

THE ROLE OF AGRICULTURAL EXTENSIONS IN THE ECONOMIC AND SOCIAL DEVELOPMENT OF ENUGU STATE

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Abstract

The study was on the appraisal of the role of agricultural extension in the economic and social development of Enugu State. It examined efforts of government on this. The sample size for the study was 240 farmers. Instrument for data collection was questionnaire. The formular for test for proportion was used to test the hypotheses formulated at significance level of 0.05 ($Z \alpha = 0.05 = 1.64$) The test indicated that agricultural extension services have not contributed meaningful to the economic and social development of the state. The following recommendations were made for improving the rate of Agricultural extension services in achieving economic and social development of the state:

Agricultural programme should be:

- (1) Targeted mostly to farmers and the budgetary allocation increased.*
- (2) Establishment of more colleges of Agriculture and encouragement of women and youths participation in Agriculture.*
- (3) Provision of infrastructure, modern farming equipment and enough extension workers.*
- (4) Continuity in viable programme in Agriculture should be uphold.*

Agriculture constitutes the major or bedrock of our nation's economy. Agricultural produce supply us with the food we eat, provide us with means of livelihood for those who work in agricultural sector, create social events like social gathering at the beginning of farming season and the harvesting period, provide welfarism like during National, State or Community food fairs when the best farmer among the competitors is rewarded. Agricultural products come in the form of fruits and vegetables, grains livestock, forest products and marine products (Adirika, Ebue and Nnolim; 2001:275).

~~*Academic Excellence*~~ ~~In Nigeria, bulk of farming are locally based. Food production in Nigeria has not kept pace with the nations teeming population because government support to Agriculture is inadequate which is mostly caused by lack of provision of modern implements, improved seeds, farm inputs, livestock etc moreover other necessary infrastructure like good roads for the movement of the produce from farmers' farm gate to areas of needs are poor.~~

These problems has resulted to poor Agricultural production and that of marketing of farmer's produce. However, Uturu, (2004:1) holds that it is not enough to provide abundant food rather what is more important is to make the provisions according to the needs of consumers in terms of quality and the form in which it appears desirable and appealing to the consumers. Kotler P. and Armstrong G. (2004:6) describe needs as a state of felt deprivation. This can be achieved through innovation on consumers needs. A way of boasting the social and economic development of the nation is through scientific innovation in Agriculture considering the role of Agriculture in the nation's economy. One of these scientific innovations is better achieved through Agricultural Extension Services.

Agricultural Extension as it is known, is an American innovation. It grew out due to national problem situation; the need to extend the benefits of new knowledge, facts and ideas obtained from intensive research to all concerned (Uwalaka, 1983:31) Agricultural extension services involves the extension of modern Agricultural techniques to rural farmers by the agricultural scientists and obtaining of consumers reaction through the farmers which is then used as information guide to them and government. By this arrangement, the extension workers services are much more equipped and subsequently, when adopted by the farmers contribute meaningfully to their wellbeing and the social and economic development. The problems of extension services workers are mostly due to inadequate support from government. Nevertheless, within the few areas where the services of those Agric scientists exist, the benefiting farmers witness improvement in their farm, and consequently in their income, social and economic status.

Farmer who has bumper harvest is likely to receive higher income. The coming together of farmers from various background like during the beginning and harvesting seasons and food fair creates social interactions.

In any case, Nigeria government still realize the importance of Agricultural Extension services and this informed its introduction in virtually all the state of the federation through each state's Agricultural Development programme, even though their impact is not much felt due to its limited number and poor government support.

