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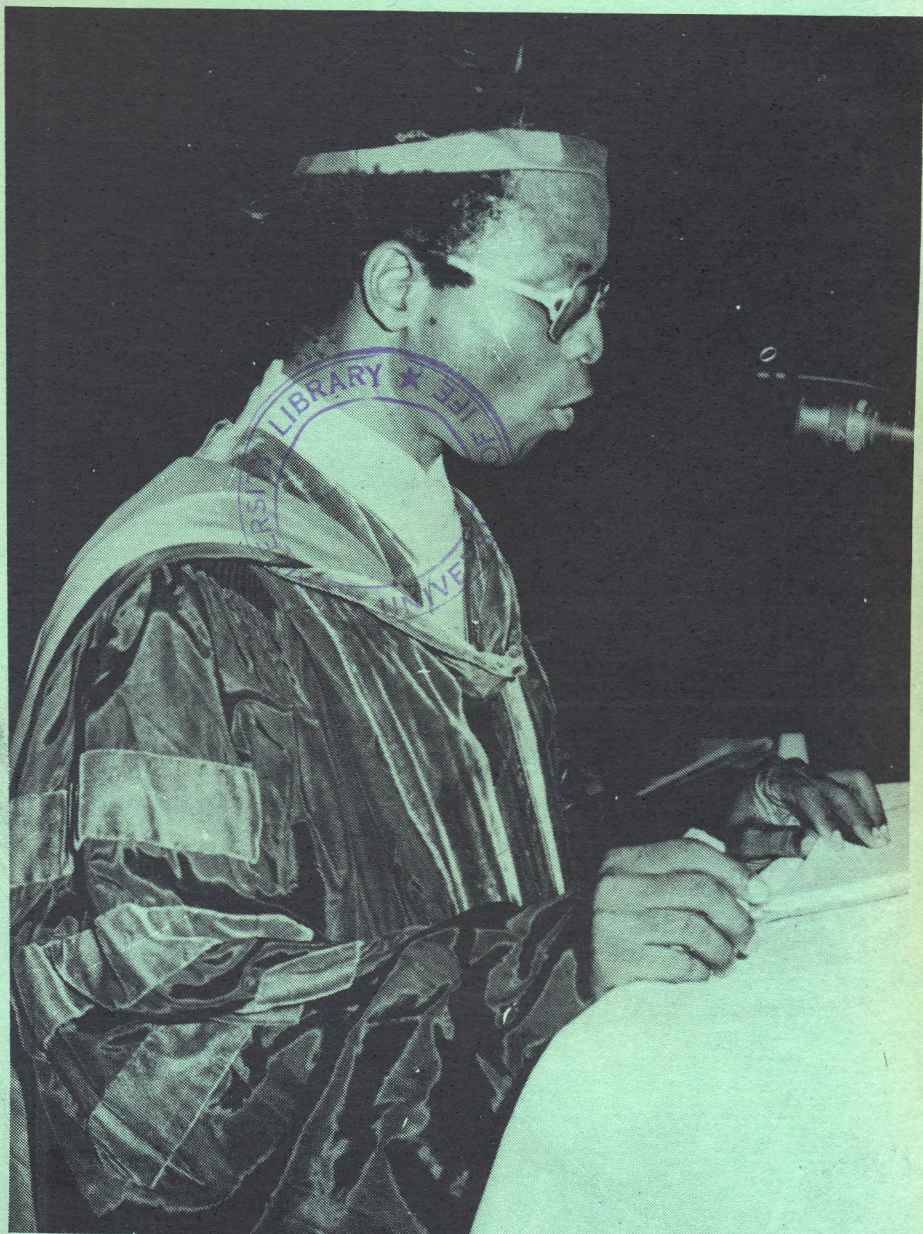
**EXTENSION FOR THE
EMANCIPATION
OF
THE SILENT MAJORITY**

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This inaugural address could not have come at a better time than now when the country's extension system is in a state of utter confusion if not total collapse. Extension as an educational process and programme is usually on the priority list of programmes to be jettisoned anytime there is problem in the nation's economy. Extension programmes and staff are moved from one agency to another, oftentimes to those with little or no understanding of what it is all about, nor appreciation of its principles and philosophy, and they are replaced with 'crash' programmes which often crash before take-off. The consequence of this is that the country's peasants who still account for about 95 percent of Nigeria's agricultural output suffer. This then is the origin of the title of my inaugural lecture, "Extension for the emancipation of the silent majority".

The significance of extension in our well-being is better illustrated by the following anecdotes: On some islands near the coast of Japan lived some monkeys. These animals have been studied and fed by the Japanese for some time. There also lived a lady around these islands who developed the habit of regularly washing her potatoes in a creek before eating them. This habit spread quickly across the islands, except among some old people. These apostles of continuity turned out to be those least inclined to accept new ideas. Later, the monkeys washed their potatoes in the sea. Newborn animals took over the habit from their mothers and got so used to the salty taste that they dipped their food into sea water before each bite.

A few years later, the island lady made another discovery. Instead of picking up grains thrown on the beach one by one from the sand, she collected a handful of sand and grains and threw it into the water. The grains floated and could easily be collected. This new habit also quickly spread with dramatic consequences. Young animals learned to swim and discovered seaweed as a source of food. Thus, a new ecological niche opened with possible consequences for future development.

The above illustrations demonstrate that even among animals, the development and extension of knowledge seem to play an important role in evolving and maintaining a pool of strategies for coping with the environment and for controlling it for purposes of survival and welfare. Human beings do not have fur skins; they do not have much instinct; they do not have ecological niches with special necks, beaks, and so on, to fit into that niche. All that human beings have for survival, welfare and security is their store of knowledge on how to control their environment, a store of knowledge which can only be maintained by extension of this knowledge to all members who need it, and can only be improved by new inventions and discoveries which can be extended to all members of the society.

The dependence of the human race on the discovery and extension of knowledge has made us the most successful species around. How dependent we are on development and extension of knowledge can be further illustrated by the historical cases of children who got lost in the wilderness and were found and brought up by wolves and other animals. They tried to behave like the wolves but they could not because they had no swift legs, no pointed teeth and no sharp noses. They were brought back to civilization — the human race — but they could not adapt and eventually died at early ages. Our civilization then can be seen as resulting from the development and extension of strategies for eliciting survival, welfare, comfort, security and pleasure from our environment, either by individual or collective efforts. Again, extension is an essential aspect in the maintenance of this civilization. In modern times, the world is rapidly becoming one single civilization; and in this process, extension has the important task of ensuring that useful knowledge which is available anywhere can be utilized by everyone.

