

ISSN:978-978-923-450-9



**VOL. 3 NO.1**

**JUNE, 2015**

# **TARABA**

## **JOURNAL OF AGRICULTURAL RESEARCH (TAJAR)**

I. S. Tyabo

**TARABA JOURNAL OF AGRICULTURAL RESEARCH**  
**"TAJAR"**

ISSN: 978-978-923-450-9  
Volume 3, No.1, June, 2015

**EDITORIAL ADVISER**

**Professor Mohammed Sani Yahaya**  
Vice Chancellor  
Taraba State University, Jalingo

**EDITOR-IN-CHIEF**

**Professor Aliyara Haruna Yakubu**  
Department of Animal Science  
Taraba State University, Jalingo

**MANAGING EDITOR**

**Dr. Chukudi G. Michael**  
Department of Agronomy  
Taraba State University  
Jalingo

**ASSOCIATE EDITORS**

**Prof. Daniel T. Gungula**  
Dept. of Crop Production  
& Horticulture,  
MAUTECH Yola

**Prof. M.B. Sastawa**  
Dept. of Crop Protection  
University of Maiduguri

**Prof. N. Voncir**  
Dept. of Crop Production  
ATBU Bauchi

**Prof. H. Tijjani-Eniola**  
Dept. of Agronomy  
University of Ibadan

**Prof. G.N. Akpan**  
Dept. of Animal Science  
ABU Zaria

**Prof. C. Akosim**  
Dept. of Forestry and  
Wildlife, MAUTECH Yola

**Prof. E. Ekefan**  
Dept. of Crop Production  
University of Agriculture  
Makurdi

**Prof. J.N. Maduako**  
Dept. of Agricultural  
Engineering,  
MAUTECH Yola

**Prof. F.A. Ajayi**  
Dept. of Agronomy  
Nassarawa State University  
Shabu Lafia

Copyright © TAJAR, 2015  
This is an open access Journal, however, a written permission of the publisher is required  
for storage or transmission of any part of this journal in any form.

