Stakeholders' perception, knowledge and attitude toward the goal to end poverty

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ABSTRACT: The study was carried out in Delta State, Nigeria to determine the stakeholders' perception, knowledge and attitude toward the goal to end poverty. The study used an ex-post-facto design and survey research method adopted on a population of 3,667 stakeholders, comprising Agricultural extension agents (101) in 3 extension zones, Agricultural science teachers (1,143) in 464 public secondary schools, and registered Cassava farmers (2,423) in 364 clusters with a sample size of 487 stakeholders selected through multistage sampling technique. A self-developed structured questionnaire on a 4-point scale was used to answer 3 research questions. The instrument went through the face and content validity by 3 experts. The reliability of the instrument was tested for internal consistency using the Split-half reliability technique and it yielded a mean ($\bar{x}$) reliability coefficient of 0.76. Data collected were analyzed using means ($\bar{x}$) and Standard Deviations. The findings of the study showed that the stakeholders' perception is positive, their knowledge is good and their attitude is positive toward the goal to end poverty. Based on the findings, the study recommended that the Government of Nigeria should implement policies that support agricultural infrastructures and technical assistance, as well as create an enabling environment that will boost the stakeholders' capabilities.

Keywords: Attitude, End poverty, Knowledge, Perception, Stakeholders, toward the goal.

INTRODUCTION:

To end poverty is a United Nations (UN) general assembly agenda to encourage improvement in stakeholders' livelihoods and incomes to meet basic physical, emotional, economic and sociological needs. The general assembly underpins her commitment to ending poverty in the areas of ensuring that all stakeholders have equal access to basic facilities and infrastructures, the same rights to her nation's economic resources, right of ownership over farmland, access to agricultural information and innovative technologies, resilience capacities, access and affordability of quality vocational education, among others (Agbidi et al., 2022; Ikeoji & Agbidi, 2021; UN, 2015). More so, the United Nations Education, Scientific and Cultural Organization (UNESCO, 2020) emphasized that all these areas of commitment are measures primarily aimed at ending the social, economic, and psychological demands of stakeholders on government.

The stakeholders are the Agricultural Extension Agents (AEAs), Agricultural Science Teachers (ASTs) and Cassava Farmers (CFs) who through their livelihood activities are engaged in agricultural production. Agbidi et al. (2021) describe these stakeholders as individuals who are engaged either directly or indirectly in an agricultural occupation. The AEAs and ASTs are a subset of stakeholders who are responsible for passing vital knowledge, skills and attitude about Agricultural education and production either through field trip experience, labouratory experience and classroom instructions (Agbidi & Ikeoji, 2020). The CFs are a group of individuals who are engaged in cassava production to meet their personal and family needs. Apart from oil and gas, agriculture is the mainstay of the state economy, and cassava is grown widely for local market consumption.

Stakeholders' perception refers to the way and manner the people who are in the agricultural workplace see and view things. Agbidi (2022) defined stakeholders' perception as the organized experiences of what these stakeholders see, hear, feel, and how agricultural information is being interpreted in their occupational livelihoods. Furthermore, knowledge acquired through information, awareness, and observations of past and present experiences is key to the formation of stakeholders' perceptions about ending poverty because it can help to create a conscious understanding of what sustainable development is all about and what it stands for (Agbidi, 2022).

This conscious understanding eventually forms the AEAs, ASTs and CFs' perception. Notwithstanding, greater education in human capital could influence stakeholders' perceptions and attitudes when directed appropriately. Some studies have shown that stakeholders' livelihood activities are dependent on their perception and knowledge reflected through their attitude predicated on intentional behaviour (Anguera et al., 2018; Foxall, 2020; Hagger, 2019). This suggests that knowledge and perception could precede attitude (Agbidi, 2022).

Vogel et al. (2014) remarked that attitudes could guide information, attention, and behaviour, even if the stakeholder is chasing after an unconnected desired goal. More so, the attitude of the stakeholders towards ending poverty could be changed through deliberate education. With better-informed stakeholders, emerging issues to ending poverty can be confronted with new thinking habits as reflected in quality Agricultural education (Agbidi et al., 2022). These habits will help them develop and key into the UN measures to scale away from poverty.