In a simple society which changes slowly, we can conveniently rely on extension of knowledge from the old to the young, i.e. through socialization. But in a complex society, there is an additional emphasis on development and exten-

sion of knowledge. In a rapidly changing society where new knowledge is continually available and where conditions and desires constantly change, requiring new responses and strategies, the emphasis is on ensuring that a regular stream of new knowledge reaches the segments and individuals in the society. It is the need to ensure this permanent stream of knowledge that has given rise to 'extension'. This leads us to the consideration of 'what extension is all about'.

What is Extension?

Ordinarily, the explanation of what 'extension' means would have been unnecessary as the term appears commonplace. However, our experience has been that the concept, process and discipline of extension are very much misunderstood even by some of its practitioners.

Broadly speaking, extension is concerned with conscious efforts to help people develop sound and rational attitudes and behaviours. In other words, 'extension' is concerned with *influencing behaviours*. Let us now examine the various approaches for influencing behaviour in order to put in perspective the true meaning of 'extension'.

One method of influencing behaviour is through *compulsion* or *coercion*. In this approach, power is exerted by an authority, forcing somebody to do something. The following conditions are required for this approach to work:

- i. someone must have power over and above the others;
- ii. the power holder must know how the goals of the programme can be achieved;
- iii. the power holder must be able to check whether the persons being coerced are behaving in the desired manner.

All of these conditions are contrary to extension philosophy and hence compulsion or coercion cannot be regarded as extension.

Another method of influencing behaviour is through *exchange*. Under this arrangement, goods or services are

exchanged between two or more individuals or groups. For this to be possible:

- i. each party to the exchange considers the transactions to be in their favour;
- ii. each has the goods or services desired by the other;
- iii. each can only deliver his part when the exchange goods have been delivered by the other, or he can be trusted that this will be done; and
- iv. each knows that the other must deliver if they are to achieve their goals.

This is the type of situation we find in industrial and trade negotiations between employers and employees rather than in extension.

Manipulation or influencing other people's knowledge level and attitudes without the people being aware is another way of changing behaviour. This is done when the manipulator:

- i. believes that it is necessary and desirable for the other people to change their behaviour in a certain direction;
- ii. considers it unnecessary or undesirable for the manipulates to take independent decisions;
- iii. can control the techniques of influencing them without their being aware of this; and also when
- iv. the people being manipulated do not actively object to being influenced in this way.

In this situation, the manipulator bears responsibility for the consequences of his actions and these are done mostly for his own selfish interests as we often find in many commercial advertisements and political propaganda. This also does not fall within the extension approach.

Another method of influencing behaviour is *providing means or services*. We resort to this approach when:

- i. we agree with the recipients that certain goals or tasks are appropriate;
- ii. we believe the recipients do not have the knowledge and/or means to accomplish the goals; and

- iii. we believe we have these resources and are prepared to make them available to the recipients on a temporary or permanent basis.

These cover some of the services agriculturists provide to farmers, e.g. procurement of farm inputs such as fertilizers, improved seeds, chemicals, machineries and so on, which only constitute support for extension.

Advice can also be used to choose solution for a certain problem when:

- i. the advisee and the adviser agree on the nature of the problem and the criteria for choosing a correct solution;
- ii. the adviser knows enough about the advisee's situation and has adequate information which has been tested scientifically and in practice to solve the problem;
- iii. the advisee has trust and confidence in the adviser;
- iv. there is sufficient evidence that the advisee requires help to solve the problem; and
- v. the advisee has sufficient means to carry out the advice.

This was extension at its infancy or the extension advisory system as it is sometimes referred to.

And yet another approach is to *openly influence people's knowledge level and attitudes*. This method is applied when:

- i. we believe our clients cannot solve their problems due to insufficient or incorrect knowledge, and/or because their attitudes do not match their goals;
- ii. we believe the clients can solve their problems if they have more knowledge and/or change their attitudes;
- iii. we are prepared to help our clients collect more and better knowledge to help them change their attitudes;
- iv. we have this knowledge or know how to get it;
- v. we can use teaching/learning principles to transmit this knowledge and to influence the clients' attitudes; and
- vi. the clients trust our expertise and motives and are prepared to cooperate with us in our task of changing their knowledge and attitudes.

This is the situation in any effort aimed at achieving long-term behavioural change. The clients' self-confidence and capacity to solve other similar problems in future by themselves are increased. This is what 'extension' is all about. For example, an extension worker who only teaches a farmer to apply insecticide A or B whenever insect X or Y attacks his crops is only giving advice; whereas the extension worker who explains the life cycles of the insect pest and the crop so that the farmer understands when each is most vulnerable to attack and knows how to apply the pesticide at the most vulnerable times of the insects' life-cycle is carrying out 'extension'.

Furthermore, when social, economic and political emancipation is the goal, 'extension' also comes in handy using what Paulo Freire (1970) calls "conscientization".

This becomes possible when:

- i. we agree with the clients about their optimal behaviour;
- ii. the clients are not in a position to behave in the desired way because of barriers in the social, economic and political structure;
- iii. we and the clients consider changes in this structure to be desirable;
- iv. the atmosphere exists to work towards these changes; and
- v. we are in a position to do this.

This is extension at an advanced stage. Attempts to change social, economic and political structure in any society is usually the most difficult and the most strongly opposed especially by individuals and groups who believe that such changes will lead to reduction in power and privileges they are used to. I will be the first to confess that this is one area which 'extension' all over the world has almost completely neglected. In fact, the question is being asked in many quarters as to whether or not extension should be involved in this problem. My personal view on this is that given the fact that 'extension' has the largest coverage of the underprivileged areas and peoples of the world, there is every

moral justification for it to be involved in changing the undesirable social, economic and political structures of our society provided it adopts the educational approaches rather than violence. We will return to this later.

In effect, I have tried to give the definition of what I call the 'pure' form of extension by showing that what differentiates 'extension' from other methods of influencing behaviour is that in extension there is greater amount of harmony of interest between the clients and the helper. Extension is a discipline that deals with changes in knowledge, attitudes and behaviours in all their ramifications using principles of non-formal education. It is for this reason that training as an extension specialist includes training in sociology, social psychology, cultural anthropology, communication, economics, organization theory, education plus the subject-matter which the specialist wishes to 'extend'.

