WORKING WITH FARMERS' GROUPS,
AN EXTENSION EXPERIENCE

BY

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DEGREE OF M. PHIL. AGRICULTURAL EXTENSION.

JUNE, 1997.
DECLARATION

I, Albert Yeboah do hereby declare that, except for the references to other peoples' work, which have been duly cited, this work is the result of my own investigation. I also declare that this thesis has neither been presented in whole nor in part for another degree elsewhere.

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DEDICATION

I dedicate this thesis to my mother Abena Dufie, my wife Josephine, and my daughters Priscilla and Eunice.
ACKNOWLEDGMENT

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ABSTRACT

The study aimed at researching into the prevailing farmers' groups and examine the capability of the nature of farmers' groups and extension interactions with them to influence the expected improvements in their farming activities. The study was carried out in the West Akim district of the eastern region of Ghana.

All the twelve FLS in the field as well as the two extension supervisors in the district were interviewed.

Fourteen extension farmers' groups and four non-extension farmers' groups were interviewed from five sub-districts. From each farmers' group interviewed five of its members were randomly selected and interviewed. A total of 84 individual farmers were consequently covered in the study. Four other extension supervisors from the DAES as well as three from other extension organisations involved in the study were also interviewed. They included officers in charge of field operations in the district, regional and national headquarters. Data collection started from 14th November 1995 and ended on 18th January 1996.

The result of the study revealed that in the West Akim district the DAES deals with both autonomous and sponsored groups. The autonomous groups were found to be more sustainable than the sponsored groups. The sustainability of the autonomous groups was attributed to their nature, mode of formation, and the existing internal dynamics. In sustainable groups the extension agent has...
the opportunity to plan for series of lessons which together can bring about improvements in the farming activities of group members.

The nature of a farmers' group thus affects its sustainability and the opportunity for extension agent and farmers to teach and acquire knowledge respectively. The effectiveness of extension delivery is also influenced by the nature of farmers' groups.

The extension agents of the DAES were not able to arrange and meet farmers' groups according to the visit schedules as envisaged under the T&V system being practised by the DAES. The expected two weeks interval between consecutive meetings of extension agents and farmers' groups was not fully achieved. Thus regular teaching and learning opportunities were not created by the extension agents.

The monthly training sessions which could have reinforced the extension delivery skills of the extension agents were directed towards technical topics. Extension agents were not adequately equipped to contribute much to the social life of farmers' groups.

Extension interaction with extension and non-extension farmers' groups in the West Akim district enhanced the production levels of farmers, but not much was achieved in the development and sustainability of the farmers' group life.

To work effectively and efficiently with farmers' groups, extension organisations among others need to renew and meet the needs of their clients, and also train their agents to be adept in
working with farmers’ groups and encouraging farmers to form their groups.
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LIST OF ABBREVIATIONS

1. DAEO - District Agricultural Extension Officer
2. DAES - Department of Agricultural Extension Services
3. DDAEO - Deputy District Agricultural Extension Officer
4. DDFS - Deputy Director of Field Services
5. FAO - Food and Agriculture Organisation
6. FLS - Frontline Staff
7. JSS - Junior Secondary School
8. NMP - National Mobilisation Programme
9. RAEO - Regional Agricultural Extension Officer
10. SAA - Sasakawa Africa Association
11. SG 2000 - Sasakawa Global 2000
12. SPSS - Statistical Package for Social Sciences
13. T&V System - Training and Visit System
14. WIAD - Women In Agricultural Development
CHAPTER ONE

1.0 INTRODUCTION

1.1 Importance of Agriculture

Economic development in most developing countries to a large extent is dependent on agricultural development. This is so because agriculture is the main livelihood of the majority of the population. It has the capacity to feed the population of a country as well as provide raw materials for industrial growth. The development of the agricultural sector therefore has a beneficial effect on the overall economic development of a country.

In Ghana, the government through its agencies works in partnership with foreign governments, non-governmental organisations as well as farmers in bringing about agricultural development.

Agriculture employs a substantial proportion of the nation's population and thus reducing greatly the level of unemployment. It has been found that between 1987-1988 and 1991-1992, 69.2% and 62.3% respectively of rural households obtained their incomes from farm self-employment. It has also been observed that the sectoral pattern of individual rural self-employment between 1987-1988 and 1991-1992 showed that 89.0% and 87.2% respectively of the rural people are in farm self-employment. (World Bank, 1995).

The bulk of the nation's foreign exchange earnings is derived from the agricultural sector through traditional and non-traditional exports. In 1986 agriculture contributed 49.5% of the
nation's Gross Domestic Product (GDP), and that was the highest sectoral contribution. The contribution of the private and public sectors were 39.6% and 9.9% respectively.

The contribution of the private operators in the agricultural sector to the nation's GDP from 1987-1994 ranged between 32.9% and 37.4% (World Bank, 1995). By such significant contributions to the GDP, the agricultural sector supports the development of the other sectors of the national economy.

While farmers work on their farm businesses, the government together with foreign governments as well as non-governmental organisations provide the farmers with extension services and other technical support. This support provides opportunity for farmers to learn and respond appropriately to current technologies applicable to their farming operations. They also learn about the broader agro-economic environment in which they operate. To facilitate such understanding, farmers need continuously updated advice, thus making the role of agricultural extension services crucial in agricultural development.

1.2 Role of Extension

Agricultural extension is

A service or system which assists farm people, through educational procedures, in improving farming methods and techniques, increasing production efficiency and income, bettering their levels of living, and lifting the social and educational standards of rural life (Maunder, 1973:3).
This implies that irrespective of the method used, agricultural extension is expected to bring improvements in the way of life and the modes of operation of farmers who participate in its programmes.

In addition, extension helps farmers to develop their decision-making skills, as new technologies inevitably place a lot of demand on their abilities. Agricultural extension also helps rural people to develop leadership and organisational skills, so that they can better organise, operate and/or participate in cooperatives, credit societies and other support organisations, as well as participate in the development of the local communities.

The attainment of these goals involves the continuous training of farmers to acquire relevant knowledge, skills and attitudes which are needed if their performances are to meet the expected ends. Agricultural extension therefore channels its efforts, resources and activities towards the achievement of behavioural changes in the farmer as well as changes in his farming methods.

1.3 Extension Strategy

In the quest for efficiency in extension delivery, various methods are used in its activities. These are the individual, group and mass teaching methods.

Although all the three methods continue to be used by extension organisations, the group method, over the last decade has been recommended for use (Benor and Baxter, 1984; World Bank, 1992). This is due to the advantages the group method has over the
other methods which include increased extension coverage, increased number of farmers who come into direct contact with the extension agent, and cost effectiveness.

Benor and Baxter (1984), proposed a shift from the individual contact farmer approach to the contact farmer group approach to extension delivery. According to the proposal extension agents are to work with groups of farmers within a precisely defined area of operation.

The use of groups as the focal point for extension activities to increase the number of farmers contacted directly by extension workers is fast gaining grounds. In a survey conducted in Kenya "sixty five (65) percent of all sampled farmers who received extension advice reported doing so in groups" (World Bank, 1993).

It is worthy to note, however, that "workers need to remember that all groups are not organised in the same way. There are thus autonomous groups and dependent or sponsored groups" (Batten and Batten, 1975:3-4). Members of autonomous groups have a high tendency of internalising the group and considering it as theirs since the members are the promoters. On the other hand sponsored groups are often considered by the members as belonging to the promoter who is not a member of the group.

The agricultural history of Ghana reveals that both sponsored and autonomous groups formation has been encouraged, with the purpose of improving upon the farming efficiency of farmers.

In the year 1962-1963 a re-organisation of the Ministry of Agriculture was undertaken in the light of government's programme
of increased agricultural production through large-scale mechanisation. The ministry secretariat worked through the production fronts which the government had created. These production fronts were:

(i) the Agricultural Co-operatives under the aegis of the United Ghana Farmers Council (UGFC);

(ii) the State Farms Corporation;

(iii) the Workers Brigade; and

(iv) the Ghana Fishing Corporation (Harris, 1984, 177).

The execution of the agricultural component of the Programme of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) in the 1990s through the use of groups is a demonstration of government's encouragement of group work in farming.

Various governmental agencies, and non-governmental organisations such as World Vision International, TechnoServe and Sasakawa Global 2000 have spearheaded the formation of Farmers Co-operative Societies, Block Farming and Crop Associations, Mobisquads and Irrigation Farming Groups.

Under the National Agricultural Extension Project (NAEP) of the Ministry of Food and Agriculture a lot of prominence is given to farmers' groups as the focal point for extension activities (World Bank, 1992). The DAES has adopted the group extension approach as a policy to increase its coverage in view of the diminishing number of field staff. The FLS are thus encouraged to give prominence to group teaching methods.
1.4 **Extension Staff Organisation in the West Akim District**

Extension operations by the Department of Agricultural Extension Services have been activated following a World Bank/Government of Ghana National Agricultural Extension Project (NAEP) initiated in 1987.

The activities of the Ministry of Food and Agriculture in the West Akim district supervisors the District Director of Agriculture. For extension operational purposes the district is divided into fifteen (15) sub-districts. Each sub-district is placed under the control of one (1) extension agent or frontline staff (FLS). The FLS is the extension worker who is in direct contact with the farmers in the field.

Each sub-district is divided into eight (8) operational areas to allow for a uniform coverage of the entire sub-district. In each operational area the FLS is expected to work with two to three farmers' groups. In the entire sub-district therefore the FLS is expected to work with 16 to 24 farmers' groups. The whole district is thus expected to work with 240 to 360 farmers' groups.

Given this environment in which the Department of Agricultural Extension Services is focusing on farmers' groups, it is important that extension's experiences with farmers' groups is critically examined. Such examination will give extension the opportunity to learn more about farmers' groups and be able to improve upon its operations.
1.5 Research Problem Statement

The main purpose of agricultural extension organisations is to educate farmers to improve upon their farming methods and techniques. It is hoped that this purpose if achieved, and in combination with improvements in access to other factors such as credit, inputs and land, is likely to lead to increased farming efficiency and eventually uplift the living standards of farmers.

In order to realize the benefits of its educational programmes in the farming communities extension seeks to have as many farmers as possible participate in its activities.

Extension uses the individual, group and mass teaching methods to reach its audience. However, to ensure that the coverage is increased, the emphasis in recent times has been on the group method of extension.

The individual teaching methods using the contact farmer approach of extension and the mass teaching methods using the print and the electronic media continue to be used alongside the group teaching methods.

The use of any of the above mentioned methods thus depends on the appropriateness of the method to the prevailing situation.

The group method of extension delivery has become acceptable as exemplified by its use by most NGOs and governmental agencies in the execution of their programmes. The use of the group method may present varied problems which may emanate from the group or the extension process. Organisations that use the group method of extension delivery are constantly confronted with the problem of
how to reach as many farmers as possible in the most effective and efficient manner. In addition to this problem most extension organisations have low staff strength. In the DAES for example, it has been observed that while the number of farmers is increasing, government is cutting back on extension staff.

1.6 **Research Questions**

The Department of Agricultural Extension Services and other quasi extension organisations operating in Ghana are directing their efforts at the group approach to extension delivery. The results of these efforts will be enhanced if the factors that militate against effective and efficient group extension delivery are identified and given the required attention.

To identify these factors that hinder effective and efficient group extension delivery, it is important to study farmers' groups and the way extension organisations have interacted with them.

This knowledge will give extension organisations the opportunity to improve upon their modes of operation in order to make for effectiveness and efficiency.

The two main questions that constitute the subject of this study are as follows:

(i) Does the nature of the farmers' groups that extension deals with influence the effectiveness of extension?

(ii) Does extension interaction with farmers' groups promote change in group activities?
1.7 **General Objective**

The main objective is to study the prevailing farmers' groups and find out if the nature of farmers' groups and extension interaction with them promotes required changes in their farming activities.

1.8 **Specific Objectives**

The study will specifically seek to:

(i) Find out the origin of farmers' groups in the study area;

(ii) Examine the characteristics of farmers' groups and extension workers;

(iii) Study the internal dynamics of farmers' groups;

(iv) Examine the operational processes extension adopts in working with farmers' groups, and

(v) Find out the achievements of extension's work with farmers' groups.

1.9 **Conceptual Framework**

The concepts that will form the basis of this study are discussed in this section.

1.9.1 **Farmers' Group**

In this study the concept of "farmers' group" would imply a number of crop farmers in a given locality who are in a reciprocal interaction with one another, working on common or on their individual fields, and who have some shared goals, aspirations and interests. The definition focuses on crop farmers because extension messages of late have tended to be crops biased hence the
Based on the fact that a "farmers' group" is constituted by a number of people coming together, it can be viewed as a social system. The members hence may interact and influence one another. The group can also influence its members to conform to certain laid down or evolved group expectations.

**Extension and non-extension farmers' groups.** Extension farmers' group is defined in this study as the farmers' group extension agents of the DAES had initiated at the beginning of the study. On the other hand, non-extension farmers' group is the farmers' group initiated by either the farmers themselves or other organisations other than the DAES.

**Sponsored and autonomous farmers' groups.** A farmers' group may be formed as a result of the promotional activities by farmers who finally become members of the group. Again a farmers' group may also be formed as a result of the promotional activities of a person, a group of persons or an organisation outside the group.

In this study a sponsored group will refer to a group promoted by a person, a group of persons or an organisation outside a group. On the other hand, an autonomous will refer to a group formed as a result of the promotional activities of people who finally become members of the group.

Extension groups can said to be sponsored groups, the non-extension groups based on who promoted and was instrumental in
their formation, may considered as sponsored or autonomous groups.

1.9.2 Group Dynamics

Group dynamics in this study refers to the ways in which individuals affect groups and vice versa. It encompasses all the relationships within and outside a group, which influence both group and individual behaviour.

The way external forces influence both individual and group behaviour is referred to as external group dynamics. Internal group dynamics on the other hand refers to the way forces internal to the group affect both individual and group behaviour. The nature of influence these forces bring to bear on a group determines to a large extent whether a group will collapse or be sustainable.

1.9.3 Extension Operational Process

In the provision of extension services the extension agent goes through a lot of activities in order to push his or her programme forward. All the organisational as well as physical activities the extension agent may go through in his or her attempt to push his or her programmes forward will be referred in this study as the extension operational process.

Organisations such as SG 2000, World Vision International, TechnoServe and MOFA may vary in their extension processes if they vary in the type of extension adopted.
1.9.4 Results of Extension Activities

The results of extension activities in this study will imply the impact of an extension action or a process on a target individual or group. Extension action may also be defined as activities done by extension organisations or farmers which have the potential of educating other farmers.

1.9.5 Group Communication

Communication goes on continually in a group as a result of both emotional and physical condition of the members of the group. Communication involves the transmission of a message from a source through a channel to a receiver. In the extension and non-extension farmers' groups the communication process involves the passing on of information from one person to another person, from a person to a group or from a group to a person using a preferred communication channel. Thus speech, body language, facial expressions and even the degree of commitment to the group may be used to communicate one's intentions.
2.0 LITERATURE REVIEW

2.1 Introduction

In this chapter the literature related to the objectives of the study is reviewed. Emphasis shall be laid on group formation, group characteristics, group dynamics and extension operational process.

The main concepts relevant to the study shall also be discussed and explained. Among the concepts to be discussed include "farmers' group" and communication. This chapter shall become the basis for the design of the questionnaires for this study.

2.2 The Group

The term "group" has attracted several definitions from various fields of study, including psychology and sociology. In all the definitions offered, the issues of "agreement", "relation" and "mutualism" stand out.

