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AGRICULTURAL EXTENSION PROGRAMS AS PERCEIVED BY
NIGERIAN EXTENSION ADMINISTRATORS

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FACTORS, INFLUENCING THE PLANNING AND IMPLEMENTATION OF
EXTENSION EDUCATION PROGRAMS AS PERCEIVED BY
NIGERIAN EXTENSION ADMINISTRATORS

A thesis submitted to the Graduate School of
the University of Wisconsin in partial fulfillment
of the requirements for the degree of Doctor of
Philosophy.

by

Ingrid Naemi Janelid

Degree to be awarded

January 19—

June 19—

August 19⁶⁶—

To Professors: Havens

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Bjoraker

This thesis having been approved in respect
to form and mechanical execution is referred to
you for judgment upon its substantial merit.

Robert Alvesty
Dean

Approved as satisfying in substance the
doctoral thesis requirement of the University of
Wisconsin.

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Date of Examination, *24 June* 1966

FACTORS INFLUENCING THE PLANNING AND IMPLEMENTATION OF
AGRICULTURAL EXTENSION PROGRAMS AS PERCEIVED
BY NIGERIAN EXTENSION ADMINISTRATORS

BY

INGRID N. JANELID

A thesis submitted in partial fulfillment of the
requirements for the degree of

DOCTOR OF PHILOSOPHY

(Cooperative Extension Education — Home Economics and
Rural Sociology)

at the

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1966

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CHAPTER I

INTRODUCTION

In most emerging countries agriculture will remain the main source of income and employment for many years to come. A high demand for rapid social and economic development necessitates trained manpower in the agricultural sector of the economy, and investment in agricultural education has become a prerequisite for economic growth. The evolution of educational systems in Western cultures has been relatively gradual, and has emerged without specific development plans.¹ In a developing country, however, a more precise strategy is needed if an educational system is to meet the pressure of short term targets; national development plans are in fact demanded by national or international agencies providing financial or other support.

Agricultural educational institutions and organizations, such as agricultural extension services, given the task to modernize agriculture, must include an educational administration that can set in motion forces which facilitate the best utilization of available resources in a given environment.

¹Irving Louis Horowitz, Three Worlds of Development, The Theory and Practice of International Stratification (New York: Oxford University Press, 1966), p. 8.

Purpose of Study

The aim of this study is to analyze the perception of extension administrators regarding factors that influence the planning and implementation of extension programs in a developing country. To aid in the selection of these factors a conceptual framework, based on fundamental planning principles and theories of a social system, was developed. In particular, the purposes of this study are:

1. To analyze the perception of extension administrators in regard to: (a) the application of selected planning principles in the actual and ideal situation; and (b) the relative influence which selected socio-cultural factors have on the planning and implementation of extension programs.
2. To suggest ways and means of improving the continued planning and implementation of extension programs in the selected country.

The Republic of Nigeria, where agriculture is the most important contributor to the national economy, is a newly emerging country making profound efforts to speed up its development. Two of its four regions, Western and Eastern Nigeria, have been chosen as the basis for this study. Modernization of rural life is a process of long range social, economic, political, and cultural change including not only improved agricultural practices, but also industrial development. The Nigerian economy may, according to Oluwasanmi, experience considerable

difficulty in promoting a rapid industrial development without obtaining radical changes in agricultural organization and techniques.² Modernization in Nigeria can be effectuated by means of land reforms, consolidation of scattered holdings into more economic sized farm units, and improved agricultural practices; but education is implicit in this process. Any educational system which wants to promote the modernization process must look well beyond purely quantitative dimensions of development to more intangible results in terms of changes in people's attitudes and increased achievement motivation. Educational planning is an instrument for obtaining a better result, and it "embraces both the internal affairs of education and its external relationships to the rest of the society."³ So defined, an educational system must include a sufficiently strong and creative institutional mechanism to provide a continuous critical appraisal of its processes and products in order to become an effective tool in the modernization process.

Several years ago Williams stressed the need for using an appropriate educational approach in the dissemination of agricultural information in the Nigerian extension services, particularly by promoting better incentives among the farmers to participate in solving their own

² H. A. Oluwasanmi, Agriculture and Nigerian Economic Development (Ibadan: Oxford University Press, 1966), p. 209.

³ P. H. Coombs, "The Adjustment of the Educational Structure to the Requirements of Economic Development," Education in Developing Countries, Conference in Rotterdam, 1963, A Report Prepared by Peter A. Cornelisse and Jan Versluis, International Review of Education, 10:53, No. 1, 1964.

problems instead of giving purely technical advice.⁴ The extension services were earlier criticized for paying little attention to the relationship between social factors and technical change and to isolate agricultural problems from their place in the socio-economic environment.⁵ Since then, constant improvements and reorganizations have taken place in Nigeria, including in-service training courses for the staff in extension methods and procedures, studies of farm planning and management, etc.⁶ The Nigerian extension services have shown an interest in the farm family as a unit by making provisions for projects concerned with rural women and youth; it is perhaps one of the most significant developments recently made in view of the important functions these two groups play in the agricultural economy.

This study is timely insofar as it aims at appraising selected aspects of the planning process of the agricultural extension service in Nigeria, even though it constitutes but a small part of what is termed educational planning. Anderson and Bowman have defined educational planning as "the process of preparing a set of decisions for future action

⁴ S. K. T. Williams, "An Analysis of Extension Service in Western Nigeria and Some Proposals for Improving its Effectiveness" (unpublished Master's thesis, Cornell University, Ithaca, 1961), p. 101.

⁵ Oluwasanmi, *op. cit.*, pp. 205-06; and Williams, *op. cit.*, p. 72.

⁶ G. D. Agrawal, Farm Planning and Management Manual, (Ibadan: Ministry of Agriculture and Natural Resources, 1964); and W. S. Mann, "Farm Management Studies in Eastern Nigeria, 1963-1964" (Enugu: Ministry of Agriculture, 1964).

pertaining to education."⁷ As a continuous process educational planning must, however, constantly be adjusting to provide for relevance to national and local needs and to be feasible in terms of available resources and changing socio-economic conditions. This study is particularly concerned with the formulation of objectives and the way in which they are perceived by the extension administrators. Planning is an instrument of getting better results, but "the most crucial and yet most difficult issue of all, is how to define the learning objectives of an educational development plan, as distinct from quantitative objectives of education."⁸

Development, therefore, requires social and cultural change as well as economic growth; that is, qualitative transformation must occur concurrently with quantitative increases. Development thus refers to change plus growth. Development planning, of which educational planning is a part, has been defined by Hirschman as:

. . . deliberate, rational, continuous efforts by governments to accelerate the process of development and to channel it into desired directions by means of the comprehensive and detailed choice of objectives and determination and allocation of the resources necessary for their achievement.⁹

⁷ C. A. Anderson and M. J. Bowman, "Theoretical Considerations in Educational Planning," Educational Planning, ed. Don Adams (Syracuse University: Center for Development Education and All-University School of Education, 1964), p. 9.

⁸ Coombs, op. cit., p. 62.

⁹ Albert O. Hirschman, "Comments on A Framework for Analyzing Economic and Political Change," Development of the Emerging Countries, An Agenda for Research, eds. Robert E. Asher, et al. (Washington, D. C.: The Brookings Institution, Third Printing, 1963), p. 46.

As a result of studies in transitional countries Millikan and others have stressed that technical knowledge can rarely be transferred un-
adapted from a modern to a traditional society without investigation in a given country as to what methods and techniques are least disruptive of local culture.¹⁰

Significance of Study

The introduction of new technologies in emerging nations does not only require change in agricultural techniques and practices as such, but also changes in the thinking, feeling, and attitudes of those who are to utilize the new technologies. Agricultural extension education is one type of out-of-school, rural adult education organization which promotes the adoption of new farming practices. One broad definition of an educational activity which promotes rural development in general is given by the United Nations: "a process designed to create conditions of economic and social progress for the whole community with its active participation and the fullest possible reliance upon the community's initiative."¹¹

The nature and content of an informal adult education program in a developing country whose population is mainly illiterate, must be closely adjusted to prevailing variations of social and cultural patterns. The choice

¹⁰ Max F. Millikan and Donald L. M. Blackmer (eds.), The Emerging Nations (Boston: Little, Brown and Company, 1961), pp. 116-117.

¹¹ United Nations, Social Progress Through Community Development (New York: U. N. Bureau of Social Affairs, 1955), p. 6.

of a program for a particular area should not be arbitrary, but part of a well designed plan which has taken into consideration not only economic potentials but also prevailing social patterns and cultural heritage of a given area. The traditional peasant society, which is the final target of change for a rural adult education agency, has certain characteristics which must be understood by the change agency. For example, the degree of local autonomy is often negatively correlated with the extent of contact with the larger society. If social communication channels are restricted, greater efforts must be made by the change agency when explaining and demonstrating methods and techniques.

Demographic factors, such as ethnic groupings, density of population, and literacy rates have a profound impact on educational efforts. Where tribalism flourishes there may be little understanding at the local level of national goals to produce for export on a world market rather than maintaining the traditional subsistence economy to meet local needs.

Ecological factors, or man's relationship to land, determine settlement patterns, amount of land available and its distribution among the farming population. Land ownership patterns and social groupings have a reciprocal relationship and must be understood by any change agency. Social interactions and patterns of living are highly influenced by dominating value orientations in a given area. For example, in a modern society man aspires to master nature while in a peasant society man frequently feels subjugated to nature; that is, he has a fatalistic view that whatever happens in nature is inevitable.

A most serious obstacle to change lies in the people themselves, individually and collectively, in their social structure and cultural pattern as well as a lack of monetary means. Unorganized efforts to diffuse knowledge among people are bound to have little impact. If change occurs it may be merely by chance, and sometimes such a change may even aggravate the situation by developing tensions and frustrations because aspirations brought about cannot be met.

A country may possess natural and manpower resources required for economic "take off," but it may at the same time lack the needed human capacity to utilize available resources to produce results needed to reach desired goals. The institutional framework and social structure of a given population may contain resistance forces which delay development. It is not uncommon that technological changes in the material culture precede changes in the adaptive culture; that is, norms and attitudes. When agricultural technologies are introduced in a society where traditional norms govern land ownership patterns and small holdings continue to become fragmented, the effect of these technologies are very limited.

An educational system should be developed only after it has been carefully investigated and planned. If changes are introduced too rapidly and with too little thought as to how they fit into traditional patterns, there may be a reaction against these changes that merely reinforces traditional conservatism. If agricultural extension programs are to

avoid becoming a disruptive force and producing serious disintegrative effects, there is a need to study in detail the socio-cultural environment. Since it is unrealistic to try to investigate every social aspect affecting educational planning efforts, it is necessary to select certain phases for investigation and to do so in a scientific manner that can yield improved approaches and further working hypotheses.

Background of Problem

Countries and regions which have not yet reached the standard of living of that of Western countries are labeled with different terms, such as less developed, underdeveloped, or developing; these terms are used interchangeably in the literature. Underdevelopment does not refer only to resources but also to the economic backwardness of its people.¹² A country belonging to this category has low per capita income, untapped natural resources, tradition-oriented rather than market-oriented economy, small amount of capital for investment relative to labor force, structural underemployment and unemployment, and a widespread belief among people of the country that it is "underdeveloped."¹³ When these

¹² H. Myint, "An Interpretation of Economic Backwardness," The Economics of Underdevelopment, eds. A. N. Agarwala and S. P. Singh (New York: Oxford University Press, 1963), p. 96.

¹³ Robert J. Alexander, A Primer of Economic Development (New York: The Macmillan Company, 1962), p. 6.

conditions exist, they mutually aggravate each other.¹⁴ The magnitude of the problem is evident since it is estimated that about two-thirds of the world's population is living in technologically underdeveloped regions; i. e., Asia (except Japan), the Pacific Islands, Africa, most parts of South America, and the Caribbean.¹⁵

The African continent with many newly independent countries contains a number of variations of factors that give evidence of underdevelopment. In Nigeria, as in other developing countries, literacy rates, per capita income, and per capita consumption of animal protein are inversely proportional to the death rates, but the lack of statistics makes it impossible to give reliable figures.¹⁶ In addition, the transitional period of political unrest and constraints on modernization that

¹⁴ Science, Technology and Development, Organization, Planning, and Programming for Economic Development, Vol. VIII (Washington, D. C.: U. S. Government Printing Office, 1963), p. vii. Another broad definition of a developing country include characteristics that have a bearing on this study: "(1) production, income, and economic consumption per capita are low in comparison with more highly developed countries; (2) while production, income, and consumption may increase in all countries, in countries characterized as less developed the process of growth is combined with a profound transformation of the political, social and economic structure; (3) the concept of 'economically less developed' suggests that countries have an economic potential which is not fully realized. This unrealized potential might refer to unemployment or underemployed labor. It might include natural resources, such as fertility of the soil, minerals, or water, which are not being put to use, or are not used in the best possible way. Underemployment in this latter sense means especially that available findings of science and technology are not fully applied."

¹⁵ United Nations, Population and Food Supply, Freedom From Hunger, Basic Study No. 7 (New York: U. N. Office of Public Information, 1962), p. 3.

¹⁶ B. Gans, "Some Socio-Economic and Cultural Factors in West African Paediatrics," Archives of Diseases in Childhood, 38:1-12, 1963.

many of these countries are undergoing in their efforts to stabilize themselves, impede to a greater or lesser extent the speed of progress.

The population in the African continent is expected to rise by 1984 from 261 million to very nearly 400 million.¹⁷ Efforts to diminish the high rate of infant mortality; to lengthen the expectations of life, and to meet the increasing population pressure create a series of obstacles to the socio-economic development of a nation.¹⁸

The Republic of Nigeria is the largest single country along the West Coast of Africa and occupies a central position on the continent. It lies entirely in the tropical zone extending from the coastline over 650 miles northward. Its population, estimated to be about 55 million at the last census in 1963/64, is the largest country along the West Coast of Africa. Nigeria comprises four regions: Northern Nigeria which is by far the largest both in population and area; and the three southern regions, Western, Mid-Western, and Eastern Nigeria. This study is concerned with the Eastern and Western Regions, comprising about 10 and 12 million people respectively.

The agricultural sector of the Republic of Nigeria occupies nearly 60 per cent of the national income and occupies over 70 per cent of the

¹⁷ Godfrey Lardner, "Adult Education and Economic Development," Development and Adult Education in Africa, ed. Carl G. Widstrand (Upsala: The Scandinavian Institute of African Studies, 1965), p. 17.

¹⁸ Ibid., p. 19.

total population.¹⁹ The Nigerian economy displays not only great regional diversity but also different stages of development, according to the Commonwealth Committee, and even though the economy is still based on subsistence agriculture, peasant producers have responded to world market opportunities.²⁰ Agriculture in Nigeria has a multiple task: (1) to increase export crops to maintain position on world market; (2) to avoid excessive imports of food and raw material; and (3) to increase production of food crops to keep up with demands as income arises and commercial markets grow as a result of over-all economic development. These considerations are of main interest in determining agricultural extension policies.

Another aspect of a developing country which is of greatest importance and which has been stressed by Staley is the need to reshape the structure and functioning of social institutions, and to learn how to operate new institutions essential for modern productivity and free society.²¹ A main point of interest proposed by Staley is that there can be no successful development unless there are institutional changes.

¹⁹ Food and Agriculture Organization of the United Nations, "Agricultural Development in Nigeria, 1964-1980" (unpublished report, Rome: F.A.O., 1965), p. A-1.

²⁰ Commonwealth Economic Committee, Nigeria, Commonwealth Development and Its Financing (London: Her Majesty's Stationary Office, 1963), pp. 8-38.

²¹ Eugene Staley, The Future of Underdeveloped Countries, Political Implications of Economic Development (Revised edition; New York: Harper and Brothers, 1961), p. 228.

Family institutions in a traditional society, as are most parts of Nigeria, embrace most economic, religious, social, and other functions of the kinship group. Functions, such as those of the tribal grouping, will have to undergo fundamental reconstruction in terms of new social, economic and other institutions that are compatible with full participation in a modern society.

Nigeria is faced with a number of deep-rooted social and cultural customs which constitute impediments to agricultural improvements. This is particularly visible in the land tenure system and traditional farming methods.

- (i) The traditional systems of land tenure, which insofar as they prevail, mean that an individual cultivator enjoys the usufruct of a plot of land for a limited time only, after which it returns to the pool for reallocation.
- (ii) The prevailing custom of growing crops in mixed cultures, although it has some recognized advantages for subsistence farming under tropical conditions, greatly reduced the possibility of using, or even may prevent the use, of some improved techniques for cash crops where high yields and economic returns on investment become important.²²

A country with chronic mass poverty which is not due to some temporary misfortune, and that has low productivity not due to poor resources but rather to obsolete methods of production and rigid social organizations, is more in need of assistance which imparts new knowledge and skills than economic assistance. Lardner refers particularly to the

²² F. A. O., op. cit., pp. A-21-22.

need for educating the farmer himself and not be concerned only with the per capita income. He maintains that the peasant farmer and his family must be induced "to accept new standards of quality, unfamiliar crops and strange application of fertilizers and other agricultural chemicals, dependence on irrigation rather than on direct seasonal rainfalls."²³

In spite of all efforts being made to improve the standards of living in Nigeria as rapidly as possible, economic, social, health, and educational problems are still overwhelming and to a great extent interrelated. An attempt to summarize the major problems is based on readings of recent reports, documents, and from observation in Nigeria:

Low productivity capacity: The bulk of the population is engaged in agriculture based on traditional farming methods and inefficient use of land; that is, the bush fallow system. A disturbing aspect of the dilemma has been observed by Ibrahim: "The ill-nourished farmers and their families are likely, as always, to consume all the additional agricultural out-put themselves."²⁴

Land tenure problems: The prevailing land tenure system and tradition of inheritance without titles to the land give little incentive to long-term investments. In addition to modifying existing land rights and customs by replacing traditional ownership by individual tenure, there is

²³ Lardner, op. cit., p. 19.

²⁴ M. W. Ibrahim, "National Development Plans and Agriculture," Keypaper (Washington, D. C.: The World Food Congress, 4-18 June, 1963), p. 3.

also a need to modify the use of land already in production and to bring in new land under cultivation. It is estimated that about 45 per cent of the Western Region's land resources, which are climatically and physically very suitable for cultivation and grazing, are not used.

Fragmented holdings: The uneconomic size of holdings and fragmentation of them are often a direct result of the land tenure system and are not conducive to new farming techniques. For example, the small size of a holding, less than five acres, does not fill the requirements for participation in government subsidy schemes, such as the oil palm scheme promoted by the extension services. About 87 per cent of the holdings in the Western Region are estimated to be less than five acres, and the average size for the region as a whole is 2.7 acres; in addition to that the holdings are fragmented and scattered. The same is true in the Eastern Region where it is reported that the size of the holding has a definite relationship with the supply of family labor, intensity of cropping and land use.²⁵

High rates of illiteracy: Even though universal education was introduced in Western Region in 1955, and in the Eastern Region in 1957, the lack of qualified teachers, inability to participate in existing education, etc., has resulted in a great number of adults among the farming population that functionally are not literate.

Malnutrition: Although Nigeria does not suffer from lack of calories (under-nutrition) there is a general lack of vital nutrients

²⁵ Mann, op. cit.

(malnutrition) particularly in terms of high quality protein. Malnutrition particularly affects children, but also other categories of population by lowering the resistance to disease as well as lowering work-efficiency.

Lack of health facilities: Not only is there a lack of doctors and health nurses who can take preventive health measures, but clean water, sewerage problems, and environmental sanitation requires the services of many agencies.

Changing patterns of family life: A change from subsistence living to a monetary system introduces new values, which may cause social disintegration. In a society where production and consumption patterns are closely integrated, and which is characterized by a kinship centered social structure, the idea of "new practices" is not part of the peasant thinking. Rising aspirations of school-leavers causes them to migrate to urban centers and deprives the farm family of the results of the investment in education.

Lack of adequate research. The demand for rapid social and economic development is hampered by lack of research in the whole sphere of social change. Even though some research is under way, more research is needed if educational and other programs are to make headway.²⁶

²⁶ On-going research projects, sponsored by the USAID Mission to Nigeria, contributing to the understanding of adoption of innovations among Nigerian farming population: Robert C. Clark, USAID-University of Wisconsin Team, University of Ife, Western Nigeria, "Acceptance or Non-Acceptance of Selected New and Improved Farming Practices by Village Farmers in the Western Region of Nigeria," From Notes, 1965; and Everett M. Rogers, Michigan State University, East Lansing, and Economic Development Institute, University of Nigeria, Enugu Campus, Eastern Nigeria, "Research Project on the Diffusion of Innovation in Rural Societies," from notes, 1965.

The above listed problem areas give an indication of the tremendous obstacles facing Nigeria in her efforts to develop her economic and social sectors.

Situation

The four regions of the Republic of Nigeria provide for immense differences not only in terms of natural resources but also in terms of ethnic groupings, different languages and religions, and different ecological and climatic conditions. Western and Eastern Nigeria did not constitute a sample but were purposely selected for this study. Northern Nigeria contains a cultural heritage quite different from the other three regions and a number of non-Nigerian extension officers are still employed in the extension service. Mid-Western Nigeria, until a few years ago, was a part of the Western Nigeria and has a very similar set-up in the extension services, and was believed not to add any additional aspects to the study.

Western and Eastern Nigeria have sufficient similarities to provide a basis for this study. The two regions have achieved a similar level of development, have set corresponding development targets, and have a similar set-up of agricultural extension services within the ministries of agriculture. The main reasons for choosing Nigeria as a basis for testing the conceptual framework were as follows:

1. Nigeria is well advanced among African nations in the projection of development plans for the various sectors of its economy and

can thus serve as an example of comparison for studies of other countries with similar development problems.

The National Development Plan for 1964-1968 shows the determination of the Republic of Nigeria to make all efforts to reach an early "take-off." The main aim of the Plan is to provide "general direction and the means by which the flow of resources into the most productive channels could be constantly watched and allocated."²⁷ Each of the four regions is expected to join in continuous efforts to maintain a balance between their regional objectives and those of the national plan.

The 1962-1968 Development Plan of Western Nigeria is similar to that of Eastern Nigeria and includes objectives having implications for agricultural extension services.²⁸ Modernization of agriculture in order to obtain an increased production of cash crops for exports and improved quality and quantity of food crops for home consumption is emphasized. Such modernization is being achieved by the establishment of farm settlements, farm institutes, and extension services, which are working hand-in-hand. The plan also aims at a diversified economy both within agricultural production as well as in other sectors of the economy. An integrated rural development, involving ministries other than agriculture, aims at developing community spirit and self-help programs, and has a particular bearing on the extension services.

²⁷ Federation of Nigeria, National Development Plan, 1962-1968 (Lagos: The Federal Ministry of Economic Development Planning, no year), pp. 25-26, 209.

²⁸ Ibid., p. 209.

2. Nigeria is expanding its agricultural education and extension services both quantitatively and qualitatively in all four regions.

Agricultural schools and colleges, preparing junior and senior staff members of the extension service, are constantly expanding and strengthening their training programs; for example, recent additions in the curricula are courses in agricultural extension methods and procedures, rural sociology, etc. A number of extension staff members with university backgrounds are being sent abroad for advanced training and post-graduate work. The number of staff in the administrative hierarchy from the lowest level upward are being increased in order to meet the demands being placed on the extension service through targets set in development plans.

3. Nigeria belongs to a category of countries which are not yet economically self-sufficient but still depends on outside assistance.

Bilateral and multilateral agencies which are giving assistance are concerned with measuring the progress made not only in terms of increased agricultural out-put but also in terms of the administrative planning and implementation machinery of the agricultural extension services. The most comprehensive bilateral aid is given through the U.S.A.I.D. Mission to Nigeria. This includes a Consortium for the Study of Nigerian Rural Development aimed at an objective assessment of the contribution of the AID support to Nigeria mainly by means of

intensive evaluation of the Nigerian governmental programs of agricultural development.²⁹

Among United Nations agencies, the Food and Agriculture Organization has among other activities in Nigeria projected a development plan, Agricultural Development in Nigeria, 1964-1980, which refers to the magnitude of tasks facing the agricultural sector, both in terms of modernization of agriculture from a primarily agricultural country to an industrialized one, and in the diversification of agriculture. The report is considered "an attempt at unfolding the implications of the objectives that Nigeria has set itself."³⁰

The setting of targets in a developing society are often expressed by the leaders in terms of economic, political, and sometimes cultural goals, some openly stated, some simply implied. Harbison maintains that the purpose of target-setting, particularly in long-range human resource development, is to influence the future course of development and indicate a direction for action, and not to make a prediction of what will take place.³¹ The national development plan referred to above has

²⁹ Consortium for the Study of Nigerian Rural Development, Final Report, Phase I - Planning Team (East Lansing, Michigan: Michigan State University, 1965), Foreword. The consortium includes Colorado State University, Kansas State University, The University of Wisconsin, the Research Triangle Institute, the United States Department of Agriculture and the United States Department of Interior.

³⁰ F. A. O., op. cit., Foreword.

³¹ Frederick Harbison, "Human Resource Assessments," Economic and Social Aspects of Educational Planning (Paris: UNESCO, 1964), p. 125.

set long-term targets. The regional ministries of agriculture have set up sub-targets with specific objectives to be achieved in a limited time schedule.

What are the reasons for the targets not being reached? In its first progress report, Western Nigeria stated three reasons for failure to reach the set targets: "(1) shortfall in foreign loans and grants anticipated; (2) inadequacies in project analysis submitted to donor countries and institutions; (3) shortfall in domestic savings anticipated."³² Eastern Nigeria, having similar objectives in its development plan, also points to difficulties in reaching set targets.³³ During the first year of the plan, little or nothing could be done on projects planned. Limiting factors were the lack of executive machinery and uncertainty of foreign aid in general, and lack of adequate training facilities as related to agricultural education in particular.

The above stated reasons for failure to reach the targets refer to two different problems; lack of capital and lack of organizational machinery, one providing concrete evidence and one intangible evidence of failures. This supports a proposition made by Warner and Havens that goals of developmental organizations are typically intangible, and a

³² Ministry of Economic Planning and Community Development, Western Nigeria Development Plan 1962-68, First Progress Report (Ibadan: The Government Printer, 1964), p. 2.

³³ Ministry of Economic Planning, First Progress Report, Eastern Nigeria Development Plan 1962-68 (Enugu: The Government Printer, 1964), pp. 2, 4, 8.

difficulty in evaluating their programs is "inability to handle intangibility." If the goals and objectives of an extension service are diffuse, it is difficult for the extension administrators to measure any progress.³⁴ Although intangible goals leave room for flexibility and adaptability and can prevent an organization from potential conflicts by insulating concrete activities from outside measurements, intangible goals have more serious dysfunctions. Goals that do not provide guides for decision-making and action do not provide the necessary basis for evaluation, since there is no real bench mark from which to evaluate.

If there is a lack of congruence between sanctions and organizational goals, the extension staff member will adhere to the sanctions regardless of whether he is aware of organizational goals. Since this study is particularly concerned with the educational aspects of the extension services, and the educational aim of extension is to change the behavior of the clientele, evaluation of intangible goals and objectives are of particular interest.

An assessment of the way in which the educational administrator perceives the organization's goals and interprets them for application in the environment is a necessary precondition for balancing available resources between an organization's goals and the receivers' needs, and for providing a feedback of results for the readjustment of future goals.

³⁴ W. Keith Warner and A. Eugene Havens, "Intangibility Displacement in Evaluating Development Programs" (unpublished paper, The University of Wisconsin, Madison, 1966), pp. 1-5.

Objectives of Study

The basic question underlined in this study is to determine the perception of extension administrators in regard to: (1) the application of selected planning principles in the actual and ideal situation; and (2) the relative influence which selected socio-cultural factors have on the planning and implementation of extension programs.

Based on this question, the following objectives were derived:

1. To determine the extent to which extension administrators perceive that the selected planning principles are being used in developing their current extension objectives.
2. To determine the extent to which extension administrators perceive that the selected planning principles should be used in developing their current extension objectives.
3. To determine the extent to which an administrator's location in different categories in the extension administrative hierarchy influences the perception as to whether the planning principles are being used in developing the current extension objectives.
4. To determine the extent to which an administrator's location in different categories in the extension administrative hierarchy influences the perception as to whether the planning principles should be used in developing the current extension objectives.
5. To determine the extent to which the extension administrators perceive the selected socio-cultural factors in the environment as favorable

or unfavorable to the planning and implementation of their current extension program.

6. To determine the extent to which the categories in the extension administrative hierarchy influence the perception of selected socio-cultural factors in the environment as favorable or unfavorable to the planning and implementation of their current extension program.

7. To determine the relationship between personal and professional characteristics and selected demographic factors.

Limitations of the Study

In the study of agricultural extension education as a social organization and its reciprocal relationship with the external environment it is necessary to limit things or aspects to be studied. Homans has expressed the opinion that a study becomes more fruitful if it is limited to common problems and items chosen are "as few as you may and as many as you must."³⁵

This study deals only with a few elements of a concrete situation; the decided limits may exclude other elements which are equal or more important in the given situation. The danger of such abstraction lies in the fact that action might be taken on the basis of the findings without

³⁵ George C. Homans, The Human Group (New York: Harcourt, Brace & World, Inc., 1950), pp. 16-17.

considering the variety of other elements or variables also operating in the situation. Investigations of other elements would, therefore, be desirable and add to the usefulness of this study.

