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Role of YouTube on Influencing Educated Youth into Farming in Kano State, Nigeria

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ABSTRACT
The immense increase of unemployed youth precisely educated due to the inability of government and private firms to employ them has been a serious issue that is worrying the policymakers. The agricultural sector has been pointed out by the international development agencies as a key sector to employ more youth precisely if supported with modern technologies. However, the engagement of educated youth in the sector is poor due to the inadequate qualified extension personnel who can guide and counsel the new intake youth. The study examines the role played by YouTube in providing the information needed that can guide and teach new intake educated youth participation into farming in Kano state, Nigeria. The study selected 120 educated youth respondents from a stratified sampling method and Binary logit was used in the estimation. The findings indicate that the use of YouTube by educated youth has been found positively significant in influencing their participation in farming. The study suggests the need to include teaching on the process of utilisation of YouTube in the agricultural sector particularly those who are at secondary schools and higher institutions. Also, all local governments should organise free workshops on educating and enlightening youths on accessing agricultural information from YouTube. Also, the inclusion of providing data and computers should be made among subsidizing farm inputs provided to youth farmers.

Keywords: farming, unemployment, YouTube**,** youth,

Introduction
Extension services in agriculture evolve around meeting farmers on various agricultural needs that required guidance, counselling, enlighten and techniques for adoption of modern farm technology on planting seasons, crop varieties, quality seeds, animal breeds, disease and pest control mechanisms among others (El Bilali & Allahyari, 2018). The traditional

visit by extension workers has become a central aspect of today's agriculture extension due to resource constraints, transportation and bureaucratic challenges among others. These paved the way to the adoption of technological advancements that increase to the growing penetration of non-contact of extension in recent years for greater efficiency (Omulo & Kumeh, 2020). Although several programs have been implemented to improve the extension services, the current participation of private firms has improved the sector. However, there is biggest opportunities in ICT-enabled extension especially in advisories that can easily address the challenges of poor governance and management capacities and cultures and inadequate of qualified staff in extension services delivery (Huber, 2017). Also, there are complaints on the inability to reach majority of farmers due to insufficient of technical human resource which leads to decrease efficiency and dilute the focus on the extension services in the sector. Though, over period of time television and radio have been used in passing extension information, the recent development in technological communications has provide ways of technological transfer (Raj & Bhattacharjee, 2017). Thus, sharing knowledge through the internet and its allied Information and Communication Technology (ICT) was common among the preserve of 'experts', despite farmers too, can use their mobile phones and internet-based applications to access information related to their needs (World Bank, 2017).

Recently, information and communication technologies have connected the people through its social media. Thus, social media has entirely changed the landscape of personal communication.

YouTube is the second largest search engine and third most visited site on the web and are the major platforms for agricultural information dissemination. The remarkable growth of social media can mostly be connected to the common platform it gives to people to create their own content and share their ideas via texts, images, videos or sound (Suchiradipta & Saravanan, 2016). YouTube is the largest online video material repository with more than one billion users in the world (Camm, Russell, Xu & Rajappan, 2018). Also, it is one of the most recognised video-hosting service in the social media flatform. Though, it is more than video viewing and sharing channel, as it has provided career for new talents in the field of'a business, arts, education, psychology, entertainment, medicine, entertainment, etc. The triumph of YouTube is an echo of I the channel has provided to the users and how the users have use of it (Balakrishnan & Griffiths, 2017). It allows users to view, interact, engage, collaborate and assess system of communication (Gill, Arlitt, Li, & Mahanti, 2007). It is also the most popular dedicated video- applications, with more than a billion users, nearly 33% of Internet populace (YouTube, 2016). It has reported that in the year 2016 more than hundreds of million hours are spent daily on platform, and result in billions

of views everyday platforms. Moreover, it has found in 2020 about 2.6 billion, 2 billion, and 1.6 billion of people are actively using Facebook, YouTube, and WhatsApp respectively every month (Anonymous, 2020). The development of devices and multifunctional digital component have stimulated users to engage with YouTube via hardware platforms and interfaces including personal computers, television, laptops, tablets, and smartphones. Therefore, YouTube serves as a platform for professionals to showcase themselves (Cha, 2014). Moreover, YouTube video is an admirable source of dissemination of knowledge using audio-visual aids (Mamgain, Joshi, & Chauhan, 2020). It is use in the educational process as it provides information to both teachers and students (Alkhudaydi, 2018). These benefits including focusing student's concentration, attracting student's attention and increasing their understandings.

