed and developing economies (Lauder et al., 1994). In the recent time, the call for youth involvement in agriculture across the nation has lingered and is becoming stronger now, based on the current socioeconomic hardship, ageing farming population and food insecurity in the country. According to Aphunu and Atoma (2010), in Nigeria,

farming population is aging. It is therefore practically impossible for this aged generation dominating agricultural sector to deliver the expected productivity to meet the food needs of the ever growing population. However, Oluwole (2008) argued that the self-sufficiency in agricultural production experienced by Nigeria in the early 1970's was because the society accepted as part of its culture to have a child follow the parents to farm even as early as six years of age. He further stated that, even when the missionaries introduced formal education, it was still expected that a child goes to work on his father's farm after school hours and during weekends. The child, thus, obtained an informal education in agriculture through a system of apprenticeship. Furthermore, Oluwole (2008) argued that education in productive agriculture refers to the acquisition of skills, attitudes, and values that will make the students capable of production of agricultural produce. It should, therefore, provide knowledge and skills that may be directly or indirectly useful for agricultural activities. In this regard, Noroozadeh and Mehrabi (2006) stated that the development of entrepreneurship in applied and scientific higher education centers of agriculture is one of the efficient methods in increasing the efficiency of human resources in agricultural sector.

Khosravipoor et al. (2007), in a case study about identifying influential factors in empowering entrepreneurship for Agricultural Scientific-Applied Instruction Centers, presented some important indices. These include the necessity for changing instructional methods, the necessity for changing and improving educational contents, the necessity for equipping educational centers, changing the students' enrollment and selection, as well as improving the organization and management system of the Agricultural Scientific-Applied Instruction Centers.

In a study by Czuchry and Yasin (2008), it was found that gender and education have positive influence among students in Wells. The report revealed that the students were likely to have the will to engage in entrepreneurship three years after graduation. Stella (2008) also found that among British India and Chinese

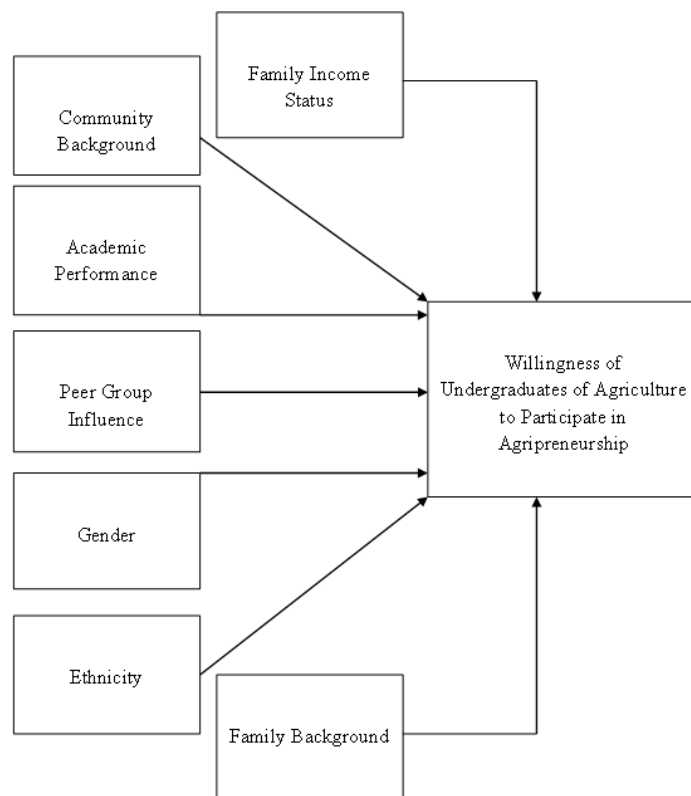


Figure 1. Theoretical framework

students, family and community background had positive influence on entrepreneurial will. Entrepreneurial family easily conditions their children or inspires them through success or hardship. Djankov et al. (2005) stated that while students from wealthy family might be motivated by ease of access to capital, the less privileged may view entrepreneurship as a necessity for getting out of financial bondage, complementing parents' income and/or saving generation unborn. Davidsson (1991) reported that beliefs of certain people that include colleagues, friends, family, and other relevant contacts influence a person's entrepreneurial motive. Hammond et al. (2007) stated that youth's family background and home experiences are found to exert powerful influences over educational career. Grawe and Mulligan (2002) reported that economic resources and potentials of parents correlate significantly with children's schooling process and their academic achievement. They concluded that children who come from families with prestigious occupations had more resources and their parents can afford to pay for extra lessons and other auxiliary educational services. Such parents can mold the behavior of their children using pecuniary incentives

to motivate their academic motives toward making a career choice.