In studying the situation in which the extension services in Nigeria are carried out, efforts have been made to select problem areas amenable to observation, and to ask pertinent questions that have relevance to the respondents. As in any study involving opinions, the responses are influenced not only by personal frames of references but also by the social position in the administrative hierarchy. Administration in a developing country is often characterized by centralized decision-making patterns; that is, most information is going downward and little information is penetrating from lower levels upward; this sets a limit to information available in positions on different levels.³⁶

Definitions of Terms Used

Administrative behavior. Administrative behavior is defined as the resultant of the behavior of all those who act collectively under the stimulus of the behavior of an administrator.³⁷ Administrative

³⁶ Ernest Dale, Planning and Developing the Company Organization Structure (New York: American Management Association, 1952), p. 107. Managerial decentralization has been defined by Dale to meet the following conditions: the more decisions made lower down the management hierarchy, the more important these decisions are; the more functions affected by decisions made on lower level, and the less checking made by superordinates, the greater the degree of decentralization.

³⁷ John A. Ramseyer, et al., Factors Affecting Educational Administration: Guideposts for Research and Action (Columbus, Ohio: College of Education, The Ohio State University, 1955), p. 7.

behavior is defined in this paper as the result of the collective efforts from the chief executive administrator to the local extension agent, and also including the efforts of local people who actively engage in supporting the extension activities.

Administrative situation. The situation in which the educational enterprise is carried out encompasses factors which qualify or modify administrative behavior.³⁸ This can be interpreted to include economic, social and cultural factors, but will in this paper mainly be used in terms of socio-cultural factors that influence the effectiveness of the extension program.

Quality of administrative behavior. Quality of administrative behavior in this context is defined as the extent to which behavior enhances or inhibits the growth of community programs. This study is concerned with quality of behavior in terms of educational planning that enhances or inhibits the planning result, but not in terms of tasks, functions, or processes of the educational administration.

Principles of administration. Clark and Evans consider that administrative principles are "underlying generalizations about organized group efforts toward common goals."³⁹ Principles developed for a particular educational enterprise are to a certain extent culturally

³⁸ Ibid., p. 3.

³⁹ Robert C. Clark and Jean C. Evans, "Guidelines for Extension Administrative Organization," eds. Robert C. Clark and Roland H. Abraham, Administration in Extension (University of Wisconsin: National Agricultural Extension Center for Advanced Study, 1959), p. 80.

determined, because different societies have different needs which are reflected in the principles. In this study principles are not considered universally true but rather as a proposition which embodies a high degree of regularity.

Educational administration. Educational administration is defined as "the marshalling of human and material resources of a community to produce and maintain an educational program."⁴⁰

Hypothesis. Hypotheses, as used in this study, are defined as "propositions for which more evidence is needed" and that can be empirically tested.⁴¹

Criterion. A criterion is defined by Ryans as a:

. . . standard or rule used to provide a frame of reference for judging or testing something. It is a base, often of a rather arbitrary nature and ultimately involving value judgement, against which comparison may be made.⁴²

Organization. An organization is seen by Barnard as containing certain basic properties: communication, willingness to serve, and a common purpose.⁴³ "The vitality of an organization lies in the willingness of the individuals to contribute forces to the cooperative system. This willingness requires the belief that the purpose be carried out."

⁴⁰ Ramseyer, op. cit., p. v.

⁴¹ Hans L. Zetterberg, On Theory and Verification in Sociology (Third enlarged edition, New York: The Bedminster Press, 1965), p. 101.

⁴² David G. Ryans, "Notes on the Criterion Problem in Research, with Special Reference to the Study of Teacher Characteristics," The Journal of Genetic Psychology, 91:34, September, 1957.

⁴³ Chester I. Barnard, The Functions of the Executive (Twelfth Printing, Cambridge, Mass.: Harvard University Press, 1956), pp. 72, 82.

Perception. Perception is the ability to perceive and judge accurately a given situation. It is basic to the decision-making process. A person's ability to perceive is not only limited by his own intellectual capacity but also by the surrounding culture. Each culture has a set of arrangements for solving problems which is typical for the members of a given society. Explicit cultural arrangements to cope with problems are influenced by physical and environmental factors such as climate, topography, natural resources, etc. Implicit cultural patterns include beliefs, values, and norms which can be inferred from observed regularities in behavior.⁴⁴ Perception sets the limit for communication; that is, an individual cannot utilize information or communicate information correctly to others if his own cognitive system cannot absorb given information.

Facilities. A social system has certain means, facilities, or resources; for example, knowledge, skill, technology which aid in attaining its goals. The depths and amount of knowledge in utilizing community resources set a limit in development. Persons who have access to and control over local resources and facilities set a limit to the degree of development, and so do prevailing patterns of norms and values.

⁴⁴David Krech, et al., Individual in Society, A Textbook of Social Psychology (New York: McGraw-Hill Book Co., Inc., 1962), p. 346.

Scope and Procedure

Population.

The population under study encompasses the senior extension staff at the regional, circle and divisional level within the Ministry of Agriculture and Natural Resources in Western Nigeria, and at regional and provincial levels in the Ministry of Agriculture in Eastern Nigeria. Organizational charts of the two regions are found in the following Figures 1 and 2. All staff was included because of their small number but only about 80-90 per cent were available for interviewing.

In each region the respondents, comprising several different social positions in the administrative hierarchy, were divided into two categories on "high" and "medium" level:

Category I: Senior administrators were mainly responsible for policies, procedures, personnel, funds, etc., in their subject matter area of responsibility. Category I in each region consisted of ten respondents, all attached to a regional level, except three from circle level in Western Nigeria.

Category II: Senior supervisors were mainly responsible for program implementation either in subject matter area, or in general extension education. Category II in each region included thirty-four respondents each, most of whom worked on the provincial or divisional level, a few from this category in Eastern Nigeria were attached to regional level.

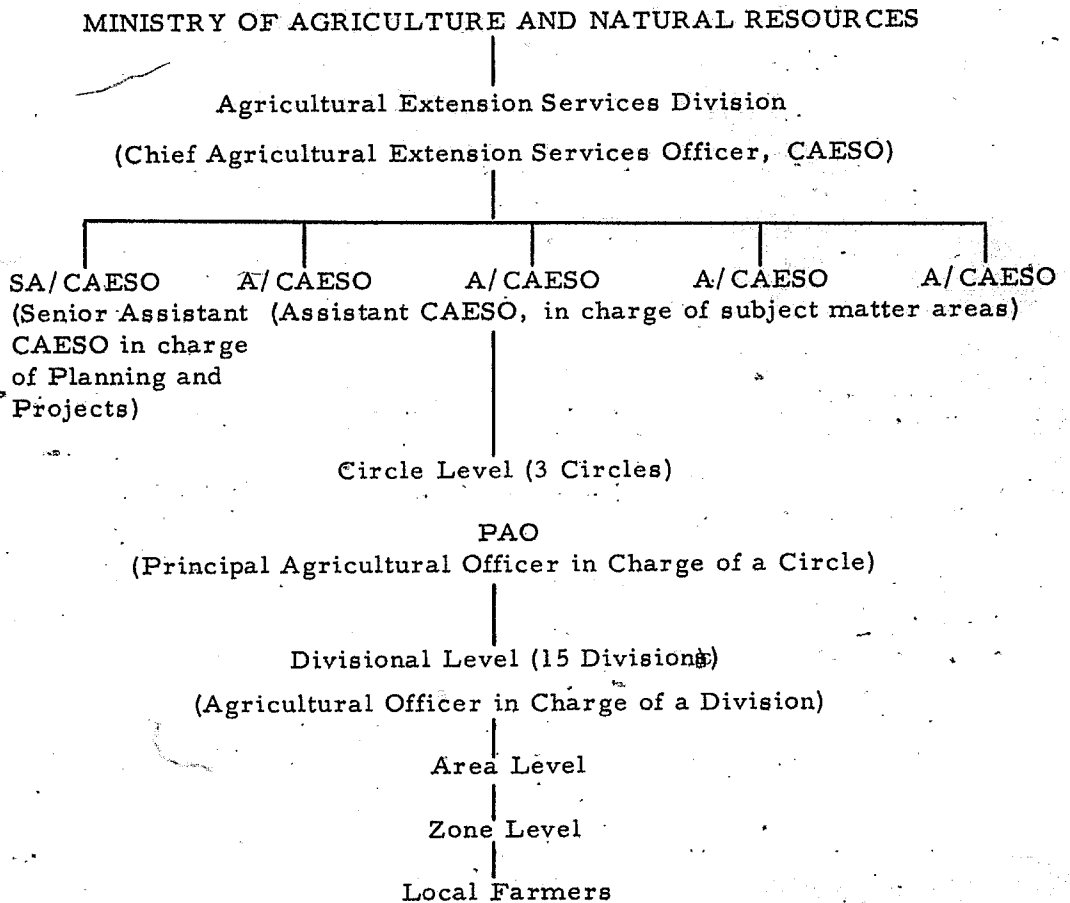


FIGURE 1

ORGANIZATIONAL CHART OF AGRICULTURAL EXTENSION SERVICES
DIVISION OF THE MINISTRY OF AGRICULTURE AND NATURAL
RESOURCES IN WESTERN NIGERIA⁴⁴

⁴⁴ J. M. Fenley and S. K. T. Williams, Background for Extension Workers for Western Nigeria, Extension Training Bulletin, No. 3 (Ibadan: Ministry of Agriculture and Natural Resources, 1964), p. 12.

MINISTRY OF AGRICULTURE

Agricultural Division

Chief Inspector of Agriculture (CIA)

Deputy to Chief (DCIA in Charge of Extension Services)

Regional Level

(Schedule Officers in Charge of Subject Matters Sections:)

Training
 Records and Statistics
 Supervised Agricultural Credits and Cocoa
 Rice Development and Extension
 Livestock
 Oil Palm and Rubber Development
 Soil Conservation
 Agricultural Engineering
 Seed Improvement Service
 Agricultural Economics
 Young Farmers Clubs
 Supporting Services (Agricultural Research, Farm Settlements,
 Agricultural Information, Horticulture)

Provincial Level (15 Provinces)

(Agricultural Officers in Charge of Provinces)

Divisional Level

Area Level

Local Farmers

FIGURE 2

ORGANIZATIONAL CHART OF THE AGRICULTURAL EXTENSION
 SERVICES OF THE MINISTRY OF AGRICULTURE IN
 EASTERN NIGERIA⁴⁵

⁴⁵ Annual Report, Agriculture Division, 1963-64, Official Document No. 2 (Enugu: The Government Printer, 1966), p. 103.

Selltiz maintains that "selection of individuals who represent different positions in the social structure helps to produce a rounded view of the situation they are reflecting."⁴⁶

Due to a number of reasons earlier explained, the selection of Western and Eastern Nigeria can be referred to as purposive sampling:

. . . the sample is restricted to units thought by someone to be especially typical of the population or convenient for sampling. Purposive selection may produce good results when the sample is small, but it is not amenable to the development of a theory, because it contains no elements of random selection.⁴⁷

Since the above categories include the total number of extension staff, they can statistically be defined as a population, where all differences are considered real differences.

Information was collected from the respondents through an interview questionnaire. The scope and purpose of the study was introduced before each respondent filled out the questionnaire. Comments or questions made in connection with filling out the questionnaire were used as a guide in the interpretation of data. The respondents were assured that the completed schedule would be confidential and that they would not be personally identified with the answers.

Development of instrument.

The instrument used in the collection of data was an interview-questionnaire which was mainly structured; that is, consisting of

⁴⁶ Claire Selltiz, et al., Research Methods in Social Relations (Revised one-volume edition, New York: Holt, Rinehart and Winston, Inc., 1961), p. 63.

⁴⁷ William G. Cochran, Sampling Techniques (New York: John Wiley and Sons, Inc., 1953), p. 7.

"definite, concrete, and pre-ordained questions, with additional questions limited to those necessary to clarify inadequate answers or to elicit a more detailed response."⁴⁸ In addition to categorical, "fixed-alternative" or closed questions, the respondents were given an opportunity to add additional information or explanations to their answers of the structured questions. (The questionnaire is attached in Appendix A.)

The instrument was based on a conceptual framework with specified criteria and on information obtained from literature, reports, and documents about Nigerian conditions. Considerations in developing criteria are given in Appendix B. It was tested among Nigerian graduate students of the College of Agriculture of the University of Wisconsin and among persons experienced in agricultural extension administration in Nigeria.

The questionnaire was divided into three sections. Section I consisted of sixteen extension education planning principles derived from four main criteria and representing a profile of principles in descending order of comprehensiveness. Section II was based on sixteen sociological concepts that were assumed to have an effect on the selected planning stages. Section III solicited information regarding personal and professional characteristics of the respondents, some of which were assumed to influence the way in which the respondents perceived the situation stated in Sections I and II,

⁴⁸ Pauline V. Young, Scientific Social Surveys and Research (Third edition, Englewood Cliffs, N. J.: Prentice Hall, Inc., 1956), p. 177.

Sections I and II were based on measurement scales and the respondents were asked to give their opinion on each item on a fixed point rating scale. Attempts to obtain and measure attitudes or beliefs of an individual are known as opinionnaire or attitude scale. Difficulties involved are described by Best.

How an individual feels, or what he believes, is his attitude. But it is difficult, if not impossible, to describe and measure attitude. The researcher must depend upon what the individual says as to his beliefs and feelings. This is the area of opinion. Through the use of questions or by getting an individual's expressed reactions to statements, a sample of his opinion is obtained. From this statement of opinion may be inferred or estimated his attitude — what he really believes.⁴⁹

Since questions were related to selected concepts, the respondents' statements of opinion were analyzed in terms of these concepts. An ordinal scale was chosen for the study; the relative position of an object on an ordinal scale can be determined with respect to certain characteristics in terms of "greater," "equal," "less," etc., but no indication is given as to how much greater or how much less the distance between the positions are.⁵⁰ Selection of measurement scales is further discussed in Appendix C.

The questionnaire was developed with the aim of focusing attention on positive and/or negative forces that were assumed to influence

⁴⁹ John W. Best, Research in Education (Englewood Cliffs, N. J.: Prentice Hall, Inc., 1959), p. 155.

⁵⁰ Selltiz, op. cit., p. 189.

the effectiveness of the educational program; these forces constituted the variables or factors. Sixteen socio-cultural factors were assumed to cluster around the four main concepts. The impact of a cluster of variables has been explained by Selltiz:

The separate items or questions in an attitude scale are usually not of interest in themselves; the interest is, rather, in the total score or in subscores that result for each individual from the combination of his responses to various items. In effect, any set of items works as well as any other set provided they give the same final scores on the particular attitude being measured.⁵¹

In order to obtain reliable and valid ratings in the schedule, definitions of the basic frame of reference for the questions were accomplished in terms of illustrations through the questions. Such illustrations, says Selltiz, provide a check on validity if "the attributes being measured were relatively objective, so that their meaning would be uniformly understood by the raters using the scales."⁵²

In the analysis of data non-parametric statistics were used (summarized in Appendix D) since the data did not meet the specific conditions about parameters of the population required in parametric tests. Certain assumptions are associated with non-parametric tests; that is, observations must be independent and the variables under study must have an underlying continuity; the data met these assumptions.⁵³

⁵¹ Selltiz, Ibid., p. 357.

⁵² Ibid., p. 356.

⁵³ Sidney Siegel, Nonparametric Statistics for the Behavioral Sciences (New York: McGraw-Hill Book Co., Inc., 1956), p. 31.

The background of the problem and the specific situation with which this study is dealing have been introduced in this chapter. The conceptual framework developed in order to facilitate the selection of aspects of educational planning and factors in the socio-cultural environment to be studied are discussed in Chapter II, while the conceptual framework is applied in Chapter III by the development of criteria. In Chapter IV the findings are presented and summary, conclusions and recommendations are presented in Chapter V.

CHAPTER II

CONCEPTUAL FRAMEWORK

Development of a Conceptual Framework

A theoretical framework is useful in focusing attention to sources and consequences of human behavior and forms the basis for observations and comparisons. It involves a system of classification and a precise set of definitions, which are basic to any scientific study.¹ A framework or model provides a tool for investigation and analysis of certain activities and is "not concerned with influencing the process, but with analyzing it."² In setting up a model or framework for this study the considerations proposed by Getzels have served as useful guidelines:

- (i) The model must provide a set of integrated concepts and relations capable not only of answering questions already asked in administration but of posing questions that still need to be asked;
- (ii) The concepts and relations must be operational in that they not only give direction to our understanding but simultaneously provide blueprints for investigation;
- (iii) The model must be able to handle as many of the commonplaces or familiar issues in administration as possible within a single set of concepts and relations.³

Griffiths maintains that a model has an organizing function relating a great deal of data to a very few concepts, an analytical function giving

¹ William J. Goode and Paul K. Hatt, Methods in Social Research (New York: McGraw-Hill Book Company, 1952), p. 9.

² Roland L. Warren, The Community in America (Chicago: Rand McNally and Company, 1963), p. 309.

³ Jacob W. Getzels, "Administration as a Social Process," Administration Theory in Education, ed. Andrew W. Halpin (Chicago, Ill.: The Midwest Administration Center, University of Chicago, 1958), pp. 150-151.

a precise analysis of the concepts, and a mediating function utilizing and fusing various disciplines.⁴ Concepts have been defined by Griffiths as terms to which particular meanings have been attached and they have in this study been developed in terms of criteria or standards constituting definitions and forming the basis for limiting the aspects to be appraised. The criteria were derived from (1) educational and administrative theory, and (2) from sociological concepts. (See Appendix B.) In the appraisal of an ongoing social institution Harris maintains that "appraisal of any kind may be defined as an act of judgment in which judging implies both a criterion--a standard of some kind--and a pertinent description of what is being judged."⁵ Such standards are referred to as criteria in this study.

The framework may serve as basis for analysis of a social organization in another society provided that society has a similar level of development and contains basically the same cultural heritage, but differs only in properties such as institutions and role-expectations. The extent to which the framework is universal depends upon the basic concepts and their representativeness of the social system which it attempts to analyze.

The notion of social change and its ramifications will be discussed before turning to external and internal aspects of extension organizations.

⁴Daniel E. Griffiths, Administrative Theory (New York: Appleton-Century-Crofts, Inc., 1959), p. 45.

⁵Chester W. Harris, "The Appraisal of a School - Problems for Study," Journal of Educational Research, 41:173-174, November, 1947.

The Dynamics of Change

The very purpose of extension education is to introduce change, and it is therefore imperative to understand the notion of change. With rapid social and economic evolutions, tensions increase due to unforeseen consequences of social changes in the social system, consequently upsetting equilibrium. Planned change has been described by Lippitt as "a decision to make a deliberate effort to improve the system and to obtain the help of an outside agent in making this improvement."⁶ He has referred to outside help as the change agent, and classified forces which may increase or decrease readiness of a client system to change, as change forces and resistance forces. The more aware the educational and technical planners of change are of the struggle between these forces, the more successful they are apt to be. Change forces have their origin in any part of the situation which increases the willingness of client system to make a proposed change, and similarly, resistance forces have their origin in any part of the situation which reduces the willingness of the client system to make change.⁷ Hagen points out that the problem does not lie in limited human technological knowledge but rather in the social structure and motivations of people in slowly progressing countries.⁸

⁶ Ronald Lippitt, Jeanne Watson and Bruce Westley, The Dynamics of Planned Change; A Comparative Study of Principles and Techniques (New York: Harcourt, Brace and World, Inc., 1958), p. 10.

⁷ Ibid., p. 72.

⁸ Everett E. Hagen, "The Process of Economic Development," Economic Development and Cultural Change, 5:196-197, No. 3, April, 1957.

This view is also held by Foster, and others who maintains that cultural, social, and psychological forces are either stimulants or barriers to change, and always exists in an economic setting which sets the ultimate limit to change.⁹ The most carefully planned change of a society will be meaningless unless an economic potential exists or can be built into a program of change. The subsidy programs in Nigeria, the oil-palm scheme, etc., are examples of such an economic incentive.

Since there is always a struggle between scarce resources and power in any social system there will always be conflicts, particularly in societies undergoing rapid social and economic change. Coser has analyzed contemporary views on social conflicts, and cites Cooley saying "conflict and cooperation are not separable things, but phases of one process which always involves something of "both;" while he disagrees with Parsons who considers conflict a disease, dysfunctional and disruptive, and maintains that conflicts are not always dysfunctional but necessary because they vent hostilities.¹⁰ The notion of social disorganization or conflict, whether an ideological, power, or racial conflict, is basic in understanding change. Any change agent aiming at the introduction of change must anticipate group conflict, be ready to develop techniques to reduce frictions, mediate opposing interests and in other ways

⁹ George M. Foster, Traditional Cultures and the Impact of Technological Change (New York: Harper and Row, Publishers, 1962), p. 59; and Raymond Firth, Elements of Social Organization (Boston: Beacon Press, 1963), pp. 123; 133.

¹⁰ Lewis A. Coser, The Functions of Social Conflict (Glencoe: The Free Press, 1956), pp. 18, 21.

seek to prevent the rise or spread of conflict. It is hypothesized that if prior to the introduction of a program, certain values already have brought about tensions and conflict, these weakening of values become a potential source of change; that is, people are more likely to accept ideas and new practices at a time when values are not strongly felt.

Considering that there are both rational and non-rational conflicts in any social system, lack of overt conflicts cannot be taken as an index of a stable relationship between members of the social system. Coser underlines a proposition by Simmel that conflicts can initiate new patterns of interaction and new institutional structures:

Conflicts act as stimuli for establishing new rules, norms, and institutions, thus serving as an agent of socialization for both contending parties. Furthermore conflicts reaffirms dormant norms and thus intensifies participation in social life.¹¹

The change agent's role is to mobilize and release energy with the client system and assist it in finding rational ways of solving problems. The function of a change agent is as a catalyst toward change and indeed demands his skill and experience in addition to understanding of basic properties of a social system, from which change forces or resistance forces emerge.

Environmental Factors Affecting an Extension Program

The development of the conceptual framework in this study is based on an intensive review of literature containing concepts of social systems.

¹¹ Ibid., p. 128.

The key work in social systems is interaction; that is, members of a group have common concerns and express themselves in collective behavior. A social system is composed of units or institutions, such as family and kinship units, political, economic, religious, and educational institutions. Social institutions have been described by Haire as:

. . . a continuing system of differentiated and coordinated human activities utilizing, transforming, and welding together a specific set of human, material, capital, ideational, and natural resources into a unique problem-solving whole . . .¹²

Each institution has a number of statuses or positions which have corresponding roles or behavior deemed appropriate to each status. Each larger social organization can also be differentiated in positions according to level. The extension service in Nigeria is composed of regional, circle or provincial levels, divisional, and local levels. Each level is composed of individuals occupying different social positions interacting with other members of the organization for the purpose of attaining a common organizational goal. This study is concerned with goals and facilities; that is, compatibility between goals of the educational organization and those of the society at large on regional and provincial level. If the reciprocal relationships between these two sets of goals are in agreement or in balance, it is hypothesized that the degree of goal attainment of the extension education organization will be increased. The notion of

¹² Mason Haire, ed., Modern Organization Theory, A Symposium of the Foundation for Research on Human Behavior (New York: John Wiley and Sons, Inc., 1959), p. 37.

goal attainment, according to Parsons, is the primary characteristics of an organization.¹³

Certain structural elements or attributes are common to all social systems, such as goals, values, sanctions, social power and these elements provide a useful means of analyzing a given social organization. Functional processes such as communication and decision-making are also of interest since these make the system more dynamic and can reinforce or change the relationship between the elements.

This study is concerned with both social and cultural factors, which terms are interdependent and are here differentiated only as a means for specific analysis. Society refers to people and culture refers to the behavior of people. Each society, including its institutions, has basic rules that guide its way of life; "culture" is the learned human adjustment to the physical environment and to society. Culture can also be defined as the common way of life shared by members of a society and consists of the totality of tools, techniques, social institutions, attitudes, beliefs, motivations, and value systems known to the group.¹⁴

The system of family and village organizations and the context in which it has developed has a great impact on patterns of response to innovations. The degree to which political authority has been traditionally

¹³ Talcott Parsons, "Suggestions for a Sociological Approach to the Theory of Organizations," Administrative Science Quarterly, 1:64, 1956.

¹⁴ Foster, op. cit., p. 11.

centralized, according to Almond, formed the basis for distinguishing political systems in Nigeria and the variations in leadership.¹⁵ The Yorubas, the main ethnic group in Western Nigeria, have a history of belonging to "centralized chiefdoms, a variety of countervailing forces which acted as checks on the arbitrary exercise of chiefly power." The main tribes in Eastern Nigeria, the Ibos and the Tivs, consisted of dispersed tribal societies which were characterized by the absence of any central organ of government, with the largest political unit being the compound or the village community. These traditional political systems have to a great extent, shaped the present attitudes toward authority. The Ibo culture has a pronounced egalitarianism of members, while the Yorubas are more dependent on their different chiefs.

The most common social unit among both the Yorubas and Ibos is the extended family, consisting of a man, his wife or wives, and unmarried children. The ecological basis for social organizations among the Yorubas consists of hamlets and towns, the hamlets are used during farming time while main social activities are performed in the towns. The Ibos, occupying scattered homesteads or single hamlets, are characterized by physical mobility due to the high population density in certain areas. This continuous adjustment to new conditions has been described by Ottenburg as the main factor of the Ibo receptivity to change.¹⁶

¹⁵ Gabriel A. Almond and James S. Coleman, The Politics of Developing Areas (Princeton, N. J.: Princeton University Press, 1960), pp. 253-254.

¹⁶ Simon Ottenburg, "Ibo Receptivity to Change," Continuity and Change in African Cultures, eds. William R. Bascom and Mellville J. Herkovits (Chicago: University of Chicago Press, 1962), pp. 130-143.

The schedule of daily work is routinized in the Nigerian farming community. Certain times of a year are for certain activities, preceded or followed by traditional ceremonies, and this creates another obstacle to change. A farmer following the same schedule year after year is not required to make new decisions or be flexible in his work program or to meet new problems with a problem solving mind. Smock underlines that foresight and flexibility only come with experience, but that the peasant farmer needs constant guidance the first years of his trials.¹⁷

The division of labor among men and women has also implications for extension education. In some places the women have their own plots; but regardless of whether or not they do have their own farming land, they have very substantial responsibility in the family farming. In Eastern Nigeria the man's task is to clear the bush and cultivate yams, while the wife is responsible for assisting with the clearing and the burning of the bush, and planting all other crops than yam, and carrying most of the crops from the farm to the house. Each job is clearly designed to one another, and "it would be upsetting for one to be put in the position to do the other's job."¹⁸ The Yoruba women in Western Nigeria occupy important positions in the economic institution, not only in the farming, but also as traders of locally produced cash or food crops. They enjoy

¹⁷ David R. Smock, Agricultural Development and Community Plantation in Eastern Nigeria (Lagos: The Ford Foundation, 1965), p. 24.

¹⁸ Ibid., p. 4.

considerable economic independence and may be trading both on their own account and on behalf of their husband or another farmer.¹⁹

One of the main obstacles to change in the Nigerian agriculture is the existing land tenure pattern. This is a traditional system of land tenure, which in Western Nigeria has been categorized by Lloyd as: (1) public land, used for public purposes of the whole community; (2) allotted land, which has been allocated to individuals or groups of individuals; (3) unallotted land, which is available for allocation based on decision by the village head or a council of elders.²⁰ The problems resulting from this system of land tenure include: the fragmentation of holdings, partly due to the system of inheritance by which each son of a farmer inherits a piece of land of each type of soil good for various crops; and the difficulty involved in acquiring new land due to scarcity of land, and to the tradition that selling land is considered unfair to the next generation. If the farmer is to benefit from the security of permanent or commercial crops, he needs to establish more lasting relationships with the land he tills, accompanied with rights of control, unhampered by claims from his kin-group and accompanied by a new set of values.

Social power structure is of particular importance in the introduction of change; the decision-making body in the Nigerian village rests

¹⁹ Paul Bohannon and George Dalton, (eds.), Markets in Africa, Eight Subsistence Economies in Transition, (Evanston, Ill.: Northwestern University Press, 1962), p. 110.

²⁰ P. C. Lloyd, Yoruba Land Law (Ibadan: Oxford University Press, 1964), pp. 73-74.

with the village head or traditional ruler. Important criteria for local leadership are kinship positions as a determinant for authority. The head of a compound unit has authority over its members, and the village council is composed of family or compound heads who serve as an executive committee for village matters.²¹ The accumulation of wealth as a prestige factor stimulates hard work and flexibility and is considered by Smock as a significant determinant to change and a promoter to agricultural development in Eastern Nigeria.²² This notion is confirmed by the fact that the region lacks strong hierarchial social organizations and positioning by ascription, which Hagen maintains are barriers to change.²³

Emerging forces in one part of a social system may set up other forces in other parts of the system, and Lippitt maintains that a number of resistant forces are commonly prevailing among peasants: general inability to change; shortage of time, money and energy; opposition to proposed change objectives, because of lack of information or conflicting information about the change project; desire to preserve existing satisfactions; fear of awkwardness in trying to initiate a new practice or behavior pattern; environmental obstacles; a fatalistic expectation of failure instilled by previous unsuccessful attempts to change; insecurity of

²¹ Tunde Oloko, et al., A Handbook for Extension Workers (Ibadan: University College of Ibadan, Department of Extra Mural Studies, 1961), p. 42.