A group has been defined as

A social system consisting of two or more persons who stand in status and role relationships with one another and possessing a set of norms or values which regulate the attitudes and behaviours of the individual members in matters of consequence to the groups (Klein, 1972: 43).

It has also been described as an enterprise in mutual aid, an alliance of individuals who need each other in varying degrees, to work on certain common problems or goals. An important fact is that
this is a helping system in which the clients need each other as well as the worker. This need to use each other to create helping relationships is a vital ingredient of the group process. It also constitutes a common need over and above the specific tasks for which the group was formed (Gitterman and Shulman, 1986).

In a group both group and individual interest are held. The two kinds of interest may be in harmony or in conflict. Where conflict exists between individuals and the group's interests, one has to decide which of the distinct interests should be dominant (Agassi, 1973). The readiness of the individual to make dominant the group interest is dependent on the degree of conformity between the individual and the group's interest.

2.2.1 Group Formation

Groups are formed as a result of the desire to satisfy some wishes or needs of those who formed them. Group formation may therefore be initiated naturally by the members or may be sponsored by agents working with groups. The result is the formation of autonomous and sponsored groups. It has also been found that a group can emerge under the pressure of a common strong experience.

The manner of group formation may vary from group to group and can be a basis for classification. Sociologists have distinguished between natural and sponsored groups. Natural groups are those formed by the members themselves; sponsored groups are those brought together by a person outside the group's membership. Most natural groups form around causes, traditions, or people. Yet the
purpose for which such groups were originally formed may change in time (Konopka, 1972).

2.2.2 Sponsored Groups

Sponsored groups may be formed:

(i) Because the external organisation or agent sees the need for them. Members of such groups find it difficult to accept them as theirs and the groups may collapse with the withdrawal of the agent or promoter.

(ii) By the use of political influences. The result is the polarisation of the farmers in the locality where it is formed. Since the purpose of such groups is to serve a political interest, farmers on the other side of the political divide find it difficult to join such groups.

(iii) By the use of force with the aim of getting the farmers to conform to an ideology.

In Yugoslavia, a campaign to collectivize agriculture according to the Soviet model was undertaken from 1947-1952. The police and the army participated in that massive effort to force peasant farmers to enter production co-operatives.

The result was that membership in general and specialised co-operatives declined during and after the forced collectivization. These new worker co-operatives were poorly managed and the whole campaign had catastrophic economic results. The government admitted failure and in 1953 made a decree which made it possible for peasant farmers to leave the production co-operatives, taking their land and livestock with them. Almost none of the government-supported co-operatives survived. (Stipetic, 1994).
2.2.3 **Autonomous Groups**

Farmers may constitute themselves into groups because:

(i) They see the group formation as a precondition for them to receive external assistance. Such groups most often fold up when the external assistance is no more coming to them.

(ii) They see the group formation as means through which they can together work towards the realisation of their collective and individual objectives. The farmers through their own initiatives and support from group workers can achieve remarkable successes.

A study in Yugoslavia observed that in the 1980s, the gradual rise of democracy permitted the resurgence of co-operatives which were largely of a grassroots nature. Those new co-operative movements received considerable support from professional circles and politicians. The period 1980-1988 therefore saw a 43% increase in the number of co-operatives and the number of machines held by the co-operatives rose by 50% (Stipetic, 1994).

The mode of formation of a group among others sets the tone for the future of the group. This study looks at the origins of the farmers' groups extension works with as a means of finding out the extent to which the mode of farmers' groups formation has contributed to the collapse or sustainability of the groups.

2.3 **Group Development and Sustainability**

The existence of the possibility for a farmers' group to influence its members makes it an instrument for change in the knowledge, skills and attitudes of people. It is worth acknowledging that the farmers' group will thrive as an instrument
of change in a democratic environment. It is also important that farmers in a group realise and accept the kind of environment the group offers. A group should provide an enabling environment to facilitate the realisation of group and individual objectives. The commitment of group members to the group’s activities is greatly influenced by the extent to which group objectives are realised. Group development and sustainability is also influenced among others by membership commitment to the group.

Effective group work also thrives on the group worker's knowledge of the group as well as the environment where it exists. It has further been indicated of the group worker that:

The assessment of the group and the establishment of objectives (group diagnosis) is one of the first steps in the group work process, parallel to the assessment of and establishment of objectives for each and with each individual member in the group (individual diagnosis) Konopka (1972: 80).

The realisation of the objectives of groups and that of individual group members may not be enough to score successes in group work. It has been realized that

In group work, the group is a system of mutual aid wherein each member assists every other member to meet his needs, to create a maximising environment, and to achieve the group goal. In mutual aid, each member helps the others and expects that he will be helped also (Klein, 1972: XV).

Konopka (1972: 47) has also observed that:

A group becomes a group - more than the sum of its individuals - when it develops a certain relationship, a tie, a force that gives the individual a feeling of belonging. This feeling of belonging is called group bond. Bonds may change in time; it may become stronger or weaker. A group cannot exist for long without a bond.
The literature on group development points out conditions and practices that can make for group development and sustainability. Group promoters and members of groups have the responsibility of establishing the conditions, and encouraging the practices that enhance group development and sustainability. It is expected therefore that the activities of farmers' groups and extension are development and sustainability oriented.

2.4. **Characteristics of Groups**

Groups of almost all theoretical persuasions share, as a fundamental assumption, a view of the group as a social microcosm, a small complete social world, reflecting in miniature all the dimensions of real social environment (Lieberman, 1980: 478).

As in a society a group can have nearly every kind of person with almost every conceivable psychological or social complaint. Hodges Jr. (1971) stressed the view that the group is a small social world when he pointed out that the society and the small group entail a hierarchy of statuses and attendant roles, a complex of norms which are binding on members. Groups also have commonly shared values and a system of sanctions.

A "farmers' group" as a social system possesses social characteristics. The knowledge of these characteristics will promote effective use of farmers' groups. The characteristics include:

(i) Norms and conformity;
(ii) Role;

(iii) Structure and Position;

(iv) Size;

(v) Composition; and

(vi) Life Span.

2.4.1 Norms and Conformity

Groups have laid down or evolved attitudes and patterns of behaviour expected to be held in common by their members.

Norms are shared ideas of appropriate behaviour in a particular social system. Norms do not only influence group members, but are also perceived by each member as being accepted by most others in the system (Lieberman 1980).

A person, thus becomes a group member to the extent that he internalizes and conforms to the significant norms of the group, carries the responsibilities that the group norms place on him, and meets the group's expectations.

The establishment of the right and appropriate norms is essential for the viability and sustainability of groups. The influence of the extension agent is crucial in the establishment and alteration of group norms.

2.4.2 Role

Roles are parts played by individuals toward the formation, development and running of institutions. In a group each member is expected to perform certain functions which may contribute to the
successful running of the group. These functions may or may not be clearly stated.

The provision and maintenance of a positive group atmosphere in which each member has a sense of psychological safety is the essence of the climate-making function (Cragan and Wright 1980). Every group member for the sake of group success must perform this function or role. A positive group atmosphere allows group figures such as critics, analysers and summarisers to perform.

Roles assigned to individuals in a group are determined by the group goals and the personal characteristics of the individual members expected to play the roles. Functional roles may impose such task components as information sending, solution formation and answer sending (Guetzkow, 1968). In assigning roles to individuals in a group cognisance is taken of the age, status and educational level of the individual as well as his contribution to the initiation of the group. The scope of the function to be performed in a particular role position and the group goals also influence the appointment of people to role positions.

Group members perform roles which relate to the positions they occupy. The occupant of a particular position is subjected to "role expectations" from the other group members to engage in actions appropriate to his role (Cartwright and Zander, 1968).

It is important that the function of each member is identified so that he can be helped to perform creditably to ensure that group goals are achieved.
2.4.3 Structure and Position

The way members of a group actually relate to one another within the group is considered as the structure of the group. It must be realized that as a social system members of a group may relate to one another in various respects.

A structure may have four essential building blocks, namely, job description, the structure of working relationships, decision making complexes and operating procedures which are necessary for the realisation of group objectives.

In a group each member has a job to do and some understanding is needed by all members of the content and boundaries of the job. The structure of working relationships describes the hierarchy and the system, expressed by the hierarchy, for distributing power through the group.

Some decisions in groups are made by individuals, while others are made by the group. The scope of decisions to be made by an individual will be contained either in his job description or in his position in the group.

Operating procedures refer to the ways in which decisions are implemented and the standardised means whereby the everyday activities of group life are conducted (Torrington and Weightman, 1985).

The established structure of a group has a great impact on the quality of group life. It consists of the relatively stable instrument which determines the distribution of authority and responsibility, the governing procedures, and the manner in which
co-ordination of activity is affected. (Northen, 1969).

Groups may have formal and informal structures. Many structures may be identified within a group. Thus among others, we may identify the leadership, communication, friendship and power structures.

A knowledge of the various structures within a group the extension agent works with can influence planned strategies to achieve a successful group work.

Position may refer to the placement of individual members within the group structure. One might be associated with certain roles by virtue of his position. A member in leadership position will thus perform leadership roles. The clearer the positions of members of a group to the extension agent, the easier it will be for him to work with the group.

2.4.4 Size

This refers to the number of members in a group. The size of a group has several implications on the functioning of the group.

As the size of a group increases, it is less likely that all individual members will have the same opinion on all issues or speak the same language or be equally informed or be equally resourceful. Size will also affect the opportunity to satisfy individual wants (Napier and Gershenfeld: 1973).

Group size or the number of people in a group can influence group performance either negatively or positively. There seem not to be a general consensus on what may constitute a large or small
group, since a group considered small for one purpose may be considered large for another purpose. It has been observed that:

Optimum size is determined in relation to the nature of interaction desired. The smaller the group the more it demands involvement and the greater is its potential for intimacy (Klein, 1972: 65).

It has also been found that;

A small group has several organisational advantages over larger groups. Typical small groups are self-selected, i.e. the members mutually agree on who will join the group and each member will have considerable information about the other members. Very often this information is obtained through long-term cultural, social or business ties (FAO, 1991: 31).

On the basis of extent of membership interaction, small groups have greater impact than large ones, permit more interactions for each member, and provide a milieu for closeness.

The specific purpose for which a group is organised by the members or a group worker may be a primary determinant of the composition, size, structure and choice of methodology. The specific purpose for which a group is formed or is to be utilized must be absolutely clear in the minds of the group members, group workers and hopefully, also the administrators of the extension agency or organisation (Klein, 1972).

The relationship between purpose of group formation and size was stressed by Tengey (1991: 43). He pointed out that: "The numbers (of people in a group) will depend on the purpose for which the group is being formed".
2.4.5 Composition

This is the individual characteristics of the members of a group, including their distribution and patterning. The behaviour of a group may be affected by the distribution and patterning of member characteristics such as abilities, knowledge, resources, attitudes, interest, personality dispositions, age, sex and social status.

It has been observed that the composition of a group affects its development and direction. In addition it dictates whether the group will move toward mutual aid, disintegration, or parasitism. (Gitterman and Shulman, 1986). It was also noted that group purpose must provide the context for its composition.

2.4.6 Life Span

The period over which a group exists and maintains its members may be referred to as the life span of the group. Groups are formed to serve some purposes and the life span of a group is contingent upon whether the purpose of its formation is a short-term or a long-term one.

2.5 Group Dynamics

Groups are often thought of or viewed as distinct and bounded entities. It has been observed that it is not their static but their dynamic qualities that make them such a significant force (Zauden, 1990: 97).
Group dynamics refers to the ways in which individuals affect groups and vice versa (Henslin and Kendall, 1993). The strength of groups lies in the interdependence and co-operation of the members.

2.5.1 Internal Group Dynamics

Internal group dynamics may be defined to encompass all the activities and interpersonal interactions within a group which produce the forces that put the group in a dynamic equilibrium.

Working in groups has become the preferred strategy in a lot of agricultural as well as other service providing programmes of late. This has been so because of the advantages believed to be inherent in the group extension approach.

Klein has observed that:

Natural groups may be said to have formed when a bond develop among the members to each other and also to a collective entity with which each identifies enough to refer to it as "my group" or "our group". For bond to be possible, the members must have some social hunger, a desire to relate themselves to others (Klein, 1972: 57).

Changes in member behaviour or any subpart of a group can affect group atmosphere and individual member inputs into the group process.

It has been noted that:

The essence of a group is not the similarity or dissimilarity of its members but rather their interdependence. A group can therefore be characterized as a "dynamic whole", meaning that a change in any subpart changes the state of any other part (Sills, 1972: 412).
Group dynamics is therefore determined by the kind and quality of the inputs and interaction among members.

Knowledge of a person can influence his/her attitude towards people or even things. In a group or any social system the attitude of members to one another can be affected by what members know about themselves. The relationship between knowledge and behaviour has been realized and it has been stated that:

One responds to what he knows of the other, not to some externally defined reality. Knowledge of the other, or ignorance of the other, thus is a vital determiner of the nature of the social relationship” (Borgatta and Meyer, 1961: 125).

The origin of a group also does influence group relationships and group behaviour. Groups may be associated with cliques or sub-groups which have the potential to positively or negatively influence the dynamics within a group.

It has been learnt that:

Sub-groups are part of the natural workings of the group process. Rarely will we find a group where all members have exactly the same relationships, qualitatively and quantitatively, with all other members (Konopka, 1972: 43).

Group workers thus need to learn to accommodate and direct all the factors that operate to render the group process a dynamic one.

Since a group can emerge under the pressure of a common strong experience, it is important that group members, despite their experiences, accept themselves to enhance member development and group success. It has been found that "the identification with another group member frees another member to speak up. The group
gives support and a beginning new self-concept" (Konopka, 1972: 40). The extent of membership identification with one another or the level of cohesion within a group greatly affects the internal dynamics of a group.

**Group cohesion.** Group cohesion refers to the degree to which the members of a group desire to remain in the group (Cartwright, 1968). Other researchers have also defined group cohesion as the resultant of all the forces acting on members to remain in the group. These forces are determined by the characteristics of a group as well as those of the membership. These characteristics may include group attractiveness, similarities, type of interdependence among members, and the group goals, activities, environment and size. The structural properties of a group, as well as its leadership and decision making style also greatly influence group cohesion.

When the members of a group have a strong desire to remain in the group, the maintenance of group membership, loyalty of members as well as participation in group activities are all enhanced.

2.5.2 **External Group Dynamics**

A group may relate to individuals, other groups and even larger institutions which are outside the group. Such relationships can influence the state and actions within the group. This is referred to as the external dynamics of the group.
In Sierra Leone's rice production and marketing, a study noted that the most important institutional source of credit has been the co-operative credit scheme, by which societies received loans from the Co-operative Department, for disbursement to their members. It was further observed that the repayment record of the scheme, like that of all institutional sources of agricultural credit, was unsatisfactory and as a result the scheme was stopped in 1967 (Spencer, 1971).

The loan repayment record followed the known unsatisfactory trend probably because of the influence of the other defaulting societies or co-operatives.

Generally, the dynamics that may pertain in a group will be determined among others by the communication and human relations skills employed by the membership, and the level of participation and kind of leadership offered.

It is believed that communication skills when developed for both farmers and extension agents will be able to activate any dormant group components capable of facilitating group dynamics.