Many complex factors may influence sustainable means to end poverty in Nigeria, but it is clear that greater education in agriculture plays a veritable role in preparing stakeholders to make valid contributions toward ending extreme poverty. Osman et al. (2017)

remarked that a workforce with low or limited skill levels, poor educational attainment, and limited aspirations reduces productivity, economic growth, and a nation's capacity to compete in the global economy. Since behavioral attitude is a symptom of perception, it is important to understand the thoughts that are shaping the stakeholder's perception as well as directing their actions (Agbidi, 2022).

THEORETICAL FRAMEWORK:

This study is hinged on the Human Capital Theory (HCT) as propounded by Garry Becker (1993, 1964). The theory posits that human capital is an activity that influences and increases an individual or group of individuals' future resources. This activity consists of the knowledge, skills, and abilities of the AEAs, ASTs and CFs needed to increase production. The basic premise behind the HCT as the theoretical framework of this study is that stakeholders learning capacities are of comparable value with other resources involved in the production of food and other educational services aimed at bridging the gap towards the goal of ending poverty. It is believed that building the human capital of these stakeholders would result in multiple effects in the implementation and actualization of ending poverty as illustrated in Figure 1.

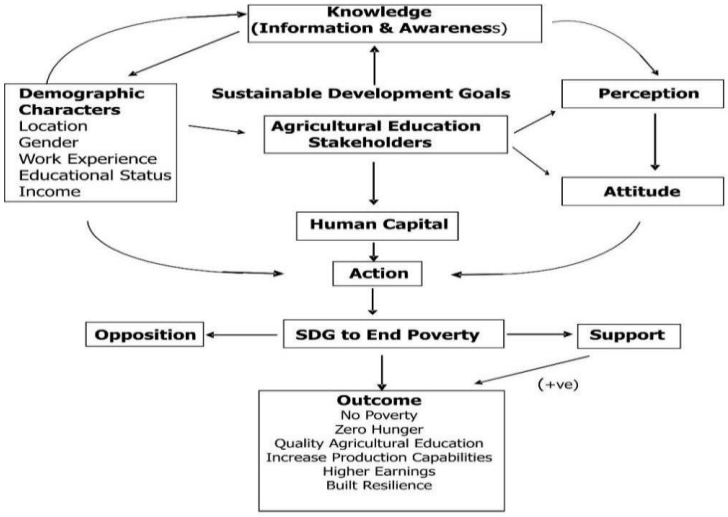

Fig 1: Action towards the Goal to End Poverty

The framework titled "Action Toward the Goal to End Poverty'' in Figure 1, shows the stakeholders' potential action being activated on receiving relevant information and awareness (knowledge) about the Sustainable Development Goals (SDGs) and the quest to end extreme poverty. Knowledge could be gathered through human capital by building stakeholders' capacity in areas that are lacking. All these knowledge, skills, and other attributes acquired eventually form their perception and the resultant attitudes toward action as reflected in Figure 1.

Several studies have argued that improving human capital creates means of investing in stakeholders, who are then expected to generate and refine opportunities for themselves and others sustainably (Gassner et al., 2019; Igbinovia & Osuchukwu, 2018; Ogbodo & Okoro, 2015; Oguchi, 2018; Simple Economist, 2019; Yang, 2019). Consequently, this leads to economic rewards in ending poverty. Nevertheless, no study has been carried out in Delta State, Nigeria to understand and examine stakeholders' capabilities if given the necessary education in skills and attitude. With this understanding, stakeholders' capabilities could be better managed sustainably towards the goal to end poverty. Therefore, this study is designed to examine the AEAs, ASTs and CFs' perception, knowledge and attitude toward the UN goal to end poverty in Delta State, Nigeria.

Purpose/ Research Questions:

The main purpose of the study is to determine the AEAs, ASTs and CFs' perception, knowledge and attitude toward the goal to end poverty in Delta State, Nigeria. The following research questions were raised to guide the study:

1. What are the Agricultural science teachers, Agricultural extension agents and Cassava farmers' perceptions toward the goal to end poverty in Delta State, Nigeria?
2. What are the Agricultural science teachers, Agricultural extension agents and Cassava farmers' knowledge of the goal to end poverty in Delta State, Nigeria?
3. What are the Agricultural science teachers, Agricultural extension agents and Cassava farmers' attitudes toward the goal to end poverty in Delta State, Nigeria?

