Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

The Role of National Farmers Helps Line in Agricultural Information
Dissemination Among Crop Farmers in Nigeria: A Case Study of Farmers Help
Line Centre, NAERLS ABU Zaria.

https://dx.doi.org/10.4314/jae.v25i1.8S

Bashir, Mohammed Bawuro¹; Adam, Ali Goni²; Abubakar, Jamila Abdulkadir³; Faruk, Aliyu Umar⁴; Garuba, Halimat Suraj⁵; Francis, Nyayekonung Bege⁶

National Agricultural Extension and Research Liaison Services, Ahmadu Bello University, Zaria, Kaduna State

bmbawuro@gmail.com; +23470679500711

goniadamali@yahoo.com; +23480274594182

jameelaabbajauro@gmail.com; +23480632225643

farukdamba@yahoo.com; +23480309285304

garubahalimah@gmail.com; +23470364436845

College of Agriculture Jalingo, Taraba State, hopefrancisx@gmail.com; +23481478877776

Abstract

The study examined the role of national farmers helpline in agricultural information dissemination among crop farmers in Nigeria, with the specific objectives to identify the various sources of information on agricultural practices available to the farmers and identify the various information disseminated to the farmers from the National Farmers Helpline. One Thousand farmers were randomly selected from the farmers who frequently call the Helpline Centre from the database of NAERLS across the six geo-political zones of Nigeria; to source the required information. Some of the crop farmers were contacted through phone calls, SMS, and social media platforms like Facebook and WhatsApp while some were through administration of guestionnaires and face to face discussion. Data sourced were subjected to descriptive statistics such as frequency distribution and percentage for analysis and were presented in tables and charts. The findings reveal that the Farmers Help Line Centre, NEARLS supply farmers around the country with all the necessary information on cultural practices, access to improved seed varieties, fertilizer and application, pest and disease management practices, weed management practices, marketing strategies, post-harvest activities, management of farm tools and machineries and also information on Government policies on agriculture. It is recommended that stakeholders of National Farmers Help Line ensure the sustainability of its services by including other Nigerian languages to have a larger coverage and not limiting spoken languages to only the major Nigerian languages (English, Yoruba, Hausa, Igbo and Nigerian pidgin); and also extend their services to West African countries and other parts of the globe at large.

Key words: Agriculture, information, dissemination and crop farmers

Introduction

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

Agriculture plays a significant role for economic and social development in most undeveloped countries. Information of adequate quality is a necessary condition for improvement of all areas of agriculture (Yun, Lei, Yanging, 2016).

Information and communication are essential ingredients needed for effective transfer of technologies that are designed to boost agricultural production. For farmers to benefit from such technologies, they must first have access to them and learn how to effectively utilize them in their farming systems and practices which should be the function of agricultural extension agencies all over the world. These extension agencies make use of different approaches, means and media in transferring improved agricultural technologies to the end users (farmers). Mass media methods in agricultural information dissemination generally, are useful in reaching a wide audience at a very fast rate (Ariyo et al., 2013).

In developing countries, latest mass media have made their place for backing up agricultural sector through extension activities. Mass media have the capacity to uplift the knowledge and having impact on behaviour (Nazari and Hassan, 2011). The potency of modern electronic technology can be exploited for infotainment of farming community (Guenthner and Swan, 2011). The cost of extension advice through mass media comes to be considerably low as compared to individual and group methods.

With the introduction of agricultural information, the traditional agriculture has been reformed by advanced ICTs, eventually contributing to the significant improvements in agricultural productivity and sustainability. Agricultural information is a long-term stimulus for agricultural development and also an important indicator of agricultural modernization. The agricultural information dissemination service is one of the critical missions in implementing agricultural information (Ahmed and Garforth, 2016).

Agricultural extension describes the services that provide farmers with the access to knowledge and information they need to increase productivity and sustainability of their production systems and improve their quality of life and livelihood. These includes but not limited to the transfer of knowledge generated by agricultural research. It has helped countries moved towards meeting food needs, conserving natural resources and developing human and social capital (Tatah, 2015).