On the other hand, *Global Entrepreneurship Monitor (GEM) (2003)* reported that ethnicity has a tendency to influence entrepreneurial willingness. The report says that, in the United States of America, African Americans participate more in entrepreneurial activities compared to Asian, White, and Hispanic Americans. This could be true, as Nigeria is diverse in terms of ethnicity. Wang and Wong (2004) also further argued that academic performance have influence over students' willingness to participate in entrepreneurship, because those with higher academic performance are more likely to go for white collar jobs than self-employment, while those with lower academic performance may go into entrepreneurship as a relief. This could be applicable in Nigeria considering the limited employment opportunities, and poor entrepreneurship knowledge relative to various fields of learning such as agriculture.

In regard to the aforementioned challenges, the present study examined the following objectives:

1. Socioeconomic characteristics of the agriculture undergraduates in the study area;

2. Willingness of agriculture undergraduates to participate in agripreneurship in the study area;

3. Selected socioeconomic determinants influencing the willingness of agriculture undergraduates to participate in agripreneurship in the study area;

4. Relationship between selected socioeconomic determinants and willingness to participate in agripreneurship.

In light of the existing literature and knowledge of the study area from reconnaissance survey, the following conceptual framework (Fig. 1) was conceived for the present study:

### MATERIALS AND METHODS

Northwest is one of the six geopolitical zones in Nigeria and the most populated one having 35,786,969 million inhabitants (National Population Commission (NPC), 2006). The geopolitical zone covers 221,437 square kilometers out of the 923,768 square kilometers total land mass of Nigeria. Seven states make up the zone, namely Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, and Zamfara. Northwest is semi-arid with the mean annual temperature of about 27°C. There is a single rainy season from May to October with the mean annual rainfall of 508-1016mm. The length of growing period ranges from 100 to 150 days. The vegetation pattern ranges from open woodland and scattered trees to dense vegetation. The major inhabitants of Northwest Nigeria are mixed farmers and livestock herders (Hassan et al., 2013). A multi-stage sampling technique was used in the study: First, based on the availability of manpower, facilities, and age of existence, three universities were purposively selected, namely Ahmadu Bello University, Zaria (ABU), Bayero University, Kano (BUK) and Usmanu Danfodiyo University, Sokoto (UDUS). Secondly, 50 respondents from each of the selected universities were disproportionately and randomly chosen to constitute the sample size of 150 respondents. The primary data were obtained through the use of a structured questionnaire, while secondary information was generated from journals, past literature, textbooks, as well as the internet. Both descriptive and in-

ferential statistics were employed as analytical tools; these include frequency, percentage, weighted mean, and Spearman rho rank correlation.

### RESULTS AND DISCUSSION

Tables 1a and 1b show that the majority (68.7%) of the respondents were male, while the females constituted 31.3%. The disparity in gender could be attributed to the period of colonial masters' system of education that greatly favored male enrollment in school, which aimed at meeting the manpower needed at the time thereby alienating females to a great extent (Omolewa, 2002). The result implies great disparity among males and females in enrollment for tertiary education, albeit the disparity may be less in other geopolitical zones of Nigeria due to awareness and access to education and literacy variation. A little above half of the respondents (52.6%) were found to be between the age of 21 and 25, while only 1.4 percent were within the range of 36-40 years. This stands in contrast to the modal age (31-35) for entrepreneurship reported in Nigeria by Okia-Anie (1994) and United State of America by Ottih (2011). The majority (90%) of the respondents were single, while only 10 percent were married. Apart from their studies, the majority of the respondents (57.3%) reported that they were not involved in any other tangible occupation.