TABLE OF CONTENT

ASSESSMENT OF WOMEN INVOLVEMENT IN SHEA BUTTER PRODUCTION IN NIGER STATE, NIGERIA. <i>Okolo, C.C., Omoregbee, F.E. and Alufohai, G.O.</i>	1-6
ANALYSIS OF POST-HARVEST (STORAGE) LOSSES OF SORGHUM AMONG WOMEN FARMERS IN KAURA LOCAL GOVERNMENT AREA, KADUNA STATE, NIGERIA. <i>Banta, A.L. and Manza, E.A.G.</i>	7-12
ASSESSMENT OF INDIGENOUS PRACTICES BY RURAL FARMERS IN YAM PRODUCTION IN SOUTHERN ZONE OF TARABA STATE: THE AGRICULTURAL EXTENSION IMPERATIVES. <i>Ben, Camilus Bassey and Adie, Linus Akomaye</i>	13-17
EVALUATION OF THE AGRICULTURAL STUDENT PRACTICAL PROGRAMME OF AMBROSE ALLI UNIVERSITY, EKPOMA, EDO STATE, NIGERIA. <i>Onemolease, E.A. and A. S. Aghanenu</i>	18-25
EVALUATION OF FACTORS AFFECTING THE USE OF IMPROVED COCONUT PROCESSING TECHNOLOGIES BY PROCESSORS IN BADAGRY LOCAL GOVERNMENT AREA OF LAGOS STATE, NIGERIA. <i>Igene, L., Okolo, C.C., Akagbosu, B.E. and M. Osifo.</i>	26-30
ANALYSIS OF POVERTY PROFILES OF IFAD/FGN/NDDC/COMMUNITY-BASED FARMERS IN CROSS RIVER STATE, NIGERIA. <i>Nwaobiala, C. U. and Ahamefule, B. A.</i>	31-35
HUNTERS AND BUSHMEAT PROCESSORS AS POTENTIAL PATH-WAYS FOR THE TRANSMISSION OF ZONOTIC DISEASES: A CASE STUDY OF KWARA STATE, NIGERIA. <i>Adefalu, L.L.; Amusa, T.O; Adebayo, K.L. and I.O. Bale</i>	36-43
EVALUATION OF ADVISORY AND EXTENSION SERVICES ACTIVITIES IN CHUCKUN LOCAL GOVERNMENT AREA OF KADUNA STATE. <i>Tsado, J.H.; Tyabo, I. S.; Mohammed, U.S; Ibrahim, F.D and W. Stephen</i>	44-49
ANALYSIS OF NON-FARM INCOME AMONG HOUSEHOLDS IN JALINGO EXTENSION BLOCK OF TARABA STATE, NIGERIA. <i>Lawal, H. and Umar, Y</i>	50-56
ASSESSMENT OF MARKET ORIENTATION AMONG SMALLHOLDER ARABLE CROP FARMERS IN ABIA STATE, NIGERIA. <i>O. R. Iheke, M. A. Idu and O. S. Uzochukwu</i>	57-63
VALUE CHAIN ANALYSIS OF SMALL SCALE CASSAVA PRODUCTION AND MARKETING IN IMO STATE, NIGERIA. <i>O. R. Iheke and A. M. Anamelechi</i>	64-71
EFFECT OF PLANT SPACING AND WEEDING FREQUENCY ON THE GROWTH AND YIELD OF SOYBEAN AT JALINGO, TARABA STATE. <i>Zanzam, M.S., Jandong, E.A., Aminu, Y.G and M.B. Jungudo</i>	72-78
REPRODUCTIVE RESPONSE AND PREDICTIVE PRODUCTIVITY OF DOMESTIC FOWL (BREEDER STOCK) TO GARLIC SUPPLEMENTED DIETS. <i>A.O, Adeyina, A.S Akanbi, R. Adepoju and B.H Raji</i>	79-82
EFFECTS OF DIETARY THYME LEAF ON OXIDATIVE STABILITY OF REFRIGERATED RAW AND COOKED BROILER CHICKEN MEAT. <i>Ayoola, M.A., Ogunsipe M.H., Oladepo, A. D. and Balogun, K.B</i>	83-87
AUTHOR'S GUIDE	88

## EVALUATION OF ADVISORY AND EXTENSION SERVICES ACTIVITIES IN CHUCKUN LOCAL GOVERNMENT AREA OF KADUNA STATE

Tsado, J.H.; Tyabo, I. S.; Mohammed, U .S; Ibrahim, F.D and W. Stephen  
Department of Agricultural Economics and Extension Technology  
Federal University of Technology Minna – Niger state Nigeria  
Email-jacobtsado2007@yahoo.com

Received 5<sup>th</sup> June, 2015 Accepted 21<sup>st</sup> August, 2015

### Abstract

The study evaluates advisory and extension services activities in chuckun local government area of kaduna state. A total of 80 respondents were interviewed through a well structured interview schedule. Frequency counts, percentages and 4 – point likert scale were used in data analysis. The findings reveals that majority (74.7%) of the respondents were between 21 – 40 years of age. While 63% were married. Furthermore, majority 53.16% had 1 – 5 members in their household while the majority 59.5 had no formal education. In addition 79.7% has more than 21 years of farming experience and 76% of them belong to one cooperative society or the other. Majority 74.7% of the respondents claimed they had no access to extension service and on the contrary. 76% of the respondents claimed that they had access to advisory services. The findings revealed that majority (76%) of the respondents claimed that they had access to advisory services admitted that it had a positive impact on them. The study also highlighted the perception of the seriousness of the constraints faced by the extension service which includes problems of funding, poor incentive for staff inadequate training of EAs, institutional bureaucracy and mobility and logistic problems which are considered as serious problems. On the contrary, the advisory service does not face the same serious problems as encountered by the conventional extension service. The study recommended revitalization of the extension system in Nigeria and that more private, public and nongovernmental organizations should be encouraged to provide advisory services to farmers.

