



ASSESSMENT OF AGRICULTURAL INFORMATION SOURCES UTILISATION AMONG GRADUATE YOUTH EMPOWERMENT PROGRAMME (GYEP) BENEFICIARIES IN MAKURDI ZONE, BENUE STATE, NIGERIA

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ABSTRACT

The study examined utilisation of agricultural information sources among graduate youth empowerment programme (GYEP) beneficiaries in Makurdi Zone, Benue State, Nigeria. Purposive sampling technique was employed in selecting 150 respondents among the last four years beneficiaries of the GYEP. Primary data were collected using structured questionnaire and analysed using descriptive statistics. The result revealed that most of the respondents were within their active ages of production with relatively small household size, farm size and years of farming experience as indicated by the mean values of 33 years, 3 persons, 1.5ha and 3 years, respectively. The finding further showed that majority (67.3%) of the respondents were male, and 57.3% of the respondents had educational qualification of HND / B.Sc. Also, the results revealed that the major sources of information by the respondents were LBRBDA (90.6%), mobile phones (90.6%) and social media (81.3%) which were ranked 1st and 3rd, respectively. The findings revealed that extension agent ($\bar{X}=3.5$), contact farmers ($\bar{X}=2.8$), ADPs ($\bar{X}=3.3$) and LBRBDA ($\bar{X}=4.0$) were very effective agricultural information sources used by the respondents. The most severe constraints were inadequate extension agents, poor network connectivity, and high cost of ICT gadgets among others. It can be concluded that sources of agricultural information utilised by GYEP farmers were mainly through LBRBDA, social media and fellow farmers. It is recommended that there is a need to increase the number of extension agents and improve network connectivity. Also, to reduce the cost of ICT gadgets and airtime/data, this may help to facilitate information access and usage.

Keywords: Effectiveness, GYEP, Information, Sources, LBRBDA, Utilisation

INTRODUCTION

The importance of Agriculture to the economy cannot be over emphasized despite the growth of industries, oil and commerce, it had continued to be the principal economic activity carried out by most Nigerians (Lughugh, 2020) and it is crucial to meet the information needs of farmers for the development of the sector (Demet *et al.*, 2016). Agriculture which is the leading sector of the economy in most developing countries is one of the areas that information is constantly sought and used. The farmers decision making is facilitated towards improved agricultural production, processing, trading and marketing through an effective and efficient release system of essential information and technology services (Anju and Satbir, 2017). According to Adamu *et al.*, (2022) information is an indispensable factor in the practice of farming and it is the basis of extension delivery. Information plays a vital role in our present day society as a result of the advancement in information and communication technologies (ICTs). Information in its most restricted technical sense is an ordered sequence of symbols that record or transmit a message. Information is an important commodity used in the realization of any objective set by an individual or group. Information equips one with the knowledge needed to overcome challenges and take the appropriate step at the right time.

Anyanwu (2017) reported that Ministry of Water resources and Sanitation, in its determination to resuscitate the twelve River Basin Development Authorities (RBDAs) with the objective of restoring their mandate, building institutional capacity and supporting the agricultural agenda of the Buhari administration, on Thursday May 18, 2017 the Operational Guidelines for Graduate Youth Empowerment Programme (GYEP) was launched in Abuja. The GYEP commenced with the first scheme at Kampe Irrigation Project, Kogi State on July 28, 2016 and so far a total of



eight (8) pilot projects under the scheme were launched. The GYEP initiative were designed to redirect the energy of the Nigerian youth positively to agricultural production and making them successful entrepreneurs in the country. Also, Sadiq (2023) reported that Minister of Water Resources and Sanitation in person of Professor Terlumun Utsev witnessed the induction of new entrants into the GYEP at the Lower Benue River Basin Development Authority (LBRBDA) Headquarters in Makurdi and distributed water pumps and inputs to the GYEP farmers. Information sources utilised by farmers in accessing agricultural technologies are subjects of issue in Nigeria especially, in the study area where their primary source of income is agriculture. Thus, it is imperative to evaluate the level of utilisation of agricultural information sources among GYEP farmers in order to increase output and living standard in Makurdi, Benue State, Nigeria.