2.6 Communication

Communication has been studied as a process identified by the passage of information through the transmission, of more or less meaningful symbols from one individual to another, from one group or representative of a group to another group or representative (Birdwhistell, 1968: 24).
Communication in a group is extremely important and sensitive to group development. The sensitive nature of communication was pointed out by Myers and Myers (1988: 27) when they observed that:

Communication is going on whenever you are in the presence of others, whether or not you intend it to. In that respect communication is inevitable. Communication is for some purposes even if you are not always conscious of your intentions.

In a group communication is highly affected by differences in styles of leadership (Williams, 1984). Leadership style affects group atmosphere. It must also be noted that the larger a group is the more formalized communication becomes. In larger groups therefore there is limited opportunity for individual attention, accessibility to other members and to the worker, and intimate, spontaneous participation (Hodges Jr. 1971).

2.6.1 Ingredients and Effectiveness of Communication

Berlo (1960) has identified the ingredients of communication as:

(i) the source;
(ii) the message
(iii) the channel and
(iv) the receiver.

The source. This is the originator or the one who conceives the idea and has the intention to communicate his idea in order to achieve a certain purpose. The source therefore formulates the
information to be carried to the recipient.

Berlo (1960) lists four kind of factors within the source which can affect the effectiveness of communication. These factors include the source's:

(i) communication skills;

(ii) attitudes;

(iii) knowledge level and;

(iv) position within the socio-cultural system.

Communication skills

The source or the encoder should have the skills of writing or speaking and reasoning. The source should either be able to write, speak, or know the symbols representing things, to be able to and transmit any ideas. The skills of thought or reasoning for a communicator is of primary importance.

Attitudes

The effectiveness of communication greatly depends on the attitudes of the source or communicator towards himself, the subject matter being communicated and the receiver.

Knowledge level

Communicators or communication sources need to be highly knowledgeable in the subject matter to be communicated to make it possible for him to tell the receiver what he needs to know.
Socio-cultural System

For effective communication the source or communicator must be aware of the characteristics of the social system, culture and values of the receiver. This awareness will enable the communicator to select an appropriate set of symbols and channels for his message. In like manner, it is essential for the receiver to be aware of the socio-cultural system within which the source is operating to be able to understand his message clearly.

The awareness of the source and the receiver, of their socio-cultural systems is important because culture and class differences can cause differences in communication and understanding.

The message. The source may put together or select symbols which are structured or arranged in a way as to express and convey the meaning of the source's purpose.

The message code which refers to the set of symbols which is used in the construction of the message can affect effective communication. For effective communication therefore the communicator should select codes or symbols which are familiar and understood by the receiver.

The channel. As an ingredient of communication, the channel provides for continuity in the process of communication after the source conceives the idea and it is encoded and transformed into a message.
The channel is a medium and serves to convey the message from the source to the receiver and back.

Communication can suffer a great set-back if inappropriate channel is used. Among the several channels available for the transmission of messages, the communicator has to choose the one that will make the communication efficient and effective.

It is essential that internal communication is effective and efficient if group members are to participate and help the group achieve its objectives.

It has been indicated that to ensure effective communication, communication sources should give attention to:

(i) Personal obstacles, which are found in both the source and the receiver and include knowledge, attitudes, communication skills and socio-cultural background.

(ii) Situation and resource obstacles which include limitation of budget, time and space (AAACE, 1976: 8).

The receiver. The one who receives the message and decodes it so that the original idea of the source is discovered is the receiver.

The intended or unintended destination or the target of the message is thus the receiver.

The receiver must possess some communication skills such as reading, listening and reasoning to be able to communicate effectively. Furthermore, the receiver's attitude towards himself, the source and the subject matter being communicated also determines how a message is interpreted.
2.7 **Extension Operational Process**

In working with farmers' groups, there exist relationships between extension operational process and group formation, characteristics, dynamics, and performance, as indicated in Figure 1 below. The extension operational process is expected to influence the process of group formation, the moulding of group characteristics and dynamics. This can be done by bringing the knowledge and experiences of the extension agent to bear on these developmental stages of a group through communication.

It is expected that when the right influences are exerted at the various stages of the development of a group, a good foundation and mechanisms for development may be established for the successful performance of a group.

As a group successfully performs a continuous interaction with extension, it is necessary for its growth. Hence the extension process should be capable of ensuring that the group is sustainable. Since group sustainability ensures among others the retention of most of the membership, extension has the opportunity to effect the transfer of technologies to the members of the group. The effects of extension are realised when the extension agent through the extension operational process is able to ensure that technologies and recommendations are applied as required.
The relationships are shown in the figure below.

Fig. 1: Relationships between extension operational process and group formation, characteristics, dynamics and performance.

A group is going to be effective and sustainable to the extent that the extension operational process positively affect the processes of group formation, moulding of group characteristics and group dynamics. A sustainable group taking through a good extension operational process is likely to produce the required results or extension effect that can lead to a change in farming methods and way of life of a farmer.

To evolve a good extension operational process requires managers of extension organisations the ability to manage both materials and human resources efficiently. The managers must also
be knowledgeable to provide direction in organisational policy making. This may include policies on staff training as well as on organisational choice of technologies and operational methodology. Staff commitment to the objectives of the extension organisation and the establishment of effective supervisory procedures are also essential.

As extension relates to farmers' groups, there is the need for the training of both the extension agent and the farmers to enable them to contribute towards the provision of solutions to some of the problems that confront farmers' groups.

In a case study on Poland's co-operatives, training was viewed as a key to alleviating the co-operative movement's endogenous difficulties. The study further explained the need for training and re-training of co-operatives in areas such as member empowerment, economic analysis, improvement of basic operations, expansion and development of new business activities, and human resource management. The study also indicated the need for workshops or seminars for people engaged in the conceptualization of the co-operative movement in Poland. At the level of co-operative management, the study advocated that training should seek not only to transmit methods of efficient management, but also to "un-teach" the old customs and erode old ways of understanding and interpreting the co-operative essence (Hunek, 1994).

In another case study on Hungary, it was observed that in order to implement reforms aimed at radical transformation of co-operatives there is the need for special education for managers of
co-operatives in the theory and operation of co-operatives, and for individuals to develop skills to run private enterprises. It was further learnt that while Hungary's agricultural intelligentsia was well qualified in the technical sense, its greatest weakness was in business skills. (Juhasz, 1994).

The observations made in the two case studies referred to provide a framework as to where extension training should be directed for the extension process to achieve results. In planning for an extension operational process it is important that the relevant needs of both the extension agent and the farmers' are addressed.

A study in Nigeria to assess a programme planned to organise Co-operative Marketing Societies within the period from 1970-1974, observed that to get co-operatives well organised is a tremendous task and certainly cannot be achieved within the 5 years (Anthonio, 1971).

This assessment indicates what enormous task extension agents have on their hands in their attempt to organise and make farmers' groups the focal point of their activities. The observation suggests that a period long enough provides the knowledgeable group promoter the opportunity to adequately educate the group members for a successful group work.
CHAPTER THREE

3.0 METHODOLOGY

3.1 Description of Study Area

The study was conducted in the West Akim district of the Eastern region of Ghana.

The Eastern region lies within three geographical regions, namely the middle belt, the cocoa forest and the food crop belt.

The West Akim district falls within the portion of the region which lies in the cocoa forest. This portion of the region stretches from Mpraeso through Koforidua, Kibi, Asamankese to Oda.

The cocoa forest consist of a series of extended plateau which is interrupted in a number of places by hills and mountains. Farming activities primarily are in the area of cocoa, kola, coffee and oil palm production (Dickson and Benneh, 1988).

Interest in food crop farming is now growing with emphasis on plantain, cocoyam, maize and cassava.

3.2 Population of Study

The population that was studied in order to realise the set objectives of the study included both extension and non-extension farmers' groups and their respective members.

Extension agents or FLS in the sub-districts and extension supervisors in the district, regional and national headquarters of the Department of Agricultural Extension Services were also covered in the study. In addition extension supervisors of Sasakawa
Global 2000, TechnoServe and World Vision International who are involved in farmers' group activities in the district were also covered.

The district had 12 FLS working in the field at the time of the study. The 12 FLS in the district were expected to deal with 182 to 288 farmers' groups, however, at the time of the study they were working with 115 farmers' groups. Out of that number 108 were formed by the extension agents while 7 were not formed by the extension agents.

3.3 Sampling Procedure

The study covered all the twelve FLS in the field as well as the two extension supervisors in the district.

A list of all the twelve operational sub-districts was obtained from the District Agricultural Extension Officer (DAEO). The operational sub-districts were assigned numbers. These numbers were written on pieces of paper, folded to conceal the numbers, and put together in a bowl. Five sub-districts were then picked at random. Out of each selected sub-district three extension farmers' groups were randomly selected, using the procedure described above, from a list of extension farmers' groups submitted by the respective FLS in charge of the sub-districts. Thus 15 out of the 108 extension farmers' groups were selected. Fourteen extension groups were eventually covered as a result of difficulties in assembling members of one group who had all travelled out of the district to engage in diamond winning.
Furthermore all the four non-extension farmers' groups found to be operational at the time of the study were covered.

A total of eighteen extension and non-extension farmers' groups were hence covered in the study. Each group was represented during the interviews by between four and thirty-five group members present at the meeting with research team.

From each extension and non-extension farmers' group interviewed five members were randomly selected from a list of members of the respective groups present at a meeting with the research team. In five extension groups only four of their respective members were present at their meeting with the research team and all the four members were accepted for the interview. A total of eighty-four (84) individual farmers were consequently covered in this study.

To evaluate the factors that influence group membership ties, each FLS was made to select five farmers' groups at random from a list of the farmers' groups he works with. Thus a total of sixty extension and non-extension farmers' groups were assessed by the FLS.

Four extension supervisors from the Department of Agricultural Extension Services, and three others from the other organisations were covered in the study. They included officers in charge of field operations in the district, regional and national headquarters. The inclusion of the other organisations was to provide the researcher the opportunity to capture their perspective on group work.
3.4 Development of Study Instrument

Four sets of questionnaire were developed and used as the instruments for the collection of data in this study. Each questionnaire was designed for a group of respondents. The respondents were the extension supervisors, extension agents, extension and non-extension farmers’ groups, and sampled farmers from both extension and non-extension groups. Some questions in the questionnaire designed for the sampled farmers were adopted from Methods of Social Research by Miller, 1977: 248-255.

The questions were organised in a way as to ensure the responses they bring will make appreciable contributions to the realisation of the objectives of the study and eventually to the answering of the research questions.

With the exception of the questionnaire meant for extension supervisors, all the other questionnaires were categorised into sections namely,

(i) Origin of Farmers' Groups;
(ii) Characteristics of Farmers' Groups
(iii) Internal Group Dynamics;
(iv) Extension Operational Process;
(v) Effect of Extension and
(vi) Background Information.

The questionnaires were read and constructively criticised several times by the supervisor of this study as well as colleague student researchers of the Agricultural Extension Department of the University of Ghana.
University of Ghana. Consequently the questionnaires were reviewed and revised to ensure reliability and validity.

The questionnaires were pretested in Nyamekrom and Addo Nkwanta sub-district in the New Juaben district of the Eastern region of Ghana. This process exposed the flaws of the prepared questionnaires and thus provided the opportunity to effect the necessary corrections before they were taken to the field of study.

3.5 **Data Collection Procedure**

The questionnaire were administered by the student researcher with the help of two research assistants. The research assistants were trained over a two day period to introduce them to the questionnaire and teach them skill of questionnaire administration.

The training sought to help the research assistants to appreciate the research problem and questions and also to understand the objectives of the study. They were also taken through the various questionnaires in order to grasp their meaning and purpose.

The selected samples were contacted by first looking out for the District Agricultural Extension Officer who introduced the researcher and the research assistants to the extension agents or FLS.

A time table was drawn for the meetings between the research team and the extension and non-extension groups. Groups covered were informed of their scheduled meeting dates by the respective FLS. The data collection started from the 20th of November 1995 to
the 18th of January 1996. Though one day was spent on each group, rescheduling of meetings between the research team and some groups due to the Christmas and new year holidays accounted for the prolonged data collection period.

Though the FLS did not do the interviews, they introduced the research team to the farmers' groups they work with. In this way they enhanced the chances of the team to have the co-operation of the farmers' groups. The questions in the questionnaires were interpreted into languages the respondents understood to enable them respond appropriately.

The researcher arranged meetings with the extension supervisors and interviewed them in their respective offices.

3.6 Data Processing and Analysis

The administered questionnaires were read individually to ensure that the questions received the attention of the respondents and were appropriately answered. All the questionnaires administered to the various respondents were accepted for further processing and analysis.

Different coding manuals were developed for the different questionnaires developed for the study.

The coded questionnaires were analysed according to the respondent categories using the Statistical Package for Social Sciences (SPSS). The analysis gave the frequencies as well as percentages of responses given by the various respondents for the different questions that were asked.
Appropriate tables were constructed from the results obtained from the data analysis.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

In this chapter the results and findings of the study are presented.

The main objective of this research is to study the prevailing farmers’ groups and find out if the nature of farmers’ groups and extension interaction with them promote required changes in their farming activities.

The study is based on survey data from questionnaire administered to seven (7) extension supervisors, twelve (12) extension agents, eighteen (18) farmers’ groups, and eighty four (84) farmers sampled from the farmers’ groups.

Apart from the extension supervisors who were drawn either from the district, regional or national headquarters of the organisations involved in the study, the rest of the respondents were drawn from the West Akim district of the Eastern region of Ghana.

4.2 Social Characteristics

Sex

The distribution of respondents involved in the study by sex is presented in Tables 1 and 2 below.
### Table 1: SEX DISTRIBUTION OF EXTENSION AGENTS AND SUPERVISORS

<table>
<thead>
<tr>
<th>Respondent</th>
<th>No. of Males</th>
<th>Percent</th>
<th>No. of Females</th>
<th>Percent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extension Agent</td>
<td>12</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Extension Supervisors</td>
<td>6</td>
<td>85.7</td>
<td>1</td>
<td>14.3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td></td>
<td>1</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

All (100%) the extension agents interviewed were males. The extension supervisors interviewed were made up of 85.7% and 14.3% (Table 1) males and female respectively.

### Table 2: SEX DISTRIBUTION OF INDIVIDUAL FARMERS INTERVIEWED

<table>
<thead>
<tr>
<th>Farmers</th>
<th>No. of Males</th>
<th>Percent</th>
<th>No. of Females</th>
<th>Percent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extension Groups</td>
<td>59</td>
<td>92.2</td>
<td>5</td>
<td>7.8</td>
<td>64</td>
</tr>
<tr>
<td>Non-Extension Groups</td>
<td>16</td>
<td>80</td>
<td>4</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td></td>
<td>9</td>
<td></td>
<td>84</td>
</tr>
</tbody>
</table>

The proportions of male farmers and female farmers in the extension groups together were 92.2% and 7.8% (Table 2) respectively. In the non-extension groups there were 80% male and 20% female farmers.
Size and Sex Distribution of Members of Extension and Non-Extension Groups covered in the Study

Extension groups. Table 3 below shows the size and sex distribution of members of extension groups covered in the study.