**Keywords:** Advisory service, Evaluation, Extension, Farmers, Chuckun

### Introduction

Formal practice of advisory service started in late 1800 AD. The first modern agricultural advisory service was established in Ireland during the potatoes famine in 1845 (Swanson *et al.*, 1997). During the colonial times, commodity – oriented technical advice was in many developing countries, while agricultural advisory services, were generally established in the 1950s and 60s. These services were designed to bring new knowledge and techniques from public research organization to a broader spectrum of farmers (Purcell and Anderson, 1997).

Agricultural extension services started in the United States of America in 1914 following the promulgation of an Act in the parliament. In the 1960s and 1970s the development of agricultural extension was seen as major factors in promoting agricultural development particularly the launch of Green

revolution in Asia country. It is important to note that after the time of Green revolution, there was widespread perception that it had become ineffective, inefficient and fiscally unsustainable (Anderson *et al.*, 2006; FAO, 2010). As a result of the above, there is a current interest in agricultural advisory services as a mean of reaching out for pro-poor development by promoting agricultural productivity, increase food security, improve rural livelihood and promoting agriculture as an engine for pro-poor economic growth.

Nigeria had faced serious development challenges since 1960 when she became independent. The poverty rate stands at about 70% in 2005 from 20% in 1980. The 2004 Human Development Index (HDI) stand at 0.466 ranking at 151 out of 177 developing countries. The country takes a 57 position among the 95 poorest countries in the world (Pinto, 2005; Sodangi, 2011). Rural poverty is a serious threat

the food and nutrition security in sub-Saharan Africa (SSA) specifically, in Nigeria where it remain a challenge despite the country's plentiful agricultural resources and oil wealth (Ogunlele and Ogungbile, 2006). It is against this backdrop that this study sought to:

- i. examine the socio-economic characteristics of rural farmers in the study area
- ii. determine the respondents access to extension and advisory services
- iii. determines respondents perception of the satisfaction derived from advisory and extension services
- iv. examine the constraints faced by the extension and advisory services and the farmers perception of the seriousness of the constraints

**Methodology**

The study was conducted in Chikun local government area (LGA) in Kaduna state, the LGA has a land area of about 445, 659km with a projected population of 368, 250 people according to 2006 census figure (NPC, 2006). It is one of the 23 LGAs of Kaduna state. The main occupation of the people is farming with a large number of civil servants and traders, some of the civil servant and traders are also involved in farming on part time basis (Banje *et al.*, 1995). The area receives an annual rainfall of about 1100mm and a mean temperature 29<sup>o</sup>c (Norman, 1994). The climate is suitable for the cultivation of varieties of crops like maize, legumes and yam. It also favours the rearing of livestock such as cattle, sheep and goat with abundance of grasses and shrubs (Barje *et al.*, 1995).

A well structured interview schedule was used to elicit information from the respondents. Primary data were mainly used for the study. Eighty questionnaires were distributed and 79 were found to be valid, bringing down the total sampled size to 79 respondents. Descriptive statistic such as frequency distribution, percentages, Likert scale type and means were used for data analysis.

**Results and Discussion**

Table 1 shows that majority (74.7%) of the respondents fall within the age range of 21 – 40 years. Thus implying that most of the farmers were in their middle aged which is the productive age. The relatively youthful age is advantageous for carrying out farming activities, this findings is similar to that of Ugwoke *et al.*, (2007) who reported that 79% of the respondents were within the active age range of 21 – 40 years.