Objectives of the Study

The specific objectives are to:

- i. describe socio-economic characteristics of GYEP farmers in the study area;
- ii. describe various sources of agricultural information utilised by GYEP farmers;
- iii. examine the effectiveness of agricultural information sources utilised by the farmers; and
- iv. describe constraints to the utilisation of agricultural information sources by the GYEP farmers in the study area.

MATERIALS AND METHODS

The Study Area

The study area is Makurdi, Nigeria. Makurdi is the capital city of Benue State in central Nigeria, sits at a pivotal point within the country. Understanding its geographical location and climatic conditions, along with its demographics and economic makeup, provides a well-rounded perspective on the city. Makurdi's geographical coordinates are 7°44' North, 8°32' East and it is basically the tropical wet and dry climate (Monday *et al.*, 2020). The population of Makurdi is estimated to be around 510,000 persons as of 2024. This makes it a significant urban center within Benue State and the surrounding region. Makurdi experiences a substantial amount of rainfall, has mean annual rainfall total of 1190mm and annual rainfall total ranging between 775mm and 1792mm (Monday *et al.*, 2020). The rainy season typically stretches from April to October, with the peak occurring in July and August. Makurdi's temperatures are consistently warm throughout the year, with an average daily maximum exceeding 30°C (86°F). The hottest months are typically March and April, just before the rainy season commences. Agriculture plays a dominant role in Makurdi's economy. The city serves as a major trading center for crops such as yams, cassava, rice, and soybeans.

Sampling Technique and Sample Size

A multi- stage sampling technique was used to select the respondents for the study. The first stage involved the purposive selection of four years in which Graduate Youth Empowerment Programme (GYEP) was conducted (2018, 2019, 2020 and 2021). The second stage involved selection of eight batches from 2018 to 2021 (two batches in each year). In the final stage, all the beneficiaries in the sampling frame were selected making a total of 150 respondents. The sampling procedure is presented in Table 1.



Table 1: Sampling Technique and Sample Size

Zone	Years	Batch Number	Sampling frame (Beneficiaries)	Sample size (100%)
Makurdi	2018	1	20	20
		2	20	20
	2019	3	20	20
		4	15	15
	2020	5	20	20
		6	20	20
	2021	7	20	20
		8	15	15
Total	-	8	150	150

Source: LBRBDA, 2024

Methods of Data Collection

The primary data for the study were collected using a structured questionnaire which was used to elicit information from the respondents. Information collected include those on socio-economic characteristics of GYEP young farmers; various forms and sources of agricultural information utilised by GYEP farmers; effectiveness and level of utilisation of agricultural information sources; various interventions provided to the GYEP young farmers; and constraints affecting utilisation of agricultural information sources by the GYEP farmers in the study area.

Likert scale

Likert (1932) proposed a five summated scale for the assessment of survey of the respondent attitudes, opinions, or perceptions. It consists of a statement or question followed by a series of response options with varying degrees of agreement or disagreement (Batterton and Hale, 2017). With respect to this study a four points Likert-type was used to collect data on objective three with deals with effectiveness and level of utilisation of agricultural information sources. The four points Likert type opinions on effectiveness of agricultural information sources are; Very effective, effective, fairly effective and not effective. While opinions on level of utilised agricultural information sources are; highly utilised, utilised, less utilised and not utilised. In addition, data on constraints affecting GYEP farmers (objective six), four points Likert type options was used in collecting the data as follows; very severe, severe, partially severe and not severe.

Methods of Data Analysis

Data for the study were analysed using descriptive and inferential statistics to achieve the research specific objectives.

Descriptive Statistics

Descriptive statistics such as; frequency, distribution, percentages and mean were used to achieve objectives one, two, and four.