Table 3: SIZE AND SEX DISTRIBUTION OF MEMBERS OF EXTENSION GROUPS COVERED IN THE STUDY

<table>
<thead>
<tr>
<th>Size of Group</th>
<th>No. of Males</th>
<th>%</th>
<th>No. of Females</th>
<th>%</th>
<th>No. Of Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>80</td>
<td>1</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>86</td>
<td>1</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td>89</td>
<td>1</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>9</td>
<td>90</td>
<td>1</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>70</td>
<td>0</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>80</td>
<td>2</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>12</td>
<td>86</td>
<td>2</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>12</td>
<td>80</td>
<td>3</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>16</td>
<td>80</td>
<td>4</td>
<td>20</td>
<td>1</td>
</tr>
</tbody>
</table>

Total N = 131 N = 22 N = 14

Five (35.8%) extension groups had no female members (Table 3). Groups with only one female member were four presenting 28.6% of the total number of extension groups interviewed. Three (21.4%) extension groups had two female members. Only one (7.1%) group each had four female members.

Non-extension groups. In Table 4 below the size and sex distribution of members of non-extension groups covered in the
study are presented.

Table 4: SIZE AND SEX DISTRIBUTION OF MEMBERS OF NON-EXTENSION GROUPS COVERED IN THE STUDY

<table>
<thead>
<tr>
<th>Size of Group</th>
<th>No. of Males</th>
<th>%</th>
<th>No. of Females</th>
<th>%</th>
<th>No. of Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>70</td>
<td>3</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>32</td>
<td>20</td>
<td>63</td>
<td>12</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>55</td>
<td>25</td>
<td>45</td>
<td>30</td>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 58</strong></td>
<td><strong>N = 45</strong></td>
<td><strong>N = 4</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the non-extension groups varied in the number of their female membership. The largest number of female members of a group was 30. One (25%) of the groups indicated that it had no female member.

**Age**

Table 5 below shows the age groups of the extension agents interviewed.

Table 5: AGES DISTRIBUTION OF EXTENSION AGENTS

<table>
<thead>
<tr>
<th>Category (Years)</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>31-40</td>
<td>8</td>
<td>66.7</td>
</tr>
<tr>
<td>41-50</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>51-60</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 12</strong></td>
<td><strong>66.7</strong></td>
</tr>
</tbody>
</table>

More than half (66.7%) of the extension agents interviewed were aged between 31 and 40 years. This was followed by 25% of
extension agents aged between 21 and 30 years (Table 5).

Table 6 below also shows the age ranges into which the ages of the farmers have been categorised.

<table>
<thead>
<tr>
<th>Category (Years)</th>
<th>No. of Extension Group Farmers</th>
<th>%</th>
<th>No. Of Non-Extension Group Farmers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-20</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>21-30</td>
<td>21</td>
<td>32.8</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>31-40</td>
<td>18</td>
<td>28.1</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>41-50</td>
<td>16</td>
<td>25</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>51-60</td>
<td>6</td>
<td>9.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>61-70</td>
<td>3</td>
<td>4.7</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>N = 64</td>
<td></td>
<td>N = 20</td>
<td></td>
</tr>
</tbody>
</table>

Extension group farmers. The study shows that 32.8% of the extension group farmers were aged between 21 and 30 years. This was followed by 28.1% and 25% of the farmers who were aged between 31-40 years and 41-50 years respectively. There was less than 10% of farmers in each of the remaining age categories (Table 6).

Non-extension group farmers. Among the non-extension group farmers 35% each of the farmers were aged between 21-30 years and 31-40 years (Table 6). Twenty percent (20%) of the farmers were also aged between 41-50 years. While no farmer was found in the age 51-60 category, the categories 11-20 years and 61-70 each had 5% of the farmers.
Age of Extension and Non-Extension Farmers' Groups

Response of extension agents. The ages of the groups the extension agents work with in the district are presented in Table 7 below.

Table 7: AGE OF EXTENSION AND NON-EXTENSION FARMERS' GROUPS AS INDICATED BY THE EXTENSION AGENTS

<table>
<thead>
<tr>
<th>Age</th>
<th>No. of Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>32</td>
<td>30.2</td>
</tr>
<tr>
<td>1 year</td>
<td>14</td>
<td>13.2</td>
</tr>
<tr>
<td>2 years</td>
<td>47</td>
<td>44.3</td>
</tr>
<tr>
<td>3 years</td>
<td>7</td>
<td>6.6</td>
</tr>
<tr>
<td>4 years</td>
<td>5</td>
<td>4.7</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>N = 106</td>
<td>13.2</td>
</tr>
</tbody>
</table>

Table 7 shows that 44.3% of the farmers' groups extension works with in the district are 2 years old. This is followed by 30.2% and 13.2% of the groups which are less than 1 year old and 1 year old respectively. One percent of the groups is more than five years old.

Response of extension and non-extension farmers' group. The response of extension and non-extension farmers' groups on how long their groups have been in existence are shown in Table 8 below.
Table 8: AGE OF EXTENSION AND NON-EXTENSION FARMERS’ GROUPS

<table>
<thead>
<tr>
<th>Age</th>
<th>Extension Groups</th>
<th>Non-Extension Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>Percent</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>4</td>
<td>28.6</td>
</tr>
<tr>
<td>1 year</td>
<td>6</td>
<td>42.9</td>
</tr>
<tr>
<td>2 years</td>
<td>3</td>
<td>21.4</td>
</tr>
<tr>
<td>3 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>More than 4 years</td>
<td>1</td>
<td>7.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 14</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Extension groups.** 42.9% and 21.4% of the extension groups have been in existence for 1 year and 2 years respectively. Table 8 also shows that while no extension group is 3 years, only 1 (7.1%) is more than 4 years.

**Non-extension groups.** All the non-extension groups varied in the number of years they have been in existence (Table 8). Period of existence of 1 year, 2 years, 3 years and more than 4 years old were each given by one (25%) non-extension group.

**Educational Status**

**Extension agents.** Most (83.3%) of the twelve extension agents had attained certificates in general agriculture from Agriculture colleges while 16.7% had national diplomas in general agriculture from the universities.
One extension agent indicated that he had a diploma in marketing (by correspondence with a private institution) in addition to his certificate in general agriculture.

**Extension supervisors.** The educational status of the seven (7) extension supervisors interviewed varied.

A certificate in general agriculture was the lowest qualification indicated. Three (42.9%) of the extension supervisors had first degrees in agriculture. Two (28.6%) of the extension supervisors indicated that they had second degrees, one was in Agricultural Extension and the other in Soil Science.

Table 9 below shows the level of education of the extension and non-extension group farmers interviewed during the study.

**Table 9: LEVEL OF EDUCATION OF EXTENSION AND NON-EXTENSION GROUP FARMERS**

<table>
<thead>
<tr>
<th>LEVEL OF EDUCATION</th>
<th>Extension Group Farmers</th>
<th>Non-Extension Group Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Formal Education</td>
<td>11 17.2</td>
<td>6 30</td>
</tr>
<tr>
<td>Primary School</td>
<td>5 7.7</td>
<td>3 15</td>
</tr>
<tr>
<td>Middle School</td>
<td>38 59.4</td>
<td>8 40</td>
</tr>
<tr>
<td>J.S.S.</td>
<td>1 1.6</td>
<td>0 0</td>
</tr>
<tr>
<td>Secondary School</td>
<td>2 3.1</td>
<td>2 10</td>
</tr>
<tr>
<td>Commercial School</td>
<td>3 4.7</td>
<td>1 5</td>
</tr>
<tr>
<td>Technical School</td>
<td>3 4.7</td>
<td>0 0</td>
</tr>
<tr>
<td>University</td>
<td>1 1.6</td>
<td>0 0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 64</strong></td>
<td><strong>N = 20</strong></td>
</tr>
</tbody>
</table>
Extension group farmers. Most (59.4%) of the extension group farmers had been educated to the middle school level. This was followed by 17.2% (Table 9) of farmers who had had no formal education. Farmers who had been educated to the primary school level constituted 7.7%. Only 1(1.6%) farmer each had been educated to the JSS and university level.

Non-extension group farmers. Forty percent of the non-extension group farmers had been educated to the middle school, 30% had no formal education while 15% had been educated to the primary school level. The trend is similar to that of the extension group farmers. No farmer in the non-extension group had been educated to the JSS, technical school and the university level.

4.3 Group Size

The sizes of extension and non-extension groups are presented in Table 3 (see page 48) and Table 4 (see page 49) above respectively.

Size of extension groups. Eight extension groups varied in their sizes. Majority (6 representing 43.0%) of the extension groups were made up of 10 people (Table 3). Two (14.4%) of extension groups indicated that their groups had 15 members. Only 1 (7.1) of the extension groups had 20 members.
Size of non-extension groups. All the non-extension groups varied in their sizes. The largest group had 55 members and the smallest group had 6 members (Table 4). One group had 10 members and the other group had 32 members.

4.4 Years of Membership

Table 10 below shows the number of years over which the sampled farmers interviewed have remained as members of their respective groups.

Table 10: YEARS OF MEMBERSHIP AS INDICATED BY EXTENSION AND NON-EXTENSION GROUP FARMERS

<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Extension Group Farmers</th>
<th>Non-Extension Group Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>6</td>
<td>9.4</td>
</tr>
<tr>
<td>1 year</td>
<td>18</td>
<td>28.1</td>
</tr>
<tr>
<td>2 years</td>
<td>26</td>
<td>40.6</td>
</tr>
<tr>
<td>3 years</td>
<td>10</td>
<td>15.6</td>
</tr>
<tr>
<td>4 years</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>3</td>
<td>4.7</td>
</tr>
<tr>
<td>Total</td>
<td>N = 64</td>
<td></td>
</tr>
</tbody>
</table>

Extension group farmers. From the Table 10 above 40.6% and 28.1% of the extension group farmers have been members of their groups for 2 years and 1 year respectively. The table also shows that 15.6% and 4.7% of the farmers have been members of their groups for 3 years and more than 5 years respectively.
Six (9.4%) of the farmers had been members of their groups for less than 1 year.

Non-extension group farmers. Thirty (30), twenty five (25), and twenty (20) percent of the non-extension group farmers had been members of their groups for more than 4 years, 4 years and 3 years respectively.

Ten (10) percent each of the farmers had been group members of their groups for 1 year and two years.

Ten (10) percent of the farmers had been members of their groups for less than 1 year.

4.5 Number of Persons who Joined or Left the Farmers' Groups Over the Past One Year

Five (35.7%) of the extension groups said nobody joined their groups over the past one year. Fourteen people joined one (7.1%) group over the past year.

The 8 (57.2%) remaining groups had between 2 and 10 people joining the groups over the past one year.

One (25%) each of the non-extension groups had nobody, one person, two and sixteen people joining the groups over the past one year.

The numbers of people who left the farmers’ groups over the past one year as indicated by the extension and non-extension farmers’ groups are presented in Table 11 below.
Table 11: NUMBER OF PERSONS WHO LEFT THE EXTENSION AND NON-EXTENSION FARMERS' GROUP OVER THE PAST ONE YEAR

<table>
<thead>
<tr>
<th>No. of Persons</th>
<th>No. of Extension Groups</th>
<th>Percent</th>
<th>No. of Non-Extension Groups</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
<td>71.5</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>7.1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>7.1</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>14.3</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>N = 14</td>
<td></td>
<td>N = 4</td>
<td></td>
</tr>
</tbody>
</table>

Extension groups. Ten (71.5%) extension group pointed out that nobody left the groups over the past one year (Table 11). Two (14.3%) extension groups indicated that five persons left the groups over the past one year.

Fifty percent of the non-extension groups indicated that nobody left the groups over the past one year. One (25%) non-extension group indicated five persons left the group over the past one year.

4.6 Farming Activities Performed Together by Farmers in Groups

The activities performed together by members of farmers' groups on either group or individual farms are presented in Table 12 below. The views of the extension and non-extension group farmers are given.
Table 12: FARMING ACTIVITIES BY FARMERS IN GROUPS AS INDICATED BY THE EXTENSION AND NON-EXTENSION FARMERS' GROUPS *

<table>
<thead>
<tr>
<th>Activity</th>
<th>No. of Extension Groups</th>
<th>%</th>
<th>No. of Non-Extension Groups</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Preparation</td>
<td>10</td>
<td>71.4</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Sowing/Planting</td>
<td>13</td>
<td>92.9</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Weeding</td>
<td>7</td>
<td>50</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Harvesting</td>
<td>12</td>
<td>85.7</td>
<td>4</td>
<td>100</td>
</tr>
</tbody>
</table>

*Multiple Responses

Extension groups. From Table 12, 92.9% of the extension groups pointed out that they do sowing/planting together. It was also indicated that 85.7% and 71.4% of the extension groups do harvesting and land preparation together respectively.

Non-extension groups. All the non-extension groups said that all the activities namely: land preparation, sowing/planting, weeding and harvesting are done together by members of their respective groups (Table 12).

4.6.1 Participation in Joint Farming Activities by Members of Farmers Groups

The general assessment by the extension agents of the proportion of group membership who participate in joint farming activities are shown in Table 13 below.
Table 13: PARTICIPATION IN JOINT FARMING ACTIVITIES BY MEMBERS OF EXTENSION AND NON-EXTENSION FARMERS GROUPS AS INDICATED BY THE EXTENSION AGENTS

<table>
<thead>
<tr>
<th>Proportion of Group Members</th>
<th>No. of Respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Majority</td>
<td>7</td>
<td>58.4</td>
</tr>
<tr>
<td>Minority</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 12</strong></td>
<td></td>
</tr>
</tbody>
</table>

Only 1 (8.3%) of the extension agents observed that all the members of the groups he works with participate in the joint farming activities of their groups (Table 13). One (8.3%) extension agent could not assess on the average the extent to which members of the groups he works with participate in the joint farming activities of their groups.

It was further observed by 58.4% of extension agents that a majority of the farmers participate in the joint farming activities of their groups. Three (25%) extension agents indicated a minority of the farmers take part in the joint farming activities of their groups.

4.7 Major Crops Cultivated by Members of Farmers’ Groups in the West Akim District

The major crops cultivated by individual members of farmers’ groups in the West Akim District of the Eastern region of Ghana are presented in Table 14 below.
### Table 14: MAJOR CROPS CULTIVATED BY MEMBERS OF BOTH EXTENSION AND NON-EXTENSION FARMERS’ GROUPS AS INDICATED BY THE EXTENSION AND NON-EXTENSION FARMERS’ GROUPS *

<table>
<thead>
<tr>
<th>CROP</th>
<th>NO. OF RESPONDENTS</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans</td>
<td>4</td>
<td>22.2</td>
</tr>
<tr>
<td>Cassava</td>
<td>16</td>
<td>88.9</td>
</tr>
<tr>
<td>Cocoyam</td>
<td>1</td>
<td>5.5</td>
</tr>
<tr>
<td>Garden eggs</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Maize</td>
<td>16</td>
<td>88.9</td>
</tr>
<tr>
<td>Oil Palm</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Pepper</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Plantain</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>1</td>
<td>5.5</td>
</tr>
<tr>
<td>Vegetables</td>
<td>1</td>
<td>5.5</td>
</tr>
</tbody>
</table>

*Multiple Response

Sixteen (88.9%) of all the farmers’ groups interviewed indicated separately that cassava and maize are the major crops cultivated by their members (Table 14). Garden eggs and oil palm were each given by 27.8% each of farmers’ groups as major crops they cultivate. Four (22.2%) of the farmers’ groups indicated that beans are the major crop they cultivate.

#### 4.8 Evaluation of Factors that Influence Membership Ties by Extension Agents

The evaluation by the extension agents of the factors that influence membership ties was based on 60 selected extension and non-extension farmers’ groups the extension agents work with. Each extension agent selected 5 groups from his sub-district for the evaluation. Factors such as ownership of common farms, membership of other groups and involvement in other occupations were evaluated.
The analysis showed that 90% of the selected groups did not own a common farm. Members in all the groups had individual farms. Fifty percent of the groups had some of their members as members of other groups. 45% of the groups had none of their members in other group.

