

FACTORS AFFECTING EXTENSION GRADUATES' WILLINGNESS TO PRACTICE PRIVATE EXTENSION SERVICE DELIVERY

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Abstract

The study identified factors affecting extension graduates' willingness to practice private extension service delivery in Oyo State, Nigeria. Using Taro Yamane sampling formula for finite population, extension graduates were selected from universities, public research institutes, state ministry of agriculture. The results of the factor analysis revealed that five factors affected the willingness of extension graduates to practice private extension service delivery. All the factors were isolated from twenty-eight variables with 69.5% contributions to the willingness of extension graduates to practice private extension service delivery in the study area. These include the institutional factor, extension personnel factor, economic factor, experience factor and association factor. The study concluded that institutional factor of the private extension system was the most important factor affecting extension graduates' willingness to practice private extension service delivery. Therefore, a well legislated extension policy and institutional framework of operation should be developed by policy makers in order to facilitate a successful private extension practice.

Key words: private extension, factors, willingness, service

INTRODUCTION

In recent years, private extension service has been sought as an alternative to the public extension system. This is as a result of challenges facing the public extension service in Nigeria. These weaknesses could be summarized as follows: poor and erratic funding, ineffective extension supervision, unsatisfactory change agent/farmer ratio, duplication of organization and services which resulted in extension agents performing none-extension duties, inadequately trained extension agents who were not properly motivated due to poor service conditions and ineffective extension supervision as well as improper job descriptions [4]. In the same vein, [5] noted that these challenges can be attributed to their lack of adequate financial resources, inability to effectively increase farm income and improve the livelihoods of the rural poor. Several stakeholders including farmers and researchers have questioned the effectiveness and relevance of the extension message in meeting the needs of the farmers. [1] opined that the Nigerian public extension

system has been criticized for its lack of purpose and ineffectiveness in delivering extension services to the farmers.

The most prominent argument against public agricultural extension services is that of high and unsustainable public costs [9]. Additionally, the withdrawal of the World Bank sponsorship of the Agricultural Development Programmes (ADP) and decline in government funding for extension service delivery has posed a serious challenge to the future of the public good in Nigeria. Most of the challenges identified in the public extension system have revolved round the problem of inadequate funding of extension services and the effectiveness of the services currently been delivered with the public system. Therefore, it might not be possible to continue to have a completely free of charge extension system that would meet the diverse needs of the clientele. Hence, a well-developed private extension system would be timely in compensating for the defects of the public system.

Even though private extension service delivery is being considered as a viable

alternative to the public service system, it is not without its own challenges. As identified by [1], some of the challenges facing the privatization of extension services in Nigeria include: farmers' willingness to pay for the services, institutional framework, professionalism and competence of the extension system, corruption, availability of infrastructures and environmental imperatives. Previous studies have extensively researched issues relating to privatization of extension services in Nigeria. [2] stated that farmers can pay for services and are willing to pay if their income from farming would increase and the extension messages be made relevant to them. Also, the issue of professionalism and competence of the current extensions system have been the subject of several debates. [1] stated that farmers in the past have often complained of the relevance of the extension messages to farmers' current need and incompetence on the part of the extension agents for they lack adequate knowledge. [10] pointed the fact that it will take time to bring private extension into the planning process of agricultural development programmes. This is because private extension is an unknown quantity for many extension development experts and it is not always clear how it fits into the previously existing system. However, none of these research have identified factors affecting the willingness of extension graduates to practice private extension service delivery, hence this study.

The study aims to identify factors affecting the willingness of extension graduates to practice private extension service delivery in Oyo, State, Nigeria.

MATERIALS AND METHODS

Extension graduates who were enrolled into the university postgraduates' studies and those practicing the profession in the public extension system were selected for the study. Applying Taro Yamane formula [12] for finite population, data was collected from 169 respondents using structured questionnaire.

$$n = \frac{N}{1 + (e)^2}$$

where n = sample size

N = population under study

e = margin of error (0.05)

Factor and component analyses were used to isolate the crucial factors affecting extension graduates' willingness to practice private extension. Twenty-eight variables were subjected to the factor analysis; with the selection of variables that have their scores above the critical value of 0.30. These variables were inter-correlated and run with varimax factor rotation pattern.

RESULTS AND DISCUSSIONS

Personal and Socio-Economic Characteristics of Extension Graduates

This session present the socio-economic characteristics of the respondent. Table 1 shows the descriptive statistics of some socio-economic characteristics of respondents.

Table 1. Descriptive statistics of some socio-economic characteristics of respondents.

Variable	Mean	Standard deviation
Age (years)	38.9	9.12
Years of formal education	18.33	2.417
Years of extension experience	8.86	7.58
Monthly income (Naira)	85,860.29	69,945.34

Source: Field Survey, 2016.

The mean age recorded in this study is lower than the mean age recorded by [8] in a study involving agricultural extension agents in Ondo state, Nigeria. However, the mean age revealed that many extension graduates are middle-age individuals who are part of the active workforce in the country.