However, tradition and culture play a great role in defining youth (Giuliani *et al.*, 2017). The word has been defined from different geographical locations stage of life and age ranges (FAO, 2002; Leavy & Smith, 2010). According to the United Nations (2009) youth was defined as people between 15 and 24 years of age. While in Nigeria context as defined by the Baseline Youth Survey Report, the youth age bracket starts from 18 – 35 years old (NBS, 2012). The youth involvement in farming will prove the acceptance of new agricultural technology because of their innovative behavior like adding value to agricultural commodities, integrating ICTs into agricultural activities and acquiring new business opportunities (Sumberg & Hunt, 2019). Also, digitalisation provides youth with an opportunity to participate profitably in the various capacities in the agricultural sector (Farayola *et al.* 2020). The internet and social media usage among youth improve economic status of the communities and aids in accessing and sharing information, market information and production technologies. This has improved innovations, efficiency and minimise entrepreneurial risks. Therefore, The ICT content should be targeted to revolutionarise youth through expanding Twitter, YouTube and WhatsApp (Irungu, Mbugua & Muia, 2015).

The growing number of unemployed and underemployed youth in developing countries and Nigeria in particular has become a worrisome issue in the world (IMF, 2018). For instance, it was projected that by the year 2030, about 440 million youth will enter the rural labor market in Africa (World Bank Group, 2017). It was reported that about 47% of Nigeria's university graduates are unemployed annually (Kazeem, 2016), despite the rise of literacy rate among youth to 72.79% in 2016 (Trading, 2018). The situation could even be eviler, considering that on average over 6000 youth graduates are produce from the thirty-seven in every year, and enter labour market (Ezeah & Gever, 2017). Kano is one of Nigeria's states with the highest number of youth in Northwest zone states with about

3,713,679 (NBS, 2017). The state was blessed with an abundant fertile land for farming, this made majority of the people of the state are either directly or indirectly engaged in farming. Yet, majority of youth of the state are unemployed or underemployed (33%) (Sagagi, 2019). The high rate of drug abuse in the state was connected to youth unemployment (Guardian, 2017).

Literature Review

There are number of studies that were conducted in area of stimulating youth participation in farming as well as implications of usage of social media among the youth. For instance, OLuyare et al. (2019) examined attitude of farm youth on use of social media in rural community of FCT, Nigeria. The study used a multistage sampling technique in selecting about 234 samples. The finding indicates that farm youth had indifferent attitude towards social media usage. Also, Bankole et al. (2020) assess factors influencing social media usage for agricultural dissemination among farm youth in FCT, Nigeria. About 212 samples were selected from adopting a multistage sampling method. The study found that sociocultural and social media-related were the two factors that influenced social media usage for agricultural information dissemination among farm youth. Moreover, Balakrishnan & Griffiths (2017) analysed the relationship between youth addiction, content creation and contact viewing in India. About 410 samples were selected and administered questionnaire. A structural model was used in the analysis. The result indicates that content creation in YouTube had a closer connection with YouTube addiction than content viewing. Furthermore, Mamgain, Joshi & Chauhan (2020) analysed the current and future of perspective of social media in the agribusiness and extension. The study found that social media are electronic communication tools that allow users to interact, create, share, retrieve and exchange information and ideas in any form that can be discussed upon, archived, and used by virtual communities and networks. Further, Maziriri, Gapa, & Chuchu (2020) examined students' perception towards the use of YouTube. The study selected 377samples from the selected universities through non -probability sampling. Structural Equation Model was used in the analysis. The study found that there was a great perception among students upon usefulness of YouTube in learning process. In addition, Almobarraz (2018) studied the utilisation of YouTube as an information resource to support higher institution learning in Saudi Arabia. Also, the study established there is a strong relationship between intention to use YouTube and adoption of it as an educational tool. Moreover, Datti, Said, Ismail & Abd.Rahman (2021) assess the effect of extension connectivity technology in influencing youth participation in paddy farming in Kano, Nigeria. The study selected 180 youth respondents from mixed sampling techniques. The binary logit was used in the estimation of different models. The findings proved that

extension connectivity used in farming can inspire youth to participate and remain in paddy farming.

Moreover, Thakur & Chander (2018) examined the use of Youtube, Facebook and Whatupp on sharing farming extension knowledge and advisories in India. The study used online exploratory method. The findings indicate that Youtube has become a good source of dissemination extension information precisely in animal husbandry. Furthermore, Tata & McNamara (2020) assess the effect of Catholic Relief Service (CRS), Skills for Marketing and Rural Transformation (SMART) and Farmbook Information Communication Technology (FICT) on agricultural extension services in Kenya. Random sampling technique was used in selection 60 participants and regression models were employed in the analysis. The findings indicate that the use of CRS, SMART and FICT have significantly improve the extension service delivery and yield positive results to the farmers.