Statement of the Problems

In Nigeria, Agriculture is yet to receive its due attention from the government at all levels. ~~Farmer are not satisfactorily encouraged and as a result, their output has fallen short of the food required by the nation's populace.~~ *The Role of Agricultural Extensions in the Economic* The idea behind the establishment of Agricultural Extension services is to boost Agricultural production in the country and thus contribute to the economic and social development. Unfortunately the services by the extension workers have fallen short of farmers demand and thus Agricultural production continued to be poor. The food required by people are inadequate. Among the reasons for this are: greater number of farmers are peasant, agricultural extension workers are inadequate and poorly supported by the government, improved livestock, seedlings, implements and modern farming equipments are insufficient. There is also little or no infrastructural facilities which facilitates agricultural programme. Then how can the aims for the establishment of agricultural extension be achieved for the purposes of playing a good role in the Economic and Social Development of Enugu State? This informed researcher's quest for the study.

Objectives of the Study

The study aims at ascertaining if Enugu State policy on agricultural extension services have been satisfactorily attained and specifically;

1. To ascertain whether Enugu State Agricultural Extension services have significantly improved social and economic development of the State.
2. To find out if reasonable number of farmers in Enugu State are aware of the extension services offered by Agric extension workers of Enugu State Agricultural Development Programme (ENADEP).
3. To determine whether majority of the farmers in Enugu State have benefited from the Enugu State Agricultural extension services programmes;
4. To ascertain if the services rendered by Agricultural extension workers are satisfactory or not and
5. To offer recommendations in the areas where services rendered by the Agric extension workers in the State require improvement to enable it contribute to economic and social development of the state.

Formulation of Hypothesis

The following null hypotheses which shall be tested later have been formulated to address the subject matter.

1. Majority of the farmers in Enugu State are aware of the existence of services offered by agricultural extension workers of Enugu State Agricultural Development Programme (ENADEP).
2. Majority of the farmers in Enugu State have benefited from the Enugu State agricultural extension services.
3. Enugu State Agricultural Extension Services have significantly improved social and economic development of Enugu State.
4. The services rendered by the state agricultural Extension workers in Enugu are satisfactorily.

The Evolutionary Development of Agric Extension

The evolutionary development of the Nigeria's extension service can be grouped into three district areas, namely;

- ~~a. The colonial and immediate post independence era: 1893-1968.~~
- b. The oil boom era: 1970-1979.
- c. The state nation-wide Agricultural Development Project (ADP) era: 1980 to present.

A. The Colonial and Immediate Post Independence Era 1893-1963.

This era was characterized by the following extension strategies and approaches.

1. The Colonial Community Extension Approach, Between 1893-19231: This era witnessed the introduction of scientific agriculture in Nigeria and the beginning of direct government participation in Agricultural development.
2. The Ministry of Agriculture Approach: The approach featured the compartmentalization of the service into the various sectors, agriculture, livestock, fisheries, forestry etc. with incompatible or parallel extension services.
3. The Revitalized Commodity Extensions Strategy: The revitalized commodity extension strategy emphasizing on selected export crops.
4. The Farm Settlement/Farm Institute Leavers Extension Strategy (1959-1965).

The aim of this community development based concept was to entice the youth's especially young school leavers to engage in farming as a career and to serve as models for concentrated extension service. The strategies adopted within the period did not succeed as a result of the following:

- ◆ Planning was top-down and no involvement of clientele.
- ◆ There was conflicting roles of extension education and law enforcement.
- ◆ Little or no involvement or linkage with research in all the approaches resulting in the development of inappropriate technologies or innovation.

B. Oil Boom Era 1970-1979

Within this era, Agriculture suffered serious setback. The government of the day felt that the rate of oil production and price will remain indefinitely and sustain the nation's economy. However, the following extension approaches which were weakly handled were in place:

i. The National Accelerated Food Production Programmes (NAFFP).

The programme involved training farmers in the modern approach to arable Agriculture through result demonstrations, variety trails, fertilizer and herbicide trails.

ii. Operation Feed the Nation (OFN)

The intention of government to introduce OFN programmes in 1976 was to substantially increase food production to serve the food needed by the people in the country and possibly encourage food exportation. According to Idach, (2000) "The primary intended beneficiaries have been

small scale farmers, but almost always the real but unintended beneficiaries have been merchants, contractors, middlemen, government officials and transporters”.