Our formal education (primary, secondary, and to a great extent, the tertiary) is designed to pass on knowledge which our teachers believe we should know. It is in rare and fortunate cases that such education is geared towards our total development so that we can understand the society in which we live. Rapid social, economic and technological developments affect our daily lives, and substantial changes which follow make a discipline like 'extension' imperative. It should be noted that 'extension' is sometimes referred to as 'adult', 'continuing', 'life-long' or 'further' education in some places. What binds them together is the 'andragogy' methodology of education, as opposed to the 'pedagogy' methodology of formal education. The andragogy method of extension takes the position that the best way to learn is through interaction and sharing of knowledge. On the other hand, the pedagogy is the banking method of education. It assumes that the extension worker has all the answers and that all he needs to do is to deposit his content in the empty heads of the farmers.

The term 'extension' was first used in the British university system early in the 19th century to refer to teaching

activities away from the main university campus or for audiences other than the students enrolled for university education. Extension education was intended to help people outside the universities adjust to the many social and technical changes taking place in Great Britain at that time.

This principle was however quickly grabbed by the Americans when America was in search of solutions to her agricultural and technological problems. And so, the term 'agricultural extension' came into common use in the United States of America early this century when farmers' advisory services were developed in association with the Land Grant Colleges. Each state of the union was granted land by the Federal government on which to develop agricultural experiment stations and to build associated educational institutions or colleges. Today, these colleges are mostly major universities, but are still the headquarters of the county-based extension or advisory services.

The next logical question we wish to address is whether extension is applicable to agricultural problems only or can be extended to other sectors.

Extension of the Agricultural Extension Approach

Although the oldest and most known form of extension is in agriculture, it is clear from the introduction and theoretical framework of this address that the extension approach is a versatile system which can be used in any field focussing on change using educational process.

For example, *health education* is increasing rapidly in importance in most countries of the world. Many countries, have realized that despite the increasing cost of curative medicare, there is not likely to be drastic improvement in the health conditions of their citizens, and that poor health stems mostly from poor health behaviour. Emphasis is therefore being put on preventive medicine aimed at influencing those undesirable behaviours in a positive direction. This is health extension.

Career information and guidance are also given by labour exchanges and bureaux. This form of extension becomes important as careers become more complicated and occupational requirements change rapidly.

Even here in our own University of Ife we can cite a number of disciplines other than agriculture which are borrowing the extension approach to achieve their goals. Among the examples that readily come to mind are: the Centre for Industrial Research and Development Unit of the Faculty of Social Sciences; the Technology Planning and Development Unit of the Faculty of Technology; the Drug Research and Production Unit of the Faculty of Pharmacy; the Ife Law Reports of the Faculty of Law; the Community Health, Family Planning and Nutrition Programmes of the Faculty of Health Sciences; the Environmental Design and Research Unit of the Faculty of Environmental Design and Management, and the Continuing Education Programme of the Faculty of Education, to mention a few. Even the religious groups, including the traditional religionists are seeking extension assistance to help them win more converts.

However, extension has not been as successful in these other sectors as it has been in agriculture. A number of reasons can be adduced for this. First, in agriculture, there is relatively a more elaborate research system which produces and publishes innovations which are relevant to many farmers' problems. In many developed countries, up to 2 percent of the agricultural gross domestic product is invested in agricultural research (World Bank, 1981). In many other sectors of society, the investment in research is much lower. In addition, in agriculture most research is financed by the government and the research findings are public, whereas in other sectors, especially in industry, research is often done by private firms who try to prevent the communication of research findings to other firms or protect their innovations with patents.

Secondly, in agriculture this research is often geared to the needs of farmers in general by integrating different disciplines and information on the problems and situations of farmers.

In countries where agricultural sciences have advanced, there are strong personal ties between research workers, extension officers and farmers. Also farmers' organizations try to make sure that research is focussed on the major problems of their members. In other sectors, this user-orientation of research is often much weaker. In small scale industry, for example, this is more difficult to accomplish because most firms are rather specialized.

Thirdly, there should be a good linkage between the research institutions and the people who are responsible for communicating the innovations to users. (i.e. the field extension workers). In agriculture, this is often the task of the subject-matter specialists, who in a certain discipline or branch of agriculture (e.g. crop protection) are responsible for the communication between the research workers and the extension workers who are in direct contact with the farmers. These are usually located in what we call Agricultural Extension and Research Liaison Services (AERLS). In this way, these specialists can have both formal and informal contacts with researchers as well as regular meetings with field extension workers. In the ideal situation, a chain of confidence is developed — the farmer in the field extension worker who in turn has confidence in the subject-matter specialist, and the specialist in the research workers.

In addition, the farmers' organizations are often represented on the boards of research institutes and so can exert some user control on agricultural research. Thus, both the culture and the structure of the society increase the willingness of the agricultural research workers to listen to their consumers.

In other sectors, different elements of this linkage structure are found in separate organizations. For example, in the health field, while the medical schools and specialist hospitals carry out the researches, the public hospitals and public health organizations with limited or no formal linkage with the research institutions are responsible for carrying the research findings to the public. The research institutions on their part have limited contact with the public which consume their findings.

The fourth difference between agriculture and other sectors is the need for open interpersonal communication among the potential users on their experience with the technologies. In agriculture, this is often realized both informally and through organizations like farmers' associations. Usually there is cooperation between these associations and the extension service. In industry, this is quite different. If there are three manufacturers of transistor radio for example and one has increased the efficiency of his production through the use of modern technology, he will not disclose to others how he has done this. The basis for discussion among farmers is often that they have seen that one of them has adopted an innovation. This is easier to do in agriculture because of the easy visibility of consequences of innovations.

The last factor that differentiates agricultural extension from other sectors is the fact that often, individual farmers (and his/her family) can decide on the adoption of an innovation thus making the process relatively easier than what happens in industry, for instance, where the adoption of an innovation often affects the life of a whole group of people.

In summary, the extension approach is relevant and applicable to other sectors of human development if:

- i. There is appreciable public investment in research in these sectors;
- ii. These researches are focussed on the major problems of the users;
- iii. There is good linkage between research workers and users through subject-matter specialists and all round extension workers;
- iv. There is planned communication of innovations to the users using mass and interpersonal methods;
- v. Research workers are motivated to listen to what the problems of the users are;
- vi. There is open interpersonal communication about the experiences of the users with the innovations; and
- vii. Users are free to decide to use or not to use innovations (Ban, n.d.)

We are not saying in the discussions above that agricultural extension is at present perfect. The conditions vary from one country to another as we shall soon see in the case of Nigeria.

All we have done is to examine reasons why extension has been more closely associated with agriculture and what it takes to extend it to other sectors.

Agricultural Extension in Nigeria

Having now examined the applicability of agricultural extension approach to sectors other than agriculture, the next logical consideration is the status of agricultural extension in Nigeria.