METHODS:

The study was conducted in Delta State, situated in Southern Nigeria and it is made up of 25 Local Government Areas (LGAs) with 3 agricultural zones. The study adopted an *ex-post-facto* design and used a descriptive survey research method because pre-existing information are gathered from subjects who are stratified based on similar demographics without manipulation (Ikeoji & Agbidi, 2021; Creswell, 2014).

The population of this study is 3,667 stakeholders comprising 101 AEAs in 3 extension zones (Delta Agricultural and Rural Development Agency [DARDA], 2019), 1,143 ASTs in 464 public secondary schools in Delta State (Delta State Post-Primary Education Board, 2019) and 2,423 registered CFs in 364 clusters (Delta State Ministry of Agriculture and Natural Resources, 2019). A sample size of 81 AEAs, 215 public secondary schools, and 191 CFs clusters all in Delta State were obtained using Slovin's 1960 sample size method. The multi-stage sampling technique was adopted in stages to sample the population of each group according to their various strata using a stratified random sampling technique at each stage.

A structured 26-item instrument on a 4-point scale titled "Stakeholders Perception, Knowledge and Attitude Towards the Goal to End Poverty (SPKATGEP) was self-developed and used for data collection. Each item on the scale was assigned a response option ranging from 4 to 1 (Strongly Agree to Strongly Disagree). One expert each from the field of Agricultural education (Modibbo Adama University of Technology, Yola), Test and Measurement (Delta State University, Abraka), and Ministry of Agriculture and Natural Resources (Delta State, Asaba) validated the instrument for face and content validity to ensure it contains the right items that were needed to prompt the right responses.

The reliability of the instrument was established by pre-testing it on 10 AEAs, ASTs and CFs each from Edo State. The internal consistency of the instrument was determined using the Split-half technique by splitting each section of the instrument into two halves (odd and even number groups). The scores that were gathered from each group were computed into Statistical Package for Social Sciences (SPSS) version 26 and analyzed using the split-half reliability tool correlated with the Spearman Rank Order Correlation Coefficient to obtain a reliability coefficient of the half test. The reliability of the entire test was then calculated using the Spearman-Brown coefficient which yielded a mean reliability coefficient of 0.79.

Four hundred and eighty-four copies of the questionnaire were personally administered with the help of 4 research assistants to the ASTs (215), and the DARDA programme manager, meeting coordinator, and two personnel from the Ministry of Agriculture and Natural Resources during the flag off/meeting of Cassava Development Programme held at the Cenotaph – Asaba Delta State to the AEAs (81) and CFs (191). The same method was used to retrieve the questionnaire back after appropriate explanations were given to the respondents where any of the items was not clear to them. However, out of the 487 copies of the questionnaire administered only 445 copies were filled and returned (AEAs – 70, ASTs – 195 and CFs – 180) indicating a 91.38% return rate. Data collected were analyzed using means ($\bar{x}$) and Standard Deviations (SD) with the aid of SPSS version 26 software. A mean ($\bar{x}$) score of 2.50 was set as the cut-off point, and where any mean ($\bar{x}$) score is higher than 2.50, it was remarked as Agreed (A) and any mean ($\bar{x}$) score lower than 2.50 was remarked as Disagreed (D).

Results:

The results of the study are presented in Table 1 – 3.

Research Question 1: What are the Agricultural science teachers, Agricultural extension agents and Cassava farmers' perceptions toward the goal to end poverty in Delta State, Nigeria?

Table 1

Agricultural Extension Agents, Agricultural Science Teachers, and Cassava Farmers' Responses on their Perception of the Goal to End Poverty (n=445).