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iii. The River Basin Development Authority (RBDA) Strategies

The aim for the introduction of RBDSs in 1977 was for the exploitation of water resources for irrigation. However, it was between 1984 – 85 that extension responsibilities were assigned to them to offer extension services to farmers in their catchments area.

iv. Green Revolution

The Green Revolution programme which was launched in 1979 was to replace OFN which could not live up to expectation. It has as a primary objective to achieve food self-sufficiency for Nigeria in five years. This was not achieved.

v. The Pilot (Enclave) Agricultural Development Projects (ADPs)

The ideas behind the ADP extension system rest on the premise that a combination of essential factors made up the right technology, effective extension, access to physical production enhancing inputs, adequate market and other infrastructural facilities are essential ingredients to get agriculture moving in the country.

Roles of the Extension Workers (The Change Agent)

The extension workers assists both the organization and rural farmer. The change agent as he is usually called is a person who perform his duties to promote the adoption or learning of new ideas. Basically, he functions as a teacher and as mentioned above, provides a two way communication link between the organization and the clientele. In practical terms, his duty encompasses a wide variety of functions some of which may have little or no apparent educational implications. Stone (1961) and Funlay (1969) identified and classified the operational roles of the change agent into seven categories. These are:

1. Consultant/Adviser to rural people
2. Programme Administrator for the Agency
3. Salesman of Information and Ideas (Teaching)
4. Student (continuous learning to maintain competence)
5. Organizer of people into cooperatives i.e. productive groups.
6. Service agent/facilitator or supplier of farm inputs.
7. Organizer and supervisor of events.

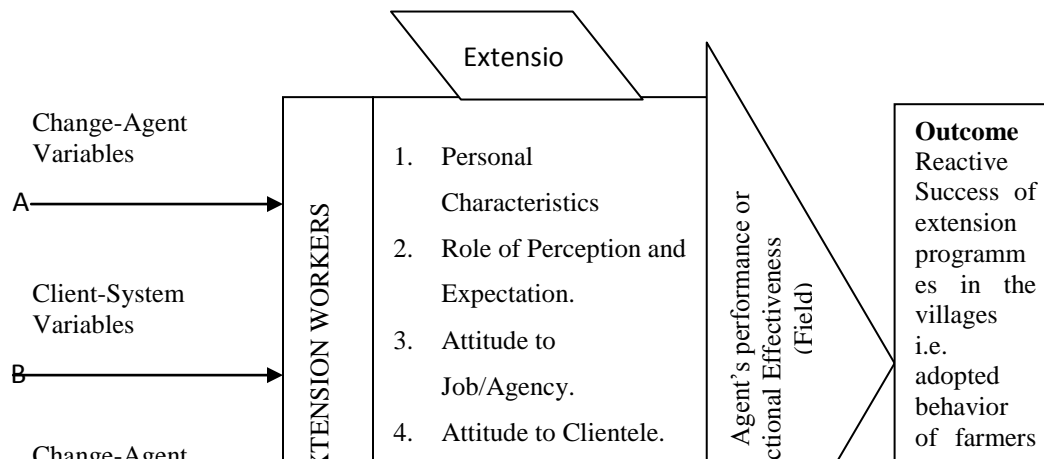
Determination of Success

Uwalaka (1983:34) observed that three groups of variables interact to influence or determine the success of Agric extension programme in any given situation or social system. These variables are:

- i. Those variable relating to the change agent.
- ii. Environmental variables and
- iii. Variable relating to the client system.

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Figure ABC - Variables Influencing the Outcome on Extension Situation



Source: Uwalaka 1983:35 with Modification

Those relating to the change agent are most crucial in determining the success of extension work (see the figure above).

Those of client system variables covered generally the economic, psychological and socio-cultural patterns of behaviour of the local or rural people (community) on these factors.

The environmental factors cover, organizational, administrative and programme variable (elements); economic, social and political situation, as well as both the internal and external relationships existing between the extension service organization and other institutions serving the rural community.