For the past eleven years, our research interest and effort have been focussed on the "organization and management of agricultural extension in Nigeria". The following are the highlights of our research work:

Our agricultural extension organization and management from inception to date can be examined under four phases:

Phase One

The first three decades of extension which spanned 1893 to 1921 saw extension organized and managed through a combination of coercion, manipulation and provision of means and services strategies. This means that extension at that time was nothing near the 'pure type' earlier discussed. It was characterized by (i) absence of scientific information to extend to its clients; (ii) conflicting roles arising from the adoption of incongruous strategies, i.e. coercion, manipulation, service and education; and (iii) dual structure of agricultural development strategy (i.e. cash vs food crops dichotomy) in favour of cash crops and neglect of food crops.

The specific programmes within the period include:

- i. the establishment of a Botanical Garden at Olokemeji, now in Ogun State in 1893;
- ii. the acquisition of a plot of land at a site now known as Moor Plantation, Ibadan by the British Cotton Growers'

Association in 1905 for the production of cotton for the British textile industry; and

iii. the establishment of a unified Department of Agriculture in 1921 with headquarters at Moor Plantation, Ibadan.

It is not difficult to understand why the behavioural change strategies of coercion, manipulation, and at best, service and provision of means were found the most convenient during this phase. The extension organization was not designed to serve Nigerians in general and the Nigerian farmers in particular. One direct evidence which supports this claim is that the most important objective of the unified Department of Agriculture was to "experiment on the production of export crops". Realistically, one has to concede however, that it could not have been otherwise since the top hierarchy of the extension system at the time was staffed and managed almost completely by British colonialists whose primary assignment was, of course, to protect the interest of their home country.

The intervening period of 1921 to 1950 which also saw the second World war only witnessed internal reorganization and consolidation of the status quo in the development of our agricultural extension.

Phase Two

What one can properly refer to as the second phase of agricultural extension development in Nigeria covered the period 1952 to 1968. This period, not by coincidence, embraced our first National Development Plan period (1962-68).

It was also during the period that the Federal Government concertedly started to get involved in agricultural development through the establishment of a Federal Ministry of Agriculture and Natural Resources in 1964. This phase also witnessed a number of reorganizations. Regions were established and for the first time agricultural extension and rural development became the exclusive responsibility of regional

governments. Other reorganizations include the introduction of the Farm Settlement and the School Leavers' Farms patterned after the Israeli moshav system, and the establishment of separate Special Commodity Extension Services for some of the export crops (e.g. cocoa and rubber) leaving the general extension services for food crops and livestock. This latter action led to unprecedented improvement in the production of export crops such as cocoa, which made the building of the famous but recently gutted down "Cocoa House" and the establishment of this University — the Great Ife, possible. Other export crops that benefitted from this 'philanthropic gesture include rubber, groundnut (as evidenced by the popular groundnut pyramids in Kano) and palm oil and kernel.

Although manipulation (through the economic forces), service and advice strategies of behavioural change characterized this phase of extension development, the tangible economic benefits that accrued to the farmers and the nationalist dedication of the increasing number of Nigerians who then found themselves in extension management positions made the progress cited above possible.

Phase Three

Then came the third phase of extension development which I have chosen to call the period of "wealth illusion" which threw our extension system, and in fact, our overall agricultural development policy into total disarray. This manifested itself in our propensity to run from pillar to post, establishing one extension agency after the other without conclusively testing and taking a position on a previous strategy. This period saw the establishment of many extension organizations:

- i. In 1970, the Federal Department of Agriculture (FDA) field offices were established in the states to supplement the activities of the states' Ministries of Agriculture. However, a study conducted by Akinbode, Osuntogun and Ekong (1978) revealed that most of the states were

reluctant to relinquish their extension responsibility to the Federal Department of Agriculture in extension on the ground that the latter might take over their role with consequent job security problem. On the other hand, we also found that the Federal Department of Agriculture itself was hampered. There were no formal or legal bases specifying the kind of relationships that should exist between the Federal Department of Agriculture and the states' Ministries. Secondly, the Federal Department of Agriculture did not possess the resources with which to perform the coordinating function assigned to it.

ii. In 1972, the National Accelerated Food Production Programme (NAFPP) which according to a study conducted by Akinbode, Osuntogun and Ekong (1978) was then the best extension strategy ever adopted in this country was established. It brought researchers, extension workers and farmers together in a cooperative effort to improve production, thereby making the required linkage between technology producers, communicators and consumers possible.

One shortcoming of this approach however, is that it focusses on mono-cropping, a system alien to Nigerian farming culture. It is therefore not surprising that the NAFPP is gradually dying out as an extension strategy.

iii. In 1974, the Project Performance Budgeting System (PPBS) was introduced along with Agro-Input Services Units (AISU). The purpose of this strategy was to harmonise agricultural development plans with budget provisions, as well as separate extension as an educational activity from services. Studies carried out by Akinbode and Ladipo (1979) showed that these programmes have not made the desired impact due to (i) inadequate management training, (ii) inadequate financial support, and (iii) lack of built-in feed-back from extension clients.

iv. In 1975, an integrated approach to agricultural extension and rural development was introduced with the

establishment of the Agricultural Development Project (ADP). The purpose of this was to accelerate agricultural and hence rural development through the integration of extension education (using the Training and Visit approach), services (social and economic) and infrastructural development. In a critical assessment of this approach carried out in 1982 by Akinbode (1982), we concluded that "... whilst the superiority of this strategy (like many other pilot projects), compared with general extension, may not be in doubt principally due to limited geographical coverage and concentration of resources, its replicability on a wider scale was yet to be ascertained" (p. 50).

In another study completed recently by Akinbode and Yayock (1984), we concluded that the ADPs have come up against recurrent cost financing problems being encountered by both the federal and state governments. These problems, according to this study, emanated from the attempt to sponsor simultaneously a large number of rival and sometimes wasteful programmes. Reference was made to the huge sums of money wasted on OFN, Green Revolution and other similar propaganda programmes which otherwise could have been properly channelled to the ADPs. The case was then made for a properly coordinated agricultural and rural development policy. These apprehensions were soon confirmed by the federal government's decision, after the pilot phase, to adopt a scaled down version of ADP in the names of Accelerated Development Area Programme (ADAP) and Phased ADP in those states where the Agricultural Development Project was yet to start.