Mean Score

Mean score was also used to achieve objective three. That is to determine effectiveness and agricultural information sources. A four points mean score was used and coded as follows; Very effective = 4, effective = 3, fairly effective = 2 and not effective =1. The mean score threshold of > 2.5 showed that information source was effective, while a threshold of < 2.5 indicate that the information source is not effective. Mean score is calculated as:

$$M = \frac{\sum X}{N} \quad \dots(1)$$

Where;

M = Mean

\sum = Sum

X = Raw Score

N = Number of Cases



RESULTS AND DISCUSSION

Socioeconomic Characteristics of the Respondents

The result in Table 2 shows the socio-economic characteristics of the respondents in the study area. The results revealed that more than half (56.7%) of the respondents were within the age bracket of 25-30 year. Only 2.7% and 2% of the respondents were within the ages of 43-48 years and 49 years and above. The result further revealed that respondents had a mean age of 33 years in the study area. This finding implies that most of the respondents were within their active ages of production in agriculture and have access to different agricultural economic activities in the study area. Also, the result revealed that majority (67.3%) of the respondents were male. According to Mohammed *et al.* (2019) male dominates and participated more in agricultural activities than the female in some regions due socio-cultural factors. Inuwa (2020), reported that older farmers have more experience in cultivation and are able to assess the characteristics of modern technology than younger farmers. Similarly, middle age farmers were found to be in their economically active age and as such can take good planning decision on agricultural production (Uwandu, 2018). The result further showed that more than half (52.7%) of the respondents had a household size of 3-4 persons with a mean household size of 3 persons. This finding implies that most of the respondents had relatively small household and this is not surprising since the targeted respondents were youth in the study area. The result from the finding further showed that more than half (56%) of the respondents had a farm size of 2.2ha and above with an average farm size of 1.5ha in the study area. This finding implies that most of the respondents were small scale farmers with relatively small farm size in the study area.



Table 2: Distribution of Respondents according to their Socioeconomic Characteristics (n=150)

Variables	Frequency	Percentage	Mean
Age			
25-30	85	56.7	33
31-36	26	17.3	
37-42	32	21.3	
43-48	4	2.7	
49 and Above	3	2.0	
Sex			
Male	101	67.3	
Female	49	32.7	
Household size			
1-2	65	43.3	3
3-4	79	52.7	
5-6	2	1.3	
7-8	3	2.0	
9 and Above	1	.7	
Farm size			
0.5-1.0	19	12.7	
1.1-1.5	1	.7	
1.6-2.1	46	30.7	1.5
2.2 and Above	84	56.0	
Farming experience (years)			
1-2	123	82.0	3
3-4	19	12.7	
5-6	4	2.7	
7-8	1	.7	
9 and Above	3	2.0	
Educational level			
HND	45	30.0	
B.Sc.	41	27.3	
B. Tech.	18	12.0	
PGD	38	25.3	
M.Sc.	8	5.3	

Source: Field Survey, 2024

This is in line with the finding of Uwandu *et al.* (2018) who reported that majority of the farmers had 1-5ha. The result further showed that majority (82%) of the respondents had 1-2 years of farming experience with an average farming experience of 3 years, which implies that most of the respondents were relatively beginners in the study area. Abdulsalam *et al.* (2018) reported that the higher the farming experience, the more the farmers would have gained more knowledge and technological ideas on how to make good farming decision in order to tackle farm production problems. The result further showed that 30%, 27.3% and 25.3% of the respondents had HND, B.Sc. and PGD, respectively, while 12% and 5.3% of the respondents had B. Tech. and M.Sc., respectively. This finding implies that most of the respondents had attained one form of tertiary education or another in the study area. This is in line with the finding of Mohammed *et al.* (2019) who reported that educational attainment of the youth stimulates the effectiveness and utilisation of information.