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Roles of agriculture to the Economy

Agriculture occupies strategic position in the development of the economy.

Among its roles to the economy as summarized by Ugwuanyi (1999:46) are:

- (a) Provision of adequate food for the nation.
- (b) Supplying of raw materials to the industrial sector.
- (c) Provision of employment.
- (d) Provision of foreign exchange earnings for the nation.
- (e) Provision of markets for the production of the industrial sector.
- (f) Provision of entertainment and physical protections.

Agriculture also provides social centres for food exhibition and competition. It as well attracts tourism and investors.

The Roles of Agricultural Extension System

Effective agricultural system enhances the following:

- (a) Transformation of subsistence production to commercial and marketing oriented production system.

- (b) Provision of efficient and usable information and training system that facilitate a meaningful organization of farm production and development.
- (c) Necessitating effective decision making competence.
- (d) Ensuring an optimum combination of farm enterprises conducive to dynamic maximization of farm income.
- (e) Facilitating the efficient allocation of farm as well as non farm resources through better knowledge situation.
- (f) Penetrating the rural farmers through familiarization of their attitudes and beliefs for easy understanding and implementation of extension programmes.
- (g) Performing dual roles (farm organization and farmers) to create flow of information and maintenance of standard in agricultural settings.

Agricultural Extension Programme in Enugu State

According to Enugu State Agricultural Policy (2005:2009:15) in Agricultural extension service, government will:

- ◆ encourage demand driven extension services;
- ◆ teach farmers the appropriate technology to use in their farm operation;
- ◆ strengthen ENADEP to be able to render effective service to the farmers;
- ◆ establish a strong link between ENADEP and research instructions for crops, livestock and fishery that are importance to the state;
- ◆ Give special attention to the farming needs of women and youths.
- ◆ Establish and maintain demonstration farms where farmers can observe improved practices and breeds varieties of livestock and fishery.
- ◆ ~~Link state extension with L.G.A extension to reduce duplication and necessary competition and;~~
- ◆ Encourage extension to be fully involved in the campaign in HIV/AIDS awareness and prevention, because of its advise effect on agricultural labour.
- ◆ Encourage community adverse farms and farm clusters.

The researcher in course of investigation found out from a senior staff of ENADEP that all as stated above are far from reality. The staff who preferred to be anonymous stated that majority of farmers in the state are not aware of extension programmes and do not benefit either. That poor budgetary allocation and diversion of fund meant for agricultural is evidenced in the state.

Methodology

The survey method was employed in this study. Since the state do not have authentic record of registered farmers in each of the local government area, the researcher arbitrary selected a total of 255 farmers made up of 15 farmers from each of the 17 local government areas of Enugu State to form the sample size of the population used for the study. They were later issued with questionnaire by the researcher. The outcome of their response shows that only 240 out of 255 were successful. These were later subjected to verification by using the appropriate tool to test null hypotheses earlier formulated.

Tool for the Test of the Hypotheses

The formular for testing of proportion was used in this study. This formular according to Ola (1997:148) relates to comparing two variables, evidence or factors and weighing them statistically in order to know which one or side has more influence. The formular is thus given as hereunder:

$$Z = \frac{\hat{P} - P}{\sqrt{\frac{P(1-P)}{n}}}$$

\hat{P}

Where \bar{p} = The sample proportion
 n = The sample size
 P = The hypothesized population proportion

Decision Rule

Reject H_0 if $Z > Z_{\alpha}$

Note: $Z_{\alpha} = 0.05 = 1.64$ (Normal Distribution Table)

Out of 255 questionnaires issued to farmers, 240 questionnaires were returned. In order to achieve the objectives of the study, only questions that concerns hypotheses earlier formulated were used. From the outcome of the respondents issued with questionnaire, the following number of respondents responded positively to the alternative hypotheses (H_1) and against null hypotheses (H_0). They are: 164, 80, 192 and 204. These were used to test the earlier formulated hypotheses respectively.