S/N	Items	Agricultural Extension Agents (n_1=70)		Agricultural Science Teachers (n_2=195)		Cassava Farmers (n_3=180)		Grand Mean (Items)	Decision
		($\bar{x}_1$)	SD_1	($\bar{x}_2$)	SD_2	($\bar{x}_3$)	SD_3		
	I believe that:								
1	it is possible to end poverty in Nigeria by shared resources	3.29	0.76	2.93	0.97	2.51	1.08	2.91	Agree
2	investment in human capital can lift people out of poverty	3.26	0.85	3.01	0.94	2.96	0.81	3.08	Agree
3	building the resilience of farmers would make them more productive	3.19	0.91	3.02	0.87	3.48	0.51	3.23	Agree
4	increase in income would lead to meeting basic needs of life	3.39	0.75	3.09	0.86	3.49	0.50	3.32	Agree

5	the spirit of living no one behind will end poverty	2.87	1.02	2.88	0.94	2.97	0.84	2.91	Agree
6	investment in agriculture offers the end to poverty	3.26	0.72	3.05	0.83	3.33	0.62	3.21	Agree
7	investment in quality vocational education is a pathway to end poverty	3.21	0.80	3.08	0.83	3.33	0.61	3.21	Agree
8	access to farm infrastructures-tools-technology would lead to ending poverty	3.29	0.80	3.33	0.69	3.50	0.50	3.37	Agree
	Grand Mean (Cluster)	**3.22**		**3.05**		**3.20**		**3.16**	

Table 1 presents the mean ($\bar{x}$) scores of the stakeholders on their perception of the goal to end poverty with all the items on the cluster mean ($\bar{x}$) ranging from 2.87 – 3.39 (AEAs), 2.88 – 3.33 (ASTs), and 2.51 – 3.49 (CFs). The grand mean ($\bar{x}$) of all items on the responses of the stakeholders also ranged from 2.91 – 3.37. These values are above the cut-off mark of 2.50 indicating agreement that stakeholders' perception is positive towards the goal to end poverty in Delta State, Nigeria, especially on ensuring access to farm infrastructures, tools and technology, increase in income to meet basic needs of life, building the resilience of farmers among others. The values of standard deviations of the responses ranged from 0.72 – 1.02 (AEAs), 0.83 – 0.97 (ASTs), and 0.50 – 1.08 (CFs). These values showed that their responses do not deviate widely from the mean ($\bar{x}$) but are close to one another in their perception of the goal to end poverty.

Research Question 2: What are the Agricultural science teachers, Agricultural extension agents and Cassava farmers' knowledge toward the goal to end poverty in Delta State, Nigeria?

Table 2

Agricultural Extension Agents, Agricultural Science Teachers, and Cassava Farmers' Responses on the Knowledge Towards the Goal to End Poverty (n=445).

S/N	Items	Agricultural Extension Agents (n_1=70) ($\bar{x}_1$)	SD$_1$	Agricultural Science Teachers (n_2=195) ($\bar{x}_2$)	SD$_2$	Cassava Farmers (n_3=180) ($\bar{x}_3$)	SD$_3$	Grand Mean (Items)	Decision
	To end poverty is:								
1	being able to meet basic needs	2.97	1.04	3.09	0.98	3.25	0.76	3.10	Agree
2	eliminating lack in all its forms	3.17	0.88	3.11	0.78	3.26	0.73	3.18	Agree
3	social intervention measures are available to the vulnerable	2.94	0.99	3.03	0.87	2.81	0.90	2.93	Agree
4	there is equal right to ownership-control over farmland	3.27	0.78	3.48	0.50	3.41	0.56	3.39	Agree
5	access to financial support services	3.29	0.73	3.48	0.50	3.42	0.53	3.40	Agree

6	building farmers resilience against shocks	3.26	0.72	3.36	0.63	3.43	0.51	3.35	Agree
7	food is available-affordable to everyone	3.09	0.97	3.36	0.64	3.41	0.52	3.29	Agree
8	increasing incomes of small-scale farmers are high	3.41	0.71	3.47	0.50	3.43	0.50	3.44	Agree
9	there is equal access to quality education	3.19	0.75	3.33	0.65	3.27	0.70	3.26	Agree
	Grand Mean (Cluster)	**3.18**		**3.30**		**3.31**		**3.26**	