- v. In 1976, the Operation Feed the Nation (OFN) programme was hurriedly installed, and on this we also had this to say: "Most of the studies which examined the contribution of OFN returned failure verdicts except on the issue of creation of awareness of the food situation in the country ... For instance, the increase in aggregate

food production recorded in the first year of the programme was not sustained beyond that year" (Akinbode, 1982).

vi. Again in 1976, the most radical reform in the history of local government administration and extension management in Nigeria was carried out. With this reform, agricultural extension was made the responsibility of local governments while state governments and other organizations were expected to perform those functions which the local governments could not perform. Our study also showed that this effort failed because the local governments were not given the wherewithal to execute such responsibility (Akinbode, 1984).

vii. In 1977/78, on realizing that the natural rain-fed agriculture might not meet the food and fibre needs of Nigeria, the River Basin Development Authorities were created. While hard data on the performance of these authorities are not yet available, it is public knowledge that poor management had limited the impact of the programme.

viii. In 1980, the Green Revolution Programme was introduced to replace the OFN. The amount spent on the programme before it was halted as a result of change in government has been put at about ₦2 billion; the fact however is that no one will be able to calculate the actual amount that was sunk into it. The undisputable fact about the programme is that it was used to further exploit the suffering masses of this country, leaving the few privileged rich richer and the poor poorer.

ix. It was also in 1980 that the pilot phase of the Agricultural Development Project (ADP) (Funtua in Kaduna, Gombe in Bauchi and Gusau in Sokoto), started in 1975, was completed. Because of the seemingly encouraging results obtained, a gradual spread of ADPs to other states of the federation, as well as the transfer of state extension services from the ministries to the ADPs were initiated. It is necessary to remind ourselves

at this juncture that the Agricultural Development Project is a joint venture of the federal and state governments and the World Bank with the contributions averaging 25, 40 and 35% of the total cost respectively. While this transfer of function was going on, the state ministries were left intact although some of their extension workers were seconded to the ADP.

Phase Four

The fourth phase is the period when the management of extension is taken further away from those who need it. It is the period of the adoption of a top-down philosophy of extension. Between 1984 and now, a number of reorganizations had been introduced. Each state of the federation (except Lagos which shares with Ogun) now has her own River Basin and Rural Development Authority (a federal agency) and this authority has now taken over extension services in the country. Furthermore, the Federal Departments of Agriculture and Rural Development field offices have been scrapped and replaced with the Field Projects Monitoring Unit to oversee the activities of the River Basin and Rural Development Authorities.

In addition, in those states where the Agricultural Development Project (ADP) has gone statewide, the responsibility for extension services has been passed to this project with almost all the states' Ministries of Agriculture extension staff transferred or seconded to the project; yet the ministry remains in the government structure. It was this situation that lead Mijindadi (1983) in his study of Sokoto state to ask the question "who controls Nigeria's extension service ...? Akinbode (1983) in a follow-up study of five northern states (Sokoto, Kaduna, Bauchi, Plateau and Kano) confirmed this confused situation when he reported that not less than six agencies which knew almost nothing about each other's programmes were involved in extension services in each state studied.

These reorganizations, it was gathered, were designed by the Federal Military Government to stop the proliferation of

agricultural/rural development agencies which were doing more or less the same thing. Thus, efforts are being made to achieve clear-cut division of functions. While the Federal Departments (FDA, FDRD, FDL, FD Forestry, FD Fisheries etc) now have responsibility for policy formulation, planning and monitoring, the River Basin and Rural Development Authorities, Agricultural Development Projects (ADPs) and the State Ministry Extension Services have responsibility for extension implementation. The intention for the reorganizations is good; but the principle on which it is based is faulty.

Where Do We Go From Here?

Agriculture being the oldest profession and the fact that our fore-fathers have been able to make a living out of it without any formal training make it the most abused in terms of claim of expertise in the practice of the profession. However, because of the growing complexity of our society and the ever-changing nature of our eco-system, the agriculture of yester-years cannot meet the needs and challenges of today. Thus, in addition to the peculiar demands of agriculture as a business, the organization and management of extension services if it is to be effective, should be based on well-grounded principles: These principles can be put in two categories — (1) those which form the basic tenets of extension process, and (2) those which form the roots of extension organization and management. I have chosen to deal with the latter because such principles are the most often taken for granted and neglected, and secondly, extension organization and management form the focus of my research interest.

1. *Our first principle suggests that the likelihood that an extension service will be effective is increased when there is an appropriate research support.* Without up-to-date research input, there is nothing for extension workers to extend. With eighteen agricultural and related research institutes, and about fourteen Faculties of Agriculture in the country, it is sad that we are at this

time still talking about unavailability of appropriate research support. While a number of researchers have argued that there are research findings available for farmers to use, others contend that the claim cannot be true and that if the findings are available, they are probably available on the researchers' shelves and in the research journals and not in the form the farmers can use. This is where extension-research linkage comes in.

When the Federal government in the late seventies recognized the absence of this linkage, it directed that all the agricultural research institutes in the country should, as a matter of urgency, establish an Agricultural Extension and Research Liaison Services (AERLS) Unit to provide this missing link. However, while we acknowledge the usefulness of this policy, we recognize that it would not be possible for all the research institutes to achieve this goal mainly because the type of manpower required for this type of job is not yet available in the country. Also, it was obvious that some of the directors of the research institutes could not see extension and research on the same footing and hence were not enthusiastic about giving support to AERLS. For these reasons, in 1978 I recommended that *five* (rather than eighteen) National Agricultural Extension and Research Liaison Services be established in the country, with each located in the five ecological zones — Sudan Savanna, Guinea Savanna, Forest Savanna, Tropical Rain Forest and Mangrove Swamp, and that each should be attached to a University, following the Ahmadu Bello University structure (Akinbode, 1978). This recommendation, was accepted: it was picked up and reechoed by study groups set up after our original study. But up till this time this linkage has not yet been established except the one existing in Ahmadu Bello University. We are therefore once again calling on the Federal Military Government to make the establishment of the remaining four Agricultural Extension and Re-

search Liaison Services part of the current reorganization of the research institutes. These should be located at Ife with IAR&T, Umudike, Calabar (or Port-Harcourt) and Maiduguri.

2. *Our second principle is that the likelihood that an extension service will enjoy the confidence and respect of its clients and hence be effective is increased when the field extension workers receive regular and continuous training.* Agricultural technologies are always changing based on new scientific discoveries, and unless extension workers are regularly and continuously trained, there will be disparity between *actual* and *desired* performance. It is in recognition of this that the World Bank has made the introduction of the Training and Visit (T & V) system a condition for supporting the Agricultural Development Project (ADP) in any state of Nigeria. The T & V is based on the philosophy that research and extension can never be useful unless they are based on the needs and problems of the farmers, and that these needs and problems are dealt with in the production recommendations passed on to the farmers. Through regular and frequent contact between farmers and extension workers, and by establishing systematic linkage between extension and research, T & V encourages the two-way three level interactions required. Thus, following on our first recommendation on the establishment of Agricultural Extension and Research Liaison Services, we are further recommending that regular and continuous training be built into the system and that it should include all those involved in extension service from the researchers to the field level extension workers. Specifically, we are recommending that the subject-matter specialists attached to the ecological zonal AERLS should receive *half-yearly* training, those attached to the ADPs who will be at the state level should be

trained *quarterly*, those at the local government level which will be a sub-station will receive *monthly* training, while the village extension workers are trained *fortnightly*.