**Table 1: Distribution of the respondents according to their socio-economic characteristics (n = 79)**

Variables	Frequency	Percentage
<b>Age</b>		
Below 21	7	8.9
21 – 30	13	16.5
31 – 40	46	58.2
41 – 50	13	16.5
Total	79	100
<b>Sex</b>		
Male	61	77.2
Female	18	22.8
Total	79	100
<b>Marital status</b>		
Single	4	5.0
Married	63	79.7
Divorced/separated	12	15.2
Total	79	100
<b>Household Size</b>		
1 – 5	42	53.1
6 – 11	24	30.4
11 & above	13	16.5
Total	79	100
<b>Level of education</b>		
No formal education	47	59.5
Primary education	22	27.8
Secondary education	10	12.7
Total	79	100
<b>Farming</b>		
Less than 10 years	4	5.1
10 – 20 years	12	15.2
21 and above	63	79.7
Total	79	100
<b>Membership of group/society</b>		
Yes	60	76
No	19	24
Total	79	100

Source: Field Survey, 2014

Table 1 also shows that majority of the respondents (77.2%) were males while only 22.8% were females. This is not surprising because most farming activities are usually carried out by the males, these can be attributed to the fact that farming requires an active and able bodied individuals. Results also shows that majority (79.7%) of the respondents were married. This implies that majority of the respondents are responsible peoples with additional responsibilities of catering for their household and this may be the singular reasons why majority of them seeks for advisory services to improved their lot

Table 1 also revealed that most of the respondents (79.7%) were illiterates, this will go a long way in affecting the rate of dissemination of information to them, and this may consequently slow down the process of acceptance and adoption of new innovations. Majority of the respondents (79.7%) had been farming for more than 21 years. This implies that the respondents had acquired enough experience to make them effective and efficient farmers. Similarly about 76% of the respondents belong to one type of cooperative society or the other and it is only about 24% that does not belong to any type of cooperative organization. This implies that farmers in the study area can take advantage of the opportunities that are usually made available by donor agencies, NGOs and other agencies that are involved in providing advisory services.

Table 2 revealed that majority of the respondents (74.7%) claimed that they don't have access to extension services, this cannot be dissociated from the current decay in the country's extension service, on the contrary, majority of the respondents (76%) claimed they had access to advisory services, this may be as a result of the extension service which is no longer functional.

**Table 2: Distribution of respondents based on their access to extension and advisory services**

Variable	Frequency	Percentage
<b>Access to extension services</b>	-	-
Have access	20	25.3
No access	59	74.7
<b>Access to advisory services</b>		
Have access	60	76
No access	17	24

Source: field survey 2014

Donor agencies, NGOs and development partners (public and private partnership) are now providing advisory services to the farmers, this is in agreement with Rivers and Alex (2005) who held that innovative advisory methods have gained ground, such as group based and participatory approaches for providing advisory services for alleviating poverty.

The result in Table 3 indicates that 37.5% of the respondents received advisory services from Fadama I, II and III; this implies that Fadama programmes is making an impact in the local government areas and in the state as a whole. Other sources from which farmers received advisory services includes UNDP (25%), USAID (18.75%), NGOs (12.5%) and others (6.25%).

**Table 3: Distribution of respondents sources of advisory services**

Source	Frequency*	Percentage
Government source	-	-
Fadama I, II & III	60	37.5
UNDP	40	25
USAID	30	18.75
Non-governmental organizations	20	12.5
Others	10	6.25
Total	160	100

Source: Field Survey, 2014. \*Multiple responses

This is in conformity with the claims of Anderson, Feder and Ganguly (2006) who opines that "there is a current interest in agricultural advisory services as a means of reaching out for pro-poor development by promoting agricultural productivity, increased food security, improved rural livelihood and promoting agriculture as an engine of pro-poor economic growth. This is also in agreement with Williamson (1986) who distinguished three sectors that may be involved in financing and providing agricultural advisory services via: the public sector, the private sector and non-governmental and non-profit organizations, civil society organizations from different sectors.

Table 4 revealed that majority (84.3%) of the respondents were not satisfied with the performances of the extension service, this is not unconnected with the present decay in the extension service. On the contrary majority (74.7%) of the respondents were satisfied with the performance of the advisory service, this also is not unconnected with the present commitment of the organizations that provide advisory services.

**Table 4: Distribution of respondents according to their perception of extension and advisory services performance**

Variable	Frequency	Percentage
<b>Extension service performance</b>		
Very satisfied	-	-
Satisfied	-	-
Not satisfied	10	12.7
<b>Advisory services performance</b>	69	84.3
Very satisfied		
Satisfied	59	74.7
Not satisfied	15	19.0
	5	6.3

Source: field survey, 2014.