²² Smock, op. cit., p. 18.

²³ Everett E. Hagen, On The Theory of Social Change (Homewood, Ill.: The Dorsey Press, Inc., 1962), pp. 185-193.

traditional leaders due to a sense of threat to the stability of their leadership roles; and lack of community's mechanism for decision-making.²⁴ The importance of these factors in educational administration has been pointed out by Ramseyer: "A comprehensive understanding of administration requires an insight into the situational factors which qualify or modify administrative behavior."²⁵

The variety and scope of factors operating in the environment are unlimited. The influences of international technical assistance aid programs can have a profound effect on the course of action, and although a great concern, these factors are not considered in this study. The degree to which there is a common understanding and acceptance of the goal of an educational program among local people is another example of a factor which operates in a given situation.

The concern of this study is to identify selected socio-cultural factors which qualify, condition, and give direction to an educational planning effort, and to delineate which clusters of these factors have a particular influence on certain planning stages in a given administrative situation which in this study refers to regional and local levels.

In the choice of situational factors proposed by Ramseyer, the main considerations were given to attitudes, motivations, values, relationships, conditions and processes. These affect the quality of

²⁴ Lippitt, op. cit., pp. 72, 83-86.

²⁵ Ramseyer, op. cit., p. 3.

behavior in certain critical areas of educational administration although not all factors may meet every standard. He suggests certain standards for the identification of factors: (1) The factor has an interacting relationship with other factors; (2) The factor is stated as a significant entity; (3) The factor is open for observation; (4) The factor describes conditions related to administrative behavior.²⁶ In addition, two other factors have been added for the purpose of this study: (5) The factor is significant in a wide variety of educational planning situations; (6) The factor is essential in that it can either be a stimulant or an obstacle to change, or both.

Variations in and among factors make a significant difference in the quality of administrative behavior; alteration in educational administration or aspects thereof, without taking these factors into account, would therefore be like dealing with symptoms rather than causes.²⁷

Factors, which have been predicted to be either a stimulant or an obstacle to change of a program concerned, raise the question--can these factors be manipulated? If a factor is a stimulant to change; that is, produces action toward a set goal, the educational administrator might wish to reinforce it. If the factor is an obstacle to change; that is, restrains the movement in desired direction, the administrator looks for ways to eliminate or at least to limit its force. If the factor is neutral,

²⁶ Ramseyer, *op. cit.*, p. 15.

²⁷ *Ibid.*

neither a stimulant nor an obstacle to change, no action may be needed. However, the great problem arises when a factor appears to contain both stimulating and restraining forces, which are interrelated--the manipulation of such a factor becomes a serious problem.

Changes in administrative behavior, or educational planning efforts, can result from different kinds of change in conditions: "(1) changing a specific factor; (2) altering the relationship among factors; and (3) limiting the degree and manner in which the factor is operative in the situation."²⁸ For example, attempts can be made to bring about change in a farmer's beliefs by trying to minimize the importance of these beliefs in relation to other factors also affecting the farmer's goal-setting behavior, or altering the attitude of the farmer concerning the extent to which his beliefs should affect his behavior.

Socio-cultural factors, mentioned earlier, appear to operate: (1) in the personality of the top administrator, his co-workers, and in the relationship between them; (2) in the administrative framework in which the educational efforts are being carried out; (3) in the content and techniques of the educational program; (4) in the educational clientele--demographic factors; (5) in the characteristics of the social groupings; (6) in the geographical locale--ecological setting; and (7) in the level of technology reached.²⁹ In the process of selecting areas of

²⁸ Ibid., p. 97.

²⁹ Ibid., pp. 60, 111.

concern in which forceful factors are assumed to be located, main considerations were given to Nigerian conditions through the review of literature and reports, and by interviewing Nigerian graduate agricultural students. The final choice of factors included qualitative aspects of the administrative framework, demographic and ecological factors, social power structure, and the change target itself--the farm family unit.

Internal Aspects of an Extension Program

The basic aim of an agricultural extension program is to assist the farming population so they are in a position to utilize scarce resources, to make choices, and to solve problems. An educational program must, however, be acceptable and understood by the staff carrying it out and by the people for whom it is aimed:

An induced technological change will succeed to a degree proportionate to the extent to which administered people feel a need for it, are brought into its planning and execution, and feel it to be their own.³⁰

The clarification of certain basic elements in educational planning is an aid for the educational administrators in their attempts to evaluate their efforts. Essential elements in educational planning have been considered by UNESCO to include: (1) quantitative planning, covering all questions involving the expansion of educational facilities; (2) qualitative planning, covering aims, content, methods and structure of educational systems; (3) administration of education, concerned with personnel and

³⁰ Lyle W. Shannon, ed., Underdeveloped Areas; A Book of Readings and Research (New York: Harper and Brothers Publishers, 1957), p. 442.

non-educational administration; (4) financing of education, concerned with sources and distribution of finances.³¹ This study is limited to selected aspects of qualitative planning elements as applied to an agricultural extension education organization. The qualitative aspect of educational planning is proposed to include the following basic statement: (1) a broad organizational philosophy, which reflects the organization's attitudes toward its program; (2) over-all objectives, which clarify in general terms its broad goals; (3) policies, which operationalize the broad objectives and provide guidelines for action, and are stated in a manner so as to allow flexibility in decision-making as appropriate to delegated authority of staff members; and (4) procedures which are detailed guides to action, as emerged from the policies. This includes a design for planning, and delegation of duties and responsibilities.

Planning principles of agricultural extension education should emerge from the above statements and be relevant to conditions of a given country. Basic considerations need to be given to educational philosophy, administrative principles, planning and learning principles, etc. Since there is a lack of educational principles prepared with a developing country in mind, certain basic principles of adaptive administration, proposed by Thompson, have formed one source of criteria on which this study has based its planning principles.³²

³¹ UNESCO, Elements of Planning, Educational Studies and Documents, No. 45. (Paris: UNESCO, 1963), p. 15.

³² Victor A. Thompson, "Administrative Objectives for Development Administration," Administrative Science Quarterly, 9:94-108, No. 1, June, 1964.

1. An innovative atmosphere: Group efforts within the organization are based on professional experience and group decisions rather than on control from above.

2. Shared planning goals: The educational goals are a group product which makes more certain that the goals are operational.

3. A combination of planning and action: The planning group is in close contact with the place of action.

4. A cosmopolitan atmosphere: The planning group has the ability to perceive, understand, and respond to a variety of situations outside their own organization, where changes constantly occur.

5. The diffusion of influence: Developmental educational planning calls for specialized personnel for fact-finding, planning and coordination; this personnel must be given authority to carry out their recommendations, but in close contact with the extension staff.

6. The toleration of interdependence: National development targets call for willingness to "tolerate interdependence" in order to cooperate and coordinate. It implies a need for group cohesiveness and non-hierarchical channels of communication, which if rightly used, will increase toleration of interdependence.

7. Avoidance of bureaupathology: This is based on the notion that personal insecurity in persons of authority results in behavior that is "bureaupathic;" that is, a need to dominate. This is manifested in close supervision, restricted communication, lack of delegated authority, etc.

These principles can be used as one set of criteria by which intangible aspects of the extension organization can be evaluated; educational philosophy constitutes another source. An educator in Nigeria, Ikejiani, has developed a philosophy that is consonant with desires and aspirations of a newly independent Nigeria.³³ He feels that the national purpose of education is to equip people to participate in, and contribute to the modernization process in Nigeria by creating a new style of life that will bear the imprint of the traditional culture as well as be adapted to new technologies and advancements. It should also be a tool for individual advancement as well as for national advancement in terms of aspirations and capabilities.

The growth of an agricultural extension program stems from effective program planning. Certain elements have been pointed out by Fenley and Williams as fundamental in meeting the needs of rural people in Nigeria, including: (1) organization of the extension program by specifying objectives that are to be accomplished; (2) local support by involving official local leaders such as local councils, and traditional leaders such as village heads, or emerging leaders such as progressive farmers; (3) local needs that form the basis for local programs rather than directions from above; local people are involved in setting local program objectives which are in harmony with national targets.³⁴

³³ O. Ikejiani, (ed.), Nigerian Education (Ikeja: Longmans of Nigeria, 1964), pp. 21, 95-96.

³⁴ John M. Fenley and S. K. T. Williams, Extension Programme Planning as Developed for Western Nigeria (Ibadan: Ministry of Agriculture and Natural Resources, Training Bulletin No. 2, 1963), pp. 3-4.

Basic learning principles and educational criteria developed in countries with long educational experiences can serve as sources for the consideration of specific extension planning principles. Munk has developed certain standards that can serve in the judgment of goals or objectives: (1) critical analysis of the specific meaning of stated objectives; that is, the objectives should be stated in terms of level and degree of achievement; (2) consistency with relevant situational factors and known learning principles on which the objectives are based; (3) inclusiveness, the establishment of meaningful relationships between relevant and significant facts in the total situation; and (4) fruitfulness in terms of the learner, aiming at expanding his experience and awakening his creativity that will lead to growth of human ability.³⁵ Carefully stated objectives directly influence the way in which the allocation of resources, the planning, organizing, and coordinating functions of extension education is carried out.

The following objectives are examples of broad statements from the program of work of the extension service in Western Nigeria:

The teaching of improved practices to farmers, both in cultivation and processing of crops; The teaching of improved methods of livestock husbandry; The multiplication and distribution of improved planting materials and strains of livestock; . . .³⁶

³⁵ Arthur W. Munk, A Synoptic Philosophy of Education, Toward Perspective, Synthesis, and Creativity (New York: Abingdon Press, 1965) p. 115.

³⁶ M. B. Tella, "1964/1965 Extension Work Programme," Manual Prepared by the Extension Service (Ibadan: Ministry of Agriculture and Natural Resources, 1965), pp. 10-11.

These objectives are stated in terms of the extension organization and not in terms of desired behavioral changes, therefore, they are not adequate as basis for evaluation of changes in farmers' behavior.

In the selection and evaluation of a specific locale or geographical area, certain efficiency criteria can serve as guidelines in investment, since efficiency is a rationality concept. Examples of such criteria are: human investment with priority given to groups of people that have capacity to absorb education, those who have positive attitudes toward new ideas; economic investment with priority given to agricultural areas where reasonable economic return is predicted; potential response with priority given to a locale where interpersonal contact between the groups of people can be established; potential collaboration with priority given to areas where other change agencies are operating, and people have already been exposed to new experiences and are receptive to new ideas.³⁷

Development of voluntary local leadership is of particular importance in a society with long experience of traditional tribal leadership patterns. To what extent can traditional leaders, such as village heads, be most useful in an agricultural extension program? How can progressive non-traditional local people be encouraged to emerge as new leaders? The development of voluntary leadership in Nigeria needs to consider established criteria for leadership such as age, wealth, prestige, but as social changes occur there will be new criteria by which efficient leadership can be measured.

³⁷ Anderson and Bowman, op. cit., pp. 16-17.

The planning of a nationwide extension program must take local program objectives into consideration; that is, people to be reached, subject matter to be taught, and desired behavior changes. In the organization of learning experience Tyler has suggested criteria that will support change-producing behavior: (1) continuity referring to the need to provide reoccurring educational experiences which reinforce development of certain attitudes, skills, etc., in terms of repeated demonstration around a particular problem; (2) sequence of learning experiences goes beyond continuity by providing a series of successive experiences with increasing levels of difficulty; and (3) integration of educational experiences where each specific demonstration should be seen in an over-all perspective in its relation to other farming problems.³⁸ This calls for well coordinated activities on local levels both within extension services and with outside agencies.

The problem of motivation is related to the concept of "level of aspiration."³⁹ In a society with few opportunities for innovations, there is also a lack of experience to change and levels of aspiration are consequently low. It may not be lack of willingness on the part of the learner, but lack of opportunity to try new ideas which affects his disposition to change. The apparent rigidity and lack of spontaneous flexibility among peasants is primarily based on socialized beliefs and are cognitive in nature.

³⁸ Ralph W. Tyler, Basic Principles of Curriculum and Instruction (Chicago, Ill.: The University of Chicago Press, 1964), p. 55.

³⁹ Edmund deS Brunner, et al., An Overview of Adult Education Research (Chicago, Ill.: Adult Education Association of the U. S. A., 1959), p. 32.

This is a crucial point in learning and Kuhlen proposes that "one should distinguish the willingness to be exposed to a new experience from the capacity to focus attention on that which is to be learned."⁴⁰

A person's reference group, those serving as standards for comparison and expectation, becomes a baseline for evaluating what is relatively gratifying or a relatively depriving experience. Blau and others refer to this as the notion of relative deprivation: "such dissatisfactions produced not by one's own meager rewards but by comparisons with more highly rewarded others."⁴¹ A social group in which a person operates influences his level of aspiration and the range of his goals.

Since this study is concerned with the perception and consensus of organizational aspects of an agricultural extension program, factors that enhance staff coordination and improve the quality of administrative behavior are important: (1) when all members of an organization have a common insight into the coordination process and have a common agreement on goals and responsibilities in the planning process; (2) when there is a mutual understanding of each others work; (3) when there are adequate means of communication among staff members.⁴²

⁴⁰ Raymond G. Kuhlen, (ed.), Psychological Backgrounds of Adult Education (Chicago, Ill.: Center for the Study of Liberal Education for Adults, 1963), p. 32.

⁴¹ Peter M. Blau, Exchange and Power in Social Life (New York: John Wiley and Sons, Inc., 1964), p. 159.

⁴² Russel T. Gregg, "The Administrative Process," Administrative Behavior in Education, eds. Roald F. Campbell and Russel T. Gregg (New York: Harper and Brothers Publishers, 1957), pp. 307-311.

In the final choice of internal aspects of educational planning of an agricultural extension program special consideration was given to Nigerian conditions. Factors important in this investigation are the following: qualitative elements of educational planning, geographical change target, local leadership, and local program objectives.

The basic assumptions and hypotheses were derived from factors in the external situation and the internal aspects of educational planning; these constitute the key concepts and are presented in Figure 3, and further explained in Chapter III.

Basic Assumptions

The main assumptions of this study are: (1) educational planning enhances the application of human ability and experience and scientific methods to the effective pursuit of national and regional educational goals within the system of existing social institutions; and (2) the lack of congruity among the extension administrators concerning their perception which planning principles and which socio-cultural factors are important will have a detrimental effect on the rational operations of the extension organization. This would seem to be true, since, if administrators perceive different factors as important or as being used in determining program objectives, then they will sanction activities differently thus creating confusion among lower level administrators as to what type of activities to undertake.

EXTERNAL FACTORS IN THE ADMINISTRATIVE SITUATION

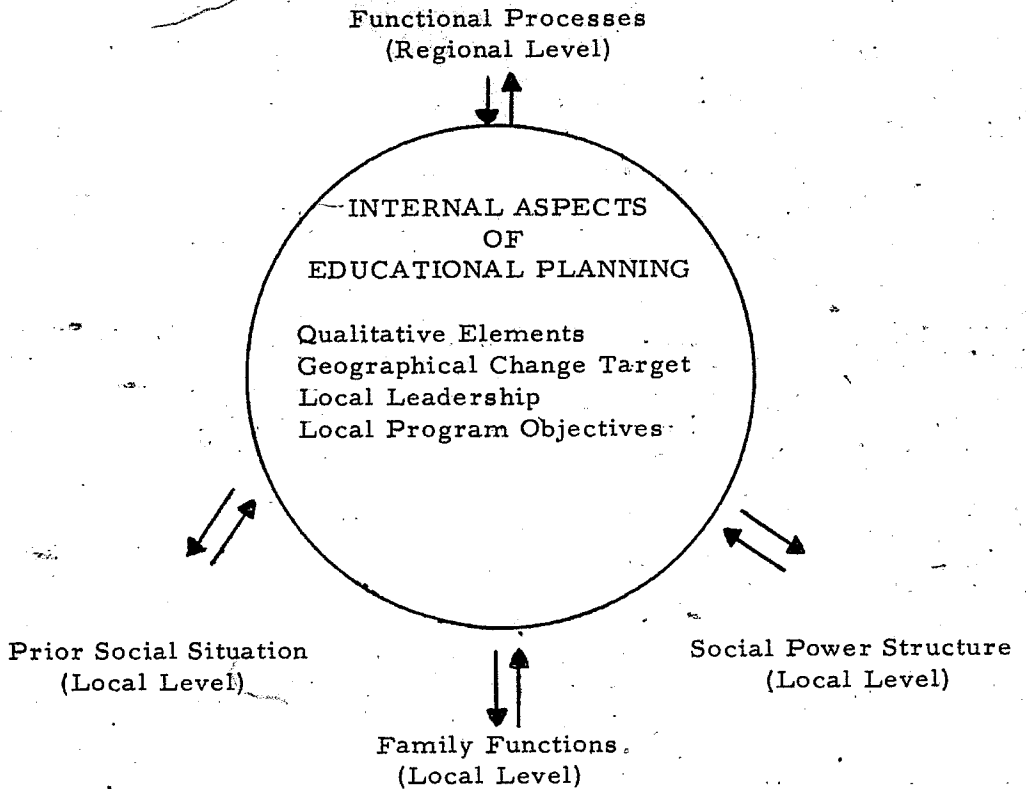


FIGURE 3

RELATIONSHIP BETWEEN SELECTED EXTERNAL FACTORS
IN THE ADMINISTRATIVE SITUATION AND INTERNAL
ASPECTS OF EDUCATIONAL PLANNING

Minor assumptions.

1. An integrated approach using cooperative efforts in the educational planning process, taking regional as well as national goals and development targets into consideration, geared to available human and material resources, adapted to socio-cultural and economic conditions, is more likely to arrive at set targets than a non-integrated approach.

2. An adult education program aiming at social and economic development can proceed more effectively when a geographical area contains ecological and demographic factors that facilitate the assimilation of an adult education program.

3. The readiness of a given social system to receive information and become motivated to perform desired behavioral changes is closely related to prevailing social power structure; the legitimation of the adult education program by this power structure is essential for the progress and continuity of the program.

4. Adult educational efforts are more likely to succeed better over time if the local program is cooperatively determined by the clientele and the change agency, based on a realistic assessment of expressed interests and needs, and feasible in terms of level of technology and local resources.

Hypotheses

General Hypothesis I.

There is a lack of agreement among Nigerian extension administrators concerning their perception of the application of selected planning

principles in developing program objectives and concerning their perception of the importance of these planning principles.

The selected planning principles referred to in the following six null hypotheses were derived from the conceptual framework, presented in Chapter II, and are detailed in the following chapter.

Null Hypotheses:

1. There is no agreement in the perception among the administrators within a category in a region that selected planning principles are used in developing the current extension objectives.
2. There is no agreement in the perception among the administrators within a region that selected planning principles are used in developing the current extension objectives.
3. There is no agreement in the perception among the administrators within a category in a region that selected planning principles should be used in developing the current extension objectives.
4. There is no agreement in the perception among the administrators within a region that selected planning principles should be used in developing the current extension objectives.
5. There is no difference among the administrators within a category in a region in the perception of association between planning principles that are used and those that should be used in developing the current extension objectives.
6. There is no difference among the administrators within a region in the perception of association between planning principles that are used

and those that should be used in developing the current extension objectives.

General Hypothesis II.

There is a lack of agreement among the Nigerian extension administrators concerning their perception of the relative influence of socio-cultural factors on the planning and implementation of extension programs.

The selected socio-cultural factors referred to in the following null hypotheses were derived from the conceptual framework, presented in Chapter II, and are detailed in the following chapter.

Null Hypotheses:

7. There is no agreement in the perception among the administrators within a category in a region that selected socio-cultural factors have an influence on the planning and implementation of the extension program.

8. There is no agreement in the perception among the administrators within a region that selected socio-cultural factors have an influence on the planning and implementation of the extension program.

In Chapter II internal aspects of educational planning and external factors in the administrative situation, that are assumed to influence administrative behavior in the extension services in Nigeria, have been discussed.

CHAPTER III

APPLICATION OF CONCEPTUAL FRAMEWORK

A major aspect of the study was to assess the perception of senior agricultural extension administrators in Nigeria in regard to: (1) selected planning principles of qualitative aspects of educational planning in extension education (internal aspects); and (2) selected factors in the socio-cultural environment of extension education (external aspects).

A set of four criteria related to internal aspects were developed and formed the basis for sixteen planning principles. Another set of criteria related to environmental factors and derived from sociological theory were established and further divided into sixteen dimensions. Within the limits set by these dimensions sixty-four questions, based on Nigerian conditions, were developed.

The two sets of criteria related to internal and external aspects of educational planning were developed which were judged to be suitable for a developing country.

Criteria Related to Internal Aspects of an Extension Program

Criterion I:

The formulation of a national framework of the qualitative aspects of an extension education planning process includes the clarification of over-all objectives or goals, the identification of educational policies through

the allocation of resources, and making provisions for adaptation and integration of national goals with local needs.

Dimensions (principles): The effectiveness of the Extension

Program is increased:

- (1) - when the main objectives are realistically related to the Regional Development Plan, 1962-1968.
- (2) - when the allocation of resources (personnel and material) is clearly stated in extension procedures.
- (3) - when the planning and organizing functions in the Extension Service are clearly stated. (i. e., responsibilities of each officer and his relations to other officers.)
- (4) - when there is agreement between objectives of the Extension Program and locally expressed needs.

Criterion II:

The selection of geographical locale is based on the capacity of this unit to absorb education; that is, through prediction of potential socio-economic return that investment in agricultural extension education might give in this locale.

Dimensions (principles): The effectiveness of the Extension Program is increased:

- (5) - when a geographical area contains people who are receptive to education. (i. e., show interest, ability, etc.)
- (6) - when a geographical area has potential for economic return from increased agricultural production.
- (7) - when a geographical area has ways and means of spreading information among farm families.
- (8) - when a geographical area is served by other change agencies that can reinforce the Extension Program. (i. e., Community Development Programs, etc.)

Criterion III:

The location and activation of key people in a given local area forms the basis for best utilization of existing social power structure, for obtaining

the interest of local farming population, and for assuring continuity of program activities.

Dimensions (principles): The effectiveness of the Extension

Program is increased:

- (9) - when local Council officials agree with proposed Extension projects.
- (10) - when local village heads are involved in the planning of Extension projects.
- (11) - when local voluntary leaders, who have personal ability and willingness to cooperate, are utilized in the Extension projects.
- (12) - when local leaders have the ability to get farm families to participate in common efforts.

Criterion IV:

The determination of local program objectives is a cooperative undertaking with the main decisions resting with local people and the extension worker acting as a link with national development goals.

Dimensions (principles): The effectiveness of the Extension

Program is increased:

- (13) - when local extension projects are based on the needs and interest of farm families.
- (14) - when the local extension programs outline in detail what should be done.
- (15) - when the local extension programs specify how it is hoped to change the farmers knowledge, attitudes, and practices in farming.
- (16) - when local group characteristics, such as traditional authority, kinship obligations, are considered.

Criteria Related to External, Socio-Cultural Factors Affecting
an Extension Program

Criterion I:

An understanding of functional processes of the social system facilitates the identification of socio-cultural factors that influence the planning of extension education programs.

Four functional processes have been pointed out by Wilkening and others as related to social change. These processes have been used as basis for criteria used and include: (1) goal gratification, the range and level of goals of an educational system and the extent to which these goals are in agreement with goals of the surrounding society; (2) adaptation, the interaction of the educational system with the physical and social environment, or the process by which available resources (human and material) are adapted to ecological, demographic, and social environment; (3) integration, the acceptance of an educational system in time and space. An educational enterprise functions within economic, political, social, and religious activities of a given society and its integration will vary with the level of technology and opportunities of a society; (4) pattern maintenance or value orientation forms the basis for behavior pattern and is related to the principle of deferred gratification or commitment of resources over time.¹

¹ E. A. Wilkening, "Processes of Change Affecting Farm and Family: A Systematic Approach," Projection Papers: Orientations for Rural Sociological Research and Action, ed. James H. Copp (University Park, Pennsylvania: Rural Sociological Society, 1964), pp. 3-6.

1. Goal gratification: National development objectives and local needs are clarified and form the basis for agricultural extension education objectives.

Consideration of situation: Society sets its goals as does a family or an individual. Goals become evident in the persistent choices made or by analyzing ongoing activities. An educational system derives its goals by considering both the goals of the larger society and the individual in that society; for example, national development targets and local needs.

2. Adaptation of resources: Available and potential resources are taken into account in extension education procedures and policies.

Consideration of situation: In order to obtain goals there need to be means by which goals can be reached. The adaptive functions of an educational agency imply that the resources of society are carefully considered in the development of educational policies. Adaptation is a process by which the individual or groups of individuals adjust to each other and to environment. Adaptation occurs both to the material environment, or level of technology, and to the non-material environment, or social organizations and cultural patterns.

3. Integration: Integration of an educational program into society is facilitated by coordinating the purposes and activities of the program with that of related agencies.

Consideration of situation: An educational program is of little avail if not integrated into the social system and its elements. Resistance

to integration by local councils may rest upon unwillingness to give up power and position, uncertainty or lack of knowledge of problems and lack of supporting values in relation to the extension program.² Integration as well as adaptation depends on information available and existing channels of communication.

4. Pattern maintenance: The relative success of an extension program is based on the degree of adjustment to the material and non-material culture.

Consideration of situation: The cultural pattern of a society places limits on goal achievement of a social system. The material culture is the external conditions, such as ecological relationships and technological facilities; the non-material culture is less tangible and consists of belief systems and values which influence the relationship to the material culture. Value orientations are central features of a society, and, according to Kluckhohn, it is important to know not only the dominant values but also the variations in value orientation.³

Criterion II.

An understanding of ecological and demographic aspects in the prior social situation facilitates the identification of socio-cultural factors and influences the planning of the extension program.

² E. A. Wilkening, "Some Perspectives on Change in Rural Societies," Rural Sociology, 29:10-11, No. 1, March, 1964.

³ Florence Kluckhohn and Fred L. Strodtbeck, Variations in Value Orientations (Elmsford, New York: Row, Peterson and Co., 1961), p. 37.

5. Demographic factors: Structural aspects of population such as age, sex, and race, are enduring and identifiable and do not change in themselves, only over time, and are therefore predictable.

Consideration of situation: The dynamic aspects of population, such as fertility and mortality are less stable but provide difficulties to identify and therefore to predict. The implications of migration and population growth affect changes in the distribution of population. Urban migration in Nigeria is caused by low levels of income, little investment in the agricultural sector, few non-agricultural rural employment opportunities, lack of social facilities, etc. An accelerating population growth aggravates the economic situation and can be particularly serious where there is high population density. The rate of literacy in a given population has a profound impact on socio-economic change.

6. Ecological factors: Man's relationship to land are analyzed and considered in the analysis of a geographic locale.

Consideration of situation: The ecological setting forms the spatial distribution of people in terms of types of settlement patterns, such as dispersed farmsteads and villages, kinds of crops grown, and the agricultural pattern in general. For example, shifting cultivation is man's incapacity to master soils and climatic conditions. Ecological factors affect not only economic production but also social groupings of people, their character and values.

7. Social channels of communication. Existing and potential channels of communication are identified and considered in the analysis of a geographic locale.

Consideration of situation: Channels of communication depend on prevailing social institutions and cultural environment which in turn reflect the surrounding physical conditions. If more value is placed on traditionalism than on individualism, change in communal land ownership is not likely to occur. The kind of information available and the channels by which this information is distributed depends on social stratification, level of education, etc. Katz and Lazarsfeld have pointed to three major factors or dimensions with which patterns and strategic points of communication are associated: (1) group structures, (2) group "cultures" or climates, and (3) group situations;⁴ What kinds of communication flow through which kinds of interpersonal networks? Is it the family group or neighbor group which transmit opinions?

8. Reinforcing change agencies: Existing and potential change agencies are identified and considered in the analysis of geographical locale.

Consideration of situation: An area which contains a cluster of change agencies is likely to be conducive to change, provided that these change agencies have coordinated their purposes. It is thus inferred that a number of change agencies provide for a broader base of change than an area with few or no change catalysts. The change can be social, referring to "shifts in ongoing interaction patterns of person-to-person relationships,"

⁴ Elihu Katz and Paul F. Lazarsfeld, Personal Influence, The Part Played by People in the Flow of Mass Communications (Glencoe: The Free Press, 1955), p. 84.

or cultural change which is defined as "changes in system of ideas of various kinds, in beliefs, in values and norms, included also in this category are changes in the technical apparatus used for dealing with the physical world."⁵

Criterion III:

An understanding of local social power structure, which has a bearing on the direction of change, facilitates the identification of socio-cultural factors and influences the planning of the extension program.

9. Authoritative social power: Legitimation of local extension programs by official key people is essential to program initiation and continuity.

Consideration of situation: Social power has its source in one-sided dependence; interdependence and mutual influence of equal strength indicate lack of power and has been defined by Blau as the ability of persons "to impose their will on others despite resistance through deterrence either in the forms of withholding regularly supplied rewards or in the form of punishment," both constituting negative sanctions.⁶ Effective authority, according to Blau, requires both power and legitimating approval; authority is legitimate approval while leadership is collective approval.

⁵ Robin M. Williams, American Society, A Sociological Interpretation (Second edition, reprinted, New York: Alfred A. Knopf, 1961), p. 568.

⁶ Blau, op. cit., pp. 117, 199-200.