Table 2 shows the mean ($\bar{x}$) scores of the stakeholders on their knowledge of the goal to end poverty with all the items on the cluster mean ($\bar{x}$) ranging from 2.94 – 3.41 (AEAs), 3.03 – 3.48 (ASTs), and 2.81 – 3.43 (CFs). The grand mean ($\bar{x}$) of all items responses of the stakeholders also ranged from 2.93 – 3.44. These values are above the cut-off mark of 2.50 signifying agreement that stakeholders have good knowledge of the goals toward ending poverty, especially on increasing incomes of small-scale farmers, access to financial support services, there is equal right to ownership and control over farmland, building farmers resilience against shocks among others are. The values of standard deviations ranged from 0.71 – 1.04 (AEAs), 0.50 – 0.98 (ASTs), and 0.50 – 0.90 (CFs). These values showed that their responses do not deviate widely from the mean ($\bar{x}$) but are close to one another in their knowledge of the goal to end poverty.

Research Question 3: What are the Agricultural science teachers, Agricultural extension agents and Cassava farmers' attitudes toward the goal to end poverty in Delta State, Nigeria?

Table 3

Agricultural Extension Agents, Agricultural Science Teachers, and Cassava Farmers' Responses on the Attitude Toward the Goal to End Poverty (n=445).

S/N	Items	Agricultural Extension Agents (n_1=70)		Agricultural Science Teachers (n_2=195)		Cassava Farmers (n_3=180)		Grand Mean (Items)	Decision
		($\bar{x}_1$)	SD_1	($\bar{x}_2$)	SD_2	($\bar{x}_3$)	SD_3		
	By 2030, i would:								
1	support actions to end poverty	3.33	0.76	2.98	0.89	3.30	0.66	3.20	Agree
2	influence how to end poverty	3.14	0.82	2.94	0.87	3.31	0.63	3.13	Agree
3	campaign and lobby for policies to fundamental rights to shared resources	3.16	0.83	2.59	1.03	2.97	0.93	2.91	Agree
4	educate small-holders cassava farmers to boost their livelihoods	3.37	0.64	3.09	0.85	3.43	0.52	3.30	Agree
5	inspire people to invest in profitable farming	3.41	0.69	3.09	0.85	3.49	0.50	3.33	Agree

6	help implement policies to end poverty	3.39	0.62	3.07	0.85	3.13	0.87	3.20	Agree
7	support functional quality vocational education	3.33	0.76	3.37	0.65	2.99	0.89	3.23	Agree
8	encourage the buying of excess farm produce	3.30	0.73	3.11	0.82	3.35	0.59	3.25	Agree
9	encourage stability of food price	3.01	1.00	3.11	0.80	3.34	0.61	3.15	Agree
	Grand Mean (Cluster)	**3.27**		**3.04**		**3.26**		**3.19**	

The data in Table 3 showed the mean ($\bar{x}$) scores of the stakeholders on their attitude toward the goal to end poverty with all the items on the cluster mean ($\bar{x}$) ranging from 3.01 – 3.41 (AEAs), 2.59 – 3.11 (ASTs), and 2.97 – 3.49 (CFs). The grand mean ($\bar{x}$) of all items on the responses of stakeholders ranged from 2.91 – 3.33. These values are above the cut-off mark of 2.50 indicating agreement that stakeholders' attitude towards the goal to end poverty is positive, particularly in inspiring people to invest in commercial farming, educating small-holders Cassava farmers to boost their livelihoods, encouraging the buying of excess farm produce among others. The standard deviations ranged from 0.62 – 1.00 (AEAs), 0.65 – 1.03 (ASTs) and 0.50 – 0.93 (CFs). These values showed that their responses do not deviate widely from the mean ($\bar{x}$) but are close to one in their attitude toward the goal to end poverty.

DISCUSSION:

Perception towards the Goal to End Poverty:
The finding in Table 3 showed that AEAs, ASTs, and CFs' perception toward the goal to end poverty is positive signifying the belief in actions such as, ensuring access to farm infrastructures, tools and technology, increase in income to meet basic needs of life, building the resilience of farmers, among others would lead to ending poverty. This study contradicts Ejechi's (2018) findings who reported that low perception was observed among respondents on the attainment of the SDGs, but in agreement with this study, Agbidi and Ikeoji (2021) found that the AEAs and ASTs' perception of the SDG for zero hunger is positive. This implies that over time the opinion of stakeholders towards sustainable development changes.