In addition the analysis showed that some members of 75% of the groups had other occupations and 18.3% of the groups had none of their members engaged in other occupations.

4.9 Evaluation by the Extension and Non-Extension Group Farmers interviewed of Factors that Influence Membership Ties

The factors evaluated by the farmers included ownership of common farms, membership of other groups and involvement in other occupations.

Eighty eight point nine percent of both extension and non-extension group farmers said members of their groups do not belong to any other groups.

Forty eight point two percent of the farmers interviewed indicated that a minority of their group members had other occupations. In addition 37.3% of the farmers said none of the members of their groups had other occupations.

As to the ownership of individual farms, 91.7% of the farmers indicated that all the members of their groups have their individual farms.
4.10 **Group Qualities**

**Clarity of Group Goals**

It was admitted by 91.7% of both extension and non-extension farmers interviewed that the goals of their respective groups are very clear to them. 4.8% of the farmers said their group goals are clear to them to some extent, and 3.5% of the farmers indicated that the group goals are not clear to them.

**Team Qualities**

The assessment of team qualities by extension and non-extension group farmers interviewed are presented in the Table 15 below.

The opinion of most farmers (76.2%) was that there is very much team work within the farmers' groups. This was followed by 19% of farmers who said there is much team work within the farmers groups.

On tension among group members, 89.3% of the farmers saw no tension among group members. 7.1% of farmers said there is very little tension among the group members.

Most (95.2%) of farmers were of the view that the extent of tension among group members do not interfere with group work.
### Table 15: ASSESSMENT OF SOME TEAM QUALITIES BY EXTENSION AND NON-EXTENSION GROUP FARMERS

<table>
<thead>
<tr>
<th>Team Qualities</th>
<th>Rating</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Much</td>
<td>Much</td>
<td>Little</td>
<td>Very Little</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>%</td>
<td>No. of Respondents</td>
<td>%</td>
<td>No. of Respondents</td>
<td>%</td>
<td>No. of Respondents</td>
</tr>
<tr>
<td>Team Work</td>
<td>64</td>
<td>76.2</td>
<td>16</td>
<td>19</td>
<td>2</td>
<td>2.4</td>
<td>2</td>
</tr>
<tr>
<td>Tension among member</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1.2</td>
<td>2</td>
<td>2.4</td>
<td>6</td>
</tr>
<tr>
<td>Interference of group work by tension</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2.4</td>
<td>2</td>
</tr>
<tr>
<td>Disrespect among members</td>
<td>6</td>
<td>7.1</td>
<td>2</td>
<td>2.4</td>
<td>5</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Respect of members by outsiders</td>
<td>49</td>
<td>58.3</td>
<td>27</td>
<td>32.1</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Eighty two point one percent of the farmers indicated that there is no disrespect among group members (Table 15). On the other hand 7.1% of the farmers said there is very much disrespect among the group members.

It was also indicated by 58.3% of the farmers that there is very much respect of group members by people outside the groups. Another 32.1% of farmers pointed out that there is much respect by people outside the groups for the group members. Conversely, 3.6% of farmers were of the view that group members do not enjoy any respect from people outside the farmers groups.

Independent Group Work

It was the view of 64.3% of the extension and non-extension group farmers that they always do independent work and that group work is not dictated by external forces. On the contrary 32.1% of the farmers also said that they do not always but sometimes do independent work.

External Support

Seventy five percent of the extension and non-extension group farmers interviewed indicated that they do not receive any external financial and material support while 25% of the farmers observed that they sometimes receive external support.
Affiliation to Other Groups

The opinion of 91.7% of the farmers involved in the study was that they are not affiliated to other groups. On the other hand 2.4% and 6.0% of the farmers were of the view that they are always and sometimes affiliated or linked respectively to other groups.

Group Privileges

The general view of the farmers interviewed was that members of both extension and non-extension farmers' groups always receive equal consideration of their opinions and also enjoy equal group privileges.

4.11 Group Dimension Ratings

In Table 16 below are presented the assessment by the extension and non-extension group farmers interviewed of some group dimensions as they find in their groups.

Table 16: GROUP DIMENSION RATINGS AS ASSESSED BY EXTENSION AND NON-EXTENSION GROUP FARMERS

<table>
<thead>
<tr>
<th>Group Dimension</th>
<th>Rating</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Good</td>
<td>%</td>
<td>Good</td>
<td>%</td>
<td>Fair</td>
</tr>
<tr>
<td>Control</td>
<td>1</td>
<td>1.3</td>
<td>50</td>
<td>63.3</td>
<td>28</td>
</tr>
<tr>
<td>Stability</td>
<td>29</td>
<td>34.9</td>
<td>34</td>
<td>41</td>
<td>17</td>
</tr>
<tr>
<td>Intimacy</td>
<td>39</td>
<td>48.2</td>
<td>39</td>
<td>48.2</td>
<td>2</td>
</tr>
<tr>
<td>Participation</td>
<td>8</td>
<td>10.8</td>
<td>58</td>
<td>78.4</td>
<td>8</td>
</tr>
</tbody>
</table>
Control

The majority (63.3%) of the extension and non-extension group farmers concluded after their assessment that group control by the leadership is good in the farmers' groups. Twenty eight (35.4%) of the farmers also said group control is fair (Table 16).

Stability

Forty one percent (41%) of the extension and non-extension group farmers indicated that group stability is good while 34.9% (Table 16) of the farmers rated it as very good.

Intimacy

Group intimacy was rated by 48.2% each of the extension and non-extension group farmers as very good and good (Table 16).

Participation

Participation in group activities was indicated by 78.4% of the extension and non-extension group farmers interviewed as good. Participation was also said to be very good and fair each by 10.8% (Table 16) of the farmers interviewed.

4.12 Farmers' Groups Expectation of their Members

The farmers' interviewed from both the extension and non-extension groups made it known that farmers' groups also have expectations of each of their members. According to the farmers
interviewed in the study, the farmers' groups though have no constitution, they expect their members to:

- have good group membership qualities such as having a good attitude to group meetings and promote love and unity within the group;
- work towards the establishment of a good social set-up;
- work towards the realization of the objectives of the groups and safeguard the names of the groups;
- uniformly apply the groups' ideals; and
- be ready to share their resources.

4.13 Formation of Farmers' Groups

Origin of Farmers' Groups

The extension and non-extension farmers' groups were initiated by different organisations and farmers. Table 17 below gives the views of the extension agents on group promoters in the district.

Table 17: GROUP PROMOTERS IN THE WEST AKIM DISTRICT AS INDICATED BY THE EXTENSION AGENTS*

<table>
<thead>
<tr>
<th>GROUP PROMOTER</th>
<th>RESPONSES</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extension Agent</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>Farmers</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>SG 2000</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>NMP</td>
<td>1</td>
<td>8.3</td>
</tr>
</tbody>
</table>

*Multiple Responses

Extension agents. Table 17 indicates that from the point of view of the extension agents they are the main group promoters in the West Akim district of the Eastern region of Ghana.
The extension agents also indicated that farmers, SG 2000 and NMP also promoted the formation of farmers’ groups in the district.

Table 18 below indicates the views of both extension groups and non-extension groups on group promoters in the district.

Table 18: GROUP PROMOTERS IN THE WEST AKIM DISTRICT AS INDICATED BY EXTENSION AND NON-EXTENSION FARMERS’ GROUPS

<table>
<thead>
<tr>
<th>GROUP PROMOTER</th>
<th>FARMERS’ GROUPS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXTENSION GROUPS</td>
<td>NON-EXTENSION GROUPS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>Percent</td>
<td>No.</td>
</tr>
<tr>
<td>Extension Agent</td>
<td>6</td>
<td>42.9</td>
<td>0</td>
</tr>
<tr>
<td>Farmers</td>
<td>8</td>
<td>57.1</td>
<td>4</td>
</tr>
</tbody>
</table>

Extension and non-extension farmers’ groups. Eight (57.1%) of the extension groups pointed out that the farmers promoted the groups while six (42.9%) of the extension groups also indicated that their groups were promoted by the extension agents (Table 18).

All (100%) the non-extension groups confirmed the extension agents’ assertion that the non-extension groups were promoted by the farmers themselves.

Reasons for Group Formation

The reasons offered by the extension agents, extension and non-extension groups and individual farmers are presented below.

Extension agents. The extension agents indicated that groups are formed to enhance extension operations. This reason was represented by more than half (56.5%) of the responses of the
extension agents.

It was also indicated by 8.5% of their responses that groups are formed so that the interests of the farmers or members could be satisfied. The extension agents further pointed out by 25% of their responses that groups are also formed so that farmers can share ideas and give mutual help to themselves.

**Extension and non-extension farmers’ groups.** The extension groups and the non-extension groups pointed out by 92% and 100% of their responses respectively that groups are formed so that the interests of farmers could be satisfied. Eighty percent of the extension groups further indicated that they formed the groups so that they can learn and also foster unity and progress.

---

**Reasons for Joining Farmers’ Groups**

In response to why they joined their respective groups (though they did not play any pioneering role in the formation of their groups) both extension and non-extension group farmers outlined their reasons as follows:

- the need for help from government, non-governmental organisations and other farmers,

- the ability of the groups to satisfy the interests or needs of their members, and

- the desire to develop and learn new methods of farming.
Criteria for Selecting Group Members

Extension agents. In Table 19 below the factors considered by extension agents in group formation are presented.

Table 19: CRITERIA USED BY EXTENSION AGENTS FOR SELECTING GROUP MEMBERS*

<table>
<thead>
<tr>
<th>Factors</th>
<th>No. of Respon.nts</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of contact farmers</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Hardwork and seriousness of farmers</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Faithfulness of farmers</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Teachability of farmers</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Practising state of farmers</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Soil fertility</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Possession of own land</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Level of education of farmers</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Financial standing of farmers</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Nearness of farms</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Type of crop cultivated</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Nearness of source of inputs to farm</td>
<td>1</td>
<td>8.3</td>
</tr>
</tbody>
</table>

*Multiple Responses.

Twenty five percent (Table 19) of the extension agents indicated that they considered the nearness of the farms of the farmers to be constituted into a group.

The hardwork and seriousness, teachability, and the practising state of farmers were each considered by 16.7% of the extension agents. Other factors were given by the extension agents though each factor was given by only one (8.3%) extension agent. The factors included

- availability of contact farmers
- faithfulness of farmers
- soil fertility
- possession of own lands
- level of education of farmers
- financial status of farmers
- type of crop cultivated, and
- nearness of source of inputs.

**Extension and non-extension group farmers.** Both the extension and non-extension group farmers also considered mainly the personal qualities such as hard work and interest in farming and good personal conduct when accepting new group members.

**Target of Organisational Activities**

All (100%) the extension supervisors admitted that their organisations work with farmers' groups. They pointed out that though they mainly work with farmers' groups, the individual farmer contacts are also encouraged.

The extension supervisors assigned reasons why their organisations mainly work with farmers' groups. The reasons assigned were as follows:

- it is easy to work with groups;
- it ensures increased coverage;
- it is cost effective, and
- the impact of extension programmes is more felt with groups.
The Process of Group Formation

Extension agents. The process by which farmers' groups are formed were identified by the extension agents. The processes identified involved actions outlined as follows:

- contacting the farmers (prospective members) in a snowballing fashion;
- constituting into a group a number of farmers who attend an organised farmers' meeting;
- introducing the idea of farmers' groups to a few farmers who in turn bring in other farmers to future meetings, and
- constituting into a group farmers whose farms are in the same locality or area.

Extension and non-extension group farmers. The extension and non-extension group farmers who were pioneers in their groups outlined the group formation process employed by the farmers as follows:

- spreading the message of group formation to other farmers;
- persuading other farmers to join the groups, and actively participating in the activities that led to the formation of their groups. Such activities included explaining, organising farmers' meetings, contributing in cash and/or in kind to support the membership drive.

The majority (60%) of extension group farmers and a few (29.1%) of non-extension group farmers who were not pioneers in their groups joined the established groups by personally applying for membership. It was further found that forty percent (40%) of extension group farmers and 71.9% of non-extension group farmers were also introduced to the groups by relatives, friends or the
extension agents.

4.14 **Internal Group Dynamics**

**Frequency of Group Meetings**

The frequency at which the farmers' groups meet on their own are presented in Table 20 below.

<table>
<thead>
<tr>
<th>Frequency of Meeting</th>
<th>Farmers’ Groups</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extension Group</td>
<td>Non-Extension Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>Percent</td>
<td>No. of Respondents</td>
</tr>
<tr>
<td>Once in 1 week</td>
<td>2</td>
<td>14.3</td>
<td>1</td>
</tr>
<tr>
<td>Twice in 1 week</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Once in 2 weeks</td>
<td>1</td>
<td>7.1</td>
<td>-</td>
</tr>
<tr>
<td>Once in 3 weeks</td>
<td>1</td>
<td>7.1</td>
<td>-</td>
</tr>
<tr>
<td>Once in 1 month</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Once in 2 months</td>
<td>4</td>
<td>28.6</td>
<td>1</td>
</tr>
<tr>
<td>Once in 3 months</td>
<td>5</td>
<td>35.8</td>
<td>-</td>
</tr>
<tr>
<td>Once in 6 months</td>
<td>1</td>
<td>7.1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 14</strong></td>
<td></td>
<td><strong>N = 4</strong></td>
</tr>
</tbody>
</table>

Extension groups. The predominant meeting frequencies of once in 2 months and once in 3 months were given by 28.6% and 35.8% of the extension groups respectively. Two (14.3%) extension groups indicated that they meet once in a week while only one (7.1%) extension group pointed out that the members meet once in 2 weeks (Table 20).
Non-extension groups. Fifty percent of the non-extension group meet twice in 1 week. The longest meeting interval given by a non-extension group was one month.

**Group Leadership**

**Presence of group leaders.** The views of extension agents and the farmers' groups on the presence of formal leaders in the farmers' groups are presented in Table 21 below.

<table>
<thead>
<tr>
<th>Response</th>
<th>Extension Agents</th>
<th>Farmers' Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Respond-</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>ents</td>
<td></td>
</tr>
<tr>
<td>Presence of formal leader</td>
<td>10</td>
<td>83.3</td>
</tr>
<tr>
<td>Absence of formal leader</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td>N = 12</td>
<td>N = 14</td>
</tr>
</tbody>
</table>

**Extension agents.** It was the view of most (83.3%) of the extension agents that the groups they work with have formal leaders. Two (16.7%) of the extension agents indicated that their groups do not have formal leaders.

**Extension and non-extension farmers' group.** All the extension groups and the non-extension groups pointed out that they have leaders.
Mode of Selection of Group Leaders

The study revealed that both the extension agents and the farmers' groups interviewed realized that farmers groups have means of selecting their leaders. The opinions of the extension agents and the farmers' groups are given in Table 25 below.

<table>
<thead>
<tr>
<th>Mode of Selection</th>
<th>Extension Agents</th>
<th>Farmers' Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>%</td>
</tr>
<tr>
<td>Members vote to elect them</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>By unanimous decision</td>
<td>4</td>
<td>33.3</td>
</tr>
<tr>
<td>Appointed by extension agent</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Appointed by a few elders and the extension agent</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Don't know</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 12</strong></td>
<td></td>
</tr>
</tbody>
</table>
Extension agents. The selection of group leaders by unanimous decision of the group was indicated by 33.3% (Table 22) of the extension agents interviewed. Twenty-five percent (25%) of the extension agents also said members of the group vote to elect their leaders. While 16.7% of the extension agents said leaders are appointed by the extension agents, another 16.7% had no idea of the mode of selection of group leaders.