The National Farmers Help was established by the Federal Ministry of Agriculture to increase productivity for sustainable agricultural development in the country across the six geo-political zones which involves the use of Information Communications Technology (ICT) in order to have a greater penetration to cover a wide area and the target beneficiary in every aspect of agriculture, to facilitate efficient and effective agricultural extension services to farmers through the dissemination of good agronomic practice electronically, using the latest ICT and to also serve as a medium for dissemination and delivery of improved technologies, market linkages and other

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

agricultural information and advisory services to farmers to compliment traditional extension agents/farmers interface in Nigeria (The Guardian Newspaper, 2019).

The Executive Director, National Agricultural Extension and Research Liaison Services (NAERLS), Ahmadu Bello University, Zaria; Prof Mohammed Khalid Othman (2019), in his exclusive interview with LEADERSHIP FRIDAY has revealed that "The Help Line programs has adopted village concept about four years ago, but every week it receives applications from different communities in request to adopt them as the Help Line adopted village. The concept is to group farmers into groups of 25 made up of women farmers, youth farmers and conventional groups, making the minimum number in 3 village comprising 75 people. First of all, to conduct baseline surveys to identify the baseline information of such communities, bordering on agriculture resources the communities have such as manpower, land resources. agricultural practices and farming systems. In the adopted villages, it pushes out the technologies and takes feedback. We are currently working with over 200 communities comprised of over 20,000 farmers spread across the nation, it also deals with the farmers directly as it is realized that working with the ADP is not effective as they are incapable of reaching out to the farmers as a result of the challenges earlier mentioned. As it is, we receive application monthly from communities asking us to adopt them".

As a result, many innovative and effective information dissemination models have been emerged and widely used. Farmers have gained enormous benefits from the information dissemination services provided (Othman, 2019). A few studies in relation to agriculture information service have been conducted in Nigeria, but none of them have attempted to provide a focused and comprehensive review and analysis of different information dissemination channels, especially on the national farmers help line.

Over the years, Nigerian farmers depend on indigenous or local knowledge for improved farming system/animal husbandry. Such knowledge (indigenous or local knowledge) refers to skill and experience gained through oral tradition and practiced over many generations. Acquisition of such primitive skill by our rural farmers has not helped to improve agricultural yield; all that is witnessed in our rural agricultural system ranging from poor farm yield, emergence of new crop and animal diseases, resistant plant weeds and pests that attack farm crops, backwardness in adopting mechanization, use of old farm implements, poor quality fertilizers etc. Agricultural information are always meant to get to rural farmers via extension workers, community libraries, radio, television, film shows, agricultural pamphlets, state and local government agricultural agencies, etc (Nnenna, 2011). Rural farmers in their effort to access these agricultural knowledge and information from available sources for better farming system and improved agricultural yield, are confronted with certain constraints. The present study is therefore designed to assess the role of national farmers help line in agricultural information dissemination in Nigeria; following the

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

high extension agent deficit to farm family ratio, the National Farmers Helpline Centre was conceptualised as one of the pluralist extension delivery approaches.

This paper aims to identify the role of national farmers help line in the dissemination of agricultural information in Nigeria,

The specific objectives are to;

- i. identify the various sources of information on agricultural practices available to the farmers
- ii. identify the various information disseminated to the farmers from the National farmers help line

Agriculture is facing new and different challenges every day, according to a world bank report on monitoring global poverty about 900 million of the world's population is living in poverty [8], with the world's population growing steadily and the rising of food prices globally there is need to improve agricultural yield to feed the 7 ever-growing population that is expected to hit 9 billion by the year 2050, this population growth has heightened the demand for food [9]. It is the desire of the Federal Ministry of Agriculture and Rural Development (FMARD) to help improve the agricultural sector of Nigeria to meet the needs of the people with over 84 million hectares of arable land, of which only 40% is cultivated the ministry's vision is to grow Nigeria's agricultural sector with its main focus of achieving a hunger-free Nigeria through an agricultural sector that drives income growth, accelerates achievement of food and nutritional security, generates employment and transforms Nigeria into a leading player in global food markets to grow wealth for millions of farmers Information and communication have always been important ever since man started planting crops, rearing livestock and caught fish, farmers have always sort after the best and most effective agricultural practices that can maximize their production. What is the most effective planting strategy on steep slopes? Where can improved/treated seeds be bought? Where can one buy improved feeds? Where can I buy fertilizers? What are the latest agricultural practices? Which market can I sell my crops at good prices? [3]. Such information is extremely desired by farmers and most of the time they are made available to them either through extension workers, farmers association, community libraries, state and local government agricultural agencies and in some cases email or the World Wide Web (WWW) in a telecentre [4], although farmers get this information from these sources we should know that most of them are either not available or are lacking information. Information and communication have always been important ever since man started planting crops, rearing livestock and caught fish, farmers have always sort after the best and most effective agricultural practices that can maximize their production. What is the most effective planting strategy on steep slopes? Where can improved/treated seeds be bought? Where can one buy improved feeds? Where can I buy fertilizers? What are