This is in conformity with the claims of Kristin Davis *et al.* (2006) that organizations that provide advisory services are more

committed and usually ensure that farmers are seen as partners in the technology generation process rather than simply recipients of technology, they however support and provide facilities for people who engaged in agricultural production to solve problem and obtain information, skill and technologies and improved their livelihood and well-being.

Table 5 shows that 24.19% of the respondents received advisory services in form of training in acquiring skills that will make them efficient in using their resources, 20.16% received crop related advisory services, about 16.13% of the respondents received advisory service in livestock and poultry management. Others include market linkages (12.09%), agro processing services (7.26%) and 2.02% in fishery related services. This implies that advisory services providers provide a wide spectrum of services for the purpose of alleviating poverty.

**Table 5: Advisory services activities from which respondents have benefited**

Variable	Frequency*	Percentage
Crop related service	50	20.16
Livestock services	40	16.13
Fishery related services	5	2.02
Agro-processing services	18	7.26
Skill acquisition services (training)	60	24.19
Poultry/livestock management	40	16.13
Market linkages	30	12.09
Others	5	2.02
<b>Total</b>	<b>248</b>	<b>100</b>

Source: field survey, 2014 \*Multiple responses

Table 6 shows the constraints faced by both extension and advisory service. For extension service the respondents perceived all the problems to be serious, in exception of poor coordination between research and lack of qualified staff. For the advisory service the respondents perceived all the problems as not serious in exception of inadequate funding.

Table 6: perception of respondents on the seriousness of the constraints facing extension and advisory services

Variables	Means (X)	Remark
Extension service	3.49	Serious
Inadequate funding	2.50	Serious
Poor incentive of staff	2.60	Serious
Inadequate training for EAS	2.55	Serious
Institutional bureaucracy	2.30	Not serious
Poor coordination among research/ extension system	2.29	Not serious
Lack of qualified staff	2.70	Serious
Problem of mobility and logistics		
Advisory services	3.50	Serious
Inadequate funding	2.24	Not serious
Poor incentive of staff	2.15	Not serious
Inadequate training for EAS	2.21	Not serious
Institutional bureaucracy	2.04	Not serious
Poor coordination among research extension system	2.15	Not serious
Lack of qualified staff	2.20	Not serious
Problem of mobility and logistics		

Source: field survey, 2014

This implies that the conventional extension system is facing serious problems which needs urgent attention, this is in agreement with the findings of Van den Ban and Hawkins, (2002) and Dayo,\* (2010) who pointed out that agricultural extension is facing a number of serious problems in this era for which it is not easy to find good solution, on the contrary the advisory service is facing less problems and that is why it is presently doing better than the conventional extension service because the term "pluralistic" advisory services refers to the existence of a variety of institutional option that exist for financing and providing agricultural advisory service to support and facilitate people engaged in agricultural production to solve problems and to obtain information, skills and technologies and improve their livelihood and well being (Kristin Davis *et al.*, 2006)

#### Conclusion and Recommendations

Results of the study shows that majority of the respondents (74.7%) falls within the middle age range of 21 – 40 years considered appropriate for enhancing productivity. Also majorities (79.7%) were illiterate, implying that extension or advisory services may be slow down because illiteracy is a factor in the adoption process. Similarly, majority of the respondents (74.7%) claimed they don't have access to extension service, whereas, 76%

claimed they had access to advisory services, as such advisory services is having an impact on the farmers than extension service, all the recipients (76%) of the advisory service claimed it had positive effect on them. The result indicated that the extension service is facing serious problems which it is not easy to find good solution, advisory service on the other hand is not facing serious problems as the case with the extension service.