Extension groups. Most (64.3%) of the extension groups said the selection of leaders is done by unanimous decision making. This is followed by 21.4% of the extension groups who pointed out that group members vote to elect the leaders. Fourteen point three (14.3%) of the extension groups said the extension agent appoints the leaders (Table 22).

Non-extension groups. Voting by group members as a means of selecting group leaders was given by 75% of the non-extension groups. Twenty five percent (Table 22) of the non-extension group indicated that leaders are selected by unanimous decision making.

Frequency of Change of Leaders

The frequency at which group leaders are changed is presented in Table 23 below.
Table 23: FREQUENCY OF CHANGE OF LEADERS AS INDICATED BY THE EXTENSION AGENTS AND FARMERS’ GROUPS

<table>
<thead>
<tr>
<th>Period of Change</th>
<th>Extension Agents</th>
<th>Farmers’ Groups</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>%</td>
<td>No. of Respondents</td>
<td>%</td>
</tr>
<tr>
<td>1 year</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7.2</td>
</tr>
<tr>
<td>2 years</td>
<td>1</td>
<td>8.3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3 years</td>
<td>1</td>
<td>8.3</td>
<td>3</td>
<td>21.4</td>
</tr>
<tr>
<td>5 years</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No such arrangement</td>
<td>8</td>
<td>66.7</td>
<td>10</td>
<td>71.4</td>
</tr>
<tr>
<td>Don’t know</td>
<td>2</td>
<td>16.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 12</strong></td>
<td></td>
<td><strong>N = 14</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Extension agents.** Most (66.7%) of the extension agents were of the opinion that the groups they work with have no arrangements for periodic change of leadership. Two (16.7%) of the extension agents did not know how often leaders are changed in the groups they work with (Table 23). One (8.3%) extension agent each said leaders are changed every 1 year and 2 years.

**Extension groups.** Of the fourteen (14) extension group interviewed, 10 (71.4%) said they had no arrangements through which changes in group leadership are effected. One (7.2%) and three (21.4%) of the extension group indicated that leaders are changed every 1 year and 3 years respectively (Table 23).
Non-extension groups. One (25%) each of the non-extension groups indicated that leadership change every 2 years, 3 years, 5 years and that the group has no arrangement for change of leadership.

Group Members' Expectation of the Leaders

The study revealed that farmers of both extension and non-extension groups have certain expectations of their leaders. These expectations were outline as follows:

- to lead them to obtain inputs and loans;
- to ensure a successful group;
- to ensure that the farming activities of group members are profitable;
- to lead them to acquire technical knowledge in agriculture;
- to offer social and financial support to members of the groups;
- to lead group members to market their farm produce and help resolve their family conflicts.

Communication Among Farmers

Table 24 below gives the opinions of the farmers on the means by which farmers communicate their ideas to their groups.
Table 24: MEANS OF COMMUNICATION OF IDEAS BY EXTENSION AND NON-EXTENSION GROUP FARMERS TO THEIR GROUPS

<table>
<thead>
<tr>
<th>Means of Communication</th>
<th>Extension Group Farmers</th>
<th>Non-Extension Group Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Discussions with leader(s)</td>
<td>12</td>
<td>18.8</td>
</tr>
<tr>
<td>Discussions with individual members</td>
<td>3</td>
<td>4.7</td>
</tr>
<tr>
<td>Group discussions</td>
<td>49</td>
<td>76.5</td>
</tr>
<tr>
<td>Total</td>
<td>N = 64</td>
<td></td>
</tr>
</tbody>
</table>

Extension group farmers. Most (76.5%) of the extension group farmers pointed out that they communicate their ideas to other members of their groups during discussion at group meetings (Table 24).

Twelve (18.8%) of the farmers also indicated that their ideas are communicated to other group members through discussions with one or more of the leaders of their groups. Discussion among the individual group members was also given by 4.7% of the farmers as a means of communication.

Non-extension group farmers. Eighty percent (Table 24) of the non-extension group farmers indicated that they communicate their ideas to their members during their group discussions. Ten percent of farmers each pointed out that they communicate their ideas through discussions with the leaders and the individual members.
Communication and group activities. The farmers also indicated that in situations where times are not fixed for a series of activities lined up for the group, members are informed of group activities by the leaders, group porters or through other group members.

Getting Activities of Farmers' Groups on Course

The extension agents observed amongst the farmers' groups what the group leaders and the members do to ensure that their activities are on course. They outlined the following actions;

leaders monitor and supervise group work;
leaders and members consult the extension agent for advice on their activities;
members inform and discuss what they want to do with the leaders;
members learn current information on technologies from the extension agent, and
members adhere to the instructions given by the extension agent.

4.15 Extension Delivery Process

Process Adopted by Extension Agents in Working with Non-Extension Farmers' Groups

The extension agents identified the steps they take in the process of working with non-extension farmers' groups. The steps they identified were as follows:

making an initial contact with the groups;
honouring the invitations of the groups for help;
- introducing themselves to the groups;
- beginning field meetings with the groups;
- finding out their plans; and
- telling the groups what they have to offer.

Getting the Activities of Farmers' Groups on Course

Seventy five percent (75%) of the responses of the extension agents pointed out that the extension agents ensure that the activities of both extension and non-extension groups are on course through follow-up discussion, monitoring and supervision of the work of the group.

The results also indicated that 18.7% of the extension agents ensure that group activities are on course by educating the farmers to know the right things to do.

A few (6.3%) of the responses of the extension agents stood for the fact that they ensure that group activities are on course by following the group’s plan of work.

Arrangement of Group Meetings by Extension Agents

Table 25 below shows the means employed by the extension agents the arrangement group meetings with both extension and non-extension farmers’ groups.
Table 25: ARRANGEMENT OF FARMERS’ GROUP MEETINGS AS INDICATED BY THE EXTENSION AGENTS

<table>
<thead>
<tr>
<th>Means of Arrangement</th>
<th>No. of Extension Agents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fix date at last meeting</td>
<td>5</td>
<td>41.7</td>
</tr>
<tr>
<td>According to visit schedule</td>
<td>5</td>
<td>41.7</td>
</tr>
<tr>
<td>Send message a week before the meeting</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Inform them 3 days before the meeting</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 12</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Extension agents.** Five (41.7%) of the extension agents indicated that the next meeting is arranged during the last or previous meeting. Another 41.7% also indicated that meetings are arranged according to their visit schedules. Other means such as sending a message a week before the meeting and informing the groups three days before the meeting were each given by 8.3% of the extension agents.

**Arrangement of group meetings by extension agents as indicated by the extension and non-extension farmers’ groups.** The methods employed by the extension agents in the arrangement meetings with the farmers’ groups are presented in Table 26 below.
<table>
<thead>
<tr>
<th>Means of Arrangement</th>
<th>Extension Groups</th>
<th>Non-Extension Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Fix date at last</td>
<td>1</td>
<td>7.1</td>
</tr>
<tr>
<td>meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>According to visit</td>
<td>4</td>
<td>28.6</td>
</tr>
<tr>
<td>schedule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send message 1 week</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>before the meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send message 1 day</td>
<td>5</td>
<td>35.7</td>
</tr>
<tr>
<td>before the meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call farmers on</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>arrival</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmers invite him</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Meeting fixed for a</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>particular day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>N = 14</td>
<td></td>
</tr>
</tbody>
</table>

**Extension groups.** Four (28.6%) out of the fourteen (14) extension groups indicated that the extension agents arrange meetings with them according to their visit schedules. Table 26 also shows that 35.7% and 14.3% of the extension groups were of the view that to arrange for meetings, the extension agents send message one day before the meeting and one week before the meeting respectively. Two (14.3%) extension groups said the extension agents call the farmers' on arrival. Only one (7.1%) extension group also indicated that meetings are fixed at the last meeting.

**Non Extension Groups.** One (33.3%) each of the non-extension groups pointed out that the extension agent is invited for meetings, and meetings are fixed for a particular day (Table 26).
Another 33.3% of the non-extension groups indicated that the extension agents send a message a week before the meeting.

**Frequency of Group Meetings with Extension Agents**

The frequency of group meetings as indicated by the extension agents and the farmers' groups are given in Table 27 below.

<table>
<thead>
<tr>
<th>Frequency of Meetings</th>
<th>Extension Agents</th>
<th>Farmers' Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>%</td>
</tr>
<tr>
<td>Once in 1 week</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>Once in 2 weeks</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>Once in 1 month</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Once in 2 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twice in 1 week</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>Thrice in 1 month</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>Irregular</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N = 12</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Extension agents.* Most (58.3%) of the extension agents pointed out that they arrange meetings with the farmers' group once in two weeks (Table 27). This was followed by 25% of extension agents who said they meet the farmers' groups once a week. Two (16.7%)
extension agents indicated that they meet the farmers' groups once a month.

**Extension groups.** None of the extension groups indicated that the extension agents arrange meetings with them once in every 2 weeks. It was indicated by 35.7% of the extension groups that the extension agents arrange meetings with the farmers' groups once in 1 month. Two (14.3%) of the extension groups described the frequency of meeting as irregular. Meeting frequencies of once in a week, twice in a week and thrice in a month were each given by 14.3% of the extension groups.

**Non-extension group.** The frequencies at which the extension agents arrange meetings with the non-extension groups varied for all of them. While 25% of the non-extension groups also describe the meeting frequencies as irregular the meeting frequencies of one in 1 week, once in 2 weeks and once in 1 month were each given by 25% of the non-extension groups (Table 27).

**Lessons Taught by Extension Agents to Farmers' Groups and Farmers’ Group Leaders**

The Table 28 below gives the views of extension agents and the farmers on the lesson taught by the extension agents to farmers' groups and farmers' group leaders.
Table 28: ASSESSMENT OF LESSONS TAUGHT BY EXTENSION AGENTS*

<table>
<thead>
<tr>
<th>Lessons</th>
<th>To Farmers’ Groups (Extension Agents’ Assessment)</th>
<th>To Group Leaders (Extension Agents’ Assessment)</th>
<th>To Farmer’ Groups (Farmers’ Assessment)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>%</td>
<td>No. of Respondents</td>
</tr>
<tr>
<td>Technical Group enhancing</td>
<td>10</td>
<td>32.3</td>
<td>7</td>
</tr>
<tr>
<td>Importance of farmers’ fora</td>
<td>20</td>
<td>64.5</td>
<td>0</td>
</tr>
<tr>
<td>No lessons</td>
<td>1</td>
<td>3.2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Multiple Responses

Assessment by extension agents of lessons taught to farmers’ groups. Lessons taught to farmers’ groups according to the extensions agents were mostly (64.5%) aimed at group enhancing. This was followed by 32.3% of technical lessons (Table 28).

Assessment by extension agents of lessons taught to group leaders. All (100%) of the responses of the extension agents who responded to the issue suggested that the extension agents taught technical lessons to the leaders (Table 28).
Assessment by extension and non-extension groups of lesson taught to farmers' group. From Table 28 above the farmers indicated that the lessons taught to the farmers' groups by the extension agents were mostly (72.7%) technical. Lessons that aimed at group enhancing constituted 25.6% of the responses. Two (1.7%) of the farmers said no lessons were taught to the farmers' groups by the extension agents.

Achievement of Organisational Objectives

To achieve the objectives of their organisations the extension supervisors interviewed pointed out that their organisations among others seek to improve upon the skills of their staff and beneficiary farmers. This they do through training of the staff and the farmers.

The organisations also seek to organise their staff as well as facilitate the visits made by the staff to farmers.

Topics for Monthly Training Sessions as indicated by Extension Agents

The topics handled during the monthly training sessions organised by the Eastern regional headquarters of the Department of Agricultural Extension Services for its frontline staff (FLS) for the years 1994 and 1995 are presented in Table 29 and Table 30 below respectively.
Table 29: TOPICS FOR MONTHLY TRAINING (1994) AS INDICATED BY EXTENSION AGENTS*

<table>
<thead>
<tr>
<th>Topic</th>
<th>No. of Respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil fertility and water conservation</td>
<td>9</td>
<td>75.0</td>
</tr>
<tr>
<td>Vegetable production</td>
<td>10</td>
<td>83.3</td>
</tr>
<tr>
<td>Root, tuber and plantain production</td>
<td>10</td>
<td>83.3</td>
</tr>
<tr>
<td>Common pests and diseases of some common crops</td>
<td>11</td>
<td>91.6</td>
</tr>
<tr>
<td>Pest and diseases of livestock</td>
<td>9</td>
<td>75.0</td>
</tr>
<tr>
<td>Wet and dry season feeding of small ruminants</td>
<td>12</td>
<td>100.0</td>
</tr>
<tr>
<td>Post harvest management</td>
<td>10</td>
<td>83.3</td>
</tr>
<tr>
<td>Protein-energy malnutrition</td>
<td>9</td>
<td>75.0</td>
</tr>
<tr>
<td>Rural water and sanitation</td>
<td>11</td>
<td>91.6</td>
</tr>
<tr>
<td>Stocking of fish ponds</td>
<td>12</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Multiple Responses
Table 30: TOPICS FOR MONTHLY TRAINING (1995) AS INDICATED BY THE EXTENSION AGENTS*

<table>
<thead>
<tr>
<th>Topic</th>
<th>No. of Respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro-forestry</td>
<td>8</td>
<td>66.6</td>
</tr>
<tr>
<td>Plantain production</td>
<td>12</td>
<td>100.0</td>
</tr>
<tr>
<td>Agro-forestry technologies</td>
<td>8</td>
<td>66.6</td>
</tr>
<tr>
<td>Safe use of agro-pesticides</td>
<td>11</td>
<td>91.6</td>
</tr>
<tr>
<td>Sugarcane production</td>
<td>11</td>
<td>91.6</td>
</tr>
<tr>
<td>Pest and diseases of rural poultry</td>
<td>11</td>
<td>91.6</td>
</tr>
<tr>
<td>Post harvest losses (LGB)</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>Post harvest pests</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Review of crib construction</td>
<td>8</td>
<td>66.6</td>
</tr>
<tr>
<td>Weaning and weaning foods</td>
<td>12</td>
<td>100.0</td>
</tr>
<tr>
<td>Post harvest fish handling</td>
<td>11</td>
<td>91.6</td>
</tr>
<tr>
<td>Farm records keeping</td>
<td>10</td>
<td>83.3</td>
</tr>
<tr>
<td>Appraisal of monthly training</td>
<td>5</td>
<td>+41.6</td>
</tr>
</tbody>
</table>

*Multiple responses
+Topics mentioned by less than 50% of the extension agents shall be rejected.

With the exception of "Post Harvest Pest" and "Appraisal of Monthly Training" in Table 33 above, the extension agents or the frontline staff (FLS) agreed that all the topics listed in Tables 32 and 33 were handled during the monthly training sessions.

Subject matter areas. The summary of the topics handled during the monthly training session into subject matter areas is presented in Tables 34 and 35 below.
Table 31: SUMMARY OF MONTHLY TRAINING TOPICS (1994)

<table>
<thead>
<tr>
<th>SUBJECT MATTER AREA</th>
<th>NO. OF TOPICS</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Production</td>
<td>4</td>
<td>40.0</td>
</tr>
<tr>
<td>Animal Production</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>WIAD</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>Agricultural Engineering</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>Fisheries</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>Extension</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

In 1994 no topic in extension education was handled during the monthly training sessions (Table 31). Forty percent of the topics handled were in crop production. This was followed by 20% each of topics in animal production and WIAD.