An appreciable number (23.3%) were traders, farmers, and handworkers (6.7% each), while civil servants were the minority (6.0%). The majority (61.3%) of the respondents were from urban areas, while only 14.7 percent were from peri-urban communities, and all others were from rural communities. This implies limited access to education by rural people. Almost 60% (58.7%) of the respondents fall in the middle income (200,000 - 1,000,000/annum) category used in the study, while the minority (13.3%) were from low income ( $\leq$  200,000) category. An average academic performance of cumulative grade point average (CGPA) 1.50 - 3.49 was recorded as dominant. The majority of the respondents (55.3%) were Hausa/Fulani, Yoruba (14%), Igbo (6.7%), and others that in-

Table 1 a  
Distribution of Respondents Based on Socioeconomic Characteristics

Socioeconomic characteristics	Frequency	Percentage
<b>Gender</b>		
Male	103	68.7
Female	47	31.3
<b>Age (years)</b>		
≤20	33	22
21-25	79	52.6
26-30	33	22
31-35	3.0	2.0
36-40	2.0	1.4
<b>Marital status</b>		
Single	135	90
Married	15	10
<b>Secondary occupation</b>		
Handiwork	10	6.7
Trading	35	23.3
Farming	10	6.7
Civil service	9.0	6.0
None	87	57.3

Table 1 b  
Distribution of Respondents Based on Socioeconomic Characteristics

Socioeconomic characteristics	Frequency	Percentage
<b>Socioeconomic characteristics</b>		
Community background		
Rural	36	24
Peri-Urban	22	14.7
Urban	92	61.3
Family economic status/annum		
> 1,000,000	42	28.0
200,000-1ml	88	58.7
≤ 200,000	20	13.3
Academic performance		
>3.50	3	2.0
2.40-3.49	83	55.3
1.50-2.39	64	42.7
Ethnic group		
Hausa/Fulani	83	55.3
Igbo	10	6.7
Yoruba	21	14.0
Others	36	24.0

clude Nupe, Tiv, Kanuri, Igala and Epira were 24 percent.

Table 2 shows that the majority of the respondents (62%) preferred to study other fields. The situation could be a function of national neglect of the agricultural sector and its study in the country. Adekojo (1998) reported that agriculture, which was the backbone of Nigeria's economy, engaged over 70% of Nigerians. But sadly,

since oil boom, it has been given less concern, which resulted into diversion of investments and government's reduced interest in the sector, thereby making youths perceive limited career opportunities in agricultural sciences.

Manyong et al. (2005) also reported that Nigeria's agricultural sector flourished between 60s and 70s, but declined in importance thereafter. One of the consequences is the departure of the

Table 2  
Distribution of Respondents Based on Preferred Field of Study

Fields of Study	Frequency	Percentage
Agricultural sciences	57	38.0
Other fields	93	62.0

Table 3  
Distribution of Respondents Based on the Reason for Preference of Agricultural Sciences as a Field of Study and Otherwise

Reasons	Frequency	Percentage
It is Important	37	24.6
It is Self-relying	20	13.3
Not promising	54	36.0
Not attractive	39	26.0

interest of the majority of youngsters to pursue career in agricultural sciences for a living, rather the will to practice it as hobby when attained a certain social status of power or wealth. In fact, even at that, it is because it is the modern trend due to the inevitability of agricultural goods and services for continued existence.

Table 3 summarizes the motives behind the preference of agricultural sciences or otherwise for a career. The majority of the respondents (62%) did not choose to study agricultural sciences for a career due to either its view as unpromising or unattractive in nature; a possible initial driving force for unwillingness to participate in agripreneurship. The respondents that did not choose to study agricultural sciences for a career do opt to study it, because they were admitted through a rigorously competitive and uncertain process, thus accepting courses given to them different from their choices. About 38%

preferred to study agricultural sciences either for self-reliance or importance reason.

Adekojo (1998) reported that agriculture, which was the backbone of Nigeria's economy, engaged over 70% of Nigerians. But sadly, since oil boom, it has been given less concern which resulted into diversion of investments and government's reduced interest in the sector, thereby making youths perceive limited career opportunities in agricultural sciences. In line with this, Makinde (2009) opined that if the food needs of the country are to be met and economic development is to proceed, youth need to be trained as they are more receptive to new ideas and innovations; hence, they could be used as channels for disseminating new technologies to older farmers in the community and to carry out the whole complex career in agriculture.

Table 4 presented varying degrees of responses on constructs asked that depict willingness to

Table 4  
Distribution of Respondents Based on Their Willingness to Participate in Agripreneurship