The following recommendations were therefore made:

- i. Reorganization and revitalization of the conventional extension system to bring back to shape and to regain its lost glory
- ii. There is need for adequate funding of the extension organization
- iii. There is also the need to encourage public private partnership
- iv. More organizations, like donor agencies nongovernmental organizations, private sectors and public sectors should be encourage in providing advisory services to close the gap created by the inefficiency of the conventional extension system

#### References

Aderson, J.R. Feder G and S. Ganguly (2006) Training and visit Extension. An Asian Mini Drama with an African Epilogue world Bank Policy Research Working paper 3928.



May 2006. The World Bank Washington, D.C.

P.P. Echoche, O.W. Oyedipe, E.O. Agymang, K. Adu F. Halilu, Z and Rekwot, P.I. (1995). Evaluation of Peri-urban Dairy Production System in Nigeria. A paper presented at the IDRC/CARNET post survey workshop held in Accra, Ghana, 29<sup>th</sup> May to 3<sup>rd</sup> June 1995.

Burkhaeuser, D., R.E. Evenson and G. Feder (1991). The Economic Impact of Agricultural Extension: A Review; Economic Development and Cultural Change. 39 Pp

Crowder, L.W. (1996) Partners in Sustainable Development linking Agricultural Education Institution and Farmers Organizations. Sustainable Development Department of FAO.

Dayo.P. (2010). Drawbacks to Agricultural Development in Nigeria: Agriculture Digest, 5 (2): 6-7.

FAO (2010) Impact Assessment of Large Scale Food Security Programmes; Quantitative Methods: Household Survey, Larners' Notes FAO. FIAT. PANIS. PP 10-12

International Fund for Agricultural Development (IFAD) (2004) Rural Poverty Report. The Challenge of Ending Rural Poverty.

National Population Commission (2006) National Census for Nigeria. Statistical report on Nig. Population, Federal Government Press.

Norman, D.W. (1994) Land and Labour Relationship. An Economic Study of Three Villages in Zaira Province NAERLS. *Journal of Agric Extension*, 2(1): 1- 10.

Oguniela .V.B. and Ogunbile A.O. (2006). "Challenges for Agricultural Research Alleviating Rural Poverty in Nigeria. A challenge for the National Agric. Research System.

Omotesho, Y., G.S. Francis and Osunde Z. (2009) Evaluation of Advisory Services Activities in Six Northern States of Nigeria. Submitted to NFD Abuja (2009)

Pinto, B. (2005) Nigeria During and after the oil Boom: a Policy comparison with Indonesia: The World Bank Economic Review 2(5) 419 - 445.

Purcell D.L. and J.R. Anderson (1997). Agricultural Research and extension: Achievements and problems in National systems. World Bank Washington DC

Rivere, W.M. and Alex, G. (2005) Extension Reform for Rural Devolvment, Vol. 1 (5): Case Study of International Initiatives World Bank and USAID, Washington D.C.

Sodangi, T. A. (2011). Rural poverty and agrarian reforms: in rural, agricultural and environmental sociology in Nigeria. Edited by Adedoyin S. F.A publication of the Nigerian Rural sociological association. Pp 299-313.

Swanson B.R. Bentz and A Sofranko (1997) improving extension: A reference manual Rome: Food and agricultural organization

Ugwoke, F.O., Onu, D.O. and E.C. Mathew- Njoku (2007). Determinant of Job Satisfaction of field extension Workers in Enugu state Agricultural Development programme (ADP) The way forward. In the Proceedings of the 13<sup>th</sup> Annual National Conference of AESON Between 8 - 11<sup>th</sup> April 2008. Pp. 98 - 106.

United Nations (2008). Trend in Sustainable Development: Agriculture, Rural Development, Land, Desertification and drought. Department of Economic and Social Affairs of the United Nations, New York.

Van den Ban, A.W and Hawkins, H.S. (2002). Agricultural Extension. CBS Publishes and Distributors 4596/1A, 11 Daryagaji. New-Delhi - 110002 Pp. 1 - 3

Williamson O.E. (1986). The Economic Institution of Capitalism Firms, Markets, Relational Contracting. The Free Press. New York.