Ecological Zone — University/Research
Institute/AERLS

SMS — Trained Half-Yearly

/

ADP — State Level
SMS Trained Quarterly

/

Local Government Sub-station
SMS Trained monthly

/

VEW Trained fortnightly.

This disparate training periods recommendation is based on the intensity of interaction which these different levels of officers have with farmers. Normally, the intensity is expected to rise as we move from the zonal subject-matter specialists to the village extension workers; and the intensity of interaction with farmers should ideally be directly proportional to the intensity of training. The second basis for the disparate training periods is a corollary of the first — that is, the amount of time required to assemble the materials (e.g. information on new technologies) for their training. More time is required to prepare for the training of zonal subject-matter specialists than for the village extension workers.

The third principle is that *the likelihood that an extension service in a country will be effective is increased when there exists linkage between it, the political structure and the rural population*. Ultimately the politicians of a country must be the people who first advocate, finance, adopt, and defend the policies that will make significant improvements in the rural sectors of that country assuming that the leaders really do want to solve the problems of rural areas. However, communication problems may exist where they just do not have the means to correctly understand those problems. This is real because of the socio-economic gap that sets in resulting from the acquisition of western education by the political leaders. It is therefore expected that political leaders could benefit from better understanding of the nature of rural development problems so that "farsighted and sensitive political leadership, aided by knowledgeable scientists and researchers, by competent public servants who can assist in devising creative operational policies and procedures, and supported by an informed and sympathetic public opinion — all together can help resolve ... the problems" (Wharton, 1976).

Certainly, one cannot deny the importance of the effect of political variables, and the need to make a strong political commitment to resolve problems in the rural areas — more often than not a linkage, communication problem. It is therefore suggested that in order to achieve extension effectiveness, a direct linkage between it and the political leaders in the country is necessary. Operationally one would conceive of having extension services linked to the ruling political organization and ultimately to higher-level political officers in an upward-downward flow of information that would supply upper-level officers with the information they need about conditions in the rural areas, and consequently produce the kind of responsive political commitment that would support innovative changes.

4. The fourth principle relates to the basic reason reported-ly given by the present Military Government for the reorganization of extension services in the country, but the implementation of which seems to defeat the purpose for the reorganization, which is, to my mind, "more effective extension services". *This principle is that the likelihood that an extension system will be effective is increased when there is well-thought-out division of extension responsibilities among the various levels of government.* The simple reason for this is that there are so many other activities outside of what we know as "extension services" which are mandatory for successful extension programme. These, in extension terminology, are often referred to as "services" as opposed to "education". They include principally the provision of infrastructures and inputs such as roads, meeting places, transportation, irrigation and drinking water, markets, seeds, livestock breeds, chemicals, capital, land, to mention a few. Mosher (1966) refers to these as "essentials" as distinct from "accelerators".

It is my submission that the on-going reorganization which gives extension responsibility *de jure* to the River Basin and Rural Development Authorities controlled from Lagos is contrary to both the principle of extension as well as practical experience which requires these time-conscious, culture-bound activities to be as close as possible to the point of impact. Another reason for this position is that some agencies like the State Extension Services are being rendered redundant by this reorganization while the River Basins with specific terms of reference, i.e. "development of water resources", are now being asked to take over a job which requires a reasonable length of time to build up the necessary relationships with the clients. The ADPs are also there and in some states like Kano, Bauchi, Kaduna and Sokoto have taken over extension services statewide. It therefore stands to reason to predict the role conflict, compe-

tion, wastage, frustration and possible failure likely to be the consequence of the type of set-up described above. We have had precedents to this when the various Department Field Offices in the Federal Ministry of Agriculture moved out to the states with their extension services in the early seventies.

It is therefore recommended that extension responsibilities should be shared among the three levels of government as follows:

(a) *The Federal Government* should have responsibilities for:

- research support (the institutes and other agricultural research institutions);
- Agricultural Extension and Research Liaison Services established on ecological zonal basis;
- Agricultural Development Projects in cooperation with state governments and the external donors *at the investment/pilot phase*;
- Infrastructures (i.e. dams, roads, storage, electricity etc);
- River Basin and Rural Development Authorities to develop water resources for use by state extension services,
- Any other big capital projects.

(b) *The State Governments* represented by the Agricultural Development Projects (where they have gone statewide) and/or the State Extension Services in the State Ministry of Agriculture should continue to have the major responsibility for extension services, and

(c) *The Local Governments* should be the implementing agency for extension services on behalf of the state governments in the spirit of the 1976 Local Governments Reform with the modification that extension be transferred from the list of *optional* functions of local governments to the list of *obligatory* functions, and

(d) All the agro-based private industries should be made to support extension services in the same way they do for research.

It is further recommended that the Federal Department of Agriculture and the Federal Department of Rural Development be merged to form a new Federal Department of Agriculture and Rural Development. This new department should have a Projects Monitoring and Evaluation Unit which will take over the functions of the Agricultural Projects Monitoring, Evaluation and Planning Unit (APMEPU) when the World Bank eventually withdraws.

The River Basin Development Authorities should concentrate on developing the water resources and making these available for extension services rather than being directly involved in extension services.

The fifth and final principle of extension organization and management considered in this lecture focusses on my present area of research interest—*the necessity for the participation of the rural population which extension serves* and which forms the pivot of the title of today's inaugural lecture. The participation I am talking about here is not in the form of on-lookers' nor as 'beneficiaries' of programmes organized by some benevolent donors, but as the principal originators, planners, controllers and executors of their own programmes with necessary support from the governments.

The need for the farming population to participate in agricultural extension programmes is a principle we play around with so much, but we know very little about what it involves or how to achieve it. It is therefore not surprising that most of the studies that have been carried out to determine the extent of farmers' participation in extension programmes revealed limited participation (Akinbode, 1970, 1972 and 1977; Osuntogun and Akinbode, 1980; Akinbode, Onazi and Olayiwole, 1982; and Ekong, 1978). While every extension worker can almost recite this principle any time you confront him, we however lose sight of it almost in our day-to-day execution of extension programmes. Recently, one of my students was giving a seminar on his activities during the practical attachment. He eloquently recounted how he worked so hard to get one of the projects he and his colleagues designed to solve the community problems executed.