SN.	Constructs	SA	A	U	D	SD	WMS	MR
1	I prefer to be an employer than an employee in my profession	106	26	8	7	3	4.50	7
2	I want to translate my formally acquired knowledge into practice	119	28	2	-	1	4.76	1
3	I want to independently practice the skills I acquired in school for self-reliance	101	36	8	5	-	4.55	5
4	I want to be my own boss in sustainable agriculture or agriculture-related business	104	41	4	1	-	4.65	3
5	I want to create job opportunities through my profession	111	36	2	1	-	4.71	2
6	I want to challenge myself through creativity in agriculture	91	52	6	1	-	4.55	6
7	I want to transform challenges in agriculture into commodities and services of value	79	57	13	1	-	4.42	11
8	I want to change the face of agricultural productivity	91	42	15	1	-	4.48	8
9	I want to explore my talent through my profession	99	43	8	-	-	4.60	4
10	I have passion for dynamism in agriculture and related activities	80	60	7	3	-	4.44	10
12	I want to practice agripreneurship as a career for livelihood	74	57	17	2	-	4.35	12
13	I want to shape my professional competence in agriculture through commodity production and/or service provision	77	65	7	1	-	4.45	9

\* Strongly Agree (SA) = 5, Agree (A) = 4, Undecided (U) = 3, Disagree (D) = 2 and Strongly Disagree (SD) = 1

\* Weighted Mean Score = WMS \*Mean Rank = MR

Table 5  
*Distribution of Respondents Based on Socioeconomic Determinants Influencing Willingness to Participate in Agripreneurship*

SN.	Socioeconomic determinants	VH	H	N	L	VL	WMS	MR
1	Gender	55	64	7	16	8	3.95	2
2	Community Background	45	73	8	19	5	3.89	3
3	Family Background	52	59	13	21	5	3.88	4
4	Family Economic Status	60	61	10	16	3	4.06	1
5	Academic Performance	3	20	61	64	2	2.68	7
6	Ethnicity	23	33	23	44	27	2.87	6
7	Peer group influence	5	-	145	-	-	2.90	5

\* Very High (VH) = 5, High (H) = 4, No (N) = 3, Low (L) = 2 and Very Low (VL) = 1

\* Weighted Mean Score = WMS

\* Mean Rank = MR

participate in agripreneurship: "I want to translate my formally acquired knowledge into practice, I want to create job opportunities through my profession and I want to be my own boss in sustainable agriculture or agriculture-related business" ranked 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup>, respectively, while "I have passion for dynamism in agriculture and related activities, I want to transform challenges in agriculture into commodities and services of value and I want to practice agripreneurship as a career for livelihood" ranked 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup>, respectively.

Although all the mean ranks are above 4.00, the aforementioned three high and low mean ranks imply the presence of willingness to participate in agripreneurship to an appreciable extent, but looking at rank 12 it signifies that not as primary occupation for living. It could be a consequence of agriculture knowledge acquired (considering the results in table 3 and 4) and shortage of the training received in providing the necessities needed for the development of the will to participate in agripreneurship for self-reliance, respectively. This is in similitude with what was found by Kumar et al. (2013) in a study of students' willingness to become entrepreneurs at Presidents' university, Indonesia. They reported that entrepreneurship education and individual desire influence willingness toward entrepreneurship. On the other hand, Mukembo (2013) reported that in Uganda and many developing countries, the challenge of ensuring food security for their growing populations amid a decline in youth engagement in

agriculture is being faced. Although, the employment opportunities available in the sector continue to increase for graduates in agriculture, in many countries, too few youth have embraced food production as a career field (Food and Agriculture Organization, Technical Centre for Agricultural and Rural Cooperation, and International Fund for Agricultural Development, 2014). Therefore, attracting youth and retaining them in the agricultural sector remains a global challenge.

A look at Table 5 reveals that, from among the seven socioeconomic determinants influencing willingness to participate in agripreneurship analysed, family economic status ranked 1st, while academic performance ranked 7th. This implies that among the studied socioeconomic determinants by researches before, in North-western Nigeria which is the most economically backward and populated in the country, family economic status was the major influencing determinants of agriculture undergraduates' willingness to participate in agripreneurship.

This is in line with the findings of Djankov et al. (2005) that showed that students from wealthy family might be motivated to participate in agripreneurship due to the ease of access to capital. On the other hand, academic performance reported by Wang and Wong (2004) as influencing entrepreneurship among university students was found to be the least influencing factor affecting the willingness to participate in agripreneurship in the study area. However, other socioeconomic determinants influencing the willingness of agri-

Table 6  
Relationship Between Socioeconomic Determinants and Willingness to Participate in Agripreneurship

Variables	Coefficient ( $r_s$ )	P-value	Remark
Gender	0.321**	0.000	S
Community background	0.321**	0.000	S
Family background	0.281**	0.000	S
Family economic status	0.164*	0.045	S
Academic performance	-0.085	0.303	NS
Ethnicity	0.178*	0.029	S
Peer group influence	0.005	0.543	NS

\* ( $p > 0.05$ ), \*\* ( $p > 0.01$ )

S – Significant

NS – Not Significant

culture undergraduates to participate in agripreneurship were found in the decreasing order of gender, community background, family background, peer group influence and ethnicity.