Two primary functions of a leader are to motivate the group members to work toward a common goal while at the same time directing and coordinating the activities of the group.⁷ The difference between a democratic and autocratic leader is not the amount of power but the way in which the leader exercises his power. An autocratic leader guarantees that his guidance is indispensable for the long term functioning of the group, and that the group goals are unclear. The democratic leader, on the other hand, seeks to evoke maximum involvement by members in group activities in the setting of group goals and objectives.⁸

The development of leadership contributes to the achievement of group objectives, according to Blau, and "leaders are expected to emerge, therefore, in groups that have common goals and not in others;" and "common-purpose collectivities not only create a need for leadership but also facilitate its development."⁹ Traditional societies are centered around formal leaders (or local governmental authorities) and informal leaders (such as tribal groupings) and depend on each other.

10. Non-authoritative power (or collective approval): Legitimation of the local extension program by non-official key people is essential for program continuity.

⁷ Krech, op. cit., p. 433.

⁸ Ibid., pp. 434-435.

⁹ Blau, op. cit., p. 198.

Consideration of situation: Non-authoritative leaders are those that have a personal capacity to influence others in the decision making process. A potential voluntary leader must also be a person who adheres to central values and norms of the group he is a member of; "the successful leader must have membership-character in the group he is attempting to lead" ¹⁰

11. Local leadership characteristics: An understanding of local leadership characteristics is basic in efforts to obtain local support for extension program continuity.

Consideration of situation: The emergence of leadership is determined by the structure, situation, and the tasks of the group, and the personality of the leaders and his followers; the potential leader seeks not only achievement of group goals but also satisfaction of personal wants, power, prestige and material gain. ¹¹

Power can be defined by asking observers to rate community actors on a scale of "status," "influence," "prestige," etc., which gives evidence of the operation of power in "real life." In a non-literate society such rating can take place indirectly through observation and interviews. By identifying sources of leadership interest, such as prestige, wealth, position, family affiliations; or education, it can be inferred if a certain leadership is based on ascription rather than on achievement.

¹⁰ Krech, op. cit., p. 438.

¹¹ Ibid., pp. 422-426.

12. Local leadership versus change agency: The quality of the functioning of local voluntary leaders affects program continuity.

Consideration of situation: The main function of leadership is to obtain certain group goals through joint decisions of group members. The ability to delegate responsibility and authority is one of the basic properties of leadership. Other leadership dimensions are consideration involving the motivation of members to accept group goals and the maintaining of internal satisfaction and harmony, initiating and directing behavior which refers to the coordination of activities and ways and means of accomplishing group goals.¹²

Criterion IV.

An understanding of the functions of the family and kinship unit (the change target) facilitates the identification of socio-cultural factors, and influences the planning of the extension program.

13. Family values: Family values, which regulate daily activities and provide selective standards for setting family goals, influence the interest and choice of local extension program objectives and content.

Consideration of situation: Family task performance, leadership, and division of labor take place within the context of family value orientation. The value system not only regulates the activities and expectations of family members but also form the basis for family goals. Value orientation gives order and direction to human problems. It is from the

¹² Ibid., p. 432.

cognitive and affective elements that the value system derives its content, while the directive element has an integrative and guiding influence.¹³ Kluckhohn maintains the view that there are universal aspects of value orientations which are common to all human groups, because common human problems arise out of human situations, and alternative solutions are present in all societies. For example, man's relation to nature may take three different forms: (1) subjugation to nature, acceptance of the inevitable or a fatalistic outlook on life; (2) harmony with nature; or (3) mastery over nature, that man feels natural forces are to be overcome and put to the use of humans through technological innovations.¹⁴

According to Rose, those values that people are not aware of or which they may repress, covert values, often constitute the main barriers to change and can cause much unexplainable resistance.¹⁵ Since values give meaning to life and provide basis for acceptable behavior patterns, the weakening of certain values in a traditional society can make its members feel less secure in their world and personal disorganization, or anomie, can result. It must therefore be recognized that although a society has undeniable value patterns, the existing value orientation, no matter how traditional in Western eyes, give stability to a social system and can serve as a "brake" on undesirable changes.

¹³ Kluckhohn, op. cit., pp. 4-8.

¹⁴ Ibid., p. 10.

¹⁵ Arnold M. Rose, Theory and Method in The Social Sciences (Minneapolis: The University of Minnesota Press, 1954), p. 13.

14. Family goals: The kind of goals perceived as important in a family, influence the interest in and determination of local extension program objectives and content.

Consideration of situation: Are goals of the family unit based on economic achievements from agricultural production or on land ownership as means of social prestige? If the goal is to achieve maximum family satisfaction the extension agent must assist the family in reviewing its goals in light of existing and potential resources in terms of economic as well as personal knowledge, ability and skill. In order to understand how family goals are derived in a traditional society, it is necessary to understand leadership patterns. Who among the family members makes what decision concerning the farm and the home? To what extent are family decisions a result of family goals, or are decisions made based only on the goals of the family head?

In a peasant society farm and family are inseparable, production and consumption are integrated, and close interdependence between farm and family makes for inflexibility and inefficiency of individual and group goals. The notion of relative deprivation, which has a great impact on family goals, has been explained by Blau as "such dissatisfaction produced not by one's own meager rewards but by comparisons with more highly rewarded others."¹⁶ Any social group, which serves as standard

¹⁶ Blau, op. cit., p. 159.

of comparison and expectation, is a reference group, and the average reward by its members becomes a baseline for evaluating what is a relatively depriving or gratifying experience.

15. Division of labor: The pattern of work distribution of daily tasks influences the interest in and the determination of local extension program objectives and content.

Consideration of situation: The distribution of daily tasks among family members in a traditional society is related to a number of factors including degree of centralization of leadership, level of technology, degree of literacy, cultural patterns, etc. Division of labor is primarily accomplished according to age, sex, and status, but less by interest and abilities. With provision of new alternatives and more freedom to choose there is a need for specialization if more goods and services are to be obtained. Changes in practices means changes in roles between men and women and among family members. Specialization leads to differentiation of social structure and function which results in change.¹⁷

16. Decision-making: The locus of decision-making in a family and kinship unit and the process of making decisions influences the interest in and determination of local extension program objectives and content.

¹⁷ Wilkening, "Some Perspectives on Change in Rural Societies," op. cit., pp. 3-7.

Consideration of situation: Human action is goal oriented, therefore all rational actions are in terms of the attainment of goals. Decision-making is a social process by which alternative actions are considered and the consequences that may follow each alternative. The value of decisions made is thus related to the degree of goal attainment. When the levels of aspiration in a society are low the goals set are for immediate gratification based on limited resources available, which in turn depends on level of education and depths of information available.

Peasants in a traditional society, that is changing from a subsistence to a monetary economy, look for economic returns. Maximum family satisfaction can be based on profit and non-profit goals. The reaching of profit goals is related to the degree of rationality by which decisions are made. Rationality here is based on the process of arriving at decisions, not on the choices made.¹⁸ Unless the members of the family unit, who take part in carrying out decisions made, are involved in the decision-making process, it has not reached maximum rationality.

This study was based on a conceptual framework which delineated a profile of selected stages of internal and external aspects of the educational planning process on regional and local level as presented in this

¹⁸ Robert Rieck and Glen C. Pulver, An Empirical Measure of Decision-Making (Agricultural Experiment Station and Cooperative Extension Service, Research Bulletin 238. Madison, Wisconsin: University of Wisconsin, 1962), pp. 1-9.

chapter. The internal aspects included criteria referring to qualitative elements of educational planning, geographical change target, development of local leadership, and the implementation of local programs. The external factors included criteria related to functional processes of social organization on a regional level, and prior social situation, social power structure, and family functions on local level. The criteria formed the basis for the development of the interview-questionnaire (Appendix A) and for the analysis of the findings in Chapter IV. A profile of the main criteria and its key concepts are shown in Figure 4.

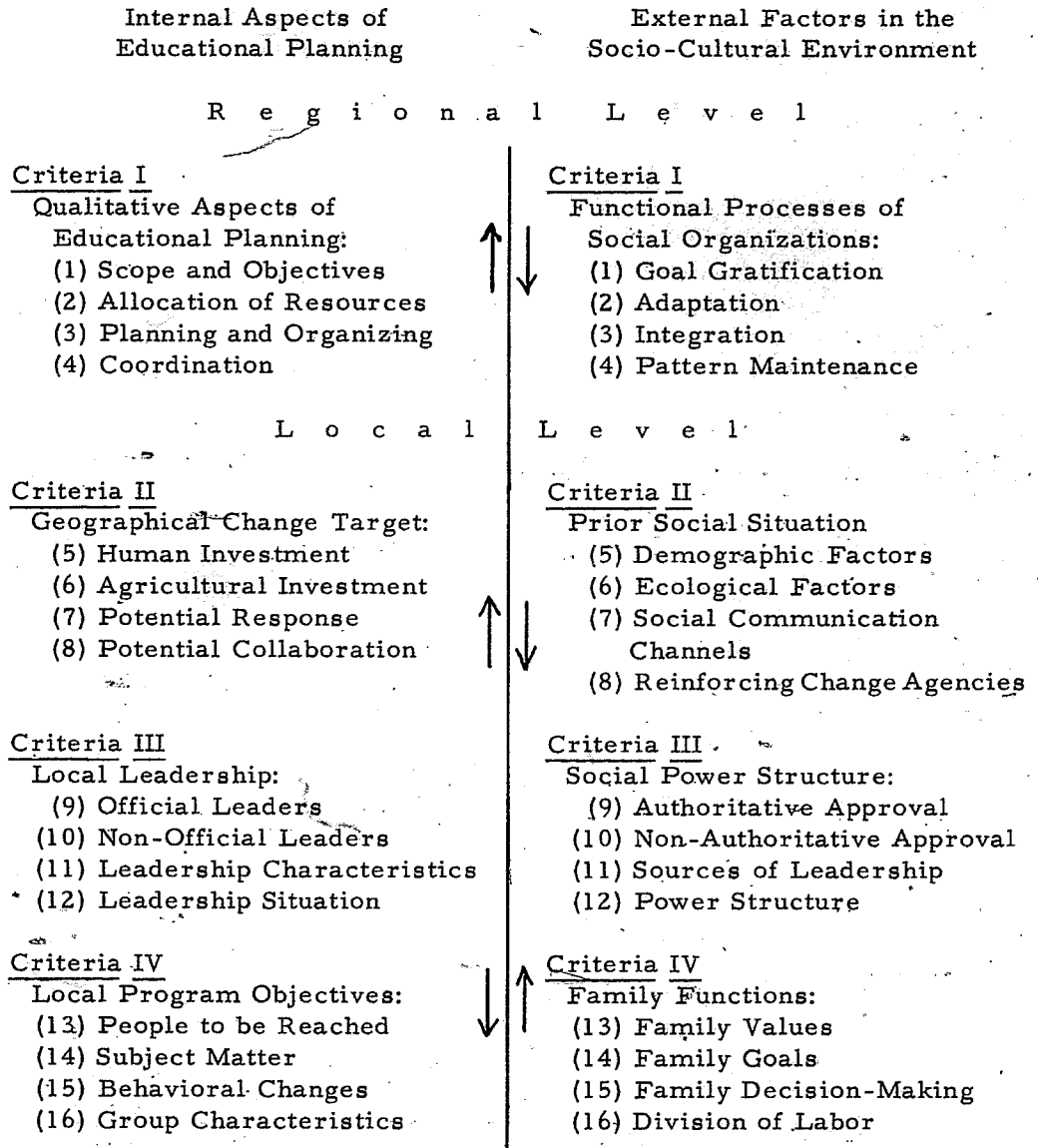


FIGURE 4

PROFILE OF CONCEPTUAL FRAMEWORK INCLUDING SELECTED
INTERNAL AND EXTERNAL FACTORS AFFECTING THE
PLANNING AND IMPLEMENTATION OF AN
AGRICULTURAL EXTENSION PROGRAM

CHAPTER IV

PERCEPTION OF THE IMPORTANCE OF PLANNING PRINCIPLES AND THE INFLUENCE OF SOCIO-CULTURAL FACTORS ON THE EXTENSION PROGRAMS IN NIGERIA

An analysis is made in this chapter of the selected planning principles and socio-cultural factors as perceived by extension education administrators in Western and Eastern Nigeria. First, it is concerned with the actual and ideal application of selected planning principles on the current extension program as specified in the first four objectives:

1. To determine the extent to which extension administrators perceive that the selected planning principles are being used in developing their current extension objectives.
2. To determine the extent to which extension administrators perceive that the selected planning principles should be used in developing their current extension objectives.
3. To determine the extent to which an administrator's location in different categories in the extension administrative hierarchy influences the perception as to whether the planning principles are being used in developing the current extension objectives.
4. To determine the extent to which an administrator's location in different categories in the extension administrative hierarchy influences the perception as to whether the planning principles should be used in developing the current extension objectives.

The responses from all sixty-eight respondents were tabulated by category and by region and formed the basis for analysis of the findings. The tabulation for each of the sixteen planning principles was performed according to five degrees of importance, or "significance," by which the principles were rated on an ordinal scale. The sixteen principles were then grouped under four main criteria, which formed the basis for measurement of agreement within the respondent groups. Consensus as to the ideal and actual rank order of planning principles was obtained through the application of Kendall Coefficient of Concordance, W_s , and the Spearman Rank Correlation Coefficient, r_s , two non-parametric statistics discussed further in Appendix D. Six null hypotheses were developed to analyze the data.

A mean weighted score was determined for each of the planning principles by adding up the weights respondents placed on each principle and dividing this score by the number of respondents included in each category in each region as well as by region and by total number of respondents. The sixteen planning principles were entered in a table in descending order according to total mean weighted score for each principle by total number of respondents in a region. The two categories were then entered into the same table according to the importance that was placed on each planning principle; the differences in ranking between the categories and the total respondents of a region were then revealed. Such tables were prepared for each region both in regard to perceived actual and ideal importance of each planning principle.

Percentage and frequency distribution were computed by category and by region, both in terms of actual and ideal perception of the selected planning principles. For the purpose of analyses the five values of importance or "significance" were regrouped into three parts: (1) "not a part;" (2-3) "not significant;" (4-5) "significant."

A further analysis of planning principles was made by comparing only those perceived as most important, or "significant," of the principles that were being used and which should be used in current extension objectives.

Second, an analysis was made of the relative influence of selected socio-cultural factors in the environment as perceived by categories and by regions, based on the fifth and sixth objectives:

5. To determine the extent to which the extension administrators perceive the selected socio-cultural factors in the environment as favorable or unfavorable to the planning and implementation of their current extension program.

6. To determine the extent to which the categories in the extension administrative hierarchy influence the perception of selected socio-cultural factors in the environment as favorable or unfavorable to the planning and implementation of their current extension program.

The result of the tabulation was based on the two categories in the two regions according to sixteen socio-cultural criteria containing factors that were perceived as obstacles or stimulants to change, or both.

Consensus as to the relative influence of socio-cultural factors on the planning and implementation of the current extension program was obtained by applying the Kendall Coefficient of Concordance, W :

Frequency and percentage distribution was computed by regrouping the five degrees of perceived favorability into three groups: (1-2) "unfavorable;" (3) "no effect;" and (4-5) "favorable." The midpoint of "no effect" was interpreted as containing an equal amount of favorable and unfavorable factors.

Third, the findings referring to the last objective: "to determine the relationship between personal and professional characteristics and selected demographic factors," were considered important to the analysis of the other data and were therefore summarized first.

Characteristics of Respondents

Personal and professional characteristics of the respondents, or demographic factors, were identified and included: categories in the administrative hierarchy, main area of responsibility, previous tenure in extension, present tenure in extension, highest training in agriculture, place of training, extent of training in extension methods and procedures, extent of training in social sciences, age, and rural residence after the age of twelve.

The respondents were classified into two categories, representing high and medium level of extension administrators, which were used as variables to determine whether or not the level in the administrative

hierarchy had an effect on the respondents' opinion of the degree to which selected planning principles were used and should be used in current extension objectives. The categories were also used to determine whether or not socio-cultural factors were perceived differently on the two levels in the hierarchy. Therefore, the following description of personal and professional characteristics were described in terms of the two categories. Since the two regions have a rather similar dispersion of personal and professional characteristics, Category I and Category II in the two regions were combined, but when important differences occur, these were mentioned.

The respondents were originally identified in four categories but for the purpose of analysis these groups were consolidated into two categories, since the total number of respondents in each category was very small.

Main area of responsibility. The respondents recognized that they had some degree of responsibility in both administration, training, and field work but were faced with making a decision as to which of these areas included their major responsibility. In Category I for both regions, fourteen out of twenty respondents considered administration as their main area of responsibility, three mentioned training and three field work. In Category II, twenty-six recognized field work as main area, eighteen considered administration, and four training as main area of responsibility.

Previous tenure. Category I, representing the higher positions in the administrative hierarchy, had in general longer previous experience

in extension than had Category II. The length of experience was somewhat higher in Western Nigeria, eight in Category I and ten in Category II had nine years of experience or more, while corresponding figures for Eastern Nigeria were three and seven.

Present tenure. One to four years of extension experience in present tenure was the most common grouping for all respondents, including thirteen out of twenty in Category I and twenty-seven out of forty-eight in Category II. Only in Western Nigeria one in each category had nine years or more of experience in present tenure.

Highest training in agriculture. The highest amount of training in agriculture was found in Category I, where seventeen out of twenty had obtained a Master's degree or equivalent (a two years postgraduate course in Trinidad was considered to be of equivalent value), two a Bachelor's degree, and one had only an Agricultural Certificate, which he had compensated with demonstrated organizational ability and long experience in extension service. In Category II, only two had a Master's degree, recently received, nineteen had a Bachelor's degree, seventeen an Agricultural Diploma, and ten had Agricultural Certificates. Category I, in both regions, had about the same training while Category II in Eastern Nigeria with one Master's and fifteen Bachelor's degrees had an overall higher training than Western Nigeria with only one Master's and four Bachelor's degrees.

Place of training. Almost all respondents in Category I, or nineteen, had received their training abroad, which was related to their age

and higher degrees. They received their higher degrees at a time when university training was being started in Nigeria. Fifteen out of forty-eight in Category II had received their training abroad. The United Kingdom and Trinidad was the place for most of the earlier training while most recent degrees had been obtained in the United States.

Training in extension methods and procedures. There seems to be no particular relationship between training in extension methods and categories. In Category I, five respondents out of twenty reported to have less than one month or no training in extension methods, while ten of the same category had five months or more. In Category II, there were twenty-two out of forty-eight who had received less than a month or no training in extension methods and only eight had received more than five months training. The younger staff had received their extension training mainly at agricultural schools of colleges, while the older ones had obtained their training in extension methods in forms of shorter in-service training courses held by the ministries of agriculture in respective region.

Training in social sciences. Ten of the respondents in Category I had received less than a month or no training in social sciences, while the corresponding figure for Category II was thirty-three. The greater amount of training in social sciences in Category I as compared with Category II was revealed by the fact that seven had obtained five months or more training in the social sciences with emphasis on sociology, while Category II included only two respondents with similar amount of training.

Age. The age distribution of respondents in Category I ranged from eight in the group 30-39 years of age, and twelve in the group 40 years of age or above. Category II had an almost equal distribution in the three age groups with fourteen members 29 years of age or younger, of which eleven were situated in Eastern Nigeria.

Rural residence. Only one member of Category I had never lived in a rural area after the age of twelve, while the same figure for Category II was ten. The longest rural residence was found in Eastern Nigeria with nine respondents in Category I and sixteen in Category II having lived five years or more in rural areas after the age of twelve, while in Western Nigeria the corresponding figures were four and eleven years.

Frequency and percentage distribution of respondents in regard to the above discussed demographic factors for Western and Eastern Nigeria are found in Appendix E, Tables XV to XXIV.

Perception of the Importance of Planning Principles That
Are Being Used in Current Extension Objectives

The following null hypotheses were tested:

Null Hypothesis 1. There is no agreement in the perception among the administrators within a category in a region that selected planning principles are used in developing the current extension objectives.

Null Hypothesis 2. There is no agreement in the perception among the administrators within a region that selected planning principles are used in developing the current extension objectives.

Agreement on the perception among extension administrators regarding planning principles that were being used in developing extension objectives is revealed in Table 1 through the application of Kendall Coefficient of Concordance, W . In measuring the degree of consensus within categories within Western Nigeria, Category I had a value of .04 whereas the value in Category II was equal to .28; in Eastern Nigeria corresponding values were .34 and .33. There was definitely no consensus in Category I in Western Nigeria, while consensus in the remaining categories of the two regions was also relatively low. In applying a value of W equal to .80 or above as "high" agreement, .60 to .79 as "medium," and .59 and below as "low," the first null hypothesis was not rejected. In measuring the consensus within regions the values of W were .16 in Western and .29 in Eastern Nigeria, which values also were sufficiently low to not reject null hypothesis 2.

TABLE 1

AGREEMENT ON THE PERCEPTION OF PLANNING PRINCIPLES THAT ARE BEING USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY AND BY REGION

Categories	Perception of Principles That Are Being Used	
	Western Nigeria	Eastern Nigeria
Category I	$W = .04$	$W = .34$
Category II	$W = .28$	$W = .33$
Categories I and II	$W = .16$	$W = .29$

W = Kendall Coefficient of Concordance

By computing mean weighted scores the planning principles could be ranked in order of perceived importance as applied to current extension

objectives. A great deal of difference was revealed in comparing the rank order of the categories and total number of respondents within Western and Eastern Nigeria, as shown in Tables II and III. There appeared to be agreement on individual principles, however, such as the principle of "scope and objective" which had received one of the first four rankings both within the categories in both the regions. The principle on "agricultural investment" had also received a high ranking and been placed within the first five ranks in the two categories in both regions. The principle on "group characteristics," on the other hand, had been perceived as having little application in current extension objectives and consequently received a low ranking, or among the three last ranks, both within the categories and within the regions.

A further difference in the degree to which a planning principle was perceived as being used among administrators in developing current extension objectives was also indicated by the mean weighted score as presented in Tables II and III. The first ranked principles in Western Nigeria had obtained a score of 4.05, while the first principle in Eastern Nigeria had received a score of only 3.61. The total mean score for Western Nigeria was 3.25 and for Eastern Nigeria 2.83, indicating that the planning principles were perceived to be less used in Eastern Nigeria than in Western Nigeria.

A similarity between regions was revealed in Table II by examining which planning principles were included in the first three ranks: Western Nigeria had grouped the following principles in first order of priority: "scope and objective;" "agricultural investment;" "planning and organizing;" while Eastern Nigeria (Table III) had the same principles but in

TABLE II

PLANNING PRINCIPLES, RANKED IN ORDER OF PERCEIVED ACTUAL IMPORTANCE, THAT ARE BEING USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY, WESTERN NIGERIA

Planning Principles	Mean Wtd.	Ranking		
	Score Total Staff	Total Staff	Category I	Category II
Scope and Objective	4.05	1	1.5	1
Agricultural Investment	3.70	2	1.5	5
Planning and Organizing	3.67	3	8	2
Subject Matter	3.55	4	10.5	3
Allocation of Resources	3.50	5	8	4
Leadership Characteristics	3.32	6.5	4	8
People to be Reached	3.32	6.5	10.5	6
Behavioral Changes	3.11	8	13	7
Human Investment	3.05	9	6	10
Coordination	3.02	11	14	9
Non-Official Leaders	3.02	11	4	12.5
Leadership Situation	3.02	11	4	12.5
Potential Response	2.88	13.5	12	14
Group Characteristics	2.88	13.5	8	15
Potential Collaboration	2.79	15	15	11
Official Leaders	2.47	16	16	16

TABLE III

PLANNING PRINCIPLES, RANKED IN ORDER OF PERCEIVED ACTUAL IMPORTANCE, THAT ARE BEING USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY, EASTERN NIGERIA

Planning Principles	Mean Wtd. Score Total Staff	Ranking		
		Total Staff	Category I	Category II
Agricultural Investment	3.61	1	1.5	2.5
Planning and Organizing	3.58	2	4	1
Scope and Objectives	3.50	3.5	1.5	4
Allocation of Resources	3.50	3.5	4	2.5
Potential Collaboration	2.91	5.5	8.5	5
People to be Reached	2.91	5.5	6.5	6
Subject Matter	2.85	7	4	9
Potential Response	2.76	8	8.5	7.5
Coordination	2.70	9	10.5	7.5
Official Leaders	2.67	10	6.5	12
Human Investment	2.61	11	12	10
Leadership Situation	2.55	12	12	12
Behavioral Changes	2.58	13	15	12
Leadership Characteristics	2.32	14	12	14
Non-Official Leaders	2.26	15	16	15
Group Characteristics	2.11	16	10.5	16

different order of priority: "agricultural investment," "planning and organizing," and "scope and objective."

By computing the percentage for all planning principles by category and by region some significant agreement was found, as can be seen in Table IV. In Western Nigeria, 43 per cent in Category I considered the planning principles as "significant," 54 per cent as "not significant," and 3 per cent as "not a part" of current extension objectives. Comparing with corresponding figures in Category II, 42, 49, and 9 per cent, it indicated an over-all similarity of perception. The two categories in Eastern Nigeria also had similar results. In Category I, the planning principles were perceived as "significant" by 33 per cent, "not significant" by 63 per cent, and "not a part" by 4 per cent; corresponding figures in Category II were: 26, 64, and 10 per cent.

TABLE IV

PERCENTAGE OF PERCEIVED IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY AND BY REGION

Categories	Percentage of Perceived Importance					
	Western Nigeria			Eastern Nigeria		
	Not a part	Not significant	Significant	Not a part	Not significant	Significant
Category I	3	54	43	4	63	33
Category II	9	49	42	10	64	26
Categories I and II	7	52	42	10	62	28

Western Nigeria had in general perceived all the planning principles as more important than Eastern Nigeria; the percentages for Western Nigeria were: 42 per cent of the planning principles were perceived as "significant," 52 per cent "not significant," and 7 per cent as "not a part" of current extension objectives. In Eastern Nigeria 28 per cent had perceived the planning principles as "significant," 62 per cent as "not significant," and 10 per cent as "not a part" of current extension objectives..

Frequency and percentage distribution of perceived importance of the planning principles that are being used in developing current extension objectives can be examined for each planning principle by category in Appendix E, Tables XXV and XXVI.

Perception of the Importance of Planning Principles That
Should Be Used In Current Extension Objectives

The null hypotheses were:

Null Hypothesis 3. There is no agreement in the perception among the administrators within a category in a region that selected planning principles should be used in developing current extension objectives.

Null Hypothesis 4. There is no agreement in the perception among administrators within a region that selected planning principles should be used in developing the current extension objectives.

Consensus regarding perceived importance among the administrators in regard to planning principles that should be used in developing current extension objectives was low, particularly in Category II in both regions, as

is indicated in Table V. The highest agreement was found in Category I in Eastern Nigeria where the Coefficient of Concordance, W, was equal to .37 as compared with W equal to .29 in Western Nigeria. The consensus within each region was also low. Since all values of W were far below the established .59 as a "low" value, the null hypotheses 3 and 4 were not rejected.

TABLE V
 AGREEMENT ON SELECTED PLANNING PRINCIPLES THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY AND BY REGION

Categories	Perception of Principles That Should Be Used	
	Western Nigeria	Eastern Nigeria
Category I	W = .29	W = .37
Category II	W = .10	W = .19
Categories I and II	W = .14	W = .21

W = Kendall Coefficient of Concordance

In comparing the rank order based on mean weighted score, as is shown in Tables VI and VII, the principles pertaining to "scope and objectives," and "allocation of resources," were listed in the first quartile as being of greatest importance to the two categories; that is, high and medium level extension administrators. Among those ranked as least important in both regions were: "official leaders," "group characteristics," and "behavioral changes." The principles perceived as most important were those referring to the over-all planning situation on regional level and the principles perceived as least important referred to planning on local level.

TABLE VI

PLANNING PRINCIPLES, RANKED IN ORDER OF PERCEIVED IDEAL IMPORTANCE, THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY, WESTERN NIGERIA

Planning Principles	Mean Wtd. Score Total Staff	Ranking		
		Total Staff	Category I	Category II
Scope and Objective	4.85	1	3	1.5
Leadership Characteristics	4.79	2	6.5	1.5
Allocation of Resources	4.73	3.5	3	4.5
Planning and Organizing	4.73	3.5	6.5	3
People to be Reached	4.70	5	6.5	4.5
Agricultural Investment	4.64	6	3	6.5
Potential Response	4.61	7	1	10
Coordination	4.55	8	10.5	8.5
Non-Official Leaders	4.50	9	9	11
Human Investment	4.47	10.5	13.5	6.5
Leadership Situation	4.47	10.5	6.5	13
Subject Matter	4.44	12	13.5	8.5
Potential Collaboration	4.41	13	10.5	13
Behavioral Changes	4.29	14	15	13
Group Characteristics	4.00	15	12	15.5
Official Leaders	3.67	16	16	15.5

TABLE VII

PLANNING PRINCIPLES, RANKED IN ORDER OF PERCEIVED IDEAL IMPORTANCE, THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY, EASTERN NIGERIA

Planning Principles	Mean Wtd. Score Total Staff	Ranking		
		Total Staff	Category I	Category II
Agricultural Investment	4.55	1.5	2	1
Scope and Objectives	4.50	1.5	1	2
Allocation of Resources	4.44	3.5	4	3.5
Planning and Organizing	4.44	3.5	4	3.5
Potential Response	4.32	5	9	5
People to be Reached	4.29	6	6.5	6
Subject Matter	4.11	7	4	11
Coordination	4.06	9	6.5	11
Potential Collaboration	4.06	9	9	7
Leadership Situation	4.06	9	9	8.5
Leadership Characteristics	4.03	11	11	8.5
Human Investment	3.88	12	13.5	11
Behavioral Changes	3.82	13	13.5	13
Group Characteristics	3.67	14	12	15
Official Leaders	3.64	15	15.5	14
Non-Official Leaders	3.50	16	15.5	16

By computing percentage of the degree of perceived importance as to what planning principles should be used in current extension objectives, the following results were found. Category I in Western Nigeria: 1 per cent perceived the planning principles as they should not be used in current objectives, 10 per cent perceived them as not important, and 89 per cent as important and indicated that the planning principles should be used in current extension objectives. The percentage in Category II was almost identical with Category I: 1 per cent perceived the planning principles as they should not be used, 8 per cent as being not important, and 91 per cent as important. The findings can be examined in Table VIII.