These previous studies failed to focus on the bridging the existence gap in area of assessing effect of YouTube on influencing educated youth participation into farming. This study aims to provide an answer. This will aid the policymakers especially in answering the clarion call made by World Bank to developing countries to incorporate youths in agricultural sector by investing in ICTs.

Methodology

The data of this study were obtained from educated youths who obtained minimum certificate of Diploma and were within age range between 18_35. Questionnaires were administered to them around March- June 2020 within a metropolitan of Kano state, Nigeria. The questionnaire instrument entails information demographic profiles of youth, role of YouTube in accessing information and learning, effect of demonstrating agricultural extension services through a YouTube, responses of questions asked through YouTube and the influence of YouTube in inspiring youth's participation in farming. Moreover**,** the study adopted a stratified sampling technique by identifying areas with high number of youths, then, a purposive sampling was used to identify young persons who are within youthful age. At the third stage, four local government areas were randomly selected. In the fourth stage, about 120 youths that used YouTube were selected as the study respondents. Moreover**, l**ogistic regression was employed in estimation the model. It works in similar direction with a linear regression, but with a binomial response of the dependent variable. Therefore, the probabilities of dependent variables of influencing youth by using YouTube is either be 1 or 0; Yes or No (dichotomous). Likewise, the marginal effect of each

independent variable was provided to clarify the rate of change that may occur. The model specification was given as follows (Babcock, *et al.* 1995; Maddala 1990):

$$Prob Y_{ij}^{*} = \propto + \sum \beta_k X_k + \varepsilon_{Y_{ij}^{k}} \quad (1)$$

Thus, youth influence by the YouTube was modeled as a function of demographic, farm factor and YouTube as was shown as follows:

$$Y_{ij}^{*} = \alpha_0 + \Sigma_{j=1}^{1}\beta_j DMR_i + \Sigma_{j=1}^{2}\rho_j FRM_i + \Sigma_{j=1}^{4}\rho_j YTB_i + \varepsilon_i \quad (2)$$

Where $Y_{ij}^{*} =$ youth influence by the YouTube (1=Yes, 0=No), β is a vector of parameters that relate the independent variables to the dependent variable. DMR signifies demographic profile which includes age, level of education, and income. Then FRM indicates farm size, subsidized farm inputs, membership of farmers' association and YTB was referred to YouTube connectivity which consists of video, and text usage and ε_i referred to error terms. Therefore, in this study, youth influence is their willingness to participate into farming as an occupation.

Findings and Discussions

The results were presented in two parts. The first consist the demographic and the second consist the estimated results.

Socio -Demographic Characteristics of Youth

The socio – demographic qualities of youth were indicated in Table 1. The Table indicates that about 70% respondents were between the age ranges of 18-27. This is because of the age level that usually are either completed their degree or sub-degree programme. While about 30% are within the age bracket of 28-35. This is in line with the majority of the respondents (71%) have acquired sub degree certificates. These consist of Diploma, and N.C.E. While about 29% are graduates who acquired both degrees and post degrees certificates. Also, it has shown that from 120 youth respondents, about 82% were male and only 18% were female. The income earnings of the respondents have shown is low due to their unemployment and underemployment status as many are either fresh in business or new to enter labour market. Also, over 40% do not have farming experience, while more than half of the respondents are either currently participating or were involved in farming process during teenage stage. Moreover, almost have of the respondents spent only 1-5 years using YouTube. While about 30% have experience of less than a year. Only 7% have 10 years and above experience

Table 1: Socio-Economic Characteristics of the Respondents

Variable	Frequency	Percentage
Demographic factors		

Age distribution			
18- 27		84	70.00
	28-35	36	30.00
Gender			
Male		98	81.67
Female		22	18.33
Level of Education			
Sub degree		85	70.83
Graduate		35	29.17
Family size (number)		2*	
1-5		18	15.00
6-10		08	06.67
11 and above		09	07.50
No family		85	70.83
Annual income (naira)		150000*	
Low income		76	63.33
Middle income		33	27.50
High income		11	9.17
Farming experience (Years)		3*	
1-5		28	23.33
6-10		26	21.67
11 and above		18	15.00
No experience in farming		48	40.00
Years spend on using YouTube		2*	
Less than a year		36	30.00
1-5		59	49.17
6-10		17	14.17
11and above		08	06.67

*Mean of variables.

Table 2: **Binary Logistic Regression and Marginal Effect Results**

It has shown in Table 2 the estimated results of two models. The first model estimated the effect of demographic factors on influencing educated youth to use You Tube. From the results only level of education and income among the factors influence educated youth.