Knowledge towards the Goal to End Poverty:
The findings of the study demonstrated that the AEAs, ASTs, and CFs' knowledge of the goal to end poverty are good, particularly in increasing the income of small-scale farmers, access to financial support services, equal right to ownership and control over farmland among others. This finding does not agree with Shehu, M. and Shehu, H. (2018) study that, there is low knowledge of the SDGs among the respondents regarding the goals, the year it was launched and the terminal date. In line with this study, Ogbodo and Okoro (2015) and Ayobolu (2019) found that the majority of the respondent are knowledgeable of the SDGs, particularly after being educated. This implies knowledge is essential to ending poverty.

Attitude towards the Goal to End Poverty:
The result showed that the AEAs, ASTs, and CFs' attitudes towards the goal to end poverty are positive. This finding demonstrates their positive attitude to carry out actions such as inspiring people to invest in profitable farming, educating small-holders Cassava farmers to boost their livelihoods, and encouraging the buying of excess farm produce among others. This finding is in line with Ajzen (1991), Arbuckle et al. (2013) and Igbinovia and Osuchukwu (2018) that attitude predetermines behavioural actions and it is central to the attainment of objectives. This finding implies that AEAs, ASTs, and CFs' attitudes can be influenced by intrinsic factors that support their actions.

CONCLUSION:

Agricultural extension agents, Agricultural science teachers and Cassava farmers are vital instruments in ending poverty. Their perception, knowledge and attitude towards this ambitious goal to end poverty calls for understanding in further developing, designing, and implementing the agenda before the terminal date. Although stakeholders have positive belief, and good knowledge of the goal to end poverty, have the right attitude to engage in supportive actions but needs human capital that will aid them in building their capacities for an effective contribution towards ending poverty.

RECOMMENDATIONS:

Based on the findings of this study, the following recommendations are put forward:

i. the Federal Government of Nigeria should implement policies that will support agricultural infrastructures and technical assistance to stakeholders;
ii. the Federal Government of Nigeria should provide the enabling environment that would support the mechanism for participation among stakeholders in ending poverty;
iii. the government of Nigeria should encourage the positive perception and attitude of farmers towards ending poverty by ensuring that their fundamental rights to ownership of farmland and other resources are sustained;
iv. linkages between extension agents and farmers should be improved upon so that agricultural information, innovations and technology gets to the farmers appropriately;
v. The three tiers of the Nigerian government should urgently tackle matters related to food, social and financial insecurity to enhance the productive capabilities of stakeholders, particularly farmers.

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REFERENCES:

1. Agbidi, S. S., Iyeke, A.P. & Ikeoji, C.N. (2022). Developing partnership for quality agricultural education in Nigeria: A narrative-textual case study. *Journal of Education and Practice*, *13* (4), 23-28. www.iiste.org/DOI: 10.7176/JEP/13-4-03.
2. Ikeoji, C.N. & Agbidi, S.S. (2021). Improving extension agents and cassava farmers' attitude and resilience to end poverty in a pandemic era. *Proceedings of the 34th Annual Conference of Farm Management Association of Nigeria (FAMAN)*, 920-927.
3. United Nation (2015). Transforming our world: The 2030 Agenda for sustainable development. Retrieved from https://www.un.org/120815/outcome-document-of-summit-for-adoption-of-the-post-2015-development-agenda.pdf.
4. United Nation Education, Scientific and Cultural Organization (UNESCO) (2020). International day for eradicating poverty. https://www.unesco.org>commemorations>poverty-eradication-day.
5. Agbidi, S.S., Iyeke, A.P. & Ikeoji, C.N. (2021). Imperatives of agricultural education stakeholders towards zero hunger in Delta State. Nigeria. *Journal of Agricultural Education Teachers' Association of Nigeria, 5*(1), 33-43.
6. Agbidi, S.S. & Ikeoji, C.N. (2020). Challenges faced by Agricultural education stakeholders and strategies for achieving sustainable economic recovery in Nigeria. *Journal of Agricultural Education Teachers' Association of Nigeria, 4*(1), 114-123.
7. Agbidi, S.S. (2022). *Agricultural education stakeholders' perception, knowledge and attitude towards meeting the Sustainable Development Goal to end poverty in Delta State, Nigeria*. [Unpublished doctoral thesis]. Delta State University, Abraka.
8. Anguera, T.M., Portell, M.P., Chacon-Moscoso, S. & Sanduvete-Chaves, S. (2018). Indirect observation in everyday contexts: Concepts and methodological Guidelines within a mixed methods framework. *Front Psychol*, *30*. https//doi.org/10.3389/fpsyg2018.00013.
9. Foxall, G. (2020). *Intentional Behaviorism: Philosophical Foundations of Economic Psychology*. Academic press. https://www.doi.org/10.1016/c2016-0-02639-6.
10. Hagger, M. (2019). The Reason Action Approach and the Theories of Reasoned Action and Planned Behavior in Dunn, D.S. (Ed). *Oxford Bibliographies in Psychology*. New York, NY: Oxford University Press. Doi.10.1093/obo/9780199828340-0240.
11. Vogel, T., Bohner, G., & Wanke, M. (2014). *Attitudes and attitude change*. Psychology Press.
12. Osman, A., Ladhani, S., Findlater, E. & Mickay, V. (2017). *Curriculum framework for the Sustainable Development Goal*. (1st ed). Bahamas: Commonwealth Secretariat Publication.
13. Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis with special reference to education.* Chicago: University of Chicago Press.
14. Becker, G. (1964). *Human capital* (2nd ed). New York: Colombia University Press.
15. Gassner, A., Harris, D., Mausch, K., Terheggen, A., Lopes, C., Finlayson, R.F. & Dobie, P. (2019). Poverty eradication and food security through agriculture in Africa: rethinking objectives and entry points. *Outlook on Agriculture*, *48*(4), 309 – 315. https://doi.org/10:11770030727019888513 3.
16. Igbinovia, M.O. & Osuchukwu, N.P. (2018). Predictors of knowledge sharing behaviour on Sustainable Development Goals among library personnel in Nigeria. *International Federation of Library Association and Instructions*, 44(2), 119-131.
17. Ogbodo, J.N. & Okoro, N.M. (2015). Nigeria public awareness and knowledge of the Millennium Development Goals (MDGs) and their level of implementation in Nigeria. *European Scientific Journal*, *11*(23), 301 – 316.

18. Oguchi, C.B. (2018). Harnessing the potentials of human capital for sustainable development in Nigeria. *International Journal of Advanced Scientific Research in Social Science & Management Studies, 3*(2), 81 – 91.
19. Simple Economist (2019). Human capital theory. www.simpleeconomist.com/human-capital-theory.
20. Yang, Z. (2019). Threshold effect of poverty alleviation funds on human capital accumulation: A case study of impoverished counties in China. *Sustainability, 11*(809), 1 – 12.
21. Creswell, J.W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches.* (4th ed). Thousand Oaks: SAGE Publications.
22. Ejechi, V. T. (2018). Awareness and perception of Sustainable Development Goals (SDGs), among, library personnel in Edo State University Library. http://www.researchgate.net/publication/323391987_awareness_and_perception_of_sustainable_development_goals_among_library_personnel_in_edo_state_university_library.
23. Shehu, M. & Shehu, H. (2018). Knowledge, attitude and perception about Sustainable Development Goals (SDGs) among clinical medical students of Bingham University Teaching Hospital, Jos. *Journal of Health and Environment Research*, *4*(4), 130 – 134. Retrieved from doi:10.11648/j.jher.201804004.12.
24. Ayobolu, Y.O. (2019). The role of communication in disseminating the United Nations Sustainable Development Goals in Nigerian agricultural systems. *Global Media Journal*, *17* (32), 12 - 22.
25. Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviours and Human Decision Processes*, 50, 179-211. http://www.sciencedirect.com/science/article/pii/074959789190020T.
26. Arbuckle Jr., J.G., Morton, W.L. & Hobbs, J (2013). Farmer beliefs and concerns about climate change and attitudes toward adaptation and mitigation: Evidence from Iowa. *Climatic Change*, 118: 551-563. http://dx.doi.org /10.1007/s10584-013-0700-0.