Table 6 shows the relationship between socioeconomic determinants and willingness to participate in agripreneurship. Gender ( $r_s = 0.321$ ,  $p < 0.01$ ), community background ( $r_s = 0.321$ ,  $p < 0.01$ ), family background ( $r_s = 0.281$ ,  $p < 0.01$ ), family economic status ( $r_s = 0.164$ ,  $p < 0.05$ ) and ethnicity ( $r_s = 0.178$ ,  $p < 0.05$ ) had significant association with willingness to participate in agripreneurship, while academic performance ( $r_s = -0.085$ ,  $p = 0.303$ ) and peer group influence ( $r_s = 0.005$ ,  $p = 0.543$ ) had no significant association with willingness to participate in agripreneurship.

Accordingly, a positive correlation indicates a positive association between the variables, while negative correlation indicates negative association between the variables. In essence, an increase in any of the significant variables causes an increase in willingness to participate in agripreneurship by the agriculture undergraduates. However, willingness to participate in agripreneurship does not increase when any of the non significant variables either increases or decreases.

The highest strength of the relationship between willingness and peer group influence further buttress opinions expressed by a number of scholars. Conversely, Azubuike (2011) opined that the influence of peer groups is also an important factor in choosing a professional career.

## CONCLUSIONS

Based on the major findings of the present study and their relevant interpretation, the following conclusions were drawn:

1) The majority of the agriculture undergraduates were male, within the active age and come from urban areas.

2) Most of the agriculture undergraduates have the will to participate in agripreneurship but not as primary occupation.

3) Several socioeconomic determinants have influence on willingness of agriculture undergraduates to participate in agripreneurship in various degrees. Most importantly family economic status

4) Gender, community background, family background, family economic status and ethnicity have significant relationship with willingness of agriculture undergraduates to participate in agripreneurship.

### Recommendations

Based on the major findings and conclusions of the present study, the following recommendations are given:

1) Agriculture knowledge acquired should be linked with the happenings in the real world so as to minimize the existing parallel operation of industry and academia. This would substantially help in developing willingness of youngsters; especially agriculture undergraduates to participate in agripreneurship by connecting knowledge acquired with practical application.

2) In the course of training students of agriculture in agripreneurship, consideration should be given to socioeconomic determinants so that



difficulties associated are reduced or done away with through the development of willing and positively aspiring mindsets.

3) Modalities should be drawn by government to provide graduating students with start-up capital to startup agripreneurship ventures of their desire so as to ease off the various socio-economic hardships faced by intending entrepreneurs at the inception of their career.