This is connected to the major role plays by income in accessing data from communication companies. Level of education is a catalyst that allow educated youth to learn faster and understand easily series of lectures and demonstrating from the You Tube. Moreover, an estimated result of model II indicates that a percentage increase in accessing youtube video that teach farming strategy may likely influence educated youth participating into farming by almost 40 percentage. Also, a percentage increase in accessing youtube messages or text from farming experts or consultants may likely influence educated youth into farming by 5 percent. These findings are in line with the previous findings (Irungu, Mbugua & Muia, 201).

VARIABLES	**MODEL 1**		**MODEL 11**	
Demographic factors		ME		ME
Level of Education	0.057**	0.13**	0.047***	0.002***
	(0.027)	(0.006)	(0.028)	(0.001)
Income	0.442***	0.015***	0.068**	0.015**
	(0.442)	(0.007)	(0.026)	(0.006)
Variable factors				
YouTube Video			0.211^{XXX}	0.399***
			(0.125)	(0.009)
YouTube Message			0.279^{XX}	0.053**
			(0.024)	(0.014)
Log likelihood	-235.62		-226.65	
Pseudo R^2	0.627		0.153	

Conclusion and Recommendations

The existence of massive unemployed educated youths in developing countries and Nigeria in particular has become a worrisome issue that needed a holistic approach. This study assesses the effect of YouTube on influencing educated youth to embrace farming as an occupation. The finding indicates that the use of YouTube by educated has been found positively significant in influencing their participation in farming. This finding may bridge an existence gap of insufficient literature that can be used in designing policies that can encourage more youth to venture into farming through utilisation of social media. The study suggests the need to update teaching curriculum, so that utilisation of social media precisely YouTube in the agricultural sector particularly among those who are at secondary schools and institutions can be included. Also, all local governments should organise free workshops on educating and enlightening youths on accessing agricultural information

from YouTube. Also, the inclusion of providing data and computers should be made among subsidizing farm inputs provided to youth farmers.

The study recommends more efforts should be gingered towards enlighten students at higher institutions upon the usage of YouTube through incorporating the topics in curriculum. A further study can be conducted on the assessing GSM operators and Television stations on providing agricultural extension services to youth.

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References

Alkhudaydi, (2018). Investigating factors that influence the use of You Tube in teaching biology in high schools in Saudi Arabia based on the technology acceptance model. *Electronic comprehensive journal for education and science publications*, *13*, 1-10.

Almobarraz, A. (2018). Utilization of YouTube as an information resource to support university courses. *The Electronic Library, 36*(1), 71-81.

Anonymous (2020). www.smartinsights.com/social-media-marketing

Babcock, B. A., Chaherli, N. M., & Lakshminara-yan, P. (1995). Programme participation and farm-Level adoption of conservation tillage: Estimates from a multinomial logit model. No. 95-WP136

Balakrishnan, J., & Griffiths, M.D. (2017). Social media addiction: What is the role of content in YouTube? *Journal of Behavioral Addictions*, 6(3), 364–377, Doi: 10.1556/2006.6.2017.058

Bankole, B., Abdulkarim, S. B, Ganiyu, L., Aderounmu, A. F., Danbaki, C. A., Okechalu, S. O., Akure, C. O., Lapkat, L. G., Adetunji, A. J., Bako, A., & Jayeola, E. O. (2020). Factors influencing social media usage among Farm youth in rural communities of Federal Capital Territory (FCT), Nigeria. Ad*vances in Social Sciences Research, Journal, 7(4) 454-461.* DOI: 10.14738/assrj.74.7748

Cammie, C. F., Russell, E., Xu, A. J., & Rajappan, K. (2018). Does YouTube provide high-quality resources for patient education on atrial fibrillation ablation? *International Journal of Cardiology*, *272*, 189-193

Cha, J. (2014). Usage of video sharing websites: Drivers and barriers. *Telematics and Informatics,* 31(1), 16–26. doi:10.1016/j. tele.2012.01.003

Datti, M.I., Said, R., Ismail, N.W., Abd.Rahman, A., (2021). Influence of extension connectivity on youth engagement into paddy farming in Kano state, Nigeria. *Studies of Applied Economics*

El Bilali, H., & Allahyari, M.S. (2018). Transition towards sustainability in agriculture and food systems: role of information and communication technologies. *Inf. Process. Agric.* 5 (4), 456–464. https://doi.org/10.1016/j.inpa.2018.06.006.

Ezeah, G. E., & Gever, V. C. (2017). Youths' perceptions of media campaigns on participation in agriculture in Enugu State. *International Journal of Communication: An Interdisciplinary Journal of Communication Studies.* (In English), 2, 46-55

FAO. (2002). Rural Youth.