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

the latest agricultural practices? Which market can I sell my crops at good prices? [3]. Such information is extremely desired by farmers and most of the time they are made available to them either through extension workers, farmers association, community libraries, state and local government agricultural agencies and in some cases email or the World Wide Web (WWW) in a telecentre [4], although farmers get this information from these sources we should know that most of them are either not available or are lacking information.

Information and communication have always been important ever since man started planting crops, rearing livestock and caught fish, farmers have always sort after the best and most effective agricultural practices that can maximize their production. What is the most effective planting strategy on steep slopes? Where can improved/treated seeds be bought? Where can one buy improved feeds? Where can I buy fertilizers? What are the latest agricultural practices? Which market can I sell my crops at good prices? [3]. Such information is extremely desired by farmers and most of the time they are made available to them either through extension workers, farmers association, community libraries, state and local government agricultural agencies and in some cases email or the World Wide Web (WWW) in a telecentre [4], although farmers get this information from these sources we should know that most of them are either not available or are lacking information.

Methodology

Zaria is an old large city formerly called Zazzau, situated in the central part of Nigeria, in the state of Kaduna. Zaria is situated in latitude **11.085541**, and the longitude is **7.719945**. **Zaria**, **Nigeria** is located at *Nigeria* country in the *Cities* place category with the GPS coordinates of 11° 5′ 7.9476″ N and 7° 43′ 11.8020″ E. It was created from the Northern region on the 27th of May 1967 and covers close to one third (280,419km²) of Nigeria's land area (909,890km²) with a population of 23,558,674 of 13.5% of the country's population.

Zaria has a population of about 700,000 people, and it is one of the most crowded cities in the country. Zaria is home to Ahmadu Bello University, the largest university in Nigeria and the second largest on the African continent. The institution is very prominent in the fields of Agriculture, Science, Finance, Medicine and Law.

The study was carried out from National Agricultural Extension and Research Liaison Service, National Farmers Helpline, Ahmadu Bello University Zaria, Nigeria. The Institute has 6 Zonal Offices, one in each of the 6 agro-ecological zones of the country — Umudike (South-east), Ibadan (South-west), Maiduguri (North-east), Badeggi (North-central), Kano (North-west), and Port Harcourt (South-south) (https://naerls.gov.ng/, 2019). NAERLS functions as a conductive atmosphere for Agricultural Research and Extension Services as mandated to the Institute by the

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

Federal Government, protection of lives and properties of the University Community, effective and efficient co-ordination of Security Operations in the Institute including all the Zonal offices located in the 6 (six) geo-political zones, robust patrol in areas within the Institute's jurisdiction, report happenings or observation as the case maybe to the Institute Security, a sound intelligence gathering mechanism, carry out escort duties in conjunction with mobile police unit when the need arises, fire-fighting activities with the assistance of University fire service unit, advise Institute Management on Security issues and perform duties assigned by the Institute Management or the Chief Security Officer.

NAERLS has 6 Programme areas namely: Agricultural Communication Research, Agricultural Extension and Economics, Agricultural Performance and Evaluation, Training and Outreach, Agricultural Information Management, and Agricultural Policy. There are also specialised departments, which include e-Extension, Crop and Forestry, Livestock and Fisheries, Agricultural Engineering and Irrigation, Agricultural Extension and Economics, Food Technology, and Agricultural Media. The Institute has over 500 employees, including over 90 Extension Specialists, and requires an annual operating budget of more than 2.5 billion naira or 7.8 million dollars.

Simple random sampling technique was used to select One Thousand Respondents across the six geo-political zones of the country usually who called the Farmers Help Line Center of NAERLS, ABU Zaria from the Help Line Database, based on their prominence in agricultural practices. Thus Two Hundred and Forty (240) respondents were randomly picked from the North Central, 200 from the North East, 170 from the North West, 150 from the South East, 120 from the South West and 120 from South South.

