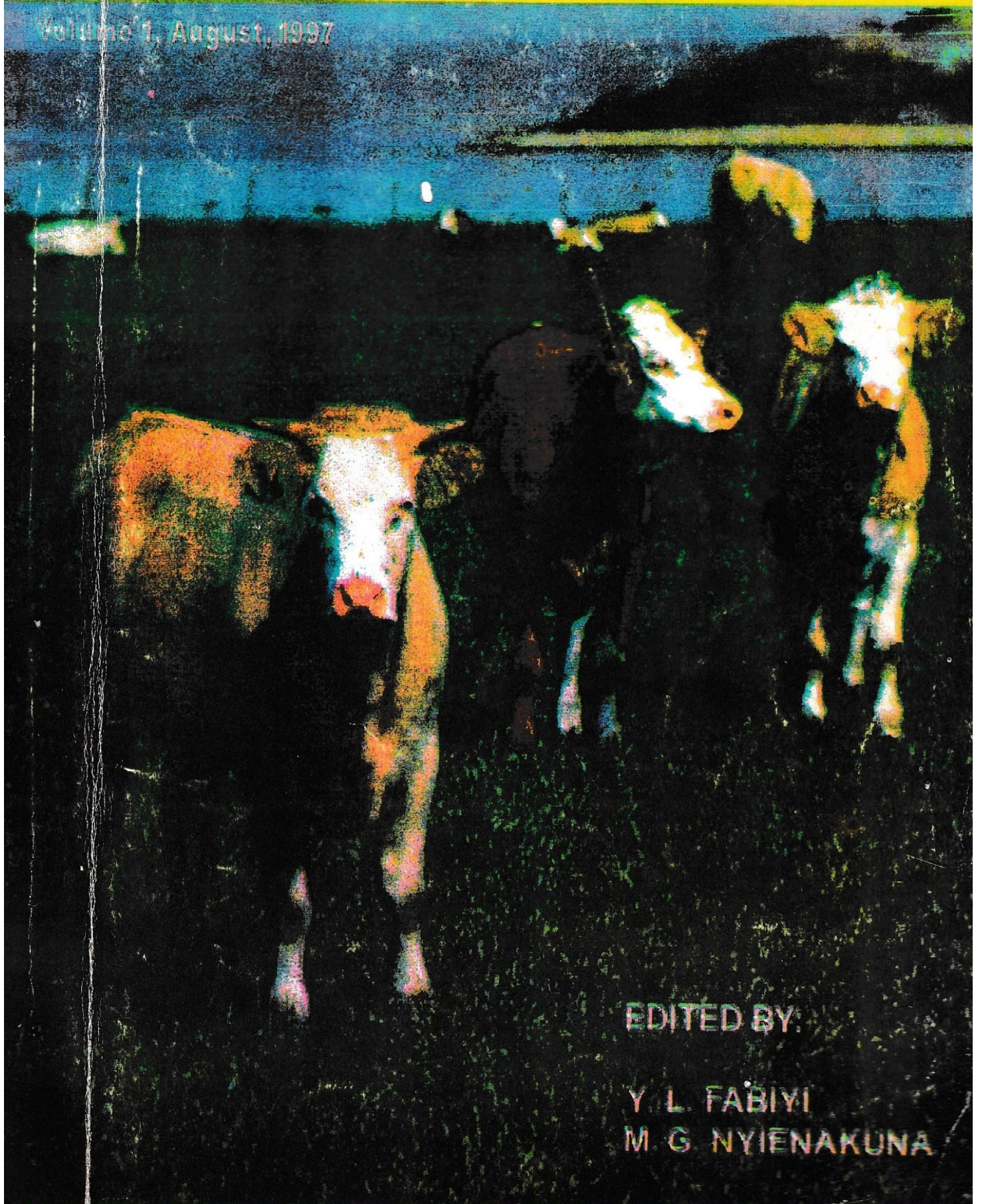


# ISSUES IN SUSTAINABLE AGRICULTURAL DEVELOPMENT

Volume 1, August, 1997



EDITED BY:

Y. L. FABIYI

M. G. NYIENAKUNA

First Published in August, 1997

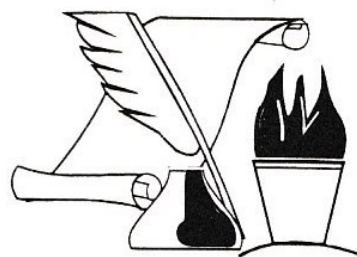
By Dorand Publishers P. O. Box 1350, Uyo

For Department of Agricultural Economics and Extension,  
University of Uyo, Uyo - Nigeria

*All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the copyright owners.*

© Department of Agricultural Economics and Extension,  
University of Uyo, Uyo - Nigeria. 1997.