TABLE VIII
PERCENTAGE OF PERCEIVED IMPORTANCE OF PLANNING PRINCIPLES THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY AND BY REGION

Categories	Percentage of Perceived Importance					
	Western Nigeria			Eastern Nigeria		
	Not a part	Not significant	Significant	Not a part	Not significant	Significant
Category I	1	10	89	-	14	86
Category II	1	8	91	2	27	71
Categories I and II	1	8	91	1	23	76

In Eastern Nigeria the percentages in Category I were: 14 per cent perceived the planning principles as not important and 86 per cent as important; that is, that the planning principles should be used in developing

current objectives. Category II included 2 per cent who felt that the planning principles should not be used in the objectives, 27 per cent perceived the principles as not being important, and 71 per cent as important.

A further analysis of consensus according to percentage distribution by category and by region revealed a complete agreement on a few planning principles. In Western Nigeria, 100 per cent in both categories agreed that the following principles should be used in the current extension objectives: "allocation of resources," "agricultural investment," and "leadership characteristics." In Eastern Nigeria the two categories had reached complete agreement only on the principle referring to "agricultural investment." A planning principle perceived as least important in both categories and in both regions was the one pertaining to "official leaders." Other principles found of relatively low importance were "non-official leaders," and "group characteristics." Frequency and percentage distribution of each planning principle can be examined in Appendix E, Tables XXVII and XXVIII.

Comparison Between the Perception of Planning Principles That
Are Being Used and That Should Be Used in
Current Extension Objectives

The following null hypotheses were tested:

Null Hypothesis 5. There is no difference among the administrators within a category in the perception of association between planning principles that are used and those that should be used in developing the current extension objectives.

Null Hypothesis 6. There is no difference among the administrators within a region in the perception of association between selected planning principles that are used and those that should be used in developing the current extension objectives.

In analyzing the data, the Spearman Rank Correlation Coefficient, r_s , used as a measure of association, was low in the two categories in both regions. The measure of r_s as related to the importance attached to planning principles that actually were used and ideally should be used in developing current extension objectives revealed a great deal of differences as is indicated in Table IX. The highest degree of association was obtained in Western Nigeria with r_s equal to .39 in Category I, while Category II had a value of r_s equal to .12. In Eastern Nigeria the value for Category I was r_s equal to -.18 and for Category II r_s equal to .13. The null hypotheses were not rejected.

TABLE IX

ASSOCIATION BETWEEN THE PERCEPTION OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY AND BY REGION

Categories	Association Between Principles That Are Being Used And That Should Be Used	
	Western Nigeria	Eastern Nigeria
Category I	$r_s = .39$	$r_s = -.18$
Category II	$r_s = .12$	$r_s = .13$
Categories I and II	$r_s = .27$	$r_s = .20$

r_s = The Spearman Rank Correlation Coefficient

The analysis of the relationship between the importance of planning principles that are used and that should be used in current extension objectives, as perceived by the categories, is most clearly indicated through a comparison of over-all percentage distributions, which are presented as graphs in Appendix F, Figures 5 to 9. For example, in the Western Region 10 per cent in Category I had perceived "coordination" as of little importance in current extension objectives, while 46 per cent in Category II were of the opinion that coordination was an important principle applied in current extension objectives. Both categories were of the opinion that coordination should receive much more emphasis, as is indicated by 90 per cent in Category I and by 96 per cent in Category II. The principle pertaining to "official leaders" in extension, according to Category I, was not being used in present extension objectives indicated by nil per cent; 25 per cent in Category II were of the opinion that this principle was of importance. In Category I, 40 per cent believed that "official leaders" should receive a more important place, while 75 per cent in Category II were of the same opinion. Only 20 per cent in Category I believed that the principle on "behavioral changes" was of importance and should be used, while 46 per cent in Category II were of the opinion it was an important principle. Category II, on the other hand, was not of the opinion that the principle on "group characteristics" was applied to any extent, indicated by 21 per cent; whereas 62 per cent believed it to be of importance. Corresponding percentages in Category I were 40 per cent and 90 per cent.

Similar comparisons were made in Eastern Nigeria. For example, 70 per cent in Category I believed that the principle on "agricultural investment" was currently applied as being important, but 100 per cent of the respondents agreed too that it should be used to a greater extent as an important principle. In Category II fewer of the respondents, 58 per cent, felt the principle was currently applied but all respondents, or 100 per cent, believed it should be applied.

In comparing the two regions with each other, it was found that Western Nigeria had perceived the planning principles in general as being applied to a greater extent than Eastern Nigeria. Western Nigeria also felt that the principles should be applied to a greater extent than Eastern Nigeria, and almost complete agreement existed in regard to the principle on "agricultural investment," which seemed to be one of the principles currently most in use and one of the most important ones that ideally should be employed to 100 per cent. A very low per cent, 17 and 15 per cent in each region, perceived the principle on "official leaders" being applied, but it was considered an important principle by 65 and 59 per cent respectively in Western and Eastern Nigeria.

A summary of frequency and percentage distribution of perceived importance of the planning principles that were being used and that should be used in current extension objectives can be examined by region in Appendix E, Tables XXIX and XXX.

Influence of Socio-Cultural Factors on the Planning and
Implementation of the Extension Programs

Null Hypothesis 7. There is no agreement in the perception among the administrators within a category in a region that the selected socio-cultural factors have an influence on the planning and implementation of the extension program.

Null Hypothesis 8. There is no agreement in the perception among the administrators within a region that selected socio-cultural factors have an influence on the planning and implementation of the extension program.

In testing the two hypotheses, the Kendall Coefficient of Concordance, W , was computed as is shown in Table X. There was a fair agreement both within the two categories and in the regions on the relative influence of socio-cultural factors on the planning and implementation of extension programs. A value of W equal to .80 or above was considered as a "high" agreement, .60 to .79 as "medium," and .59 and below as "low" agreement. In terms of this classification Category I in Western Nigeria had a "high" agreement, W equal to .80, while Category II had a "low" agreement or .53. In Eastern Nigeria the corresponding figures were for Category I .65 and for Category II, .64, for which both values were classified as "medium" agreement.

The null hypothesis number seven could be rejected for Category I in Western Nigeria. Since there is no evidence available that the respondents in this category had applied the same standard of judgment in obtaining a high consensus, and the respondents in Category II in Western Nigeria

and Categories I and II in Eastern Nigeria had "medium" or "low" consensus, the null hypothesis number seven was partially rejected. The null hypothesis eight was not rejected.

TABLE X

AGREEMENT ON THE INFLUENCE OF SOCIO-CULTURAL FACTORS
ON THE PLANNING AND IMPLEMENTATION OF EXTENSION
PROGRAMS, BY CATEGORY AND BY REGION

Respondents	Perception of Socio-Cultural Factors		
	Western Nigeria	Eastern Nigeria	Western and Eastern Nigeria
Category I	W = .80	W = .65	-
Category II	W = .53	W = .64	-
Categories I and II	W = .48	W = .64	W = .60

W = Kendall Coefficient of Concordance

Examination of Table XI of percentage distribution of the influence of socio-cultural factors on the extension program in Western Nigeria indicates certain similarities in the Categories I and II. The criteria referring to "goal gratification," the extent to which the extension objectives are in agreement with the goals of the larger society, were perceived as containing relatively favorable factors to change, since 40 per cent in Category I and 50 per cent in Category II reported this criteria as favorable. Since this criterion referred to over-all goals, which are stated in broad terms, it can be perceived as both favorable or unfavorable or both. The criterion on "integration," the acceptance of the extension organization in time and space, was perceived by 71 per cent in Category II as favorable, while only 30 per cent in Category I perceived this factor as favorable. The difference between the two groups may be due to the fact that the administrators on high levels had an over-all view

TABLE XI

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE INFLUENCE OF SOCIO-CULTURAL FACTORS ON THE PLANNING AND IMPLEMENTATION ON EXTENSION PROGRAMS, BY CATEGORY, WESTERN NIGERIA

Socio-Cultural Factors	Category I, N = 10				Category II, N = 24			
	Favorable		Unfavorable		Favorable		Unfavorable	
	No	%	No	%	No	%	No	%
Goal gratification	4	40	4	40	2	20	2	20
Adaptation	2	20	4	40	4	40	4	40
Integration	3	30	6	60	1	10	1	10
Pattern Maintenance	3	30	5	50	2	20	2	20
Demographic factors	-	-	1	10	9	90	3	13
Ecological factors	-	-	1	10	9	90	7	29
Communication channels	4	40	4	40	2	20	7	29
Reinforcing agencies	4	40	6	60	-	-	13	54
Authoritative approval	4	40	4	40	2	20	11	46
Non-authoritative approval	5	50	5	50	-	-	19	79
Source of leadership	3	30	6	60	1	10	10	42
Power structure	2	20	5	50	3	30	17	71
Family values	-	-	-	-	10	100	-	-
Family goals	2	20	6	60	2	20	5	21
Division of labor	1	10	6	60	3	30	5	21
Decision-making	2	20	7	70	1	10	5	21
							3	12
							16	67
							13	54
							11	46
							21	88
							3	12
							5	21
							8	33

Grouping of favorability:

Unfavorable: (1-2)

No Effect: (3)

Favorable: (4-5)

of the situation and were able to locate more unfavorable points in the integrating system than the administrators on medium level.

Demographic factors referring to age, education, migration, etc., were perceived by 90 per cent of Category I and 79 per cent of Category II as unfavorable to the planning and implementation of the extension program. In Category I, 90 per cent considered "ecological factors," such as shifting cultivation, fragmentation of holdings, and land tenure pattern, unfavorable by indicating the great obstacles these factors were to the general agricultural progress. Only 38 per cent in Category II considered ecological factors having an unfavorable influence, which may indicate a greater acceptance of traditional practices, such as bush fallow or communal ownership which are still prevailing in many areas.

In the summary of percentage distribution of the influence of socio-cultural factors on the extension program in the Eastern Region, the criteria on "integration" (shown in Table XII) was perceived by Category II as containing positive factors stimulating change; this was indicated by 42 per cent with a corresponding value of 30 per cent in Category I.

Demographic factors had been perceived by both groups as containing more negative factors than positive ones; 90 per cent in Category I and 100 per cent in Category II perceived demographic factors as obstacles to change. Another factor perceived by both categories as having an unfavorable influence on the planning and implementation of

TABLE XII

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE INFLUENCE OF SOCIO-CULTURAL FACTORS ON THE PLANNING AND IMPLEMENTATION OF EXTENSION PROGRAMS, BY CATEGORY, EASTERN NIGERIA

Socio-Cultural Factors	Category I, N = 10				Category II, N = 24							
	Favorable		Unfavorable		Favorable		Unfavorable					
	No	%	No	%	No	%	No	%				
Goal gratification	4	40	5	50	1	10	7	29	11	46	6	25
Adaptation	4	40	1	10	5	50	5	21	13	54	6	25
Integration	3	30	6	60	1	10	10	42	11	46	3	12
Pattern Maintenance	-	-	9	90	1	10	7	29	16	67	1	4
Demographic factors	-	-	1	10	9	90	-	-	-	-	24	100
Ecological factors	-	-	-	-	10	100	-	-	3	12	21	88
Communication channels	3	30	4	40	3	30	3	12	19	79	2	9
Reinforcing agencies	5	50	4	40	1	10	17	29	17	71	-	-
Authoritative approval	3	30	6	60	1	10	8	33	12	50	4	17
Non-authoritative approval	2	20	7	70	1	10	7	29	15	63	2	8
Source of leadership	4	40	4	40	2	20	6	25	18	75	-	-
Power structure	1	10	5	50	4	40	4	16	10	42	10	42
Family values	-	-	1	10	9	90	-	-	2	8	22	92
Family goals	1	10	4	40	5	50	4	17	12	50	8	33
Division of labor	3	30	6	60	1	10	5	21	14	58	5	21
Decision-making	1	10	5	50	4	40	1	4	16	67	7	29

Rating of favorability:

Unfavorable: (1-2)

No Effect: (3)

Favorable: (4-5)

the extension program was "family values" as related to local level; 90 per cent in Category I and 92 per cent in Category II agreed on the negative influence of this factor.

In comparing the two regions, as seen in Appendix E, Tables XXXI and XXXII, Western Nigeria had in general perceived the socio-cultural factors as containing more favorable aspects than Eastern Nigeria, which scored somewhat higher than Western Nigeria on unfavorable factors. Eastern Nigeria had perceived most factors as "no effect," which is interpreted to mean that the sixteen socio-cultural criteria used included both stimulants and obstacles to change and could not be categorized in either.

Table XIII shows a comparison between the two regions of factors perceived as mainly stimulants or obstacles to change and reveals a great deal of differences between the two regions. There was complete agreement on one factor, however, "family values;" 91 per cent in each region perceived this factor as an obstacle to change. Also, demographic and ecological factors had been perceived by both regions as particularly unfavorable to the planning and implementation of extension programs.

In answering questions referring to socio-cultural situation provisions were made for the respondents to answer a question with "no" if the question did not apply to the respondent's situation, or "don't know" whenever needed. A summary of frequency distribution is found in Appendix E, Table XXXIII. Some of the "no" answers are of interest

TABLE XIII

PERCENTAGE DISTRIBUTION OF SOCIO-CULTURAL FACTORS
PERCEIVED AS STIMULANTS OR OBSTACLES TO
CHANGE, BY REGION

Socio-Cultural Factors	Perceived Socio-Cultural Factors			
	Stimulants to Change		Obstacles to Change	
	West %	East %	West %	East %
Goal gratification	47	32	15	21
Adaptation	18	27	50	32
Integration	59	39	15	11
Pattern maintenance	54	20	8	6
Demographic factors	9	-	82	97
Ecological factors	20	-	54	91
Communication	32	17	11	15
Reinforcing agencies	50	35	15	3
Authoritative approval	44	32	15	15
Non-authoritative approval	71	27	6	9
Sources of leadership	39	30	20	6
Quality of power structure	56	15	18	41
Family values	-	-	91	91
Family goals	20	15	15	38
Division of labor	18	23	23	18
Decision-making	20	6	26	32

since they might clarify the extent to which the questions did apply in Nigeria. For example, in answering a question pertaining to "division of labor" and the extent to which work between men and women was divided according to man's work and woman's work, 22 respondents in Western and 15 in Eastern Nigeria indicated that such division did not exist. Since there is a well recognized division of work between men and women (as discussed on page 45), the negative answers may indicate

a lack of information of local situation. The question referred to accustomed local traditions and the respondents might not have thought that a division of work existed. Another question referring to the extent to which heads of families might discuss agricultural practices with their wives was answered with "no" by 20 respondents in Western Nigeria and by 7 in Eastern Nigeria. This points to a problem area of family decision making. Since rural women take a great part in agriculture, including marketing, but do not seem to have a part in decision making, it is an indication of a traditional view on the part of the respondents. This view is not corresponding with the extension viewpoint of dealing with the farm family as a "unit." There is thus a discrepancy between the frame of reference of the extension officer and the organization's goal.

In this chapter the senior administrators' perception of selected planning principles and socio-cultural factors has been analyzed. By applying Kendall Coefficient of Concordance, W , little agreement was found both within categories and within regions in regard to planning principles that are used and should be used in current extension objectives. In measuring the perception of association between planning principles that are used and that should be used in current extension objectives, the Spearman Rank Correlation Coefficient was applied and a low value obtained. Some agreements were found in regard to the ranking of individual planning principles by computing mean weighted scores.

In measuring the agreement among categories and regions in regard to the respondents' perception of the relative influence of socio-cultural factors on the planning and implementation of extension programs the value of W was much higher than in regard to the planning principles. Also, in this part of the study some agreement among categories was found in regard to individual socio-cultural factors.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Purpose

This study was designed with the aim: (1) to analyze the perception of extension administrators regarding selected planning principles and socio-cultural factors that influence the planning and implementation of extension programs in a developing country; and (2) to suggest ways and means of improving the continued planning and implementation of extension programs in the selected country. An interview-questionnaire was developed as a means of assessing the perception of senior agricultural extension administrators in Western and Eastern Nigeria in regard to: (1) the applicability of selected extension planning principles in regard to current extension objectives, and (2) the relative influence of selected socio-cultural factors on the planning and implementation of the extension program in these regions.

To achieve this purpose a set of four extension education planning criteria were developed to form the basis for sixteen planning principles, which were submitted for judgment to the respondents. Likewise a set of sixteen socio-cultural criteria were developed to form the basis for sixty-four questions related to environmental conditions of the extension programs. The main objectives, which provided directions to the conduct of the study, were:

1. To determine the extent to which extension administrators perceive that the selected planning principles are being used in developing their current extension objectives.

2. To determine the extent to which extension administrators perceive that the selected planning principles should be used in developing their current extension objectives.

3. To determine the extent to which an administrator's location in different categories in the extension administrative hierarchy influences the perception as to whether the planning principles are being used in developing the current extension objectives.

4. To determine the extent to which an administrator's location in different categories in the extension administrative hierarchy influences the perception as to whether the planning principles should be used in developing the current extension objectives.

5. To determine the extent to which extension administrators perceive the selected socio-cultural factors in the environment as favorable or unfavorable to the planning and implementation of their current extension program.

6. To determine the extent to which the categories in the extension administrative hierarchy influence the perception of selected socio-cultural factors in the environment as favorable or unfavorable to the planning and implementation of their current extension program.

7. To determine the relationship between personal and professional characteristics and selected demographic factors.

Theoretical Orientation

The conceptual framework in this study was mainly derived from theory including: (1) administrative and extension education planning principles, and (2) selected elements in a social system. The practical application of the framework was obtained through a review of literature, documents, and reports pertaining to Nigerian conditions. The criteria were developed with the aim to be applicable to a developing country. The questionnaire, based on these criteria, was specifically designed for Nigerian conditions. The main assumptions underlying the framework were that the planning of an extension education program should be based on an integrated approach taking national goals as well as local needs into consideration and be adapted to socio-cultural environment on all levels. The perception of planning principles and factors in the socio-cultural environment was assumed to influence the way in which the agricultural extension administrators plan and execute extension programs and hence the relative goal attainment of the organization.

Procedure

The respondents were purposely selected and represented Western and Eastern Nigeria. The respondents in each region were divided into two categories, high and medium levels, in the extension administrative hierarchy. The categories were: (1) senior administrative personnel, mainly responsible for policy making and decision making on subject matter projects on a regional level, and (2) senior supervisory personnel, mainly

responsible for program implementation on regional, provincial, and divisional level. Each region comprised ten respondents in Category I and twenty-four respondents in Category II, making a total of sixty-eight respondents.

The respondents were interviewed by means of a structured interview-questionnaire. In the first part of the study opinions were solicited from the respondents as to whether they perceived that the selected planning principles were being used to an important extent in their current extension objectives. The respondents also indicated if the principles were important and these should be used in the extension objectives. An ordinal scale was used in the questionnaire to indicate five degrees of "significance" attached to each selected planning principle.

In the second part of the study the respondents were asked to give their opinion whether the socio-cultural situations reflected in the questions had a positive or negative influence, or both, on the planning and implementation of the extension program. An ordinal scale was used ranking from 1, "very unfavorable," to 5, "very favorable." The intermediate rank of 3, "no effect," was used to indicate when the socio-cultural situation had no influence in either direction or that the situation had an equal amount of favorable and unfavorable aspects.

The five ranks on the ordinal scales in both part one and two of the study were used for the analysis by means of non-parametric statistics and mean weighted scores. These five ranks were regrouped into three

groups for the purpose of computing frequency and percentage distribution and for the final analysis.

Two non-parametric statistics were used indicating measures of consensus in the two categories and within regions. Kendall Coefficient of Concordance, W , measured the degree of consensus in regard to the planning principles that were perceived to be used and that should be used in current extension objectives. Spearman's Rank Correlation Coefficient, r_s , was used to measure the degree of association between the planning principles that were perceived to be used and principles that should be used in current objectives.

The mean weighted score was determined for each of the sixteen planning principles in regard to their perceived importance. The sixteen planning principles were listed in descending order according to the total mean weighted score: (1) the principles being currently used; and (2) the principles that should be used in the extension objectives, by category and by region.

Percentage distribution was used to describe perceived consensus in regard to: (1) planning principles by category, (2) planning principles by region, (3) socio-cultural factors by category, and (4) socio-cultural factors by region.

Summary of Findings

The data was summarized and interpreted in relation to the objectives and hypotheses established for the study and conclusions drawn

from interpretation of the findings. The main guidelines for interpretation was provided by six null hypotheses, which formed the basis for testing the planning principles:

1. There is no agreement in the perception among the administrators within a category in a region that selected planning principles are used in developing the current extension objectives.

2. There is no agreement in the perception among the administrators within a region that selected planning principles are used in developing the current extension objectives.

3. There is no agreement in the perception among the administrators within a category in a region that selected planning principles should be used in developing the current extension objectives.

4. There is no agreement in the perception among the administrators within a region that selected planning principles should be used in developing the current extension objectives.

5. There is no difference among the administrators within a category in a region in the perception of association between selected planning principles that are used and that should be used in developing the current extension objectives.

6. There is no difference among the administrators within a region in the perception of association between planning principles that are used and that should be used in developing the current extension objectives.

Summary of findings for hypotheses 1-6. In applying Kendall Coefficient of Concordance, W , with a value below .59, established earlier as "low,"

a markedly low value of consensus was found within the two categories and in the regions. The values of W , ranging from .34 to .04, indicated a very low consensus within the categories and regions. It was interpreted that the difference in consensus was not related to the categories; that is, high and medium level educational administrators in the extension administration hierarchy. The first four null hypotheses were not rejected.

The data analyzed by a measure of association, the Spearman Rank Correlation Coefficient, r_s , revealed a lack of consensus among the respondents in the rank order of planning principles that were used and that should be used in current extension objectives. The fifth and sixth null hypotheses were therefore not rejected.

In the ranking of each individual planning principle, based on mean weighted score, in order of perceived importance in actual and ideal application, a certain amount of consensus was found. In Western Nigeria the principle referring to "local leadership" was perceived to be applied in current activities. It received a rank of 16 (last rank) in Category I, a rank of 15 in Category II, and also in the total ranking of the region. In the ideal situation, what principles should be used, the corresponding ranks were 16 in the two categories and in the region. Similar results were also obtained in Eastern Nigeria.

The extent to which the selected planning principles were applied in current extension programs as compared with the extent to which they should be applied revealed a gap. Consensus on the need to fill this gap was found in computing the percentages for the planning principles perceived as important or "significant;" these are summarized in Table XIV.

TABLE XIV

SUMMARY OF PERCENTAGES OF PLANNING PRINCIPLES
PERCEIVED AS IMPORTANT IN ACTUAL AND IDEAL
SITUATION, BY CATEGORY AND BY REGION

Respondents	<u>Western Nigeria</u>		<u>Eastern Nigeria</u>	
	Percentage		Percentage	
	Actual	Ideal	Actual	Ideal
Category I	43	89	33	86
Category II	42	91	26	71
Categories I and II	42	91	28	76

The gap between the percentages of planning principles that are presently applied and that should ideally be applied was found to be about 50 per cent in categories as well as in regions. Western Nigeria perceived the selected planning principles to be currently applied to a greater extent than did Eastern Nigeria. Western Nigeria also perceived that the planning principles should ideally be applied to a greater extent than Eastern Nigeria.

The categories or positions in the administrative hierarchy did not seem to have an impact on the consensus or perceived degree of importance of the planning principles, either those currently applied and those that should ideally be applied.

The null hypotheses referring to the socio-cultural factors were stated as follows:

7. There is no agreement within a category in a region that the selected socio-cultural factors have an influence on the planning and implementation of the extension program.

8. There is no agreement within a region that the selected socio-cultural factors have an influence on the planning and implementation of the extension program.

Summary of findings of hypotheses 7 and 8. Kendall Coefficient of Concordance, W , was applied in measuring the degree of consensus; the values of W indicated a higher agreement among the respondents on socio-cultural factors than on planning principles. A "high" agreement was obtained in Category I and a "low" agreement in Category II in Western Nigeria, while both categories in Eastern Nigeria had a "medium" value. The null hypotheses were therefore partially rejected. The relatively high degree of consensus on the socio-cultural factors may be due to the fact that the questions referring to the socio-cultural environment were pragmatic in nature, reflecting tangible situations, which were more easily comprehended than the more theoretically stated planning principles.

The three single socio-cultural factors perceived as most "favorable" in Western Nigeria were: "non-authoritative approval," 71 per cent, "integration" of extension objectives with society at large, 59 per cent, and "quality of social power structure," 56 per cent. In Eastern Nigeria the most "favorable" factors were: "integration," 39

per cent, "reinforcing agencies," 35 per cent, "goal gratification," and "authoritative approval," 32 per cent each. Differences in the environment in which the extension programs were applied, as well as differences in scope of work of individual respondents in the two regions can be considered as reasons for perceived variations in factors acting as stimulants to change.

In examining the three single factors perceived as most "unfavorable" were in Western Nigeria: "family values," 91 per cent, "demographic factors," 82 per cent, and "ecological factors," 54 per cent; and, in Eastern Nigeria: "demographic factors," 97 per cent, "ecological factors" and "family values," each of which had 91 per cent. This complete agreement on what constituted the greatest single obstacles in both regions, in spite of varying local situations, may provide an evidence of real obstacles existing in the rural environment. Since each factor represented a cluster of problems in terms of four questions, the result cannot be considered a mere chance.

In earlier made analysis of the current situation, based on review of existing information regarding Nigeria, it has been pointed out that some of the main barriers to progress in agricultural production lie in the characteristics of the population; for example, the low level of literacy and the widely spread tradition of shifting cultivation. This study has only further confirmed the fact that these factors have a great impact on agricultural development in general and on the success of the agricultural extension services in particular.

A lack of consensus was found among the Nigerian extension administrators on both "high" and "medium" level in the administrative hierarchy in regard to their perception of the application of selected planning principles. This indicated a lack of commonly accepted planning principles.

A relatively high degree of consensus was found within the two categories and within the regions regarding socio-cultural factors perceived as stimulants or obstacles to change. This revealed a similar perception of environmental problems. The standards applied might not necessarily have been the "right" ones or the most objective ones. The amount of training in extension methods and in social sciences was found to be limited for a great number of respondents; this has a limiting affect on the perception of socio-cultural factors affecting the environment.

It was observed that the Western and Eastern Nigeria had a rather centralized pattern of decision making; the lower the level in the administrative hierarchy the less sharing of goals and the less opportunities for problem solving experience and personal creativity. It was also observed that the extension administrators were aware of this fact and the need to place more emphasis on educational attainments in extension activities. These administrators are, however, caught in a conflict of meeting educational objectives of their projects and at the same time meeting economic targets set in national and regional development plans.

Conclusions

The following conclusions are based on the author's interpretation of data and observations obtained in this study. The findings reflected the extension administrators' perception of the actual and ideal application of selected planning principles and the relative influence of socio-cultural factors on the planning and implementation of extension programs.

1. The extension administrators in Western and Eastern Nigeria had a low consensus in the perception of the use of selected planning principles in actual and ideal situation of extension activities. The two categories on "high" and "medium" levels in the administrative hierarchy had little influence on the perception of planning principles. Since the perception among the extension administrators regarding the application of planning principles differed highly the decisions made in regard to the organizational goals will consequently also differ. This results in a lack of congruency between organizational goals and actual implementation of programs.

The limited training in extension education procedures and in the social sciences are likely to influence the perception of the actual and ideal application of selected planning principles.

2. A relatively high degree of consensus among the administrators in the two categories in Western and Eastern Nigeria regarding socio-cultural factors reflected a similar perception of change forces and resistance forces. In general, the environmental factors were perceived as having a more positive than negative influence on the planning and implementation of the extension programs. The perception of socio-cultural factors as

relatively positive or neutral forces may inhibit any objective assessment of such factors. It consequently may give the administrators a wrong impression of the environment, they will act as if there were no real obstacles to change and it endangers the success of the introduction of innovations.

Certain factors in the local environment were, however, perceived as obstacles to change. These factors included: family values, demographic, and ecological factors. It may be that the extension administrators' perception of socio-cultural factors reflect their own frames of reference rather than an objective assessment of the actual situation.

3. The leading extension administrators were observed to be well aware of the need to improve the qualitative aspects of the extension services. This conclusion is supported by the observed efforts to improve the extension work by undertaking farm management studies and providing in-service training on different aspects of extension education, etc. The concept of extension as an educational agency needs, however, to be spread among economic and political leaders who have a strong influence on an extension organization's goals and scope of work.