More than half of the respondents (50.9%) had Bachelor's degree, 28.9 per cent possess masters' degree, 5.3 per cent had doctoral degree (Ph.D) while the rest 14.8 per cent and 0.6 percent of respondents had Higher National Diploma (HND) and Ordinary National Diploma (OND) degrees respectively. Majority of these extension graduates (67.5%) were employed, 10.7 per

cent were self-employed (had their own businesses), 21.3 per cent were unemployed and 0.6 per cent were retired. As rightly identified by [11], the prevailing high rate of unemployment is one of the reasons for increased enrolment for post-graduate studies. Consequently, the unemployed extension graduates might have enrolled for post-graduate studies as one of the coping strategies against unemployment in the country. Therefore, private extension practice is an avenue for job creation for the unemployed extension graduates

Additionally, majority of the extension graduates (65.7%) were civil servants while 21.3 per cent of the respondents were full time post-graduate students with no other employment engagement. Other occupations indicated by respondents were agro-processing, petty trading, livestock rearing, private extension practice and farming. As few as 16 per cent of respondents have had no extension practice experience, 69.2 per cent of respondents have had between 1-15 years of extension practice experience, while 14.2 per cent of respondents have had 16-30 years' experience and 0.6 per cent have had more than 31 years of experience.

A high proportion of extension graduates (73.4%) indicated that the farthest they have ever travelled is outside the state while 23.1 per cent of extension graduates have travelled outside the country before and just 3.6 per cent of extension graduates have travelled only within the state. Majority of the respondents (78.1%) belong to one social organisation or the other, while 23.1 percent of them do not belong to any organization whatsoever. It was observed that Agricultural Extension Society of Nigeria (AESON) is the most popular professional association among the extension graduates. More specifically, it was revealed that 41.7 percent of respondents that belonged to professional associations belonged to AESON, 30.0 percent belong to Rural Sociology Association of Nigeria (RUSAN), 15.0 per cent belong to management associations such as CIPM, NIM and so on.

Factoring and willingness of extension graduates to practice private extension

Five factors were isolated from the analysis which had its Eigen value of greater than one. Three criteria identified by [6] were employed to name the group of factors isolated in the study. These were:

- (I) The researchers' subjective interpretation of experiences from literature,
- (II) Picking synonyms of the highest loaded variable on each factor; and
- (III) Joint interpretation or explanation of the meaning of the positive and highly loaded variables on each factor.

Group of factors isolated from variables

Tables 2 show the result of the varimax rotation of the variables included in the factor analysis and the principal components subsequently extracted for the extension graduates. Five factors were isolated from 28 variables with the measures that were highly loaded on each of them.

Factor 1 was named institutional factor which accounted for 42.32 per cent variation; factor 2 was named extension personnel factor with 9.51 per cent variation; factor 3 was named economic factor with 7.15 per cent variation; factor 4 was named external orientation factor with 6.12 per cent variation and lastly factor 5 was named association factor with 4.41 per cent variation.

Factor one: Institutional factor

Several variables had high loading on factor one name institutional factors. These include: capacity building for extension professionals (L=0.892), linkage between research and extension (L=0.878), innovations to be disseminated (L=0.872), access to research institutes (L=0.843), recognition of importance of extension (L=0.826), competence in areas of agricultural extension specialization (L=0.818), favourable agricultural extension policy (L=0.817), monetary value attachment to extension (L=0.804), government support (L=0.774), availability of market for increased output (L=0.757), legal support (L=0.749), social prestige associated with extension work (L=0.743), access to farmers (L=0.742), presence of other extension graduates (L=0.735), political stability (L=0.693), prevailing system of farming (L=0.668), farmers' need for extension services

(L=0.661), amount farmers are willing to pay (L=0.464) and demand for extension (L=0.34).

All these variables make up the institutional factors in the private extension service system that can affect graduates' willingness to establish the private extension services in the study area. This finding confirms the previous identified features of an extension system that may influence graduates' willingness to establish private extension services. This also implies that a good institutional arrangement

for the private extension service system would be a favourable factor in affecting the willingness of extension graduates to partake in the private extension service delivery.

Therefore, a favorable institutional framework must be put in place. This must be free of the 4 impediments identified by [7] namely: policy, strategic, structural and financial impediments hindering the realization of agricultural policy objectives.