ISBN 978 - 001 - 732 - 1  
First Published August, 1997.



**Dorand**

# 10

## **EXTENSION COMMUNICATION METHODS AS A STRATEGY FOR AGRICULTURAL DEVELOPMENT IN THE AKWA IBOM AGRICULTURAL DEVELOPMENT PROGRAMME (AKADEP)**

**I. A. AKPABIO**  
AGRICULTURAL ECONOMICS/EXTENSION DEPARTMENT  
UNIVERSITY OF UYO

### **INTRODUCTION**

Agriculture still remains the bedrock of the Nigerian economy and the greatest employer of labour. The Food and Agricultural Organisation (FAO) year book (1990) revealed that 80 percent of the Nigerian population was involved in agriculture and related activities in 1960, and that this figure dropped to 65.1 percent in 1989. Therefore, any attempt to develop the Nigerian economy must place a premium on the agricultural sector.

Information is one of the resources required for the improvement of agro-production and is defined as, "data for decision making" (Aina, 1995). Every individual needs information in order to take decisions and therefore, every sector of the population including literate and non-literate farmers need information.

The Agricultural extension agent still remains a very important source of disseminating information for the purpose of agro-development. However, for an extension agent to be successful in this endeavour, he must be technically competent as well as being highly skilled in the methods of transferring appropriate technologies and ideas to the farmers and other agro-producers. This process is called COMMUNICATION. In essence therefore, the extension agent must know "what" to communicate and "how" to communicate.

Various barriers can however hinder effective communication. A Communicator therefore, has to utilise various methods and devices to enhance the efficacy and effectiveness of his messages in terms of producing

the desired effects on the audience (Agun, 1979). A whole range of methods and devices exist for extension communication. Sica (1982:110), however asserted that extension agents utilise only a very small range of these devices and methods. Commenting on this trend, Agun (1989) avers that "selection of aids in instruction is done on an ad-hoc basis ... that is training aids are selected just because they are available."

The trends depicted above may impact negatively on agro-development especially when viewed against the unification of the Nigerian Agricultural Extension system, which took place in 1989. With the unification, extension agents trained in specialised areas of agriculture and forestry have to be retrained to become agro-generalists in order to be able to serve farmers in all areas of agriculture. These agents will have to become better exposed to a diverse array of communication methods and devices other than hitherto was available to them, in order to more effectively impact their messages to the farmers.

In this wise, this paper will attempt to review various extension communication methods and devices available for use, after which it will attempt an identification of the methods and devices actually utilised by extension functionaries of the Akwa Ibom Agricultural Development Project (AKADEP) to disseminate agro-technology Information to the farmers. The ultimate aim of this paper is to expose extension agencies and agents to various communication methods, devices and techniques that may be utilised for effective agro-technology information dissemination.

## **2. OBJECTIVES OF COMMUNICATION**

Communication in Extension can occur in three facets. Sica (1982:104) detailed the facets to include:

- (i) **Institutional Communication:** Which occurs between extension agents and the different persons or groups who constitute his organisation;
- (ii) **Inter-institutional Communication:** Which takes place between the extension agent and members of other organisations, in the process of executing actions or exchanging experiences; and

(iii) **Extension Communication:** Which is directed to promoting the adoption of more efficient production methods and attainment of better living standards for the rural population.

The focus of this write-up is on the third facet (extension communication) which among other components, is aimed at providing technical assistance or technology transfer to clientele, in order to provide solutions to identified or envisaged problems. Essentially, the objectives of extension communication include:

- (i) To develop knowledge and competence related to the alternative solutions to be applied.
- (ii) To assist or guide small scale tests in order to acquire information and skills to facilitate the introduction of new methods on a large scale.
- (iii) To provide bases for judgement in order to interpret the results of the tests.
- (iv) To give guidance or training for adoption of an innovation as a new form of behaviour in production or in the way of life of the producer or family.