He was so convinced about the need and appropriateness of this project that he could not understand why the villagers would not have anything to do with it. Then I asked: How was this project arrived at? Was it the decision of the villagers to have it? And he answered: No, it was decided by the department. This top-down process typifies what obtains in most extension work and in fact, in most development projects.

However, with the changing definition of development from growth orientation to emphasis on increase in capacity to influence the present and the future, as well as concern for equity and empowerment, and with the disappointing experiences encountered with programmes which have adopted the top-down approach, the principle of people's participation has come to be viewed as *sine qua non* for the achievement of development objectives (Arora, 1979). The principle is seen as a way of ensuring that development programmes serve the need of the people for whom they are designed. People's participation is the only alternative to people's revolution. It seems to be the only way to achieve self-reliance very much needed now among all sections of the Nigerian populace and the rural people — the silent majority — in particular.

Most of the studies already conducted on people's participation have capitalised on the personal attributes of the populace (Nelson, Ramsey and Verner, 1960; Wilson, 1963, and Kaufman, 1970). This has happened because such earlier efforts followed the diffusion-adoption person-focussed orientation and the trickle-down assumption (Rogers, 1983). Recent thinking however, have attempted to show that there may be more than personal characteristics in people's participation in development programmes. Bryant and White (1982), discussing the new perspective of viewing participative behaviour from an economic rather than sociological angle concluded that participation (P) is a function of the benefits (B) to be gained multiplied by the probability (Pr) of gaining them, minus two kinds of costs — direct costs (DC)

and opportunity costs (OC), all multiplied by the amount of risk they can afford to take (R), i.e. $P = ((B \times Pr) - (DC + OC))R$. This Bryant and White's proposition highlights the major components in my model of extension process — the participative management approach, which is discussed in the section that follows.

Emancipation of the Silent Majority

Earlier in this lecture, I promised to come back to address the issue of using extension as a tool to change the social, economic and political conditions of rural Nigerians; in other words to use extension for the "emancipation of the silent majority". The five principles I enunciated above constitute the major elements of this process. Without research, extension will have nothing to extend. The extension workers require regular and continuous training in order to be in possession of the latest and most appropriate solutions to farm problems. The political commitment is basic and necessary for any progress to be made. And because of the scope of the problems and the resources required to solve them, the job has to be objectively shared and coordinated. And of course, because of the need to secure the commitment of the people we are concerned about, the rural Nigerians, the need to enable them fulfill themselves, to achieve their self-consciousness, thus increasing the probability of the success of extension programmes, the people must participate as partners.

Agricultural extension in Nigeria is at a crisis stage and it requires a radical transformation of our research and extension structure to make the positive development of the rural areas possible. As we said earlier, the radical transformation we are advocating is not the same thing as violent revolution, for while revolution may temporarily solve some political problems, it more often postpones institutional transformation because of the political chaos and possible elimination of skilled people caused by the process, if one were to go by the Bolivian and Chilean, and in fact, coming back home, our

own Nigerian, Ghanaian and Liberian experiences. The proposed transformation, we have chosen to call *participative management*, is radical in the sense that what is corrupt, inefficient, and unproductive in development institutions like agricultural research agencies, extension services, River Basin and Rural Development Authorities, Agricultural Development Projects, Agricultural Extension and Research Liaison Services, and so on, must be replaced by new or reformed institutions that will be professional and pure, efficient and productive. Operationally, this calls for improvement in the management as well as change in the political ideology of development institutions with a view to adopting an organizational structure that is more amenable to the process of accomplishing change in the rural areas in the form of highly effective, result-oriented system of extension services. This means that unproductive and inefficient heads of development institutions must either be reformed (through training), replaced or moved to harmless positions. Thus, a strong commitment by government leaders is needed to ensure that pressure is brought to bear upon administrators of development programmes, so that necessary changes in organizational structure and management philosophy are not thwarted.

Following therefore from our current research effort, we are recommending that emphasis be shifted from individual to the development and use of highly effective *extension work groups*. The logic behind this recommendation is not far fetched. Even when a government decides to make a serious effort in solving rural development problems, the amount of funds and facilities needed to effect significant change and train sufficient extension workers typically never approaches the ideal levels needed to accomplish the task. This is most evident in the work loads of extension agents. In more advanced countries, the work load often ranges from 100 to 150 farmers per extension agent, whereas in developing countries the load can vary from 2,000 to 8,000. In Nigeria, the figure is between 2,500 and 3,000. Many authorities feel the ideal work load should be closer to 50 farmers.

It is therefore certain from common knowledge of our present situation that unless miracles happen, the work load of 50 or even 150 is not likely in Nigeria in the foreseeable future. Furthermore, the fact that the work loads are huge and often given shoddy institutional support (poor transportation, lack of incentives, indifferent training, etc.) makes extension work unattractive to a lot of job seekers. Even those who join the profession with original commitment and basic motivation are overwhelmed by the conditions.

Extension work groups that would allow extension agents to effectively handle work loads of between 1,000 and 2,000 farmers may be a way to maximally serve a large number of rural people in the shortest period of time and at the least cost. It is essential that we clarify that the work groups we are recommending do not mean cooperative movement but may metamorphose into such societies.

Our next concern is how the extension work groups will be integrated into an extension organization in such a way that the major component of our recommendation, i.e. participative management is built into the structure. Our review of literature, particularly those of practical case studies confirm that an organizational structure that is compatible with participative management and that which promotes the integration of the positive benefits of small group organization is the one that involves all participants at all levels in group decision-making. It would have to be an organizational structure that would allow the beneficiaries to have some decision-making control to make participation worthwhile to them. To achieve this, we are recommending "overlapping organizational structure". Simply put, this means that participants (including farmers) at different levels of extension hierarchy will participate in decision-making at the levels above and below theirs. In this extension structure: (1) decision making will be based on group processes; (2) each group at a given level has a representative in a higher decision-making group; and (3) individuals representing lower level groups can perform an information feedback function. The

schematic representation of this model is presented in the Appendix.

In terms of participative management, there are several reasons why small extension work groups should be integrated into the organizational structure. These are:

1. Because the individual is motivated by social needs, it is important to structure extension organization so that each individual belongs to a cohesive work group, and in the process of participating in the group, satisfies individual needs as well as promotes the extension objectives.
2. Small group processes maximize the motivation of participants to work with extension organization.
3. Group overlapping allows extension agents and high level administrators to participate directly in the lowest levels of the organization — the farmers' extension work groups. Group overlapping requires a liaison or linking person at each level. These become the key persons in the organization since it is through them that information relevant to accomplishing group objectives and consensus decision-making is effectively transmitted up and down the hierarchy.
4. Group linkages provide a network of feedback loops from higher to lower hierarchical levels and vice versa, which facilitates rapid up-and-down communication, and
5. Representation in decision-making through participation in the groups and established linkages with higher authority facilitate development and change in accordance with our participative management conceptualization and extension's overall philosophy.