Recommendations

The recommendations are derived from findings and conclusions of the study, observations made during the process of data collection, from review of literature pertaining to educational and social theory, from documents and reports obtained in Nigeria, and from discussions with the investigator's advisory committee. Each recommendation is based on a

general proposition and refers to the agricultural extension service in both Western and Eastern Nigeria.

A. The degree of goal attainment of an educational organization is closely related to (1) the specificity and clarity of the educational objectives, (2) the congruency between these objectives and the organization's goals, (3) the consensus among the administrative personnel in the organization's hierarchy as to the perception of these objectives, and (4) the congruency between sanctions and the organization's goals.

It is therefore recommended that:

1. The educational objectives be designed for each subject matter project field, based on commonly accepted planning principles, clearly stated in terms of desired behavioral changes, and communicated to staff on all levels.
2. The sanctions, rewards or punishments given for extension activities, be distributed in balance with the educational objectives and the organization's goals by giving due regard to qualitative or intangible results, such as desired changes in the behavior of the farming population in addition to rewards for quantitative or concrete results.
3. A two-way flow of communication between positions in the administrative hierarchy be promoted by further sharing of information regarding national goals and local needs.

B. The degree of goal attainment of an educational organization is closely related to: (1) the pattern of decision-making; that is, routine decision, based on habits in daily routine and focusing on tasks, adaptive decision, concerned with problem solving, and innovative decisions,

concerned with adjustments in goals and purposes; and (2) the degree of decentralization of the decision making process; that is, the delegation of decision making to lower levels of the administrative hierarchy.

It is therefore recommended that:

1. Staff members on the various levels be made more aware of the organization's goals as related to the educational objectives, become more involved in problem-solving experiences with consequent decision making, and be delegated increased responsibility commensurate with authority, rather than relying on control from above.

2. The administrative hierarchy be made less "steep" in order to facilitate the decentralization process; that is, the number of differentiated positions and grades be decreased particularly on lower levels.

C. The degree of goal attainment is closely related to the relative discrepancy between perceived influence of socio-cultural factors in the environment as compared with the actual situation on all levels in the administrative hierarchy.

It is therefore recommended that:

1. Studies be made to assess, as realistically as possible, variations in socio-cultural factors in the environment that are assumed to have a particular influence on the planning and implementation of the extension program in terms of obstacles or stimulants to change, or both.

Examples of such studies are:

(a) Involvement of voluntary leaders in the extension activities. Basic questions that need an answer are: To what extent can

traditional status holders, the local elite, be utilized as potential channels of communication and be recognized in the legitimizing process of a change program? To what extent can potential voluntary leaders be involved and contribute to the spreading of innovations? To what extent can traditional formal and informal organizations, such as local societies and age-groups, be used as means of spreading information. To what extent can new voluntary agencies be created in harmony with traditional ones?

(b) Variations in the functions of the farm family unit: To what extent does the dominant value orientation influence family goals and the decision making pattern in the family unit? To what extent does the present socialization process condition future generations as to their level of aspiration and achievement motivation? To what extent does present social mobility, particularly among schoolleavers, influence the introduction of innovations among the farming population?

2. The extension staff, to the extent possible and feasible, be involved in the planning and execution of these studies in order to maximize their usefulness.

3. The findings of the studies be used: (a) as basis for setting realistic educational objectives in extension projects; and (b) as basis for in-service training in the program planning process of extension staff on all levels.

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APPENDIX A
SOCIO-CULTURAL FACTORS INFLUENCING THE PLANNING AND
IMPLEMENTATION OF AGRICULTURAL EXTENSION PROGRAMS:
AS PERCEIVED BY NIGERIAN EXTENSION ADMINISTRATORS

DIVISION: _____
Situating in: Province: _____ Circle: _____

Purpose of Study:

The main purpose of the study is to provide a framework for analyzing and predicting which socio-cultural factors may have an influence on certain stages of the planning and implementation of the Agricultural Extension Program.

Questionnaire:

The questionnaire consists of three sections:

Section I - Selected planning principles from different levels.

Principles 1-4: Over-all planning of extension programs.

Principles 5-8: Choice of geographical area.

Principles 9-12: Local leadership.

Principles 13-16: Content of local program.

Section II - Identification of socio-cultural factors.

Questions 1.1-4.4 refer to regional factors influencing over-all planning.

Questions 5.1-16.4 refer to factors in the local environment influencing extension projects. The Division you have indicated above should be one with which you are well-familiar, and should form the basis for answering questions 5.1-16.4.

Please give additional information at the end of each page as indicated.

Section III - General background information of respondent.

The effectiveness of the extension program as referred to in the questionnaire is defined as the relevance of the extension program to regional and national development targets and to local conditions in given Division.

Please follow instructions for filling out the questionnaire; these are given in the beginning of each Section. You are asked to give your opinion, there is no "right" or "wrong" answer.

The information you give is treated confidentially and your specific answers will not be identified in the general findings of the study.

YOUR COOPERATION IS GREATLY APPRECIATED

SECTION I - SELECTED PLANNING PRINCIPLES

Do the following statements, in your opinion, reflect the main objectives of the Agricultural Extension Program in your Region?

- | | |
|--|---|
| (a) The principle <u>is a part</u> of current Agricultural <u>Extension</u> Program. | 1 Not a part
2 A minor part
3 Some part |
| (b) The principle <u>should be</u> a part of the Agricultural Extension Program. | 4 A substantial part
5 A very significant part |

The effectiveness of the Extension Program is increased:	Circle: one item under (a) one item under (b)
1. - when the main objectives are realistically related to the Regional Development Plan, 1962-1968.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
2. - when the allocation of resources (personnel and material) is clearly stated in extension procedures.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
3. - when the planning and organizing functions in the Extension Service are clearly stated (i. e. responsibilities of each officer and his relations to other officers).	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
4. - when there is agreement between objectives of the Extension Programs and locally expressed needs.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
5. - when a geographical area contains people who are receptive to education (i. e. show interest, ability, etc.).	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
6. - when a geographical area has potential for economic returns from increased agricultural production.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
7. - when a geographical area has ways and means of spreading information among farm families.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5

SECTION I - SELECTED PLANNING PRINCIPLES (Continued)

The effectiveness of the Extension Program is increased:	Circle: one item under (a) one item under (b)
8. - when a geographical area is served by other change agencies that can reinforce the Extension Program (Community Development, schools, etc.).	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
9. - when local Council officials agree with proposed Extension projects.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
10. - when local village heads are involved in the planning of Extension projects.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
11. - when local voluntary leaders, who have personal ability and willingness to cooperate, are utilized in the Extension projects.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
12. - when local leaders have the ability to get farm families to participate in common efforts.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
13. - when local extension projects are based on the needs and interests of farm families.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
14. - when local extension programs outline in detail what should be done.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
15. - when local extension programs specify how it is hoped to change the farmers' knowledge, attitudes, and practices in farming.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5
16. - when local group characteristics, such as traditional authority, kinship obligations, etc., are considered.	(a) is a part: 1 2 3 4 5 (b) should be: 1 2 3 4 5

SECTION II - SOCIO-CULTURAL FACTORS

1. RELEVANCE OF AGRICULTURAL EXTENSION OBJECTIVES TO THE OBJECTIVES OF THE REGIONAL DEVELOPMENT PLAN, 1962-1968

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Diversification of agriculture is one objective of the Regional Development Plan; has it been possible to meet this objective within your projects last year?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Do farmers primarily raise one cash crop, such as cocoa, oil-palm, rubber, tobacco, etc.?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Have farmers responded to your efforts to promote better quality and yield of food crops, such as maize, yam, cowpea, lima bean?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Have you been able to apply some of your ideas in your current projects? (For example, develop simple demonstration materials.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of the objectives of the Regional Development Plan which influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

**2. ADAPTATION OF AVAILABLE RESOURCES (HUMAN AND MATERIAL)
TO CURRENT SITUATION**

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program? Check (✓) one item.
. 1 Were funds available and adequate to meet the objectives of your projects (or schemes) last year?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Did you have equipment and material needed to carry out meetings and demonstrations of your projects last year?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Did you have sufficient number of Extension staff to reach the objectives of your projects last year?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Were members of your Extension staff sufficiently trained to carry out your project activities last year?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of the allocation of human and material resources that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

3. COORDINATION BETWEEN THE EXTENSION PROGRAM AND ACTIVITIES OF RELATED AGENCIES

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program? Check (✓) one item.
.1 Do you find overlapping in the planning and organizing of work in your Division (i. e. Agricultural Extension Service) and that of other Divisions in your Ministry?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
.2 When overlapping does occur between Divisions, do those involved try to find a common solution?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
.3 Does present coordination of activities between your Ministry and other ministries affect extension projects and their execution?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
.4 When a project of another ministry is similar in scope to your projects are efforts made to share experience?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of coordination between the Extension Program and related activities that influence the Extension Program.

Very favorable: _____

Very unfavorable: _____

4. INTEGRATION OF THE EXTENSION PROGRAM WITH CURRENT LOCAL CONDITIONS

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program? Check (✓) one item.
. 1 Are current project requirements applicable to physical conditions in local areas? (For example, is the rainfall enough for economic rubber production.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Has the Extension staff been able to get farmers to accept current projects and start using proposed new agricultural practices?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Have farmers who adopted new agricultural practices in previous years gone back to their traditional way of working? (For example, spraying of cocoa, rubber processing.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Are younger farmers (under 30 years of age) more eager to adopt new agricultural practices than older ones? (For example, use of new fertilizers, spraying cotton.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of local conditions that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

5. CHARACTERISTICS OF LOCAL POPULATION THAT MAY HAVE AN INFLUENCE ON THE EXTENSION PROGRAM:

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program? Check (✓) one item
. 1 Are farmers living in remote villages (i. e., not within easy reach to the Extension staff)?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Do farmers move out from their villages on a temporary or semi-permanent basis for work elsewhere?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Does illiteracy among farm families influence present projects?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Do farm youth (20 years of age or younger) take up permanent jobs outside their village?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of population characteristics that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

6. FARMERS' UTILIZATION OF LAND RESOURCES

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Is bush fallow practiced in the area?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Do marketing facilities influence the amount of food crops grown? (For example, yams, cassava, maize, cowpeas.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Are family holdings divided into several plots?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Are land ownership patterns (for example, communal holdings, absentee land ownership) affecting land improvements and increased agricultural production?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of land utilization that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

7. SOCIAL CHANNELS OF COMMUNICATION AS MEANS OF SPREADING INFORMATION AMONG FARMERS

	Check (✓) the answer which applies to your work or given area.	If the answer is yes, how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Do farm families belong to formal organizations such as Co-operative Agricultural Societies, Young Farmers' Clubs, etc. ?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Are informal groupings, such as kinship groups, age groups, used as means of spreading new agricultural ideas and practices?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Is the content of the Extension Newsletters reaching farm families (through reading or hearing about it)?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Do farm families listen to radio or rediffusion? (For example, Farm Radio programs.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of communication means that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

**8. AGENCIES OTHER THAN AGRICULTURAL EXTENSION SERVICES
WHICH PROMOTE RURAL DEVELOPMENT**

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Do farm families take part in Community Development activities? (For example, building roads, bridges.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Did Community Development staff meet with the Extension staff to discuss common activities last year?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Do local children of school age attend primary school regularly?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Have local school teachers met with the Extension staff to discuss how school might cooperate in promoting new agricultural practices? (For example, improvement of the quality of food crops.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of local agencies that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

9. LOCAL COUNCIL OFFICIALS AS LOCAL EXTENSION CONTACTS

	Check (✓) the answer which applies to your work or given area.	If the answer is yes, how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Do local Council officials take an active interest in and support improvements in agriculture?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Do local Council officials encourage farmers to participate in cooperative efforts in agriculture?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Do local Council officials serve in local agricultural committees?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Is support by local Council officials necessary for the functioning of current Extension projects?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of interaction with local Council officials that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

10. IDENTIFICATION OF NON-OFFICIAL LOCAL LEADERS

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. (Check (✓) one item.)
. 1 Do traditional village heads support or assist with current projects?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Are village heads who assist with Extension activities supported in their efforts by local Council officials?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Do farmers who are more progressive than others in farming have a say in community affairs?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Do young farmers (30 years of age or younger) support Extension projects?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of non-official local leadership that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

11. CHARACTERISTICS OF LOCAL LEADERSHIP

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Are local people interested in becoming voluntary leaders in order to obtain a higher position or status in the village?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Are local people interested in becoming voluntary leaders because they would get more prestige?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Are progressive farmers more likely to be chosen as voluntary leaders than those who maintain the same living standards?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Are local people willing to cooperate for a common community goal? (For example, cooperative marketing.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of local leadership characteristics that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

**12. RELATIONSHIP BETWEEN LOCAL VOLUNTARY LEADERSHIP
CHARACTERISTICS AND THE EXTENSION PROGRAM**

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Were farmers given an opportunity by their leaders to take part in deciding upon content of your current projects? (For example, the use of a new insecticide.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Are local leaders more concerned with the prestige of accomplishing a project than with satisfying the needs of participating farmers?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Do local leaders have the capacity and power to support the Extension activities?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Are local leaders successful in coordinating current Extension projects with traditional village activities of, for example, economic, social, or religious nature?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of the relationship between local leadership and the Extension Program that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

13. THE INFLUENCE OF FAMILY VALUES ON FAMILY ATTITUDE
TOWARD CHANGE

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Do farm families accept soil erosion, pests, etc. as inevitable rather than believe that these problems can be overcome?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Do farm families utilize their land for immediate return, even though present practices may hamper economic development in the future? (For example, continue to use old oil palms instead of planting an improved variety.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Do farm families attach more importance to land ownership as a means for social prestige than as means of economic returns?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Do farm families attach more value to a person's social position (such as village head) than to his ability or skill in being a progressive farmer?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of family values that have influence on the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

14. IDENTIFICATION OF FAMILY GOALS THAT MAY HAVE A BEARING ON THE EXTENSION PROGRAM

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Does involvement in native activities by local people influence their participation in your Extension projects? (For example, ceremonies, rituals, etc.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Do agricultural cooperative societies, Young Farmers' Clubs, or other organizations influence family goals? (For example, the utilization of available credit facilities.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Do farm families make efforts to send their sons to further schooling even though it is an economic burden?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Do farm families adopt new practices that make work more convenient, but which do not give a direct economic return? (For example, the improvement of equipment, farm roads, etc.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of family goals (as reflected in their activities) that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

15. DIVISION OF WORK AMONG FAMILY MEMBERS

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Do heads of families spend more than half of their time during a year in other work than in agriculture? (For example, fishing, carpentry, setting disputes.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Do women spend more than half of their time during a year working in agriculture? (For example, planting, weeding, marketing.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Are children of school age (around 6-13) obliged to help in agriculture, or other farmwork during scheduled school time?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Is work between men and women divided according to what is considered "man's work" and "woman's work"? (i.e., some work is to be carried out only by men and some work only by women.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate other aspects of division of work among family members that have an influence on the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

16. DECISIONS AMONG FAMILY MEMBERS CONCERNING
FARM AND HOME

	Check (✓) the answer which applies to your work or given area.	If the answer is <u>yes</u> , how does it influence the effectiveness of your Extension Program. Check (✓) one item.
. 1 Do heads of families seek and take advice from their wives concerning agricultural practices?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 2 Do native traditions, for example, religious beliefs, influence decisions concerning agricultural practices?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 3 Do heads of families make most decisions concerning home and household practices?	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____
. 4 Do heads of families discuss with their adult sons new practices before adopting them? (For example, the introduction of a new crop variety.)	Yes, very much: _____ Yes, some: _____ Yes, little: _____ No: _____ Don't know: _____	Very favorable: _____ Somewhat favorable: _____ No effect: _____ Somewhat unfavorable: _____ Very unfavorable: _____

Please indicate below other aspects of decisions made among family members that influence the effectiveness of the Extension Program.

Very favorable: _____

Very unfavorable: _____

SECTION III - BACKGROUND INFORMATION OF RESPONDENTS

(Please check the one appropriate item under each question)

1. Your present position:
 - .1 C.A.E.S.O., S.A./C.A.E.S.O.,A/C.A.E.S.O. or C.A.O. Deputy C.A.O.
 - .2 P.A.O., S.A.O.
 - .3 A.O., P.A.S., S.A.S.
2. Your main area of responsibility:
 - .1 Extension administration
 - .2 Extension training
 - .3 Extension field work
3. Your experience in Agricultural Extension before present position:
 - .1 None
 - .2 Less than 12 months
 - .3 1-4 years
 - .4 5-8 years
 - .5 9 years or more
4. Length of time in your present position:
 - .1 Less than 12 months
 - .2 1-4 years
 - .3 5-8 years
 - .4 9 years or more
5. Your highest training in agriculture:
 - .1 Agricultural certificate (or equivalent)
 - .2 Agricultural Diploma (or equivalent)
 - .3 Bachelor's degree
 - .4 Master's degree or above
6. Place where you received your highest training in agriculture:
 - .1 Nigeria
 - .2 Abroad
7. Extent of your training in Extension methods and procedures:
 - .1 None
 - .2 Less than a month
 - .3 1-4 months
 - .4 5 months or more
8. Extent of your training in social sciences, such as sociology:
 - .1 None
 - .2 Less than a month
 - .3 1-4 months
 - .4 5 months or more
9. Your age:
 - .1 29 years or less
 - .2 30-39 years
 - .3 40 years or more
10. How many years after the age of 12 have you lived in a rural area:
 - .1 None
 - .2 1-4 years
 - .3 5 years or more

APPENDIX B

DEVELOPMENT OF CRITERIA

The development of acceptable standards or criteria is a methodological tool of particular importance in the analysis of an educational system which has not yet established its form and developed its objectives.

A criterion, referred to by Ryans as a standard, can be divided into components or dimensions, commonly referred to as conditions, qualities, or evidence to be met if the criterion is to be fulfilled.¹ In the development of criteria Raudabaugh and others emphasize the following considerations:²

1. Careful analysis of the total situation in which the criteria occur in order to isolate important activities which may form the basis for the sub-dimensions.
2. Definition of what is meant by effectiveness, accomplishment, or success.

¹ Ryans, op. cit.

² J. Neil Raudabaugh and Ward F. Porter, "Sociological Bases for Program Planning and Development," Federal Extension Service for Southern Sociological Society Annual Meeting, North Carolina, April, 1964, p. 12.

3. Development of the criteria and its dimensions which measure each aspect of the accomplishment.
4. Construction of scales or procedures for measuring the dimensions.
5. Procedure for combining the findings into units for analysis.

The utilization of criteria is based on certain assumptions and sets the limits for what can become a criterion: "(1) Difference in success can be identified; (2) A scale of continuum exists; (3) Values and categories can be assigned which will represent differences in proficiency and success; (4) Evaluators will understand the criteria well enough to make judgements in relation to them."³

The first three assumptions were met in the study; difficulties arose in regard to the last assumption due to the fact that the potential respondents were located in another country than the investigator. However, by interviewing Nigerian graduate students of the College of Agriculture of the University of Wisconsin, having had similar positions as were found among the respondents within the Ministries of Agriculture in the regions under study, the schedule was pretested. Review of literature, reports, etc., from Nigeria formed the basis for validating the questions used in the questionnaire.

Validity is the degree to which an instrument measures what it is intended to measure, or truthfulness. Good and Barr have explained

³ Ibid.

validity as:

The extent to which the device actually does what it purports to do. Validity is customarily checked by correlating the results of the procedure with other indexes of the thing which it is desired to measure.⁴

In situations where few systematic investigations have been made, it may be difficult to secure another index or standard. Harris has proposed that the validity of a criterion in education, lacking other indexes, can be measured to some extent by utilizing educational philosophy that might be available in a given educational system. It would provide a direction for what "should be" in education and could form the basis by which a criterion could be checked for validity.⁵ Harris further states that the concept of appraisal is an act of judgment, in which judging implies both a criterion and a pertinent description of what is being judged; the criterion functions as the major premise and the description as the minor. A relationship must exist between the major and minor premise.

Evidence has shown that criteria developed in this manner have considerable relevance if systematically applied. The use of criteria, developed and integrated in the educational process, gives by its design motivational training and supervisory implications at the same time as the main aim is being achieved; that is, to evaluate the degree of goal achievement of a given educational program.

⁴ Carter V. Good, A. S. Barr and D. E. Scates, The Methodology of Educational Research (New York: Appleton Century Co., Inc., 1936), p. 557.

⁵ Chester W. Harris, "The Appraisal of a School - Problems for Study," Journal of Educational Research, 41:171-182, No. 3, November, 1947.

Besides being valid the adequacy of a criterion can be measured in terms of reliability, feasibility, universality, observability, and desirability. Reliability can be increased by selecting from possible items those that correlate most highly with one another and by increasing internal consistency. Selltitz maintains that: "A measurement is reliable to the extent that independent applications of its yield consistent results."⁶ If different respondents use different frames of reference in answering descriptive questions reliability of the answers is affected. A clear definition of the characteristics of situations or individuals being measured is an aid in reducing unreliability of a questionnaire. Specification of reference group or frame of reference which forms the basis for various positions on the scale may also reduce unreliability.⁷

In order to obtain reliable and valid ratings in the schedule, definitions of the basic frame of reference for the questions were accomplished in terms of illustrations within the questions. Such illustrations provided a check on validity: "the attributes being measures were relatively objective, so that their meaning would be uniformly understood by the raters using the scales."⁸

Since reliability and validity are the most crucial measures of the adequacy of a criterion, special attention was paid to these in the

⁶ Claire Selltitz et al., Research Methods in Social Relations (New York: Holt, Rinehart and Winston Inc., 1961), p. 198.

⁷ Ibid., p. 353.

⁸ Ibid., p. 356.

construction of the questionnaire. However, a complete reliability and validity is difficult to obtain, particularly since there is little empirical experience of the method of approach used in the study; that is, interdisciplinary approach using both educational and sociological concepts.

In addition, the study was undertaken in a society where no previous study of this type has been undertaken. Bellows underlines common difficulties encountered in studies like this one:

It should be stressed that the reliability check is an internal one and does not insure that criterion is valid. There is no way to validate the ~~criteria~~ objectively since there is no objective, external basis for use as standards with which it may be compared. An unreliable criterion cannot be satisfactory, a reliable criterion may or may not be valid.⁹

⁹R. M. Bellows, "Procedures for Evaluating Vocational Criteria," The Journal of Applied Psychology, 25:506-507, 1941.

APPENDIX C

SELECTION OF MEASUREMENT SCALE

In selecting type of measurement scale, four types of scales in ascending order are available to choose from: nominal, ordinal, interval, and ratio scales. The ratio scale includes all the operations of the other scales in addition to information unique to itself. The interval scale contains positions that are arranged in equal units. In an ordinal scale, which was chosen for the study, the relative position of an object or individual can be determined with respect to certain characteristics in terms of "greater," "equal," "less," etc., but with no indication as to how much greater or how much less the distance between the positions are.¹⁰

Selltiz indicates that the basic requirement for an ordinal scale is:

. . . to determine, for each individual or object being measured, whether that individual has some more of the attribute in question than another individual, or the same amount, or less, in other words one must be able to determine the order of position.¹¹

The numbering of classes on an ordinal scale does not change the information as long as it does not alter the ranking. The following are the ordinal scales used in the questionnaire:

¹⁰ Selltiz, *op. cit.*, p. 189.

¹¹ *Ibid.*, p. 191.

- | | | | |
|-----|----------------------------|-----|-------------------------|
| (1) | 1. Not a part | (2) | 1. Very unfavorable |
| | 2. A minor part | | 2. Somewhat unfavorable |
| | 3. Some part | | 3. No effect |
| | 4. A substantial part | | 4. Somewhat favorable |
| | 5. A very significant part | | 5. Very favorable |

The rating scale device provides a base for measuring the degree of variation. Interpretation of results obtained from rating scales are based on consensus of variation of items as perceived by respondents.

APPENDIX D

ANALYTICAL PROCEDURE

In the analysis of data non-parametric statistics were used, since the data did not meet the specific conditions about parameters of the population as required in parametric tests. Certain assumptions are associated with non-parametric tests; that is, the observations must be independent and the variables under study must have a underlying continuity. Non-parametric tests have obtained an increasingly important role in research in the behavioral sciences.¹²

The advantages of non-parametric tests are: (1) they can be used even when the sample is small; (2) certain tests can be used for treating samples made up of observations from different populations; (3) data that is only classificatory can be used; (4) probability statements obtained are exact probabilities regardless of the shape of the population from which they are drawn.¹³ If, on the other hand, assumptions underlying parametric tests are met the use of non-parametric tests is a waste of data.

The Kendall Coefficient of Concordance, W , was used in the study to measure: (1) the agreement among respondents on the relative

¹² Sidney Siegel, Nonparametric Statistics (New York: McGraw-Hill Book Company, 1956), p. 31.

¹³ Ibid., pp. 32-33.

ranking of the planning dimensions associated with the four main planning concepts; (2) the agreement among respondents on the ranking of the socio-cultural factors associated with the four main sociological concepts.

The Kendall W is a measure of the extent of association among several sets of ranking (k) of a number of entities (N). The usefulness of W has been stated by Siegel:

. . . in determining the agreement among several judges or the association among three or more variables, and in providing a standard method of ordering entities according to consensus there is available no objective order of the entities.¹⁴

The W is also usefully applied in studies with clusters of variables which as is the case in this study.

$$\text{The formula used was: } W = \frac{s}{1/12k^2(N^3-N)}$$

s is the sum of squares of the observed deviations from the mean

k is the number of set of rankings; that is, the number of respondents

N is the number of entities; that is, the planning dimensions in Section I

and the social cultural factors in Section II of the questionnaire.

Kendall Coefficient of Concordance has a range from +1.00, indicating perfect concordance, to zero, indicating lack of concordance. A high or significant value of W may be interpreted as if the respondents applied about the same standard in ranking the dimensions under study. However, a high degree of agreement about the ordering of dimensions does not necessarily mean that this ordering is correct. A consensual ordering

¹⁴ Ibid., p. 239.

in the behavioral sciences is not synonymous with an objective ordering, but it may be the best estimate possible under the circumstances.

The Spearman Rank Correlation Coefficient, here represented by r_s (rho), was used to measure the correlation between the planning principles in Section I that are being used and that should be used in current extension objectives. The perceived order of the planning dimensions were ranked in ordered series. The r_s is "a measure of association which requires that both variables be measured in at least an ordinal scale so that the objects or individuals under study may be ranked in two ordered series."¹⁵

The formula used was:
$$r_s = 1 - \frac{6 \sum d^2}{N^3 - N}$$

$\sum d^2$ is the sum of the squares of the differences between the two ranks

N is the number of respondents

Since the subjects whose scores were used in computing r_s were not randomly drawn from a population, but constituted a population in itself, the scores cannot be used to determine the significance of r_s . All differences are real differences.¹⁶

¹⁵ Ibid., p. 202.

¹⁶ Ibid., p. 210.