In summary, extension communication simply attempts to:

- (i) identify or determine consequences of application of an introduced innovation and
- (ii) motivates early adopters to actively diffuse the innovation among other people or groups with similar production conditions.

### **3. COMMUNICATION METHODS IN EXTENSION**

Extension communication Methods (Teaching Methods/aids Channels of communicate etc.) are avenues, devices or means of organising and using instructional materials to create a situation in which a communicator can reach an audience with a specific message in order to produce a desirable behaviour. Simply put, Extension Communication Methods, refer to ways or means, used to transmit messages to and from an audience.

Extension Communication Methods are classified into two broad categories (Wilson and Gallup (1955). These are:

- (a) According to the number of people reached
- (b) According to form of Message

## **(A) CLASSIFICATION ACCORDING TO THE NUMBER OF PEOPLE REACHED**

This classification is based on the size of audience to which information is to be imparted by the extension agent. There are three sub-divisions of this classification as detailed below:

- (i) **Individual Contacts:** Here, the extension worker interacts on a one to one basis with the clientele. This method is time consuming but helps the extension worker to learn more in depth about the people of an area and gives the clientele more opportunity to get to know the extension agent. This method is best used with illiterate farmers working small holdings and where a large number of extension agents are available. Examples of this form of contacts include: Farm and Home visits, office calls and enquiries, Telephone calls, Informal Contacts, Model farmer and the field flag (Kang and Song (1984); Arokoyo (1991).)
- (ii) **Group Contacts:** These are better used when time and number of extension agents are limited and they help in persuading the clientele to try a new idea or practice because of the assumption that group decisions carry more weight in an area than an individual decision. This form of contacts include: method demonstrations, result demonstrations Farm tours, field trips, field days, contests, Young Farmer Clubs, Cooperative, Lectures, Panels. Seminars, Symposia, Colloquy, Clinic, Workshop, Brain storming sessions, Buzz sessions, Discussion group, listening team, simulation games, role playing, critical incident etc (Kang and Song, 1984).
- (iii) **Mass Contacts:** These are used to reach large number of people quickly in order to get them aware of new ideas or practices or in alerting them to sudden emergencies. Though only limited information can be relayed through this method, they however help to stimulate farmers' interest in new ideas and practices (Behrens and Evans, 1984). These include spoken and written word, static media and audio-visual presentation etc.

## **CLASSIFICATION ACCORDING TO FORM OF MESSAGE**

This refers to the ways, mode or medium of interaction between an extension agency and its clientele and is divisible into five forms, viz;

- (a) Spoken and Written Word
- (b) Pictorial Presentation (Static Media)
- (c) Audio-visual presentation
- (d) Three dimensional presentation and
- (e) Live presentation methods.

These methods are explained below:

- (i) **Spoken and Written Word:** These make use of human sight and sound and they include; Newspapers, wall newspapers, blackboard news, newsletter, hand-outs, folders, leaflets, pamphlets, fact sheets, radio broadcast, lectures, speeches, story-tellers, records, tape recording, folk tradition songs, brochures, posters, magazines, circular, notice boards, (Albrecht et al (1989); Fenley and Williams (1984), Public address systems; town criers and contact farmers etc.
- (ii) **Pictorial Presentation (Static Media):** These materials do not involve motion or sound and are often best used with small or intimate groups for maximum visibility. Their bulk may however result into transport and storage difficulty and there is a greater chance of misunderstanding compared to a conversation. Examples include chalkboards, (black or coloured), electric board, geoboards, flannel boards, magnetic boards, flip charts, posters, photographs, comics, wall Charts, maps etc (cf. Albrecht et al (1989); Agun (1989)).
- (iii) **Audio-visual Presentation:** This rely on audio or visual senses, either alone or in combination and help overcome the barrier of illiteracy. They however possess special disadvantages peculiar to each medium of presentation especially in developing countries where they may require high capital outlay in terms of electricity, accessories and maintenance repairs costs. Audio-visual presentations may be classified into two parts: (i) soft wares and (ii) hard wares (Agun and Imogie (1988)).  
**Soft Wares** are used for storing information and they include: Film, film strips, slides, transparencies, microfilm, microfiche, audio tape, video tape, computer programmes and radio and Television programmes.  
**Hard Wares** are used for recording, transmitting or retrieving information and they include: 8mm and 16mm projectors, filmstrips, slides, opaque and overhead projectors, computer machines, cameras, tape and video recorders, transparency maker, microfilm reader, photocopiers, Television and radio sets, tape duplicators, etc.