Home Economics Extension

This inaugural lecture will not be complete without a few observations on extension for the household or home economics extension, not only because I currently coordinate the home economics programme in this University, but more

importantly because of my strong belief and conviction of the complementarity between home economics and agricultural extension. Three categories of objectives can be distinguished for rural extension: (1) educational objectives which aim at transmitting knowledge, skill acquisition and change in attitudes; (ii) economic objectives which seek to improve production and income of the rural household; and (iii) social objectives which look for the betterment of living conditions of the rural household. The necessity for integration between these objectives has been stressed by Timmer (1984) in his book *The Human Side of Agriculture* when he states: "So it is not only necessary to keep in mind that there are mutual relationships between technical, economic and socio-cultural aspects of agricultural development but, in addition, *that they always have to be kept in balance*" (p. 49) (emphasis mine). The main focus of home economics extension is how to achieve the social objectives of rural extension. It does this by studying the household units and their activities. But the rural household is inseparable from the farm. The farm provides the household with products and cash needed for its upkeep; conversely, the household provides the farm with the required labour for bringing the agricultural production to fruition. Within the rural community, the farm-household complex forms one single unit of scientific analysis and of extension, and to treat them as separate entities would give a distorted picture of the situation.

For example, our studies on women in rural development have shown that women in Nigeria are heavily involved in agricultural production. In fact, in certain parts of Nigeria, women are the sole food crop producers. Osuntogun and Akinbode (1980) found in their study of the involvement of women in rural cooperatives and population education in Ondo, Oyo and Kwara states that more than two-fifths of women studied had farming as their primary occupation. Another study by Akinbode, Onazi and Olayiwole (1982) in six northern states of the federation confirmed the same trend.

Ironically however, when it comes to extension assistance, women in agriculture are the most neglected; they constitute the bulk of the 'silent majority' who need extension for emancipation most. This neglect, according to another study by Akinbode (1983), can be explained partly by lack of understanding on the part of our policy makers and administrators of the role of home economics extension in rural development, and partly by the absence of home economists in sufficient number in positions where they could overtly influence policies on rural development. Resulting from lack of understanding, home economics extension has been pushed from one ministry to another several times in many states of the federation within the last ten years. Only the military intervention of December 1983 saved the Home Economics Unit in the Federal Ministry of Agriculture from similar fate.

What these actions on the part of government did to Home Economics in the country are instability and loss of morale on the part of the staff, with consequent hinderance to the development of home economics extension and its contribution to rural development. It is therefore evident that if home economics extension is to make the expected impact, something has to be done, and quickly too. It is for this reason that I am recommending that home economics extension should be allowed to remain an integral part of the Ministry of Agriculture and Rural Development at the federal and state levels. It is further recommended that the Home Economics Unit of the Federal Ministry of Agriculture, Water Resources and Rural Development be up-graded to a departmental status so that it can be adequately equipped to continue to give leadership and support to the states' home economics agencies.

Summary of Recommendations

1. The national agricultural research agencies should be reorganized in such a way that each agency is given

specific tasks of solving specific agricultural problems within a specified period of time.

2. We must ensure from time to time that the activities and programmes of the international agricultural research agencies operating in the country are in the best interest of the nation.

3. Five Agricultural Extension and Research Liaison Services (AERLS) should be established as a matter of urgency in each of the five ecological zones of the country as follows:

— The ABU, Zaria AERLS to serve the guinea savannah zone;

— The Maiduguri AERLS to serve the Sudan savannah zone;

— The Ife IAR&T AERLS to serve the forest savannah zone;

— The Umudike AERLS to serve the tropical rain forest zone, and

— The Calabar or Port-Harcourt AERLS to serve the mangrove zone.

4. The on-going reorganization of extension services in the country should be re-examined before it goes too far in such a way that (a) there is clear division of responsibilities among the different levels of government, and (b) that the actual implementation of extension services is given to the level of government closest to the people which extension serves, i.e. the local governments.

5. Extension services in the country should be reorganised to allow for farmers' participation in extension decision-making through overlapping organizational structure and emphasis on farmers' groups as target groups.

6. Farmers' organizations should have extension workers assigned to them with part support from government.

7. All agro-based private agencies should contribute to the running cost of extension services in the country, or, in the alternative, establish extension services for their

agricultural produce as in the case of the Nigerian Tobacco Company (NTC), and

8. The home economics extension services in the country should be given better recognition and support so that they will be better equipped to complement the agricultural extension services. Specifically, the Home Economics Unit in the Federal Ministry of Agriculture, Water Resources and Rural Development should be upgraded to a departmental status.

When about nineteen years ago I was appointed into an academic position in extension in this University, I made a pledge to use my knowledge, pen, paper and energy as strong armaments to fight rural poverty. I reaffirm this pledge to continue this fight until all the silent and poorly cared for people in this country are emancipated. So help me God.

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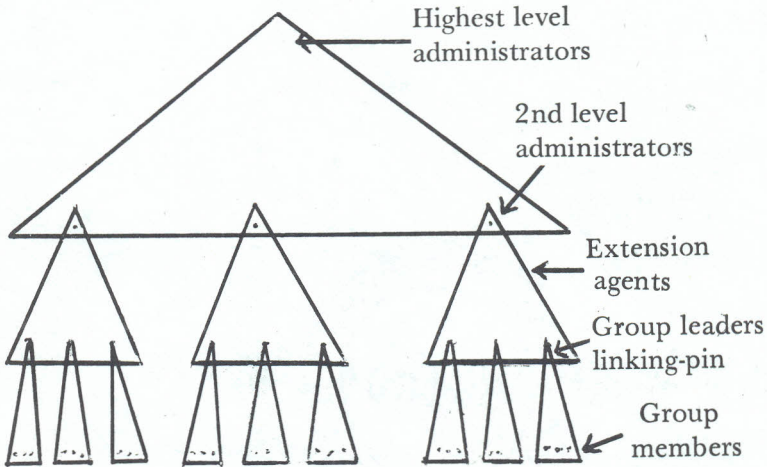
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APPENDIX

Overlapping Participative Management Extension Structure



- Decision-making dispersed throughout the organization at all levels; overlapping group responsibilities provide effective information flow on decision-making process.
- Two-way flow of communication from either top or bottom with both individuals and groups.