APPENDIX E

APPENDIX TABLE XV

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO CATEGORY AND
 MAIN AREA OF RESPONSIBILITY, BY SELECTED DEMOGRAPHIC FACTORS,
 WESTERN NIGERIA

Demographic Factors	Category			
	Category I N = 10	Category II N = 24	Administration N = 12	Training Field Work N = 18
Category:				
Group I	10	-	8	1
Group II	-	24	4	17
Responsibility:				
Administration	8	4	12	-
Training	1	3	-	4
Field work	1	17	-	18
Previous tenure:				
None	-	2	-	1
Less than 12 mo.	1	1	1	1
1-4 yrs.	1	5	2	4
5-8 yrs.	-	6	2	4
9 yrs. or more	8	10	7	8
Present tenure:				
Less than 12 mo.	3	3	2	2
1-4 yrs.	6	11	8	8
5-8 yrs.	-	9	1	7
9 yrs. or more	1	1	1	1
Highest training:				
Agr. certificate	1	6	2	5
Agr. diploma	-	13	3	8
B. Sc.	1	4	1	3
M. Sc.	8	1	6	9

APPENDIX TABLE XV (continued)

Demographic Factors	Category			Responsibility	
	Category I	Category II	Administration Training Field Work		
	N = 10	N = 24	N = 12 N = 4 N = 18		
Place of training:					
Nigeria	1	18	5	1	13
Abroad	9	6	7	3	5
Extension methods:					
None	1	2	1	-	2
Less than 1 mo.	2	8	3	1	6
1-4 mo.	3	8	5	1	5
5 mo. or more	4	6	3	2	5
Social sciences:					
None	4	17	7	1	13
Less than 1 mo.	2	2	1	2	1
1-4 mo.	1	4	1	-	4
5 mo. or more	3	1	3	1	-
Age:					
Less than 29 yrs.	-	3	-	-	3
30-39 yrs.	3	11	5	3	6
40 yrs. or more	7	10	7	1	9
Rural residence:					
None	1	5	2	-	4
1-4 yrs.	5	8	6	2	5
5 yrs. or more	4	11	4	2	9

APPENDIX TABLE XVI

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO PREVIOUS AND PRESENT TENURE IN EXTENSION, BY SELECTED DEMOGRAPHIC FACTORS, WESTERN NIGERIA

Demographic Factors	Previous tenure			Present tenure			
	Less Than 12 mo. yrs. N = 2	1-4 yrs. N = 6	5-8 yrs. N = 6	Less Than 12 mo. yrs. N = 6	1-4 yrs. N = 17	5-8 yrs. N = 9	9 yrs. or more N = 2
Category:							
Group I	1	1	-	8	6	-	1
Group II	2	5	6	10	11	9	1
Responsibility:							
Administration	-	2	2	7	8	1	1
Training	1	-	-	3	1	1	-
Field work	1	4	4	8	8	7	1
Previous tenure:							
None	2	-	-	-	1	-	-
Less than 12 mo.	-	2	-	-	2	-	-
1-4 yrs.	-	-	6	-	1	5	-
5-8 yrs.	-	-	-	6	1	3	-
9 yrs. or more	-	-	-	18	2	8	2
Present tenure:							
Less than 12 mo.	1	2	-	2	-	-	-
1-4 yrs.	1	5	3	8	17	-	-
5-8 yrs.	-	-	3	6	-	9	-
9 yrs. or more	-	-	-	2	-	-	2
Highest training:							
Agr. certificate	1	-	2	4	6	1	-
Agr. diploma	-	2	4	7	4	8	1
B. Sc.	1	1	2	1	1	-	1
M. Sc.	-	1	2	6	3	6	-

APPENDIX TABLE XVI (continued)

Demographic Factors	Previous tenure			Present tenure		
	None N = 2	1-4 yrs. N = 6	5-8 yrs. or more N = 18	Less Than 12 mo. N = 6	1-4 yrs. N = 17	5-8 yrs. or more N = 9
Place of training:						
Nigeria	1	3	9	2	9	7
Abroad	2	3	9	4	8	2
Extension methods:						
None	-	2	1	1	2	-
Less than 1 mo.	1	1	6	2	6	2
1-4 mo.	1	2	5	2	5	4
5 mo. or more	-	1	6	2	4	3
Social sciences:						
None	2	2	9	4	8	8
Less than 1 mo.	-	-	4	1	2	1
1-4 mo.	-	3	2	1	4	-
5 mo. or more	-	1	3	-	3	-
Age:						
Less than 29 yrs.	-	1	-	1	2	-
30-39 yrs.	2	2	8	2	6	5
40 yrs. or more	1	2	109	3	9	4
Rural residence:						
None	1	2	2	1	3	1
1-4 yrs.	1	6	4	4	9	1
5 yrs. or more	-	3	12	1	5	8

APPENDIX TABLE XVII

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO HIGHEST TRAINING
IN AGRICULTURE AND PLACE OF TRAINING, BY SELECTED DEMOGRAPHIC
FACTORS, WESTERN NIGERIA

Demographic Factors	Highest training				Place of training	
	Agr. Certificate N = 7	Agr. Diploma N = 13	B.Sc. N = 5	M.Sc. N = 9	Nigeria N = 19	Abroad N = 15
Category: I						
Group I	1	-	1	8	1	9
Group II	6	13	4	1	18	6
Responsibility:						
Administration	2	3	1	6	5	7
Training	-	2	1	1	1	3
Field work	5	8	3	2	13	5
Previous tenure						
None	1	-	1	-	-	2
Less than 12 mo.	-	-	1	1	1	1
1-4 yrs.	-	2	2	2	3	3
5-8 yrs.	2	4	-	-	6	-
9 yrs. or more	4	7	1	6	9	9
Present tenure:						
Less than 12 mo.	-	-	3	3	2	4
1-4 yrs.	6	4	1	6	9	8
5-8 yrs.	1	8	-	-	7	2
9 yrs. or more	-	1	1	-	1	1
Highest training						
Agr. certificate	7	-	-	-	5	2
Agr. diploma	-	13	-	-	11	2
B.Sc.	-	-	5	-	3	2
M.Sc.	-	-	-	9	-	9

APPENDIX TABLE XVII (continued)

Demographic Factors	Highest training				Place of training	
	Agr. Certificate N = 7	Agr. Diploma N = 13	B.Sc. N = 5	M.Sc. N = 9	Nigeria N = 19	Abroad N = 15
Place of training:						
Nigeria	5	11	3	-	19	-
Abroad	2	2	2	9	-	15
Extension methods:						
None	1	1	-	1	1	2
Less than 1 mo.	1	6	1	2	5	5
1-4 mo.	4	2	2	3	8	3
5 mo. or more	1	4	2	3	5	5
Social sciences:						
None	6	10	2	3	13	8
Less than 1 mo.	1	1	-	2	2	2
1-4 mo.	-	1	2	2	4	1
5 mo. or more	-	1	1	2	-	4
Age:						
Less than 29 yrs.	-	-	2	1	2	1
30-39 yrs.	2	8	2	2	8	6
40 yrs. or more	5	5	1	6	9	8
Rural residence:						
None	4	2	-	-	4	2
1-4 yrs.	1	2	4	6	6	7
5 yrs. or more	2	9	1	3	9	6

APPENDIX TABLE XVIII

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO TRAINING IN EXTENSION METHODS AND SOCIAL SCIENCES, BY SELECTED DEMOGRAPHIC FACTORS, WESTERN NIGERIA

	Extension methods			Social sciences			
	None N = 3	1 mo. or less N = 10	1-4 mo. or more N = 11	None N = 21	1 mo. or less N = 4	1-4 mo. or more N = 5	5 mo. or more N = 4
Demographic Factors							
Category:							
Group I	1	2	3	4	2	1	3
Group II	2	8	8	6	2	4	1
Responsibility:							
Administration	1	3	5	3	1	1	3
Training	-	1	1	2	2	-	1
Field work	2	6	5	5	1	4	-
Previous tenure:							
None	-	1	1	-	2	-	-
Less than 12 mo.	-	1	-	1	2	-	-
1-4 yrs.	2	1	2	1	2	3	1
5-8 yrs.	-	1	3	2	6	-	-
9 yrs. or more	1	6	5	6	9	2	3
Present tenure:							
Less than 12 mo.	-	2	2	2	4	1	-
1-4 yrs.	2	6	5	4	2	4	3
5-8 yrs.	-	2	4	3	8	1	-
9 yrs. or more	1	-	-	1	1	-	1
Highest training:							
Agr. certificate	1	1	4	1	6	1	-
Agr. diploma	1	6	2	4	10	1	1
B.Sc.	-	1	2	2	2	2	1
M.Sc.	1	2	3	3	3	2	2

APPENDIX TABLE XVIII (continued)

Demographic Factors	Extension methods			Social sciences		
	1 mo. N = 3	1-4 or less mo. N = 11	5 mo. or more N = 10	1 mo. or less mo. N = 4	1-4 or more mo. N = 5	5 mo. or more N = 4
Place of training:						
Nigeria	1	5	8	2	4	-
Abroad	2	5	3	2	1	4
Extension methods:						
None	3	-	-	-	-	1
Less than 1 mo.	-	10	-	1	2	1
1-4 mo.	-	-	11	1	1	-
5 mo. or more	-	-	10	2	2	2
Social sciences:						
None	2	6	9	-	-	-
1 mo. or less	-	1	1	4	-	-
1-4 mo.	-	2	1	-	5	-
5 mo. or more	1	1	-	-	-	4
Age:						
29 yrs.	-	1	1	-	2	-
30-39 yrs.	2	2	6	2	1	2
40 yrs. or more	1	7	4	2	2	2
Rural residence:						
None	1	2	3	-	-	-
1-4 yrs.	1	5	3	-	4	2
5 yrs. or more	1	3	5	4	1	2

APPENDIX TABLE XIX

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO AGE AND RURAL RESIDENCE, BY SELECTED DEMOGRAPHIC FACTORS, WESTERN NIGERIA

Demographic Factors	Age		Rural residence			
	29 yrs. or less N = 3	30-39 yrs. N = 14	40 yrs. or more N = 17	None N = 6	1-4 yrs. N = 13	5 yrs. or more N = 15
Category:						
Group I	-	3	7	1	5	4
Group II	3	11	10	5	8	11
Responsibility:						
Administration	-	5	7	2	6	4
Training	-	3	1	-	2	2
Field work	3	6	9	4	5	9
Previous tenure:						
None	-	1	1	1	1	-
Less than 12 mo.	1	-	1	1	1	-
1-4 yrs.	2	2	2	-	6	-
5-8 yrs.	-	3	3	2	1	3
9 yrs. or more	-	8	10	2	4	12
Present tenure:						
Less than 12 mo.	1	2	3	1	4	1
1-4 yrs.	2	6	9	3	9	5
5-8 yrs.	-	5	4	1	-	8
9 yrs. or more	-	1	1	1	-	1
Highest training:						
Agr. certificate	-	2	5	4	1	2
Agr. diploma	-	8	5	2	2	9
B.Sc.	2	2	1	-	4	1
M.Sc.	1	2	6	-	6	3

APPENDIX TABLE XIX (continued)

Demographic Factors	Age			Rural residence		
	29 yrs. or less N = 3	30-39 yrs. N = 14	40 yrs. or more N = 17	None N = 6	1-4 yrs. N = 13	5 yrs. or more N = 15
Place of training:						
Nigeria	2	8	9	4	6	9
Abroad	1	6	8	2	7	6
Extension methods:						
None	-	2	1	1	1	1
Less than 1 mo.	1	2	7	2	5	3
1-4 mo.	1	6	4	3	3	5
5 mo. or more	1	4	5	-	4	6
Social sciences:						
None	1	9	11	6	7	8
Less than 1 mo.	-	2	2	-	-	4
1-4 mo.	2	1	2	-	4	1
5 mo. or more	-	2	2	-	2	2
Age:						
Less than 29 yrs.	3	-	-	2	1	-
30-39 yrs.	-	14	-	-	7	7
40 yrs. or more	-	-	17	4	5	8
Rural residence:						
None	2	-	4	6	-	-
1-4 yrs.	1	7	5	-	13	-
5 yrs. or more	-	7	8	-	-	15

APPENDIX TABLE XX

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO CATEGORY AND MAIN AREA OF RESPONSIBILITY, BY SELECTED DEMOGRAPHIC FACTORS, EASTERN NIGERIA

Demographic Factors	Category		
	Category I N = 10	Category II N = 24	Responsibility Administration Training Field Work N = 20 N = 3 N = 11
Category:			
Group I	10		6 2 2
Group II	-	24	14 1 9
Responsibility:			
Administration	6	14	20 - -
Training	2	1	- 3 -
Field work	2	9	- - 11
Previous tenure:			
None	-	6	3 - - 3
Less than 12 mo.	-	1	- - 1
1-4 yrs.	3	5	6 2 -
5-8 yrs.	4	5	5 1 3
9 yrs. or more	3	7	6 - 4
Present tenure:			
Less than 12 mo.	-	7	5 - 2
1-4 yrs.	7	16	13 2 8
5-8 yrs.	3	1	2 1 1
9 yrs. or more	-	-	- - -
Highest training:			
Agr. certificate	-	4	1 - 3
Agr. diploma	-	4	2 1 1
B. Sc.	1	15	11 - 5
M. Sc.	9	1	6 2 2

APPENDIX TABLE XX (continued)

Demographic Factors	Category		Responsibility		
	Category I N = 10	Category II N = 24	Administration N = 20	Training N = 3	Field Work N = 11
Place of training:					
Nigeria	-	15	7	-	8
Abroad	10	9	13	3	3
Extension methods:					
None	2	-	-	-	2
Less than 1 mo.	-	10	3	-	7
1-4 mo.	2	12	12	-	2
5 mo. or more	6	2	5	3	-
Social sciences:					
None	2	10	5	1	6
Less than 1 mo.	2	4	5	-	2
1-4 mo.	2	9	8	-	3
5 mo. or more	4	1	2	2	1
Age:					
Less than 29 yrs.	-	11	5	-	6
30-40 yrs.	5	6	6	1	4
40 yrs. or more	5	7	8	2	2
Rural residence:					
None	-	5	2	-	3
1-4 yrs.	1	3	1	1	2
5 yrs. or more	9	16	17	2	6

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APPENDIX TABLE XXI

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO PREVIOUS AND PRESENT TENURE IN EXTENSION, BY SELECTED DEMOGRAPHIC FACTORS, EASTERN NIGERIA

Demographic Factors	Previous tenure			Present tenure					
	None N = 6	Less Than 12 mo. N = 1	1-4 yrs. N = 8	5-8 yrs. N = 9	9 yrs. or more N = 10	Less Than 12 mo. N = 7	1-4 yrs. N = 23	5-8 yrs. N = 4	9 yrs. or more N = 0
Category:									
Group I	-	-	3	4	3	-	7	3	-
Group II	6	1	5	5	7	7	16	1	-
Responsibility:									
Administration	3	-	6	5	6	5	13	2	-
Training	-	-	2	1	-	-	2	1	-
Field work	3	1	-	3	4	2	8	1	-
Previous tenure:									
None	6	-	-	-	-	4	2	-	-
Less than 12 mo.	-	1	-	-	-	-	1	-	-
1-4 yrs.	-	-	8	-	-	1	6	1	-
5-8 yrs.	-	-	-	9	-	2	5	2	-
9 yrs. or more	-	-	-	-	10	-	9	1	-
Present tenure:									
Less than 12 mo.	4	-	1	2	-	7	-	-	-
1-4 yrs.	2	1	6	5	9	-	23	-	-
5-8 yrs.	-	-	1	2	1	-	-	4	-
9 yrs. or more	-	-	-	-	-	-	-	-	-
Highest training:									
Agr. certificate	-	-	-	2	2	-	3	1	-
Agr. diploma	-	-	1	-	3	-	3	1	-
B. Sc.	6	1	4	4	1	7	8	1	-
M. Sc.	-	-	3	3	4	-	9	1	-

APPENDIX TABLE (continued)

	Previous tenure			Present tenure					
	None N = 6	Less Than 12 mo. N = 1	1-4 yrs. N = 8	5-8 yrs. N = 9	9 yrs. or more N = 10	Less Than 12 mo. N = 7	1-4 yrs. N = 23	5-8 yrs. N = 4	9 yrs. or more N = 0
Demographic Factors									
Place of training:									
Nigeria	5	1	3	1	5	4	11	-	-
Abroad	1	-	5	8	5	3	12	4	-
Extension methods:									
None	-	-	-	1	1	-	2	-	-
Less than 1 mo.	2	-	2	2	4	2	7	1	-
1-4 mo.	4	1	2	4	3	5	8	1	-
5 mo. or more	-	-	4	2	2	-	6	2	-
Social sciences:									
None	-	1	2	3	6	-	9	3	-
Less than 1 mo.	-	-	2	2	2	1	5	-	-
1-4 mo.	6	-	2	2	1	5	5	1	-
5 mo. or more	-	-	2	2	1	1	4	-	-
Age:									
Less than 29 yrs.	6	1	3	-	1	5	6	-	-
30-39 yrs.	-	-	4	5	2	2	9	-	-
40 yrs. or more	-	-	1	4	7	-	8	4	-
Rural residence:									
None	3	-	1	1	-	2	3	-	-
1-4 yrs.	2	-	1	-	1	2	2	-	-
5 yrs. or more	1	1	6	8	9	3	18	4	-

APPENDIX TABLE XXII

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO HIGHEST TRAINING
IN AGRICULTURE AND PLACE OF TRAINING, BY SELECTED DEMOGRAPHIC
FACTORS, EASTERN NIGERIA

Demographic Factors	Highest training					Place of training	
	Agr. Certificate N = 4	Agr. Diploma N = 4	B.Sc. N = 16	M.Sc. N = 10	Nigeria N = 15	Abroad N = 19	
Category:							
Group I	4	-	1	9	-	10	
Group II	-	4	15	1	15	9	
Responsibility:							
Administration	1	2	11	6	7	13	
Training	-	1	-	2	-	3	
Field work	3	1	5	2	8	3	
Previous tenure:							
None	-	-	6	-	5	1	
Less than 12 mo.	-	-	1	-	1	-	
1-4 yrs.	-	1	4	3	3	5	
5-8 yrs.	2	-	4	3	1	8	
9 yrs. or more	2	3	1	4	5	5	
Present tenure:							
Less than 12 mo.	-	-	7	-	4	3	
1-4 yrs.	3	3	8	9	11	12	
5-8 yrs.	1	1	1	1	-	4	
9 yrs. or more	-	-	-	-	-	-	
Highest training:							
Agr. certificate	4	-	-	-	3	1	
Agr. diploma	-	4	-	-	2	2	
B.Sc.	-	-	16	-	10	6	
M.Sc.	-	-	-	10	-	10	

APPENDIX TABLE XXII (continued)

Demographic Factors	Highest training			Place of training		
	Agr. Certificate N = 4	Agr. Diploma N = 4	B.Sc. N = 16	M.Sc. N = 10	Nigeria N = 15	Abroad N = 19
Place of training:						
Nigeria	3	2	10	-	15	-
Abroad	1	2	6	10	-	19
Extension methods						
None	-	-	-	2	-	2
Less than 1 mo.	4	1	5	-	9	1
1-4 mo.	-	2	10	2	6	8
5 mo. or more	-	1	1	6	-	8
Social sciences:						
None	4	3	2	3	6	6
Less than 1 mo.	-	-	4	2	3	3
1-4 mo.	-	1	9	1	6	5
5 mo. or more	-	-	1	4	-	5
Age:						
Less than 29 yrs.	-	-	11	-	9	2
30-39 yrs.	1	1	4	5	4	7
40 yrs. or more	3	3	1	5	2	10
Rural residence:						
None	1	-	4	-	4	1
1-4 yrs.	-	-	2	2	2	2
5 yrs. or more	3	4	10	8	9	16

APPENDIX TABLE XXIII

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO TRAINING IN EXTENSION METHODS AND SOCIAL SCIENCES, BY SELECTED DEMOGRAPHIC FACTORS, EASTERN NIGERIA

Demographic Factors	Extension methods			Social sciences			
	None N = 2	1 mo. or less N = 10	1-4 mo. or more N = 14	5 mo. or more N = 8	None N = 12	1 mo. or less N = 6	1-4 mo. or more N = 11
Category:							
Group I	2	-	2	6	2	2	4
Group II	-	10	12	2	10	4	1
Responsibility:							
Administration	-	3	12	5	5	5	2
Training	-	-	-	3	1	-	2
Field work	2	7	2	-	6	2	1
Previous tenure:							
None	-	2	4	-	-	-	-
Less than 12 mo.	-	-	1	-	1	-	-
1-4 yrs.	-	2	2	4	2	2	2
5-8 yrs.	1	2	4	2	3	2	2
9 yrs. or more	1	4	3	2	6	2	1
Present tenure:							
Less than 12 mo.	-	2	5	-	-	1	1
1-4 yrs.	2	7	8	6	9	5	4
5-8 yrs.	-	1	1	2	3	-	-
9 yrs. or more	-	-	-	-	-	-	-
Highest training:							
Agr. certificate	-	4	-	-	4	-	-
Agr. diploma	-	1	2	1	3	-	-
B.Sc.	-	5	10	1	2	4	1
M.Sc.	2	-	2	6	3	2	4

APPENDIX TABLE XXIII (continued)

Demographic Factors	Extension methods			Social sciences			
	1 mo. or less N = 2	1-4 mo. N = 10	5 mo. or more N = 14	None N = 12	1 mo. or less N = 6	1-4 mo. or more N = 11	5 mo. or more N = 5
Place of training:							
Nigeria	-	9	6	6	3	6	-
Abroad	2	1	8	6	3	5	5
Extension methods:							
None	2	-	-	1	-	-	1
Less than 1 mo.	-	10	-	5	3	2	-
1-4 mo.	-	-	14	4	1	8	1
5 mo. or more	-	-	-	2	2	1	3
Social sciences:							
None	1	5	4	12	-	-	-
Less than 1 mo.	-	3	1	-	6	-	-
1-4 mo.	-	2	8	-	-	11	-
5 mo. or more	1	-	1	-	-	-	5
Age:							
29 yrs.	-	4	7	1	3	7	-
30-39 yrs.	2	3	2	4	1	2	4
40 yrs. or more	-	3	5	7	2	2	1
Rural residence:							
None	-	2	3	1	1	3	-
1-4 yrs.	-	1	3	1	-	2	1
5 yrs. or more	2	7	8	10	5	6	4

APPENDIX TABLE XXIV

FREQUENCY DISTRIBUTION OF RESPONDENTS ACCORDING TO AGE AND RURAL RESIDENCE, BY SELECTED DEMOGRAPHIC FACTORS, EASTERN NIGERIA

Demographic Factors	Age		Rural residence			
	29 yrs. or less N = 11	30-39 yrs. N = 11	40 yrs. or more N = 12	None N = 5	1-4 yrs. N = 4	5 yrs. or more N = 25
Category:						
Group I						
Group II						
Responsibility:						
Administration	5	5	5	-	1	9
Training	11	6	7	5	3	16
Field work	5	6	8	2	1	17
Previous tenure:						
None	-	1	2	-	1	2
Less than 12 mo.	6	4	2	3	2	17
1-4 yrs.	3	4	4	-	1	6
5-8 yrs.	-	5	4	1	-	8
9 yrs. or more	1	2	7	-	1	9
Present tenure:						
Less than 12 mo.	5	2	-	2	2	3
1-4 yrs.	6	9	8	3	2	18
5-8 yrs.	-	-	4	-	-	4
9 yrs. or more	-	-	-	-	-	-
Highest training:						
Agr. certificate	-	1	3	1	-	3
Agr. diploma	-	1	3	-	-	4
B.Sc.	11	4	1	4	2	10
M.Sc.	-	5	5	-	2	8

APPENDIX TABLE XXIV (continued)

Demographic Factors	Age			Rural residence		
	29 yrs. or less N = 11	30-39 yrs. N = 14	40 yrs. or more N = 12	None N = 5	1-4 yrs. N = 4	5 yrs. or more N = 25
Place of training:						
Nigeria	9	4	2	4	2	9
Abroad	2	7	10	1	2	16
Extension methods:						
None	-	2	-	-	-	2
Less than 1 mo.	4	3	3	2	1	7
1-4 mo.	7	2	5	3	3	8
5 mo. or more	-	4	4	-	-	8
Social sciences:						
None	1	4	7	1	1	10
Less than 1 mo.	3	1	2	1	-	5
1-4 mo.	7	2	2	3	2	6
5 mo. or more	-	4	1	-	1	4
Age:						
Less than 29 yrs.	11	-	-	4	3	4
30-39 yrs.	-	11	-	1	-	10
40 yrs. or more	-	-	12	-	1	11
Rural residence:						
None	4	1	-	5	-	-
1-4 yrs.	3	-	1	-	4	-
5 yrs. or more	4	10	11	-	-	25

APPENDIX TABLE XXV

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF PERCEIVED IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY, WESTERN NIGERIA

Planning Principles	Category I, N = 10						Category II, N = 24					
	Not a part		Not significant		Significant		Not a part		Not significant		Significant	
	No	%	No	%	No	%	No	%	No	%	No	%
Scope and Objective	-	-	-	-	10	100	-	-	5	21	19	79
Allocation of resources	-	-	5	50	5	50	-	-	12	50	12	50
Planning and organizing	-	-	5	50	5	50	1	4	6	25	17	71
Coordination	1	10	8	80	1	10	3	12	10	42	11	46
Human investment	1	10	4	40	5	50	2	8	13	54	9	38
Agricultural investment	-	-	2	20	8	80	1	4	11	46	12	50
Potential response	-	-	8	80	2	20	4	17	12	50	8	33
Potential collaboration	-	-	6	60	4	40	5	21	16	67	3	12
Official leaders	2	20	8	80	-	-	7	29	11	46	6	25
Non-official leaders	-	-	5	50	5	50	3	13	13	54	8	33
Leadership characteristics	-	-	5	50	5	50	-	-	13	54	11	46
Leadership situation	-	-	5	50	5	50	2	8	8	75	4	17
People to be reached	1	10	5	50	4	40	2	8	9	38	13	54
Subject matter	-	-	6	60	-	40	-	-	10	42	14	58
Behavioral changes	-	-	8	80	2	20	1	4	12	50	11	46
Group characteristics	-	-	6	60	4	40	2	8	17	71	5	21

Rating of significance:

- (1) Not a part
- (2-3) Not significant
- (4-5) Significant

APPENDIX TABLE XXVI

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF PERCEIVED IMPORTANCE
OF PLANNING PRINCIPLES THAT ARE BEING USED IN CURRENT EXTENSION OBJECTIVES,
BY CATEGORY, EASTERN NIGERIA

Planning Principles	Perceived importance of planning principles that are used											
	Category I, N = 10			Category II, N = 24								
	Not a part	Not sig- nificant	Signifi- cant	Not a part	Not sig- nificant	Signifi- cant						
No	%	No	%	No	%	No	%					
Scope and objective	-	-	4	40	6	60	1	4	12	50	11	46
Allocation and resources	-	-	5	50	5	50	-	-	11	46	13	54
Planning and organizing	-	-	5	50	5	50	-	-	8	33	16	67
Coordination	-	-	8	80	2	20	2	8	17	71	5	21
Human investment	1	10	6	60	3	30	2	8	19	79	3	13
Agricultural investment	-	-	3	30	7	70	-	-	10	42	14	58
Potential response	-	-	8	80	2	20	1	4	19	79	4	17
Potential collaboration	-	-	6	60	4	40	1	4	21	88	2	8
Official leaders	1	10	7	70	2	20	6	25	15	62	3	13
Non-official leaders	2	20	6	60	2	20	8	33	12	50	4	17
Leadership characteristics	1	10	7	70	2	20	6	25	14	58	4	17
Leadership situation	1	10	7	70	2	20	4	17	6	66	4	17
People to be reached	-	-	6	60	4	40	1	4	18	75	5	21
Subject matter	-	-	6	60	4	40	2	8	18	75	4	17
Behavioral changes	1	10	8	80	1	10	2	8	20	84	2	8
Group characteristics	-	-	8	80	2	20	4	17	16	66	4	17

Rating of significance:

- (1) Not a part
(2-3) Not significant
(4-5) Significant

APPENDIX TABLE XXVII

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF PERCEIVED IMPORTANCE OF PLANNING PRINCIPLES THAT SHOULD BE USED IN CURRENT EXTENSION † OBJECTIVES, BY CATEGORY, WESTERN NIGERIA

Perceived importance of planning principles that should be used

Planning Principles	Category I, N = 10				Category II, N = 24					
	Not a part		Signifi- cant		Not a part		Signifi- cant			
	No	%	No	%	No	%	No	%		
Scope and objective	-	-	1	10	9	90	-	-	24	100
Allocation of resources	-	-	-	-	10	100	-	-	24	100
Planning and organizing	-	-	1	10	9	90	-	-	24	100
Coordination	-	-	1	10	9	90	-	-	23	96
Human investment	-	-	2	20	8	80	-	-	24	100
Agricultural investment	-	-	-	-	10	100	-	-	24	100
Potential response	-	-	-	-	10	100	-	-	22	92
Potential collaboration	-	-	-	-	10	100	-	-	22	92
Official leaders	1	10	5	50	4	40	2	8	4	17
Non-official leaders	-	-	-	-	10	100	1	4	3	13
Leadership characteristics	-	-	-	-	10	100	-	-	-	-
Leadership situation	-	-	-	-	10	100	-	-	3	13
People to be reached	-	-	1	10	9	90	-	-	-	-
Subject matter	-	-	2	20	8	80	-	-	2	8
Behavioral changes	-	-	2	20	8	80	1	4	3	13
Group characteristics	-	-	1	10	9	90	-	-	9	38

Rating of significance:

- (1) Not a part
- (2-3) Not significant
- (4-5) Significant

APPENDIX TABLE XXVIII

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF PERCEIVED IMPORTANCE OF PLANNING PRINCIPLES THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY, EASTERN NIGERIA

Planning Principles	Category I, N = 10						Category II, N = 24					
	Not a part		Not significant		Significant		Not a part		Not significant		Significant	
	No	%	No	%	No	%	No	%	No	%	No	%
Scope and objective	-	-	-	-	10	100	-	-	4	17	20	83
Allocation of resources	-	-	1	10	9	90	-	-	4	17	20	83
Planning and organizing	-	-	-	-	10	100	-	-	4	17	20	83
Coordination	-	-	1	10	9	90	-	-	9	38	15	62
Human investment	-	-	2	20	8	80	-	-	7	29	17	71
Agricultural investment	-	-	-	-	10	100	-	-	-	-	24	100
Potential response	-	-	-	-	10	100	-	-	4	17	20	83
Potential collaboration	-	-	-	-	10	100	-	-	7	29	17	71
Official leaders	-	-	4	40	6	60	1	4	9	38	14	58
Non-official leaders	-	-	4	40	6	60	2	8	10	42	12	50
Leadership characteristics	-	-	1	10	9	90	-	-	9	38	15	62
Leadership situation	-	-	-	-	10	100	-	-	8	33	16	67
People to be reached	-	-	2	20	8	80	-	-	5	21	19	79
Subject matter	-	-	-	-	10	100	1	4	7	29	16	67
Behavioral changes	-	-	4	40	6	60	-	-	7	29	17	71
Group characteristics	-	-	3	30	7	70	2	8	10	42	12	50

Rating of significance:

- (1) Not a part
- (2-3) Not significant
- (4-5) Significant

APPENDIX TABLE XXIX

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF PERCEIVED IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY REGION, WESTERN NIGERIA