- (iv) **Three-Dimensional Presentation:** These can be physically handled, can be viewed from different angles and can be moved. They therefore possess an image of reality which is reassuring to the illiterate farmers (Albrecht et al. 1989). Examples include models, artefacts, tools, objects in casting resin, simulation games, specimens etc.
- (v) **Live Presentation Methods:** These are useful in areas still deeply involved in traditional forms of communication, especially in sacred societies. They help to popularise issues and may be used to highlight problems existing in an area. Examples include folk dances, songs, plays puppet shows, story tellers, exhibitions, demonstrations and meetings.

#### 4. **FACTORS INFLUENCING CHOICE OF COMMUNICATION METHODS**

No one communication method may be said to be more effective than others because each method has its peculiar merits and limitations. It is therefore advisable to use a combination of extension communication methods in a particular teaching situation.

The extension organisation or agent can therefore best determine the kind of communication method to use based on his knowledge of the local situation, the actual problems, the needs and interest of the clientele and the knowledge, skill and interest of the extension agent. Other factors which may influence choice of extension communication methods include: purpose of communication, intended audience, existing conditions, availability of resources, available extension aids, available expertise (Subair, 1989) and suitability of media for particular subject matter area.

Essentially, the choice of an extension communication method should be influenced by attempts to answer three salient questions.

- (i) What is to be achieved?
- (ii) How it is to be achieved; and
- (iii) what is to be used? (Agun, 1989)

The first question focuses on the specific behaviour the extension agent is trying to change, in terms of attitude, knowledge, skill and general motivation; while the second question tries to determine a precise approach or approaches to be utilised to help make the proposed change. Effective answers to the first two questions will give an insight into the third question.



In other words, the selection of appropriate communication methods should be guided by "What is to be done" and "how it is to be done."

Some Salient factors are involved in the selection of appropriate communication methods (the third question) for effective communication. These factors are as enumerated below: (cf Arokoyo, 1989).

- (i) **Characteristics of the target audience (the farmer):** These characteristics include: the needs, interest and problems: linguistic, social cultural and economic background; beliefs, literacy level, capacity of interpretation and the individual's stage in the adoption process.
- (ii) **The Extension Agent and his Agency:** Inclusive of which are: the technical competency of the agency; level and knowledge of communication gadgets; the extension philosophy and system of the agency and its resources, in terms of staff and materials.
- (iii) **The Physical Environment:** Made up of the village location, available infrastructural facilities and time/season of the year.
- (iv) **Characteristics of the communication aid:** Number of people who will use the aid at any given time and frequency of use; attractiveness; durability; cost and ease of procurement; ease of operation; portability; ease of repair; ruggedness and availability.

## **5. EXTENSION COMMUNICATION METHODS-AKADEP EXPERIENCE**

The Akwa Ibom Agricultural Development project (AKADEP) came into existence in December, 1989. Before its creation, AKADEP was part of the Cross River Agricultural Development Project (CRADEP) which was established in 1985. The separation of AKADEP from CRADEP became necessary after the creation of Akwa Ibom State on September 23, 1987.

Akwa Ibom State is one of the multi state Agricultural Development Project (MSADP) I states that have achieved complete unification of all the facets of its extension programme since 1991. The state has about 626,446 farm families, all grouped into 274 cells and 40 blocks. However, the AKADEP Fourth quarter summarized Report (1997) asserted that the state has only 198 extension agents and about 24 Block Extension Supervisors. From all indications, the number of extension functionaries is too small to make any positive impact on the improvement of agricultural production in

the state. However, an effective use of extension communication methods may help ameliorate this potentially dangerous situation.