Sources of Agricultural Information

The results on sources of agricultural information is presented in Table 3. The finding revealed that the major sources of information by the respondents were LBRBDA (90.6%), mobile phones (90.6%) and social media (81.3%) which were ranked 1st and 3rd, respectively. These were followed by ADP (77.3%), family/friend/relatives (76%), agro-dealers (66.7%), Extension agents (54.7%), contact farmers (36%) and television (36%) which were ranked 4th, 5th, 6th, 7th and 8th, respectively. This finding implies that most of the respondents used different sources of information for agricultural activities. This result is in line with findings of Uwandu *et al.* (2018) who reported



that majority of the farmers used ADP, radio and extension agents as main sources of agricultural information in the study area. ADP is effective in carrying out their mandates in the study area which include technology transfer to farmers, distributing modern farm inputs, land development, among others. Similarly, Fawole *et al.* (2024) reported that maize farmers in Zaria Local Government Area are accessing agricultural information mainly through mobile phones, radio and television, among other sources.

Table 3: Distribution of Respondents According to their Sources of Agricultural Information

Variables	Frequency	Percentage*	Rank
LRBDAs	136	90.6	1 st
Mobile phone	136	90.6	1 st
Social media	122	81.3	3 rd
ADPs	116	77.3	4 th
Family/friends and relatives	114	76.0	5 th
Agro-dealers	100	66.7	6 th
Extension agent	82	54.7	7 th
Contact farmers	54	36.0	8 th
Television	54	36.0	8 th
Internet	36	24.0	10 th
Newspaper	34	22.7	11 th
Radio	28	18.7	12 th

Source: Field Survey, 2024 *Multiple responses

Effectiveness of Agricultural Information Sources Utilised

The result on level of effectiveness of agricultural information sources utilised is presented in Table 4. The findings revealed that extension agent ($\bar{X}=3.5$), contact farmers ($\bar{X}=2.8$), ADPs ($\bar{X}=3.3$) and LBRBDA ($\bar{X}=4.0$) were very effective agricultural information sources used by the respondents as indicated by the mean scores above the threshold value of 2.5. The findings further showed that research institutes ($\bar{X}=2.8$), family/relatives/neighbors ($\bar{X}=3.2$), radio ($\bar{X}=2.6$), television ($\bar{X}=3.1$), mobile phone ($\bar{X}=3.4$) and internet ($\bar{X}=3.0$) were effective agricultural information sources. Itse *et al.* (2023) reported that the conventional sources such as ADPs, contact farmers, mobile phone and social media were the most effective used sources for obtaining agricultural information by the respondents in the study area. Similarly, Michael *et al.* (2024) reported that respondents in the study area got information on agencies involved in agricultural credit facilities through the use of mobile phone. This finding implies that most of the respondents' agreed agricultural information sources were effective in terms of impacting knowledge and skills among the respondents in the study area. On the other hand the result also showed that internet ($\bar{X}=2.0$) and newspaper ($\bar{X}=2.4$) were not effective sources of agricultural information. This finding corroborates the work of Ayotunde and Oyedeji (2022) who reported that the most farmers used by mobile phone, agro-dealers etc. rather than internet and newspapers in accessing and utilising agricultural information in the study area.

Table 4: Distribution of Respondents According to Effectiveness of Agricultural Information Sources Utilised

Variables	VE	E	FE	NE	Mean	Decision
Extension agent	97(64.7)	35(23.3)	18(12.0)	-	3.5	Effective
Contact farmer	18(12.0)	96(64.0)	36(24.0)	-	2.8	Effective
ADP	47(31.3)	103(68.7)	-	-	3.3	Effective
LBRBDA	135(90.0)	15(10.0)	-	-	4.0	Effective
Research Institutions	84(56.0)	-	19(12.7)	47(31.3)	2.8	Effective
Family/Friends/Rel.	68(45.3)	47(31.3)	35(23.3)	-	3.2	Effective
Radio	-	48(32.0)	35(23.3)	67(44.7)	2.1	Not effective
Television	19(12.7)	131(87.3)	-	-	3.1	Effective
Mobile Phone	65(43.3)	85(56.7)	-	-	3.4	Effective
Internet	-	36(24.0)	47(31.3)	67(44.7)	2.0	Not effective
Social Media	96(64.0)	18(12.0)	36(24.0)	-	3.4	Effective
Agro-Dealers	49(32.7)	100(66.7)	1(0.7)	-	3.3	Effective
Farmers group/associations	50(33.3)	35(23.3)	65(43.3)	-	2.9	Effective
Universities and Colleges	36(24.0)	50(33.3)	64(42.7)	-	2.7	Effective
Newspaper	47(31.3)	36(24.0)	-	67(44.7)	2.4	Not effective