Farayola, C. O., Adebisi, L. O., Akilapa, O., & Gbadamosi, F. Y. (2020). Does innovation enhance youth participation in agriculture: A review of digitalisation in developing country? *International Journal of Research in Agriculture and Forestry,* 7(2), 7–14.

Gill, P., Arlitt, M., Li, Z., & Mahanti, A. (2007). YouTube traffic characterization: A view from the edge. Proceedings of the 7th ACM SIGCOMM Conference on Internet Measurement 15–28. San Diego, CA: ACM.

Guardian. (2017, October). NDLEA expresses concern over drug abuse among minors in Kano. NAN.

Huber, S. (2017). Nigeria: Indepth assessment of extension and advisory services. Delivery Local Extension Capacity (DLEC) project. *Feed the Future*. No. AID-OAA-L-10-0002

IMF. (2018). Transcript of podcast with Alexander Pitt: "A Dream deferred: Inequality across generations In Europe.

Irungu, K.R.G., Mbugua, D., & Muia, J. (2015). Information and communication technologies (ICTs) attract youth into profitable agriculture in Kenya. *East African Agricultural and Forestry Journal,* 81(1), 24–33 Http://Dx.Doi.Org/10.1080/00128325.2015.1040645

Leavy, J., & Smith, S. (2010). Future farmers: Youth aspirations, expectations and life choices. *Future Agriculture culture, June.*

Maddala (1990). Dependent and quantitative variables in econometrics. Cambridge: Cambridge University Press.

Mamgain, A., Joshi, U., & Chauhan, J. (2020). Impact of social media in enhancing agriculture extension. *Agriculture & Food*, 9(2), 366-370

Maziriri, E. T., Gapa, P., & Chuchu, T. (2020). Student perceptions towards the use of YouTube as an educational tool for learning and tutorials. *International Journal of Instruction,* 13(2), 119-138. https://doi.org/10.29333/iji.2020.1329a

NBS. (2012). National baseline youth survey final report.

NBS. (2017). Labour force statistics Vol. 1: Unemployment and Underemployment.

Oluyaire, B., Abdulkareem, S.B., Okechalu, S.O. Lapkat, L.G. Akanni, R., Olayinka, V., Adetunji, A.J., Oke, O., Danbaki, C., Umar, Y.F., Oladimeji, J.E., & Akure, C. (2019). Attitude of farm youth towards social media usage for agricultural information dissemination in Federal Capital Territory, Nigeria, *International Journal of Development and Sustainability*, 8(12), 807-815.

Omulo, G., & Kumeh, E.M.(2020). Farmer-to-farmer digital network as a strategy to strengthen agricultural perform in Kenya: a research note on ' Wefarm' platform, technical forecasting & social change (158).

Raj, S., & Bhattacharjee, S. (2017). Social media for agricultural extension. *Extension Next, Bulletin,* No 1. Published by MANAGE Index

Sagagi, M. (2019, February). 4 million people are unemployed in Kano, Jigawa.

Suchiradipta, B., and Saravanan, R., (2016). Social media:NShaping the future of agricultural extension and advisory services, GFRAS interest group on ICT4RAS discussion paper, GFRAS: Lindau, Switzerland.

Sumberg, J., & Hunt, S. (2019). Are African rural youth innovative? Claims, evidence and implications. Journal of Rural Studies, 69(March), 130–136. https://doi.org/10.1016/j.jrurstud.2019.05.

Tata, S. & MCNamara, P.E. (20017). Impact of ICT on agricultural extension services delivery: evidence from the Catholic Relief Services Smart Skills and Farmbook project in Kenya. *The Journal of Agricultural Education and extension*.

Thakur, D., & Chander, M. (2018). Use of social media in agricultural extension: some indicators from India. International Journal of Science, Environment and Technology, 7 (4), 1334-1346.

Trading. (2018). *Nigeria - Literacy rate, youth total (% of people ages 15-24)*. https://tradingeconomics.com/nigeria/literacy-rate-youth-total-percent-of-people-ages-15-aA24-wb-data.html%0A%0A

United Nations (2009). *Declaration of the world summit on food security.*

World Bank, (2017). ICT in agriculture: connecting smallholders to knowledge, networks and institutions. World Bank, Washington, DC (Updated Ed). https://doi.org/10. 1596/978-1-4648-1002-2.

World Bank, and IFAD. (2017). Rural youth employment.

YouTube. (2016). YouTube. Retrieved from https://www.youtube. com/yt/press/statistics.html (May 25, 2017).