Table 32: SUMMARY OF MONTHLY TRAINING TOPICS (1995)

<table>
<thead>
<tr>
<th>SUBJECT MATTER AREA</th>
<th>NO. OF TOPICS</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Production</td>
<td>5</td>
<td>41.8</td>
</tr>
<tr>
<td>Animal Production</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>WIAD</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Agricultural Engineering</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>Fisheries</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Extension</td>
<td>1</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Topics in crop production were the most (41.8%) covered. This was followed by agricultural engineering under which the topics handled constituted 25% of the total number of topics handled during the year (Table 32).

Only one (8.3%) of the topics covered in 1995 was in extension education. Topics in animal production, WIAD and fisheries also each constituted 8.2% of the topics handled in 1995.
Meetings with Group Leaders

Seventy five percent (75%) of the extension agents indicated that they do not organise separate meetings with the group leaders.

Activities done with group leaders. The 3 (25%) of the extension agents who organise separate meetings for the group leaders pointed out an activity each they do with the leaders. The activities mentioned include:

- checking of group records;
- training, and
- meetings to discuss group activities.

Reasons for Engaging the leaders Separately

The extension agent pointed out that they engage the leaders separately because:

- they can teach other group members;
- their training will make easy the introduction and transfer of technologies, and
- they have influence on the groups and their involvement whips up the confidence of the members in the extension agent.

Communication

Teaching methods used by extension agents. The extension agents gave the means used to transfer information to the farmers’ groups. These are presented in Table 33 below.
Table 33: TEACHING METHODS USED BY EXTENSION AGENTS*

<table>
<thead>
<tr>
<th>Teaching Methods</th>
<th>No. of Respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meetings</td>
<td>4</td>
<td>33.3</td>
</tr>
<tr>
<td>Group lectures</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Field days</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Group demonstrations</td>
<td>5</td>
<td>41.7</td>
</tr>
<tr>
<td>Passing information through group leaders</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Teaching sub-groups who teach others</td>
<td>1</td>
<td>8.3</td>
</tr>
</tbody>
</table>

*Multiple Responses

Group demonstrations, meetings and lectures are the main methods used by the extension agents to communicate to the farmers, and they were given by 41.7%, 33.3% and 25% (Table 36) of extension agents respectively.

Organisation of field days and the transmission of information through group leaders were each given by 16.7% of the extension agents.

Extension and non-extension farmers' groups. The observations of both the extension and non-extension farmers' groups on the methods used by the extension agents to teach them are presented in Table 34 below.
Table 34: **TEACHING METHODS USED BY EXTENSION AGENTS AS INDICATED BY THE FARMERS' GROUPS***

<table>
<thead>
<tr>
<th>Means of Communication</th>
<th>Extension Groups</th>
<th>Non-Extension Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Respondents</td>
<td>Percent</td>
</tr>
<tr>
<td>Field days</td>
<td>1</td>
<td>7.1</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>Lectures</td>
<td>8</td>
<td>57.1</td>
</tr>
<tr>
<td>Supply of literature</td>
<td>1</td>
<td>7.1</td>
</tr>
</tbody>
</table>

*Multiple Responses*

Table 34 above shows that all the extension groups as well as the non-extension groups gave the use of demonstrations as one of the teaching methods used by the extension agents. 57.1% of the extension groups and 50% of the non-extension groups further mentioned the use of lectures as a teaching method used by the extension agents.

**Toward Organisational Improvement**

Despite the achievements the extension organisations can list to their credit, the extension supervisors indicated the need for improvement in the way and the conditions under which their organisations function. The supervisors suggested the need for:

- the communication skills of their staff to be improved;
- adequate staff motivation;
- accommodation (residential) in the sub-districts;
- training programmes and manuals to be brought to the
level of farmers;

activities at the sub-districts to be adequately financed;

extension Organisations to link farmers' groups to financial institutions;

the extension of the duration of projects when needed to ensure that farmers have fully received the impact of projects;

a mode of credit delivery system which will ensure that credit is given to those who need it, and;

a workable loan repayment machinery to be designed and put in place.

4.16 Effects of Extension Activities

Extension agents. The views of extension agents on the effects of extension activities on the farmers' groups are presented in Table 35 below.

Table 35: EFFECTS OF EXTENSION AS INDICATED BY EXTENSION AGENTS

<table>
<thead>
<tr>
<th>Effects</th>
<th>No. of Respondents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased production levels</td>
<td>4</td>
<td>33.3</td>
</tr>
<tr>
<td>Improved storage practices</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>Improved handling of livestock</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Improvement in crop production skills</td>
<td>8</td>
<td>66.7</td>
</tr>
<tr>
<td>Improvement in organisational skills</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Raised income levels</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Improved nutritional and health status</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>Improved handling of social responsibility</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Appreciation of record keeping</td>
<td>1</td>
<td>8.3</td>
</tr>
</tbody>
</table>

*Multiple Responses
Most (66.7%) of the extension agents observed that farmers' group members as a result of extension activities have improved upon their crop production skills. It was the view of 33.3% of the extension agents that farmers' group members have increased their production levels (Table 35).

Twenty five percent (25.0%) each of the extension agents also pointed out that there have been improvement in storage practices as well as improvement in nutritional and health status of farmers' group members. It was indicated by 16.7% of the extension agents that farmers' groups have raised their income levels.

Farmers' groups. There are areas in group life in which the farmers' groups receive help from the extension agents. The areas identified by the farmers' groups are presented in Table 36 below.
Table 36: AREAS IN WHICH FARMERS' GROUP RECEIVED HELP AS INDICATED BY FARMERS' GROUPS*

<table>
<thead>
<tr>
<th>Areas</th>
<th>Extension Groups</th>
<th>Non-Extension Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Acquisition of knowledge in crop</td>
<td>7</td>
<td>50</td>
</tr>
<tr>
<td>production technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of obtaining credit and</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>inputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition of knowledge in</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>storage technologies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased production levels</td>
<td>9</td>
<td>64.3</td>
</tr>
<tr>
<td>Reduction in post harvest losses</td>
<td>1</td>
<td>7.1</td>
</tr>
</tbody>
</table>

*Multiple Responses

**Extension groups.** It was indicated by 64.3% (Table 36) of the extension groups that they have received help from the extension agent in the area of increased production levels. This was followed by half (50%) of the number of extension groups interviewed who suggested that they have received help in the area of acquisition of knowledge in crop production technologies. Two (14.3%) of the extension groups said they can easily obtain credit and input.

**Non-extension group.** Fifty percent of the non-extension groups indicated that they have received knowledge in crop production
technologies. Another 50% of the groups pointed out that they had raised their production level. One (25%) each was of the view that they had been helped to easily obtain credit and inputs, and that they had acquired knowledge in storage technologies (Table 36).

Effects of extension agent/farmers' group interaction. Table 37 below shows the views of farmers on the effects of extension agent/farmers' groups interaction on their farming activities.

Table 37: EFFECTS OF EXTENSION AGENT/FARMERS' GROUPS INTERACTION AS INDICATED BY FARMERS*

<table>
<thead>
<tr>
<th>Effects</th>
<th>Extension Group Farmers</th>
<th>Non-Extension Group Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Increased production levels</td>
<td>41</td>
<td>66.2</td>
</tr>
<tr>
<td>Improved farming methods</td>
<td>14</td>
<td>22.6</td>
</tr>
<tr>
<td>Improved storage techniques</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Minimized weed control by weeding</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Farm Labour required is reduced</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Improvement in plant population</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Reduced pest and disease attacks</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No effect</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Multiple Responses

Extension group farmers. The extension group farmers indicated by most (66.2%) of the responses that the result of farmers' groups' interaction with extension agents is that the farmers have increased their production levels (Table 37).
Fourteen (22.6%) of the responses of the farmers also pointed out that farmers have improved upon their farming methods as a result of their groups' interaction with the extension agents.

Two (3.2%) each of the responses of the farmers suggested minimized weed control by weeding, reduced farm labour requirement, improvement in plant population and reduced pest and disease attacks as some of the effects of extension agent/farmers' groups interaction.

Non-extension group farmers. Forty-one (70.5%) of the responses of the non-extension group farmers indicated that they had increased their production level as a result of their interaction with the extension agents. 11.8% of the responses of the farmers pointed out they had been able to reduce pest and diseases attacks. Two (11.8%) of the responses of the farmers indicated that they had improved their farming methods (Table 37). Only one (5.9%) of the responses of the farmers pointed out that their interaction with the extension agent had produced no effect on their farming activities.

4.17 Effective Extension Delivery - Views of Farmers' Groups

The farmers' groups suggested some actions the Department of Agricultural Extension Services should take in order to make extension delivery effective. These suggested actions are presented in Table 38 below.
Table 38: SUGGESTIONS MADE BY EXTENSION AND NON-EXTENSION FARMERS' GROUPS FOR EFFECTIVE EXTENSION DELIVERY*

<table>
<thead>
<tr>
<th>Actions Required of DAES</th>
<th>Extension Groups</th>
<th>Non-Extension Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide farm machinery for hiring/on credit</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Re-introduce subsidies on inputs</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Supply inputs directly to farmers</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Arrange financial support for farmers</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Help find market for farmers' produce</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Intensify training of farmers on non-traditional crops</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Provide support in the running of farmers' groups</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Help farmers improve on animal production</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

*Multiple Responses

Extension groups. Most (57.1%) extension group were of the opinion that the DAES should supply inputs directly to farmers (Table 38). Fifty percent of extension groups also suggested the need for the DAES to arrange for financial support for farmers. It was also indicated by 14.3% of the extension groups that it is required of the DAES to provide support in the running of farmers' groups. Two (14.3%) of the extension groups suggested the re-introduction of subsidies on agricultural inputs. Other suggestions namely the provision of farm machinery on credit or for hiring, helping farmers to improve on animal production and market their produce were each given by 7.1% of the extension groups.
Non-extension groups. The need for the DAES to provide support in the running of farmers' groups and to supply inputs directly to farmers were each expressed by 50% of the non-extension groups (Table 38). Other actions required of the DAES namely, to re-introduce subsidies on inputs, to arrange financial support for farmers, and to intensify training of farmers on non-traditional crops were each given by 25% of the non-extension groups.

4.18 Characteristics that Enhance Extension Agent/Farmers' Groups' Interaction

Presented in Table 39 below are the opinions of farmers on the extension agents' characteristics that enhance their interaction with farmers' groups.

Table 39: CHARACTERISTICS THAT ENHANCE EXTENSION AGENT/FARMERS' GROUPS INTERACTION AS INDICATED BY FARMERS*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Extension Group Farmers</th>
<th>Non-Extension Group Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Ability to provide solutions to problems</td>
<td>18</td>
<td>28.1</td>
</tr>
<tr>
<td>Good personal relation characteristics</td>
<td>51</td>
<td>79.7</td>
</tr>
<tr>
<td>Dedication to duty</td>
<td>20</td>
<td>31.3</td>
</tr>
<tr>
<td>Ability to encourage farmers to share ideas</td>
<td>3</td>
<td>4.7</td>
</tr>
<tr>
<td>Ability to advise on most agricultural issues</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Good teaching and demonstrating abilities</td>
<td>4</td>
<td>6.3</td>
</tr>
</tbody>
</table>

*Multiple Responses
Extension group farmers. Good personal relation characteristics such as friendliness, politeness, and respectfulness of the extension agent were indicated by 79.7% of the extension group farmers as factors that enhance extension agent/farmers' groups interaction (Table 39). In addition, the extension agent's dedication to duty and his ability to provide solutions to the problems of the farmer were also given by 31.3% and 28.1% of extension group farmers respectively, as factors that enhance the interaction. Furthermore, 6.3% of the extension group farmers were of the view that the extension agent's ability to teach and demonstrate what is being taught can enhance the interaction.

Non-extension group farmers. Fifty-five percent of non-extension group farmers also stressed that the personal relation qualities of the extension agent enhance his interaction with farmers' groups (Table 42). The extension agents' dedication to duty and his ability to provide solutions to the problems of the farmers were also mentioned by 15% and 10% of the non-extension group farmers respectively, as factors that enhance interaction. In addition, 10% of the non-extension group farmers pointed out that the ability of the extension agent to advise them on varied agricultural issues enhances their interaction.
4.19 **Working Experiences with Farmers' Groups**

The extension supervisors were requested to share some lessons they have learnt through their field experiences with farmers' groups. Presented below are the lessons they shared. They indicated that:

- in certain areas e.g. the Upper West Region, people tend to work together;
- working with groups in "spoilt" environments (i.e. where inputs had previously been supplied free of charge) tend to be difficult when inputs are no more free;
- some farmers, mostly the illiterate ones consider loans as gifts;
- new groups are always being formed;
- farmers' groups whose membership grow perennial crops tend to be sustainable;
- it is difficult to sustain most programmes with farmers' groups when the group promoter is withdrawn;
- some groups accept technologies when there is some attached credit facility; and
- groups with common binding factors such as tribe, religion, and education tend to be successful.

4.20 **Failure or Success of Farmers' Groups**

All (100%) the extension supervisors were of the opinion that some of the groups their organisations had worked with had failed before. The failures were attributed to certain external as well as internal group factors. The factors were given as follows:

- unfair land tenure arrangements;
- inadequate support from extension agencies;
- inability or failure of groups to pay their loans or...
the wrong notion that a group is formed to receive loans or credit;

lack of continuity in the provision of credit;

migration of some group members in search of other jobs or more fertile lands;

- lack of understanding of groups objectives by members;
- lack of commitment to group objectives by members;

failure of members to comply with group regulations;

non-involvement of members in drawing up group plans;

unfavourable weather and inputs cost; and

unfaithfulness and poor leadership on the part of group leaders.

All (100%) the extension supervisors not withstanding the failure of some of the groups agreed that some of the groups had been successful. The success of those groups were also attributed to some external as well as internal group factors such as:

extension motivation;

availability of inputs and financial support from banks, NGOs and middlemen who prefinance the farming activities;

successful results from introduced technologies;

the understanding that credits or loans are not always from government and must be paid;

availability of revolving loans;

good understanding and commitment to group objectives by members;

compliance with group regulations by members;

provision of mutual help by members;
hard work by members;
involvement of members in drawing up group plans;
openness in group dealings; and
good and responsible leadership.
CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

In this chapter, the implications and explanations of the findings of the study are offered. The chapter looks at the nature of farmers' groups in the West Akim District and its implications for effective extension delivery. It also assesses extension interactions with and the development and sustainability of the farmers' groups with the view to finding out their capability to promote positive change in the farming activities of members of the farmers' groups.

5.2 Origin of Farmers' Groups

The findings of the study indicate that extension deals with both autonomous and sponsored groups in the West Akim district. In a few cases both extension agents and farmers laid claim to the promotion of a few extension farmers' groups. This probably indicates that the farmers were allowed to participate and contribute in the promotion of the groups to such an extent which gives the farmers a sense of ownership. In sponsored groups such phenomenon should be encouraged so that the farmers consider the groups as theirs since such a conception positively influences membership commitment which is vital for the success of farmers'
Kemp (1971) has observed that regardless of how groups are formed, members need the freedom to develop and use their own ideas and to work out their own processes and plans. Stipetic's (1994) observation of the success of co-operatives which were largely of a grassroots nature in Yugoslavia in the 1980s points out the inherent potential of participatory group organisation.