Planning Principles	Perceived importance of principles that are used N = 34				Perceived importance of principles that should be used N = 34							
	Not a part		Significant		Not a part		Significant					
	No	%	No	%	No	%	No	%				
Scope and objective	-	-	5	15	29	85	-	-	1	3	33	97
Allocation of resources	-	-	17	50	17	50	-	-	-	-	34	100
Planning and organizing	1	3	11	32	22	65	-	-	1	3	33	97
Coordination	4	12	18	53	12	35	-	-	2	6	32	94
Human investment	3	9	17	50	14	41	-	-	2	6	32	94
Agricultural investment	1	3	13	38	20	59	-	-	-	-	34	100
Potential response	4	12	20	59	10	29	-	-	2	6	32	94
Potential collaboration	5	15	22	65	7	20	-	-	2	6	32	94
Official leaders	9	26	19	57	6	17	3	9	9	26	22	65
Non-official leaders	3	9	18	53	13	38	1	3	3	9	30	88
Leadership characteristics	-	-	18	53	16	47	-	-	-	-	34	100
Leadership situation	2	6	23	68	9	26	-	-	3	9	31	91
People to be reached	3	9	14	41	17	50	-	-	1	3	33	97
Subject matter	-	-	16	47	18	53	-	-	4	12	30	88
Behavioral changes	1	3	20	59	13	38	1	3	5	15	28	82
Group characteristics	2	6	23	68	9	26	-	-	10	30	24	70

Rating of significance:

- (1) Not a part
- (2-3) Not significant
- (4-5) Significant

APPENDIX TABLE XXX

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF PERCEIVED IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY REGION, EASTERN NIGERIA

Planning Principles	Perceived importance of principles that are used N = 34				Perceived importance of principles that should be used N = 34							
	Not a part		Significant		Not a part		Significant					
	No	%	No	%	No	%	No	%				
Scope and objective	1	3	16	47	17	50	-	-	4	12	30	88
Allocation of resources	-	-	16	47	18	53	-	-	5	15	29	85
Planning and organizing	-	-	13	39	21	61	-	-	4	12	30	88
Coordination	2	6	25	74	7	20	-	-	10	29	24	71
Human investment	3	9	25	74	6	17	-	-	9	26	25	74
Agricultural investment	-	-	13	9	21	61	-	-	-	-	34	100
Potential response	1	3	27	79	6	18	-	-	4	12	30	88
Potential collaboration	1	3	27	79	6	18	-	-	7	21	27	79
Official leaders	7	21	22	64	5	15	1	3	13	38	20	59
Non-official leaders	10	39	18	54	6	17	2	6	14	41	18	53
Leadership characteristics	7	21	21	62	6	17	-	-	10	30	24	70
Leadership situation	5	15	23	68	6	17	-	-	8	23	26	77
People to be reached	1	3	24	71	9	26	-	-	7	21	27	79
Subject matter	2	6	24	71	8	23	1	3	7	21	26	76
Behavioral changes	3	9	28	82	3	9	-	-	11	32	23	68
Group characteristics	4	11	24	71	6	18	2	6	13	38	19	56

Rating of significance:

- (1) Not a part
- (2-3) Not significant
- (4-5) Significant

APPENDIX TABLE XXXI

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE INFLUENCE OF SOCIO-CULTURAL FACTORS ON THE PLANNING AND IMPLEMENTATION OF EXTENSION PROGRAM, BY REGION, WESTERN NIGERIA

Socio-cultural factors	Perceived as "favorable"		Perceived as "no effect"		Perceived as "unfavorable"	
	No	%	No	%	No	%
N = 34						
Goal gratification	16	47	13	38	5	15
Adaptation	6	18	11	32	17	50
Integration	20	59	9	26	5	15
Pattern maintenance	18	54	13	38	3	8
Demographic factors ¹	3	9	2	6	28	82
Ecological factors	7	20	9	26	18	54
Communication channels	11	32	16	47	7	21
Reinforcing agencies	17	50	12	35	5	15
Authoritative approval	15	44	14	41	5	15
Non-authoritative approval	24	71	8	23	2	6
Sources of leadership	13	39	14	41	7	20
Quality of power structure	19	56	9	26	6	18
Family values	-	-	3	9	31	91
Family goals	7	20	22	65	5	15
Division of labor ¹	6	18	19	56	8	23
Decision-making	7	20	18	54	9	26

N = 33

(1-2) Unfavorable
 (3) No effect
 (4-5) Favorable

APPENDIX TABLE XXXII

SUMMARY OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF THE INFLUENCE OF SOCIO-CULTURAL FACTORS ON THE PLANNING AND IMPLEMENTATION OF EXTENSION PROGRAM, BY REGION, EASTERN NIGERIA

Socio-cultural factors N = 34	Perceived as "favorable"		Perceived as "no effect"		Perceived as "unfavorable"	
	No	%	No	%	No	%
Goal gratification	11	32	16	47	7	21
Adaptation	9	27	14	41	11	32
Integration	13	39	17	50	4	11
Pattern maintenance	7	20	25	74	2	6
Demographic factors	-	-	1	3	33	97
Ecological factors	-	-	3	9	31	91
Communication channels	6	17	23	68	5	15
Reinforcing agencies	12	35	21	62	1	3
Authoritative approval	11	32	18	53	5	15
Non-authoritative approval	9	27	22	64	3	9
Sources of leadership	10	30	22	64	2	6
Quality of power structure	5	15	15	44	14	41
Family values	-	-	3	9	31	91
Family goals	5	15	16	47	13	38
Division of labor	8	23	20	59	6	18
Decision-making	2	6	21	62	11	32

(1-2) Unfavorable
(3) No effect
(4-5) Favorable

APPENDIX TABLE XXXIII

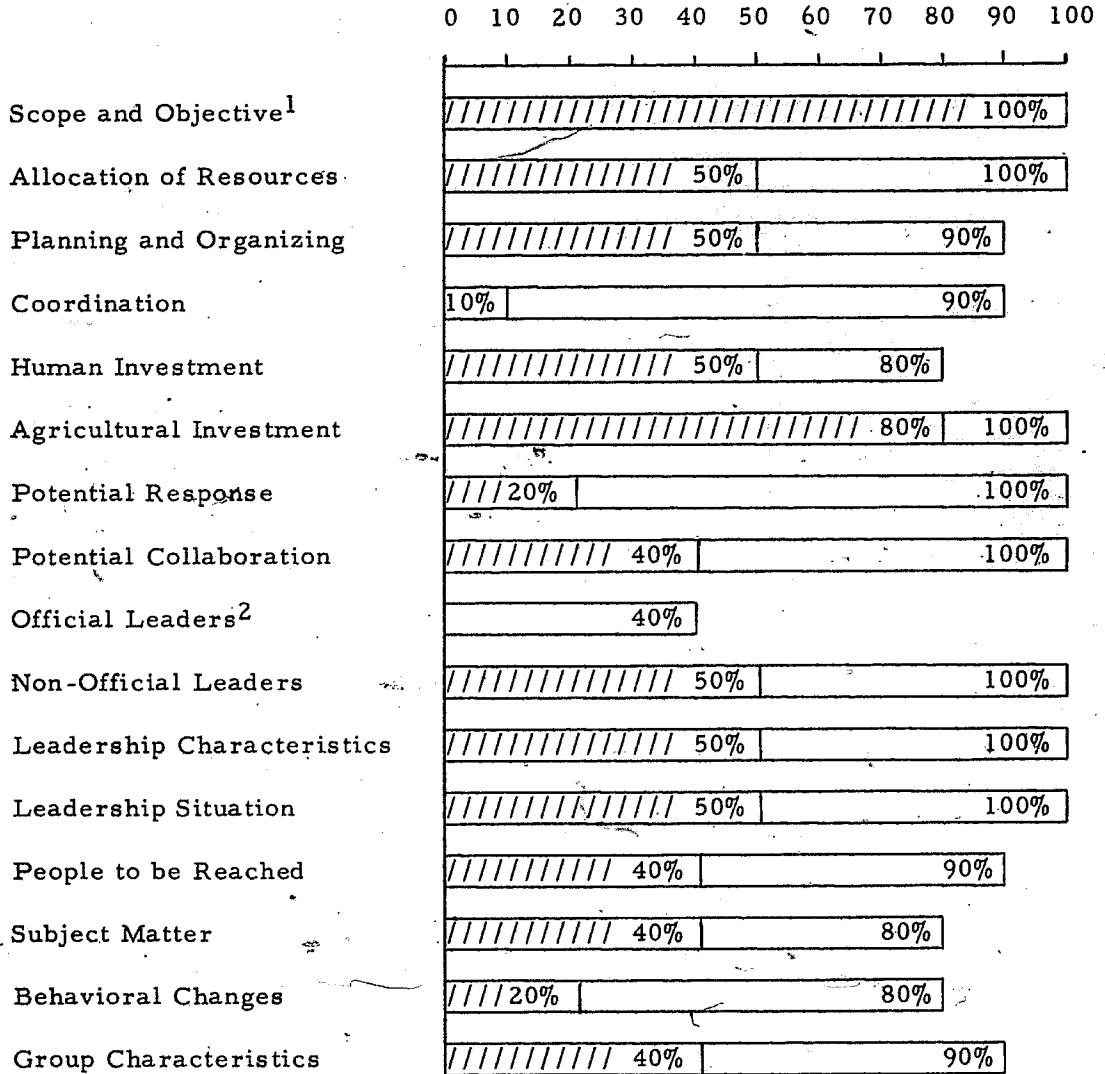
FREQUENCY DISTRIBUTION OF RESPONSES TO "NO" AND
 "DON'T KNOW" REGARDING THE PERCEPTION OF
 SOCIO-CULTURAL FACTORS, BY REGION

Socio-cultural factors	Western Nigeria		Eastern Nigeria	
	No	Don't Know	No	Don't Know
Goal gratification	11	-	4	-
Adaptation	4	-	-	-
Integration	1	1	2	1
Pattern maintenance	10	-	6	1
Demographic factors	13	-	8	-
Ecological factors	5	-	1	-
Communication channels	10	-	8	-
Reinforcing agencies	9	4	1	3
Authoritative approval	7	3	5	1
Non-authoritative approval	2	1	8	2
Sources of leadership	7	2	1	1
Power structure	16	8	13	7
Family values	10	-	5	1
Family goals	9	3	2	4
Division of labor	22	1	15	1
Decision-making	20	5	7	12

APPENDIX F

Planning Principles

P e r c e n t



¹ 90 per cent felt that this principle should be used.

² Nil. per cent felt that this principle was being used.

FIGURE 5

COMPARISON BETWEEN THE PERCEPTION OF IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY I, WESTERN NIGERIA

////// is used

□ should be used

Planning Principles

P e r c e n t

0 10 20 30 40 50 60 70 80 90 100

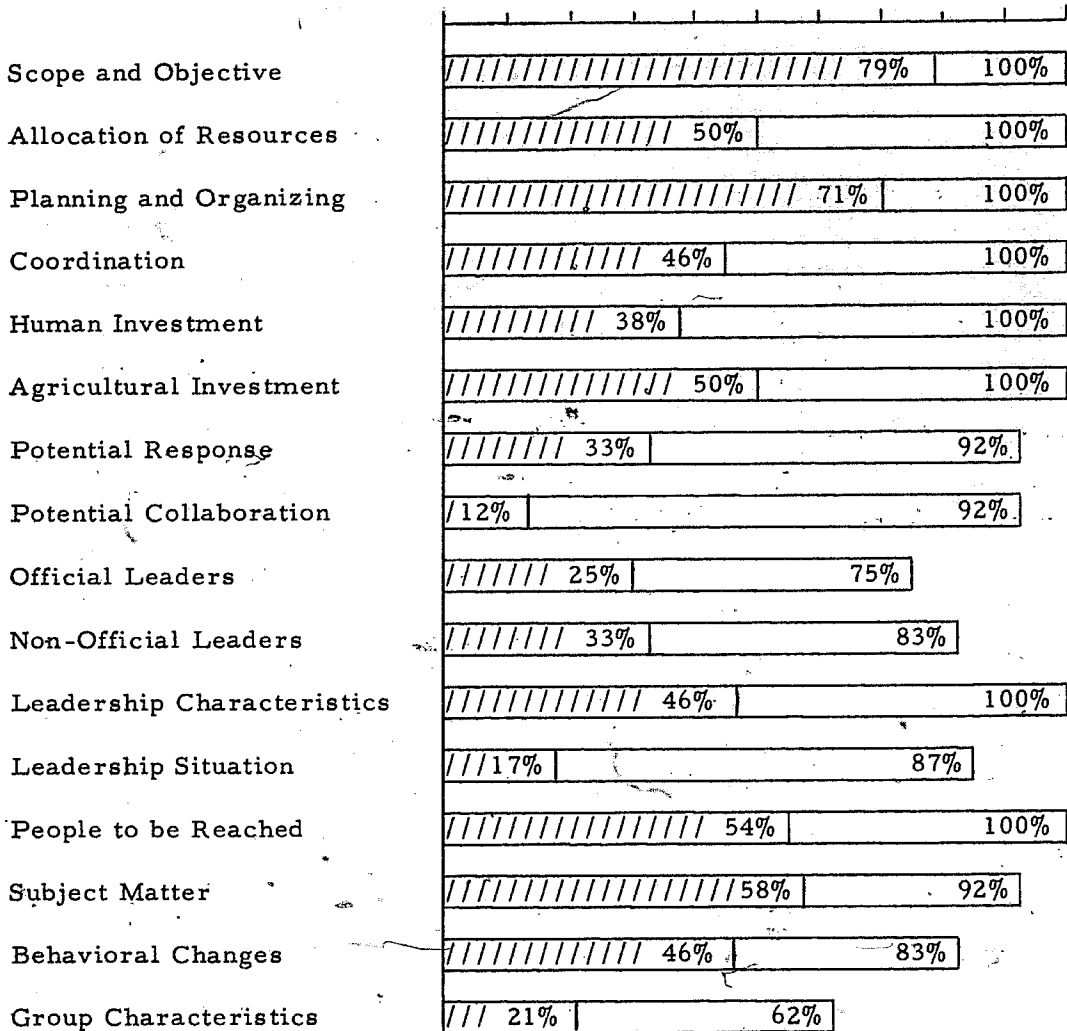


FIGURE 6

COMPARISON BETWEEN THE PERCEPTION OF IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY II, WESTERN NIGERIA

////// is used

□ should be used

Planning Principles

P e r c e n t

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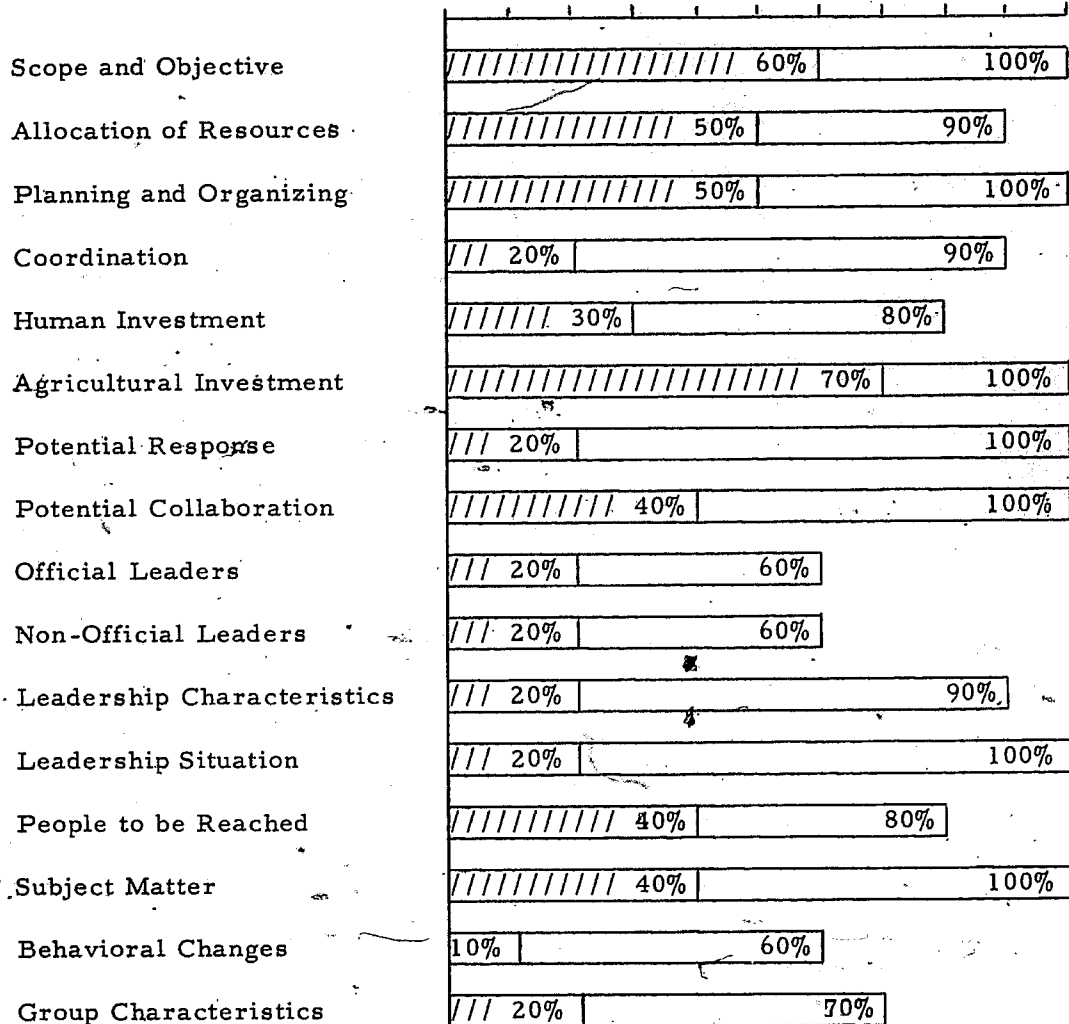
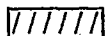


FIGURE 7

COMPARISON BETWEEN THE PERCEPTION OF IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY I, EASTERN NIGERIA



is used



should be used

Planning Principles

P e r c e n t

0 10 20 30 40 50 60 70 80 90 100

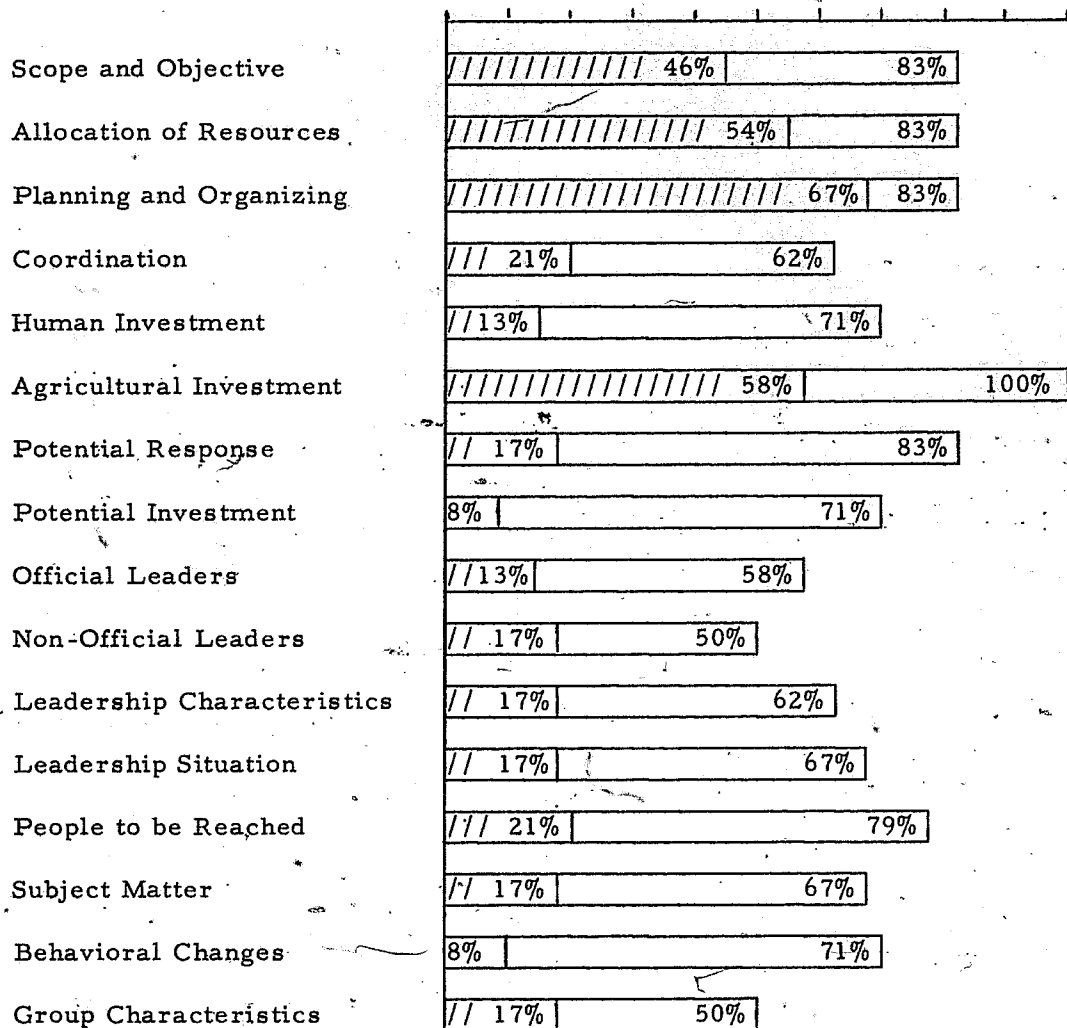
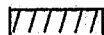


FIGURE 8

COMPARISON BETWEEN THE PERCEPTION OF IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY CATEGORY II, EASTERN NIGERIA



is used



should be used

Planning Principles

P e r c e n t

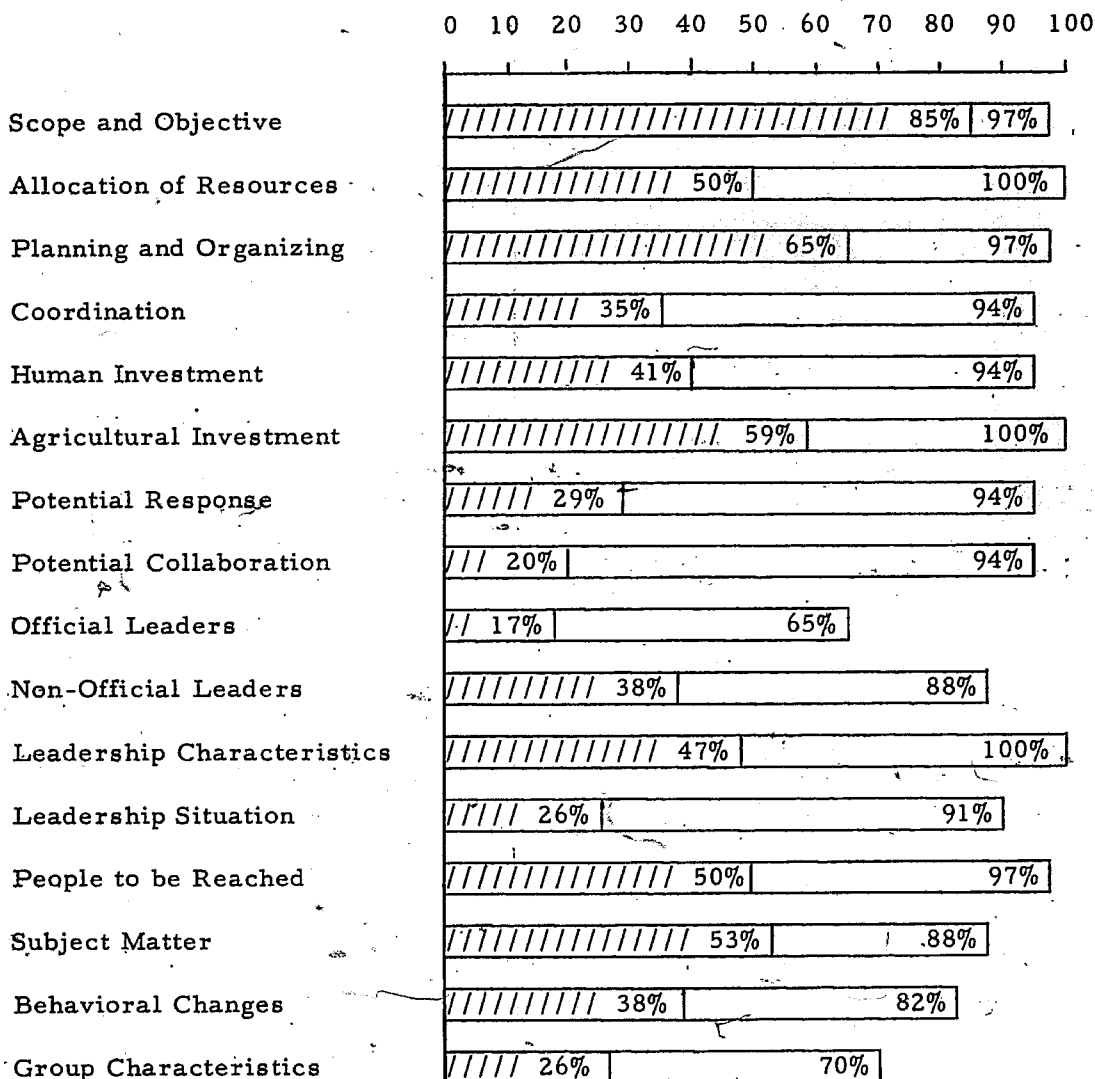


FIGURE 9

COMPARISON BETWEEN THE PERCEPTION OF IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY REGION, WESTERN NIGERIA



is used



should be used

Planning Principles

P e r c e n t

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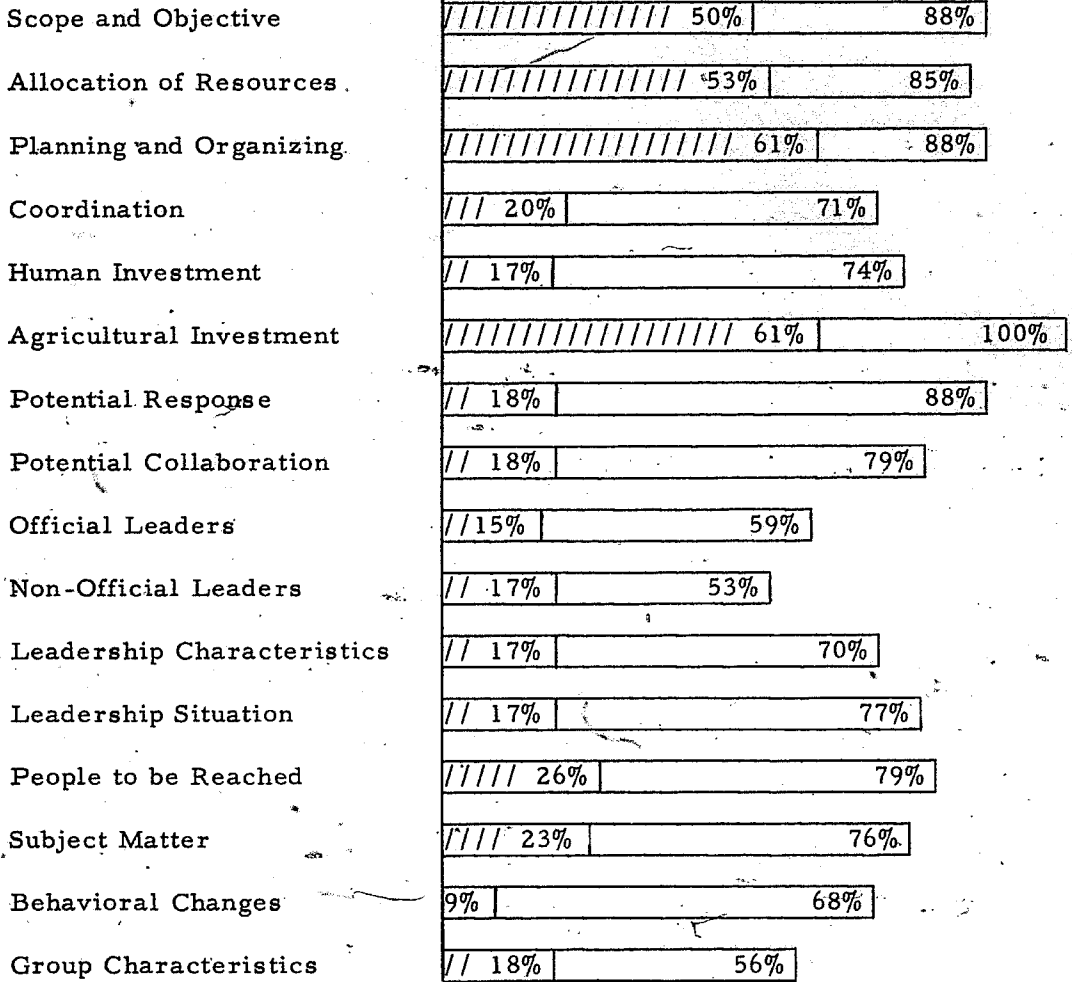
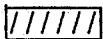


FIGURE 10

COMPARISON BETWEEN THE PERCEPTION OF IMPORTANCE OF PLANNING PRINCIPLES THAT ARE BEING USED AND THAT SHOULD BE USED IN CURRENT EXTENSION OBJECTIVES, BY REGION, EASTERN NIGERIA



is used



should be used

TITLE OF THESIS Factors Influencing the Planning and Implementation of

Agricultural Extension Programs as perceived by Nigerian
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Professor in charge of thesis