Source: Field Survey, 2024 Figures in parenthesis are percentages, Mean score <2.5 = Not effective, ≥2.5 = Effective

Constraints to Agricultural Information Sources Utilisation

The result in Table 5 depicts the constraints limiting respondents' information utilisation in the study area. The results revealed that inadequate extension agents ($\bar{X}=3.3$), poor network connectivity ($\bar{X}=3.5$) and high cost of ICT gadgets ($\bar{X}=3.1$) were reported as severe constraints affecting information utilisation among the respondents as indicated by the mean score above the threshold value of 2.5. The finding also showed that poor network connectivity ($\bar{X}=3.8$) as very severe constraints affecting information utilisation among farmers. This could be attributed to difficulty in making calls using mobile phone and browsing internet for accessing information by the respondents. This result is in agreement with the findings of Itse *et al.* (2023) who reported that low network connectivity, poor/erratic power supply and high cost of ICT tools as the foremost constraints to information utilisation by the farmers in the study area.

Table 5: Constraints affecting utilisation of Agricultural Information Sources by the respondents

Variables	Mean	Decision
Inadequate extension agents	3.3	Severe
Poor network connectivity	3.5	Severe
High cost of ICTs gadgets	3.1	Severe
High cost of airtime and data	2.9	Severe
Poor quality of information	3.8	Severe
Poor accessibility of information	3.3	Severe
Poor record keeping	2.3	Not Severe
Inadequate electricity supply	3.5	Severe
Low educational background	1.3	Not severe

Source: Field Survey, 2024 Mean score of <2.5 = Not Severe, ≥2.5= Severe

Also, the results revealed that high cost of airtime/data ($\bar{X}=2.9$), poor quality information ($\bar{X}=3.5$), poor accessibility of information ($\bar{X}=3.3$) and inadequate electricity supply ($\bar{X}=3.5$) were considered severe factors militating against information utilisation among the respondents as indicated



by the mean score values above the threshold of 2.5. Michael *et al.* (2024) reported that high cost of ICT devices, inadequate knowledge on technical know-how (46.3%) and irregular power supply were the major constraints to information utilisation. Similarly, Makwin *et al.* (2024) reported unstable power supply, unaffordable cost of ICT facilities, lack of technical know-how and lack of confidence to operate and utilise ICTs gadgets as challenges affecting farmers in utilising agricultural information. On the other hand, the result showed poor record keeping ($\bar{X}=2.3$) and low educational background ($\bar{X}=1.3$) were considered not severe factor affecting information utilisation among the respondents in the study area. This finding implies that though respondents had access to agricultural information, these information were utilised with certain constraints limiting respondents' full utilisation of information in agricultural production in the study area.

CONCLUSION AND RECOMMENDATIONS

It can be concluded the main sources of agricultural information to GYEP) farmers of LBRBDA Makurdi were mainly through LBRBDA, social media and fellow farmers, and were found utilised by the majority of the respondents. The finding also indicates that socio-economic characteristics of the respondents had positive influence on utilisation of agricultural information sources in the study area. However, information utilisation faces challenges due to poor/limited resources and infrastructure in the study area.

Based on the findings of the study, the following recommendation were made:

- v. Farmers should be more active in seeking relevant agricultural information from various information dissemination sources instead of simply waiting for the information from fellow farmers and friends and among other sources.
- vi. There is a need to increase the number of extension agents and improve network connectivity in rural areas.
- vii. Agencies concern should reduce the cost of ICT gadgets and airtime/data to facilitate information access.
- viii. Communication service providers should provide quality ICT infrastructure and training centers, this will facilitate the use of ICT among farmers for effective farming practice.

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