Table 1: Distribution of respondents across the six geo-political zones of Nigeria

Geo-Political Zones	Number of Respondents	Respondents Accessed
North Central	240	217
North East	200	180
North West	170	144
South East	150	109
South West	120	104
South-South	120	99

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

Source: Field Survey, 2019

Data for this study were collected from the farmers, using the Help line database (phone numbers), through phone calls, SMS, and Chats on Social media platforms while some were through face to face and house to house visitation, direct interviews and structural questionnaire. Observations were also made by the researchers to add up to the information obtained from the farmers.

With respect to the type and nature of the analysis that was carried out, descriptive statistics such as frequency distribution and percentages was employed and are presented in charts and table.

Result and Discussion

Sources of Information on Agricultural Practices Available to Farmers

The result in chart 1 indicates that 12.7% source agricultural information from their family members, 6.6% source information from middlemen, 9.4% from farmers' groups and NGOs, 12.0% source their information from research institutes, 7.3% from universities/colleges or polytechnics, 6.6% from the print media, 4.9% source information from electronic media while majority of the respondents (31.3%) admit that they source their agricultural information from agricultural extension workers. In line with the survey of Okwocha *et al.*, (2012) Agricultural Information Utilization among crop farmers in North-East of Nigeria reported that 20 respondents (15.38%) sources information through universities, while 52.31% access information through Agricultural Extension workers and Non-governmental organizations (NGOs). This implies that agricultural extension workers have put in enough efforts to carry out their function of information generation and dissemination to farmers. This is the reason only few of the farmers indicated print and electronic media as sources of information which is not often readily affordable, reliable, or reliable and available in the rural communities.

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

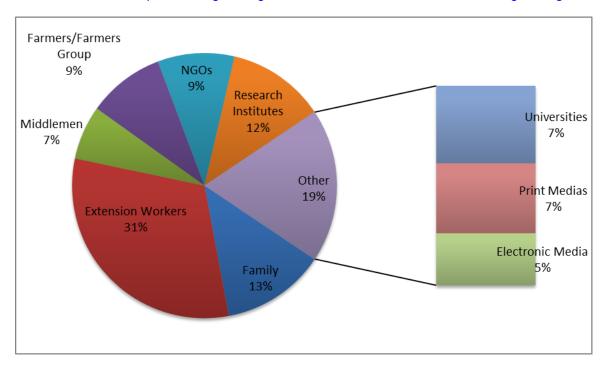


Chart 1: Sources of information on agricultural practices available to the farmers

Source: Field Survey, 2019

Information Disseminated to Farmers from the National Farmers' Help Line

Chart 2 clearly indicates the majority of the respondents (23.6%) of the farmers are been supplied with the information on cultural practices, 12.7% are served with the information on access to fertilizer and application, 14.3% gets information on pest and disease management practices, 10.8% on weed management practices, 3.0% on marketing strategies, 12.4% on post-harvest activities, 3.0% on operation and management of farm tools and machineries, 2.0% on seed varieties selection while 12.1% are supplied with the information on government policies on agriculture. On this note the National Farmers Help Line, provides farmers with virtually all the information required for successful agricultural production practices, which seems to be the main reasons why the government established the help line center.

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

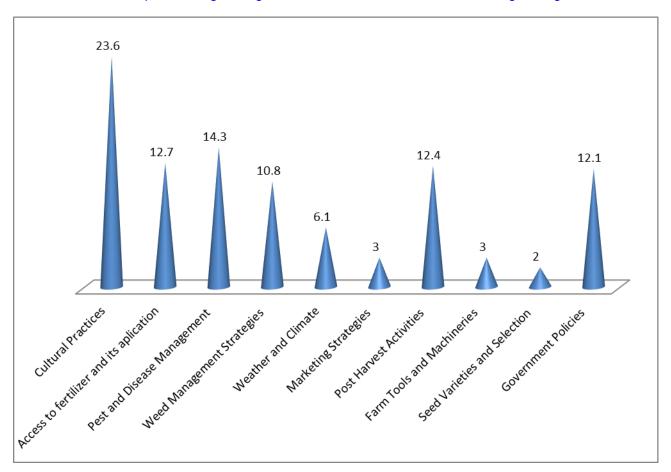


Chart 2: Various information disseminated to the farmers from the National Farmers' Help Line