Table 2. Result of varimax rotated component matrix showing extracted factors associated with extension graduates' willingness to establish private extension service

Variables	Factors				
	1	2	3	4	5
Age in years		0.906			
Household size		0.371	0.524		0.519
Years of formal education				0.777	
Years of extension experience		0.86			
Monthly income		0.54		0.631	
Perception			0.755		
Knowledge of extension		0.608	0.3	-0.478	
Favourable agricultural extension policy	0.817				
Legal support	0.749		0.39		
Political stability	0.693		0.387		
Monetary value attachment	0.804				
Amount farmers are willing to pay	0.464		0.624		
Government support	0.774				
Farmers' needs for extension services	0.661				
Prevailing system of farming	0.668				
Access to farmers	0.742				
Demand for extension	0.34		0.687		
Recognition of importance of extension	0.826				
Availability of market for increased output	0.757				
Access to research institutes	0.843				
Linkage between research and extension	0.878				
Innovations to be disseminated	0.872				
Presence of other extension graduates	0.735				
Capacity building for extension professionals	0.892				
Competence in areas of agricultural extension specialisation	0.818				
Social prestige associated with extension work	0.743				
Cosmopolitaness				0.744	
Association membership					0.843

Figures in bold fonts indicate variables with high loading

Source: Field survey, 2016

Factor two: Extension personnel factor

Variables that loaded very high on factor 2 were age (L=0.906), years of extension experience (L=0.86), knowledge of extension (L=0.608), monthly income (L=0.54) and household size (L=0.371). All these variables put together are personal and peculiar to an

extension graduate, hence, the factor was named extension personnel factor. This is a very crucial factor for the willingness of an extension graduate to establish private extension service. For instance, an extension graduate might feel he/she is too old to set up private extension outfit or on the other hand,

an extension graduate might feel he/she possesses vast experience in extension practice to provide private services.

Factor three: Economic factor

Perception (L=0.755), demand for extension (L=0.687), amount farmers are willing to pay (L=0.624), household size (L=0.524), legal support (L=0.39), political stability (L=0.387) and knowledge of extension (L=0.3) had the highest loading on factor 3. The perception and knowledge of extension the economy avails a graduate might stimulate an interest in the private extension system. Similarly, the demand for extension services and amount farmers are willing to pay are strong economic indicators that may affects a graduate's willingness to establish such services. The legal support and political stability are very important to the economic stability of a service system, hence, very crucial.

Factor four: Experience factor

Years of formal education (L=0.777), cosmopolitaness (L=0.744), monthly income (L=0.631) and knowledge of extension (L=0.478) were the variables that made up the external orientation factor. This implies that the experience an extension graduate might have gained through years of formal education, and through external exposures to training, research, conferences and networking might be favourable in affecting the willingness to establish private extension services. Also, in many organisations, the monthly income is often a function of years of work experience. Consequently, this might also affect a graduates' willingness to establish private extension services.

Factor five: Association factor

The highest loaded variable for factor 5 were: association membership (L=0.843) and household size (L=0.519). Through social organisations and family members, people often enjoy mutual support and opportunity for idea sharing. This belongingness can stimulate the kind of thoughts on new business ideas, in this case private extension service provision. Also, graduates can obtain support for the establishment of a private extension outfit from their professional network and family members. This finding

implies that the social capital of an extension graduate would go a long way in affecting the willingness to establish private extension services.

Contributions of groups of factors isolated from extension graduates-related variables to willingness

Results in Table 3 show the contribution of each of the groups of factors to willingness of agricultural extension graduates to practice private extension.

Table 3. Factors name, Eigen values and percentage variation accounted for by each factor associated with extension graduates' willingness to establish private extension service

Factors	Name	Eigen value	% variance	Cumm. % var
1	Institutional factor	11.851	42.324	42.324
2	Extension personnel factor	2.662	9.506	51.831
3	Economic factor	2.002	7.150	58.980
4	External Orientation factor	1.712	6.115	65.095
5	Association factor	1.234	4.408	69.503
6	Others		30.497	100.00

Source: Field survey, 2016.

Factor 1- institutional factor was the highest contributor to willingness which accounted for 42.33% variance. This is followed by factor 2- extension personnel factor with 9.51% contribution to willingness of extension graduates to practice private extension service. Factor 3- economic factor contributed 7.15% while factor 4- external orientation factor and factor 5 had 6.12% and 4.41% contributions respectively. To sum up, all the five factors identified accounted for 69.51 per cent contribution to willingness of extension graduates to establish private extension.

These factors identified are quite similar to the challenges of private extension service delivery noted by [1] which includes institutional framework, agricultural extension policies, farmers' socio-economic factor, corruption, professional competence, infrastructure availability and environmental

imperatives. There are some other factors not investigated in this study but had 30.5% contribution to willingness of extension graduates to practice private extension delivery system are equally important for investigation for future development of private extension system in Oyo state, Nigeria. Following the recommendation of [3], adequate attention should be given to factors identified before embarking on any form of privatization and commercialization arrangement.

CONCLUSIONS

The study concludes that majority of the extension graduates are middle age individuals actively involved in the Nigerian labour market. Most of them are civil servants in the public extension system. Also, institutional factor of the private extension system was identified as the most important factor affecting extension graduates' willingness to practice private extension service delivery in the study area. Therefore, a well legislated extension policy and institutional framework of operation should be developed by policy makers in order to facilitate a successful private extension practice. Lastly, all other factors identified in this study should be considered when deploying extension personnel for private extension practice.

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