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#### REFERENCES

- Adekojo, S.A. (1998). Functional agriculture for employment: An appraisal. *Nigerian Journal of Agriculture Education* 1(1), 79-92.
- Aphunu, A. & Atoma, C.N. (2010). Rural Youth Involvement in Agricultural Production in Delta Central Agricultural Zone: Challenge to Agricultural Extension Development in Delta State. *Journal of Agricultural Extension* 14 (2), 46-47.
- Azubuike, C.O. (2011). Influential factors affecting the attitude of students towards vocational/technical subjects in secondary schools in South-eastern Nigerian. *Journal of Education Social Research* 1(2), 49-56.
- Czuchry, A.J., & Yasin, M.M. (2008). International entrepreneurship: The influence of culture in teaching and learning styles. *Annual Journal of Entrepreneurship Education*, 11, 1-15.
- Davidsson, P. (1991). Continued entrepreneurship: Ability, Need and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6, 405-429.
- Djankov, S., Edward, M., Yingyi, Q., Gerard, R., & Ekaterina, Z. (2005). Who are Russia's entrepreneurs? *Journal of the European Economic Association*, 3(2-3), 587-597.
- Food and Agriculture Organization, Technical Centre for Agricultural and Rural Cooperation, & International Fund for Agricultural Development. (2014). *Youth and agriculture: Key challenges and concrete solutions*. Food and Agriculture Organization (FAO), Rome, Italy, Technical Centre for Agricultural and Rural Cooperation (CTA), Wageningen, The Netherlands, and International Fund for Agricultural Development (IFAD), Rome, Italy. Retrieved from [http://www.ifad.org/english/youth/publications/cta\\_fao\\_ifad\\_pub.pdf](http://www.ifad.org/english/youth/publications/cta_fao_ifad_pub.pdf) Retrieved 27/06/2015
- Global Entrepreneurship Monitor (GEM). (2003). *Global Report*. Babson College, MA, United States
- Global Entrepreneurship Monitor (GEM). (2013). *Global Report*. Babson College, MA, United States
- Grawe, N. D. and Mulligan, C. B., (2002). Economic interpretations of intergenerational correlations. *Journal of Economic Perspectives*, 16(3): 45-58
- Hammond, C., Linton, D., Smink, J., & Drew, S. (2007). Dropout risk factors and exemplary programs, a technical report, National Dropout Prevention Centre at Clemson. Retrieved from [http://www.cisnet.org/member/library/resources/downloads/Dropout\\_Risk\\_Factors\\_and\\_Exemplary\\_Programs\\_FINAL\\_5-16-07.pdf](http://www.cisnet.org/member/library/resources/downloads/Dropout_Risk_Factors_and_Exemplary_Programs_FINAL_5-16-07.pdf)
- Hassan, M.R., Steenstra, F.A., & Udo, H.M.J. (2013). Benefits of donkeys in rural and urban areas in northwest Nigeria. *African Journal of Agricultural Research*, 8(48), 6202-6212.
- Khosravipoor, B., Iravani H., Hosseini S.M. & Movahhed M.H., (2007). Identifying and analyzing educational factors affecting students' entrepreneurial abilities of agricultural applied-scientific centers. *Iran Agricultural Science Journal*, 38(2), 207-217.
- Kumar, S., Vifenda, A.T., Brigitta, M., & Valerie, (2013). Students' willingness to become an entrepreneur: A survey of non-business students of President University. *Journal of Business and Management*, 15(2), 94-102.
- Lauder, D., Bookcock, G., & Presley, J. (1994). The system of support for SMEs in the UK and Germany. *European Business Review*, 94(14), 9-16
- Makinde, M.A. (2009). Agriculture on the school curriculum: A plea. *Teachers Monthly*, 6 (13), 67.
- Man, N. (2007). *The agricultural community, 50 years of Malaysia agriculture: Transformation Issues*. Challenges and Direction. Serdang, Selangor. UPM Publisher, pp. 128-213.

- Manyong, V.M., Ikpi, A., Olayemi, J.K., Yusuf, S.A., Omonona, B.T., Okoruwa, V., & Idachaba, F.S. (2005). *Agriculture in Nigeria: Identifying opportunities for increased commercialization and investment*. IITA, Ibadan, Nigeria, pp. 159
- Mukembo, S.C. (2013). *The views of young farmers clubs members on their clubs' activities, their career interests, and their intentions to pursue agriculture-related career preparation at the post-secondary level: An embedded case study of two secondary schools in eastern Uganda*. Unpublished thesis, Department of Agriculture, Oklahoma State University, USA.
- National Population Commission (NPC) (2006). The 2006 Nigeria Census Figures. Retrieved from <http://nigeriaworld.com/articles/2007/jan/112.html>
- Noroozzadeh, R., & Mehrabi, Y.M. (2006). Applied-Scientific higher education centers to be entrepreneurs in agriculture sector. *Journal of Research and Construction*, 1(2) 78-91.
- Okia-Anie, I.A. (1994). *Venture characteristics and success: A study of selected entrepreneurships in Port Harcourt*. MBA thesis, Rivers state University of science and Technology, Port Harcourt, Nigeria.
- Oluwole, Y.A. (2008). Effective production agriculture in Nigerian secondary schools: Issues at stake. Retrieved from <http://www.linkedin.com/answers>
- Omolewa, M. (2002). *Education in Africa Atlases (Nigeria)*. Paris-France, Les Editions J.A., Pp. 115-118.
- Ottih, L.O. (2011). *Entrepreneurship: personality, process and enterprise*. Port Harcourt: Pearl Publishers.
- Stella, M.K. (2008). British Indian and Chinese student, graduate and academic international entrepreneurship. DIUS Research Report 08 20. Pp. 24-33
- Wang, C.K., & Wong, P.K. (2004). Entrepreneurial interest of university students in Singapore. *Technovation*, 24(4), 163-172.
- World Bank (2009). World development indicators. World Bank, Washington DC. Retrieved from <http://publications.worldbank.org/WDI>

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