Test of Hypotheses

As earlier stated the formulated hypotheses for the study are in null form and are re-stated as below for test.

Hypothesis One

H_0 : Majority of the farmers in Enugu State are aware of the existence of services offered by Agricultural extension workers of Enugu State Agricultural development.

Being guided by earlier stated tool for the test of hypothesis for the study;

$$Z = 5.79 > Z_{\alpha} = 1.64$$

Decision

Since $Z = 5.79 > Z_{\alpha} = 1.64$. We reject H_0 and accept alternative hypotheses and conclude that majority of the farmers in Enugu State are not aware of the existence of services offered by agricultural extension workers of Enugu State.

Hypothesis Two

H_0 : Majority of the farmers in Enugu State have benefited from the Enugu State Agricultural extension services.

$$Z = 7.91 > Z_{\alpha} = 1.64$$

Decision

Since $Z = 7.91 > Z_{\alpha} = 1.64$, we therefore reject H_0 and accept alternative hypothesis (H_1) and conclude that majority of the farmers in Enugu State have not benefited from the Enugu State Agricultural extension service.

Hypothesis Three

H_0 : Enugu State Agricultural Extension services have improved social and economic development of Enugu State.

$$Z = 9.49 > Z_{\alpha} = 1.64.$$

Decision

Since $Z = 9.49 > Z_{\alpha} = 1.64$. We thus reject H_0 and accept alternative hypothesis (H_1) and conclude that Enugu State Agricultural Extension services have not improved social and Economic Development of Enugu State.

Hypothesis Four

H₀: The services rendered by the state Agricultural Extension Workers in Enugu are satisfactory.
 $Z = 11.08 > Z_{\alpha} = 1.64$

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Decision

Since $Z = 11.08 > 1.64$. We reject H₀ and conclude that the services rendered by the State Agricultural Extension Workers in Enugu are not satisfactory.
Based on this outcome, the services rendered by Agric Extension Workers of the State requires improvement.

Summary of Findings, Conclusion and Recommendations

Summary of Findings

It was discovered that Agricultural Extension Programmes in Enugu State do not receive adequate support from the government and so perform below expectation.

The claim or the supposed operation of extension workers throughout the local government areas in the state is a nightmare. Rather few farmers in the three towns namely: Umu-Nze, (Enugu East), Agbogugu (Enugu West) and Umulokpa/Adani, (Enugu North) are said to be slightly benefiting from the services of extension workers. In Enugu State, funds budgeted for agriculture are from time to time wrongly diverted for political and selfish reasons. The target publics or major stakeholders in agriculture, namely the youths and women are not encouraged; so only very few participate in Agriculture. This has resulted to unemployment, urban drift by young school leavers and slow rate of development in the state.

Conclusion

Agricultural extension programmes when pursued rightly will contribute much in economic and social development of the state and the nation at large. Extension Education has important role to play in the socio-cultural, political and economic development of Enugu State. Apart from the confidence on rural dwellers by extension services, it raises the aspirations of rural families and encourages the use of increased revenue (possibly obtained from extension services) to improve their education and family welfare and enhances socio-economic development.

The level of development in rural areas and Enugu State as whole may definitely remains static until agriculture is given its due attention by the government.

Recommendations

From the analysis, interpretation and findings especially based on testing of the hypotheses for the study, the following recommendations are made:

1. Since improvement in Agricultural productivity and efficiency has the greatest positive effect on the social and economic development of rural Nigeria, Government at all levels should properly address the problems facing agriculture especially by increasing the budgetary allocation and targeting agricultural programme like extension services to farmers with a more pragmatic approach;
2. Government should establish college of agriculture in each of the three senatorial zones of Enugu State for purposes of training agriculturists.
3. The youths and women should be given encouragements through financial and other incentives to join Agricultural activities.
4. The issue of provision of infrastructures in rural areas of the state should be given more attention to create enabling environment for farming and thus improve agriculture which will resultantly improve economic and social development of the state.

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