**(A) COMMUNICATION METHODS UTILISED BY AKADEP TO IMPART INFORMATION TO ITS EXTENSION AGENTS**

The acquisition, knowledge of, and effective utilisation of communication methods can help to extend the coverage and impact of a small number of extension agents. Subject matter specialists (SMS) and staff of the Development Support Communication Component (DSCC) of the AKADEP however reveal that the most prevalent method of communication utilised by SMS's to familiarise extension agents with agro-based innovations are very limited and include: hand-outs, lectures, chalk-boards, method and result demonstration and (of recent) video-tape recordings. In essence, extension agents are exposed to a very minimal array of communication methods and this is expected to influence the range of communication methods they utilise to present improved agricultural information to the farmers.

**(B) COMMUNICATION METHODS UTILISED BY AKADEP AND ITS AGENTS TO DISSEMINATE INFORMATION TO FARMERS**

Ibup (1992), revealed that farmers in Uyo Urban of Akwa Ibom State (AKS) regarded the "Radio-Farmer" programme of the AKADEP and the "AKADEP field office" - as preferred information sources on improved agricultural technology while in a similar study in the predominantly rural terrain of Etim-Ekpo Local Government Area of Akwa Ibom State, Umoh (1997), identified: discussions, demonstrations (small plot Adoption Technique SPAT), the town crier and the radio; (in a decreasing order of preference) as **agro-information sources**.

A 1991 Survey on the International Fund for Agricultural Development (IFAD) funded Cassava Adoption Project revealed that while only 38.6 percent of the respondents were aware of the existence of the extension agent, a larger percentage (17.19) were already exposed to the "Radio" as an important agro-communication channel (AKADEP, 1991). A more recent *baseline survey on the National Agricultural Technological Support*

Programme (NATSP), (1995); revealed the common communication methods through which farmers access improved agro-information to be: the radio (59:42% respondents) and the extension agent (41.2% respondents). Other sources were, demonstrations (SPAT); contact farmers field days and publications.

The findings presented above all reveal the radio as a primary agro-information source. However, in a seeming departure from this trend Umoh (1997), presented data asserting that farmers prefer the radio (radio-farmer programmes of the AKADEP) only for information and awareness, as more than 77 percent of the farmers preferred other sources for authentic agro-information. The preferred sources mentioned include; the extension agent (67.8% respondents); the contact farmer (22.2%); Cooperatives (5.6%); and educated children (4.4%). The extension agent was regarded as a principal information source because (according to the farmers), innovations introduced on the radio became practicalised and authenticated through the demonstrations (SPAT) of the extension agent.

In summary, common channels/Methods of communication utilised by the AKADEP and its agents to deliver improve agricultural technologies to farmers in the State include: demonstrations (SPAT), the radio, discussions, contact farmers, field days and publications (extension guide).

## **6. CONCLUSION**

The AKADEP has succeeded, through its agents and its outreach programme on radio (the "radio-farmer" programme), in establishing itself as a primary, authentic and dependable source of improved agro-information delivery to farmers in Akwa Ibom State. However, the number of extension agents covering the estimated 626,446 farm families in the state is grossly inadequate.

It has also been established that only a very few communication channels and methods exist for the use of extension agents. In this wise it is necessary for the AKADEP to acquire and expose its field staff to a wider and more diversified range of communication methods as are indicated in this paper. This it is expected, will help to expand the scope and coverage of their (AKADEP) activities which is ultimately aimed at improving the level and quality of agricultural production in Akwa Ibom State.

## **7. RECOMMENDATIONS**

Recent reports indicate that AKADEP management has embarked on a massive recruitment exercise to increase the numerical strength of its extension agents. For effectiveness however, the agency needs to improve the quality and efficiency of its field staff. The following recommendations may suffice:

- (i) The agency needs to improve on the logistic support given to its field staff, specifically in terms of transportation and recommended inputs for demonstration.
- (ii) The agency also needs to expose its field staff to a series of in-service training. Specifically on:
  - (a) the diverse array of communication methods available and suited especially for use in the rural areas.
  - (b) how to familiarise themselves with the farmers as to understand the farm family situation and hence, their needs and wants. This will help the extension agents to easily identify the type of communication methods to be utilised to impart improved agro-innovations to farmers.
  - (c) how to help farmers with similar conditions and interest to come together in a group situation - so that they are easily reached for extension advise. Group extension method is also a more appropriate use of scarce human and material resources.
- (iii) The AKADEP Development Support Communication Component (DSCC) should be better funded as to acquire more communication gadgets and aids so as to more effectively produce its farmer outreach programme on radio - "the radio farmer."
- (iv) More field days should be held and farmers contacted to attend in person, while efforts should be expended in making recommended inputs more easily accessible to the farmer in order to ease the adoption process.