Source: Field Survey, 2019

Conclusion and Recommendations

The crop farmers get information on crop productions mainly through family, extension workers, farmers' groups, other farmers and universities. However, research institutes and universities have put in enough efforts to carry out their function of information generation and dissemination to farmers yet unsatisfactory due to the large population of the country. The findings reveal that the Farmers Help Line supplies farmers around with all the necessary information regarding agricultural production ranging from information on cultural practices, access to fertilizer and application, pest and disease management practices, weed management practices, marketing strategies, post-harvest activities, management of farm tools and machineries and also information on government policies on agriculture. The National Farmers Help Line should widen the horizon of its services

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

by introducing other Nigerian Languages to the already existing languages (English, Yoruba, Hausa, Igbo and Nigerian Pidgin) spoken by the call agents, this will enable farmers from other language speaking localities across the country to enjoy the same services; also with the diversity of the University in every aspect of agriculture, its services should not be limited to Nigeria only but extended to West African countries and other parts of the globe at large. It is highly recommended that the callers are been responded to effectively with reasonable time limit to express their agricultural production challenges and also the government should continue to invest in the programme by providing all the ICT facility and infrastructure needed and they should also subsidise the toll on farmers to enable them call even at times of limited resources and get the most reliable agricultural information they could ever access.

References

- Ahmadu Bello University (2015). Archived from the original on 9 July 2015. Retrieved 8 July 2015. predominantly Sir Eric Ashby. Investment in Education: The Report of the Commission on Post-School Certificate and Higher Education (Lagos, 1960)
- Ahmed, S., and Garforth, C. (2016). Farmer information sources and their relative effectiveness, *International Journal of Agriculture and Biology*, 3 (1): 223—225.
- Ariyo, O.C., Ariyo, M.O., Okelola, O.E., Aasa, O.S., Awotide, O.G., Aaron, A.J., and Oni, O.B., (2013). Assessment of the Role of Mass Media in the Dissemination of Agricultural Technologies among Farmers in Kaduna North Local Government Area of Kaduna State, Nigeria. Journal of Biology, Agriculture and Healthcare, 3 (6), Pp. 1-28.
- Guenthner, J.L. & Swan, I. (2011). Information source preference of farmers regarding modern aquaculture technologies in Bogra district of Bangladesh. Int. J. Agric. Ext. 3(01):01-05.
- NAERLS website 'https://naerls.gov.ng/#' Retrieved 2019.
- Nazari, M.R. and Hassan, M.S.B.H. (2011). The role of television in the enhancement of farmers' agricultural knowledge. *Afric. J. Agric. Res.* 6 (4):931-936.
- Nnenna, M. (2011). *Introduction to Mass Communication: Media Literacy and Culture*. Boston USA: McGraw Hill Publishers. Accessed 23 December, 2019.
- Okwoche, V. A., Benjamin, C. A., and Patrick, C. O., (2012) Agricultural Information Utilization among Rural Sorghum Farmers in Benue State of Nigeria. *European Journal of Scientific Research. Vol.76 No.2 (2012), pp.198-207.* ISSN 1450-216X. Retrieved from http://www.europeanjournalofscientificresearch.com
- Othman, M.K. (2019). The Guardian Newspaper: The Executive Director NAERLS, Press Conference on the establishment of Farmers Helpline. Accessed 21 January, 2020.

Number: Twenty-Fifth Annual Conference

Theme: Enhancing the Role of Public and Private Extension in Soil Conservation and

Agricultural Productivity **Date:** 28-29, July 2020

Venue: Usmanu Danfodiyo University, Sokoto, Nigeria

ISSN: 1595 - 1421.http://aesonnigeria.org/ConfProc . Email: editorinchief@aesonnigeria.org

Tatah, J.O. (2015). Analysis of Traditional Information Dissemination and Communication Method among Rural Farmers: Evidence from Traditional Communities in Nigeria: Scientific and Technical Information and Rural Development, IAALD XiIIth World Congress, Montpellier.

The Guardian Newspaper, (2019). The Guardian Newspaper. Accessed on 11 January, 2020.

Yun, Lei, Yanqing, (2016) Role of Private Sector in Dissemination of Agricultural Information among Cotton Growers in Punjab Pakistan. *Universal Journal of Agricultural Research*, 2, 89-92.