## REFERENCES

- Agun, T. (1979): "Learning with Audio-visual aid material" *The Ife Educator*, pp. 17 - 22.
- \_\_\_\_\_ (1989): "Selection, production and Use of Training Aids" (In) *Training Courses in Extension Training Principles and Methods*, O. A. U. - Ile-Ife Aug. 27 - Sept. 8 and Sept. 17 - 29 pp. 108 - 116.
- \_\_\_\_\_ and I A. Imogie (1988): *Fundamentals of Educational Technology* Ibadan, Y - Books p. 136
- Aina, L. O. (1995): Information and Agricultural Use in Africa: (In) L. O. Aina et al (eds) - *Agricultural Information in Africa 3rd World Information Service*, Ibadan pp. 1 -13.
- Akwa Ibom Agricultural Development project (AKADEP) (1997): *Fourth Quarter Summarized Report*, Uyo, Akwa Ibom State.
- AKADEP (1995): *IFAD Cassava Adoption Survey*, Uyo, Akwa Ibom State. 41 pp.
- \_\_\_\_\_ (1997): *Baseline Survey on National Agricultural Technological Support Programme (NATSP)* (in Press).
- Albrecht et al. (1989): *Agricultural Extension Vol. 1: Basic concepts and methods* G.T.Z. Eschborn, Germany. pp. 134 - 146.
- Arokoyo, T. (1991): "Effective Extension Communication Techniques": (In) *Proceedings of National Workshop on UAES 9 - 13th Sept.* NAERLS, ABU, Samaru, Zaria pp. 45-56.
- Behrens, J. J. and J. F. Evans (1984): "Using Mass Media for Extension Teaching (In B. E. Swanson (ed) *Agricultural Extension - A reference Manual* 2nd edn. FAO/UNO pp. 144 - 155.
- Food and Agricultural Organisation (FOA (1990): *FAO year Book, 1990* FAO/UNO.
- Fenley, J. M. and S. K. T. Williams (1984): "Extension Methods" (In) S. K. T. Williams et al. (eds) *A Manual For Agricultural Extension Workers in Nigeria* University of Ibadan, pp. 65-88.

- Ibup, E. A.** (1992): "The Diffusion and Adoption of "The Farmers" Radio Programme Among Farmers in Uyo L.G.A." Unpublished B. Sc. (ed) Agric-Science Degree Thesis, Faculty of Education, University of Uyo. pp. 54-57.
- Kang, J. T. and H. K. Song** (1984): "Individual and Group Extension Teaching Methods" (In B. E. Swanson (ed.) *Agricultural Extension: A Reference Manual* 2nd edn.
- Sica, I.** (1982): "Communication in Extension Work" (in) *Training for Agricultural and Rural Development*. 1981 FAO Economic and Social Development Paper Series No. 24 FAO/UNESCO/ILO.
- Subair, S. K.** (1989): "Effectiveness of Extension Teaching Techniques: Implications for Training Field Staff" (in) *Strengthening Agricultural Extension in Nigeria - Training Course in Extension Training Principles and Methods*. Aug. 27 - Sept. 8 and Sept. 17-29 OAY, Ile- Ife.
- Umoh, O. T.** (1997): "Effectiveness of Communication Channels Utilized by Agricultural Extension staff in Etim Ekpo L.G.A. of Akwa Ibom State." Unpublished B. Agric. Thesis in the Dept. of Agric-Econs/Ext, University of Uyo, Feb.
- Umoh, H. O.** (1997): "The Use of Audio-Media (Radio) for Improved Extension Delivery in Uyo L. G.A. Unpublished B. Agric. Thesis in the Dept. of Agric-Econs and Extension, University of Uyo, Feb.
- Wilson, M. C. and G. Gallup** (1995): *Extension Teaching Methods. Extension Circular No. 495* US Dept. of Agriculture, Washington D. C.&