In the formation of farmers' groups it is important that both group promoters and members have the desire to satisfy some common needs. There was strong agreement among both the extension and non-extension farmers' groups and the extension agents on the objectives for the formation of the groups. This weak agreement can be a source of conflict between the extension agents and the farmers' groups. The extension agent may thus pursue objectives which may be in conflict with those of the farmers' groups and the situation may call for compromise and harmonisation of objectives. Agassi (1973) has that where conflict exists between individuals and the group's interest one has to decide which of the distinct interests should be dominant.

It is imperative that the reasons for the formation of farmers' groups should be collectively and individually beneficial to the groups and their members.
5.3 Nature of Farmers' Groups

5.3.1 Criteria for the Selection of Group Members

Both the extension and the non-extension farmers' groups in forming their groups considered only the farmers' conduct, seriousness and interest in farming in accepting the membership. These considerations were in variance with the wide range of issues considered by the extension agents. The variation observed probably indicate the issues extension agents and farmers' groups by virtue of their experiences deem worthy of consideration in the selection of group members. The mutual understanding of the issues raised by the extension agents and the farmers' groups will enhance group work.

5.3.2 Gender and Group Work

Generally, the extension and non-extension groups had both male and female members, though a few of the groups had no female members. In most of the mixed groups the females constituted a small fraction of the membership. The extension staff is hence working with more males than females. This may be the result of the ease with which the predominantly male extension agents of the DAES work with male farmers. Social and cultural barriers can limit the extent to which the male extension agent can closely work with female farmers. The situation can inhibit the zeal with which female farmers can get involved in farmers' groups. The activities of such male dominated groups are
not likely to address female concerns and this can be a disincentive for the females to maintain their membership. Other female farmers may find it unattractive to join the farmers’ groups. Extension eventually loses the opportunity to provide technical support directly to a large number of females engaged in agriculture.

In a few cases where the female population was appreciable in a group it was found that apart from farming the group provided social assistance to its members. These included financial support during marriage, child naming and funerals. It needs therefore to be realised that apart from the primary purpose of a farmers’ group, secondary purposes are possible. It is important that other purposes of farmers’ groups are identified and given the appropriate attention by extension. The realisation of other group objectives may contribute significantly to group sustainability.

The dominance of male farmers in both the extension and non-extension groups should provide the male extension agent the opportunity to communicate and relate better than with the female farmers since less socio-cultural impediments will be encountered.

It has been observed by Mensah (1997) that women contribute about 70% of the food production in Ghana. That level of contribution of women suggests the extent of their involvement in farming. With the low level of involvement of women in the extension and non-extension farmers’ groups, extension’s objective
to reach as many farmers as possible might be achieved but only with regards to the male farmers who contribute only 30% of food production. Female farmers can be effectively reached only when there is a conscious change in extension strategy to bring the focus of extension on the female farmer. Apart from gender issues, extension methods adopted in any strategy should of necessity give consideration to the varied levels of education observed among the farmers in the extension and non-extension groups.

5.3.3 Implications of Group Size

Group size greatly affects inter-personal relations within the group. Small groups have the potential to foster inter-personal communications among group members. In small groups, the members have the opportunity to relate more closely and frequently with each other than in large groups. In a democratic environment such close and frequent interaction promotes the establishment of inter-personal bonds and the development group values. This agrees with the view expressed by Berelson and Steiner (1964) that the more people associate with one another under conditions of equality, the more they come to share values and norms and the more they come to like one another. Group members may develop intimate relations, and agree to pursue common objectives and participate in group activities. In small groups, members can be motivated by their own
objectives and the spirit of voluntarism and commitment can be high. Small groups also enhance learning by the members. This agrees with the view that in a situation where group members are free or forced to talk about new knowledge to real audience it is easier for the learner to assimilate new knowledge (Pringle and Freedman, 1990).

The extension agents appear to have influenced greatly, the sizes of the extension groups. When the purpose of a group, the desired level of membership interaction and the communication methods intended to be used are known by the extension agent, the sizes of farmers’ groups can be influenced to enhance group performance.

5.3.4 Age Relations

The majority of the extension and non-extension group farmers as well as the extension agents were within the 21-50 year bracket. In such an instance there is the chance for peer group interaction which can positively influence group and leadership style. It also provides opportunity for the extension agent to communicate with ease and forge good working relationships with farmers in the groups.
5.4 Working with Farmers' Groups

5.4.1 Education and Successful Group Work

The educational status of an extension agent is paramount in assessing his/her ability to perform. The educational status of the extension agents puts them in a position to be able to teach new technologies to farmers.

All the extension agents have attained at least a certificate in general agriculture from their pre-service training. This notwithstanding, there is the need for regular in-service training for extension field staff. In-service training sessions can offer the staff the opportunity to collectively find solutions to emerging field problems and understand newly developed technologies. The provision of appropriate in-service training contributes immensely to the effectiveness and efficiency of the extension agent in the performance of his/her duties. When extension agents are not regularly updated in their knowledge they are unlikely to provide updated advice to the farmers they deal with.

The purpose of extension is not only to teach technologies but also to ensure their adoption and also assist farmers' groups in their other activities. The monthly in-service training conducted by extension over the study period did not provide enough information on group work for the extension agents. This is evidenced by the lessons taught during the monthly training sessions. While technical issues were addressed, core lessons that
can improve the extension delivery skills of the extension agents received minimal attention. The extension agents through the monthly training sessions were not adequately informed on the group concept extension adopted as a strategy to reach as many farmers as possible. A similar situation was observed by Juhasz (1994) in a study in Hungary in which it was learnt that while Hungary's agricultural intelligentsia was qualified in the technical sense, its greatest weakness was in business skills. By virtue of the varied duties expected to be performed by the group worker, Batten (1962) has pointed out that the group worker needs a wide range of knowledge and skills. He has to be able to stimulate, educate, inform and convince people who may initially be apathetic or skeptical. He has to be able to win the confidence of local leaders, heal their rivalries, and get them to work together for their common good. The group worker has to be skilled in working with groups and with the whole community.

5.4.2 Meetings and Communication in Group Work

Meetings between extension agents and the extension and non-extension farmers' groups provide the opportunity to communicate extension messages. The expectation of DAES under the National Agricultural Extension Project (NAEP) was that extension meetings with farmers' groups would be arranged forthnightly. The extension agents and both the extension and non-extension groups were of the
view that extension agent/farmers' group meetings have not been arranged according to the forthnightly visit schedules. This may be attributed to the lack of adequate logistics, group organisational abilities of the extension agents and lack of social acceptance of the visit schedule concept. The involvement of extension agents and farmers is hence vital in the design of extension strategies. The other modes used in the arrangement of meetings need to be studied further to provide alternative means of arranging group meetings. The inability of the extension agents to regularly arrange meetings with the farmers' groups suggest their inability to create regular teaching and learning opportunities for the farmers' groups.

Both the extension and non-extension groups confirmed that lectures, demonstrations and field days are the communication methods used by the extension agents in the delivery of extension messages. The successful use of those teaching methods should consider the educational status of the farmers as well as the social acceptability of the methods in the farmers' community. There can be differences in the understanding of extension messages on technologies given to the farmers due to the variations in their perceptions due to their different educational levels. The extension agent should be careful to reach each farmer at his/her own level if the messages are to be understood. The extension agent therefore needs to be versatile and skillful in communication and evaluation of social situations.
5.4.3 Extension Agent and Farmers’ Group Meetings

Extension agents and farmers’ group meetings provide opportunity to communicate extension messages. The expectation of extension under the national Agricultural Extension Project (NAEP) was that extension meetings with farmers’ groups would be arranged fortnightly. The extension agents and both the extension and non-extension groups were of the view that extension agent-farmers’ group meetings have not been arranged according to the fortnightly visit schedules. This may be attributed to the lack of commitment on the part of the extension agents and social acceptance of the visit schedule concept. The involvement of extension agents and farmers are hence vital in the design of extension strategies. The other modes used in the arrangement of meetings need to be studied further to provide alternative means of arranging group meetings. The inability of the extension agents to regularly arrange meetings with the farmers’ groups suggest their inability to create regular teaching and learning opportunities for the farmers’ groups.

5.4.4 Initial Extension and Farmers’ Group Contact

Though extension works with both extension and non-extension farmers’ groups in the same way, initial extension contact with the two types of groups occur at different stages of the groups’ life. While extension comes into contact with the extension groups at the
formative stages, it comes into contact with the non-extension groups after they are formed by the farmers. The extension agent therefore cannot directly influence the development of group norms and values in the non-extension farmers’ group. The opportunity to influence the development of group norms and values in the extension farmers’ groups on the other hand exists for the extension agent. This calls for the adoption of different and tested approaches in working with the different farmers’ groups especially during the initial contacts with the groups. Though the study indicated that the extension agents work with the extension and non-extension groups in different ways during their initial contacts with the groups, the extension agents did not seem to have mastered the procedure for dealing with the non-extension groups.

5.4.5 Expectations in Group Work

The expressed expectations of the extension and non-extension farmers’ group members of their leaders, and the expectations of both the extension and non-extension groups of their members, give an indication of the realisation of the place of roles in group work. When group members know their roles and responsibilities they have the opportunity to do what is expected of them and can positively contribute to the success of their respective groups.

Farmers also expect extension agents to play certain roles in groups to ensure successful group work. The characteristics
required of the extension agent by farmers for a successful group work demonstrate the need for social and technical acceptability by his/her clientele. Egan(1973) summed the situation up when he noted that the extension agent must in fact be a model, adding that modelling demands a good deal of tact.

5.5 Development and Sustainability of farmers' Groups

5.5.1 Development of Farmers' Groups

Farmers' groups may be developed to fulfil either a short term or a long term purpose. The input made into the development of a group by group promoters depends on the expected purpose and life span of the group. In groups that are formed to serve a particular purpose over a short term the focus of extension activities is often on ad hoc measures that will enhance the realisation of the set objectives. Groups that are meant to serve long term purposes cannot be handled in the same way.

Group development has to do with the nurturing of a group into maturity. Group members are taught to understand each other and learn to stay together as a group. Lessons on conflict handling and issues of leadership among others go into group development.

Extension efforts have not been focused on group development probably because most extension supervisors and extension agents lack knowledge and have not fully understood the group concept. The lessons taught by the extension agents to the farmers' group
leaders and the members gave a lot of attention rather to technical issues. This indicates the lack of knowledge and understanding of the group concept by the extension agents. It also shows that the abilities of a well developed and sustainable farmers' group to solve the field problems of farmers have not been realised by the extension agents.

5.5.2 Sustainability of Farmers' Groups

The non-extension groups unlike the extension groups could sustain themselves beyond three years and on the basis of this may be considered more sustainable than the extension groups. Further evidence of sustainability among the non-extension groups is their ability to retain the majority of their members for three years and more. The sustainability of the non-extension groups may be attributed to their mode of formation, clarity of group goals to farmers, and the positive group atmosphere as shown by the assessment of team qualities and group dimension ratings by the farmers.

Both the extension and non-extension farmers' groups retained significant numbers of their membership over the past one year. This implies that the disintegration of the groups when it occurs may be spontaneous and involve large numbers of the groups' membership. Though the farmers in the extension groups were clear on their goals and also assessed as positive the group atmosphere,
their groups were not as sustainable as the non-extension groups. This may be attributed to the lack of participation by the majority members of the extension groups during group formation and inadequate extension support.

The extension and non-extension groups could participate in all the major farming activities. The extension groups have not existed long enough for the members to understand participation in joint activities. The understanding with which group members participate and react to eventualities in joint activities determines the influence of participation on group sustainability. This implies that extension agents should not only be satisfied with the physical participation of group members in group activities. Extension agents should also help members of farmers' groups to understand that group work demands among other things time, tolerance, fellow-feeling and transparency. The positive effect of participation in joint activities did not influence group sustainability as it did the non-extension groups.

The majority of the farmers cultivated similar crops, a practice which should enforce the clarity of their goals. It must be pointed out that clarity of group goals can positively influence group sustainability only when the group has the capacity to regularly review group goals to address the needs and problems of members. Inadequate group meetings can limit communication opportunities through which group ties and bonds are developed. Group sustainability can also be adversely affected in the long-run
when extension agents become dictators in the selection and change of group leaders. It is important that both extension and non-extension farmers’ group are supported to select and change their leaders in a manner socially deemed democratic and acceptable to the groups.

The experiences of the extension supervisors indicate among others that the failure or success of a group can be attributed to the process of group formation and function as well as the quality of extension support.

The sustainability of a group gives extension and the farmers’ groups the opportunity to derive the benefits of group work which include among others, cost effectiveness, high coverage, mutual learning and strong inter-personal relationships. The development of a group is essential for its sustainability. When a group is supported to develop its life and manage its situations well, group members are likely to accept the group and be committed to it.

5.6 Effectiveness of Extension Delivery

In line with the meaning of extension the extension agents and both the extension and non-extension farmers’ groups indicated various improvements the group members have had in their farming operations as a result of their interaction with extension. The extension and non-extension farmers’ groups also realised the aspects of their farming business in which they received help from
extension. In all the cases the extension and non-extension farmers’ groups were not unanimous on the kinds of improvements they have had. Some members of the extension and non-extension farmers’ groups may not have taken part in some lessons taught by the extension agents because of irregular attendance to meetings. If the records of lessons delivered are not properly kept, some groups may also miss some lessons. This may also explain the lack of unanimity on the kinds of improvement and help received by the members of the extension and non-extension farmers’ groups.

The effectiveness of extension delivery to a large extent depends on the policies of extension organizations. It also depends on how acceptable extension agents are to the communities in which they work. Both the extension and non-extension farmers’ group observed that the policies of extension organizations and the characteristics of extension agents can greatly affect the effectiveness of extension delivery. Unfavourable policies and socially unacceptable characteristics of an extension agent can lead to the refusal of some farmers to participate in activities organised by the extension agent. This realisation by the farmers implies that farmers might have some contributions to make towards the formulation of viable extension policies. The adoption of a practical bottom-up approach to extension policy formulation can give attention to the views of farmers.
CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The conclusions and recommendations of the study are presented in this chapter. The conclusions of the study are drawn based on the results and findings of the study. The conclusions seek to provide answers to the research questions of the study. In the recommendations the researcher suggests options to address the problems and practices that are found to militate against effective and efficient group work by extension organizations.

6.2 Conclusion

6.2.1 Nature of Farmers’ Groups and Effective Extension Delivery

The purpose of the use groups by extension organizations in extension delivery among others is to ensure that as many farmers as possible come into direct contact with the extension agent. Through the contacts and activities with the extension agent, farmers acquire knowledge in farming technologies. Farmers can increase their production through learning when the other factors of production are available.
The effective and efficient transfer of knowledge to farmers in groups depends a great deal on the nature of the groups. The study revealed that in the West Akim district, the DAES deals with both autonomous and sponsored groups. There were fewer autonomous groups than those sponsored by the DAES. It was also observed that the reasons for forming or joining groups given by both the extension and non-extension group farmers varied in most respects from the reasons given by the extension agents for promoting farmers' groups. Both the extension and non-extension farmers' groups were also found to have low levels of female participation, small group sizes and memberships aged between 20-50 years and of varied educational levels. These group characteristics among others determine the work to be done by the extension agent if the farmers in the groups are to benefit from extension activities. The more the variation in age, educational level and purpose for joining the group, the more the re-organisation and re-orientation work required of the extension agent.

On the basis of factors such as the ages of groups, the number of years members maintained their membership and the existing group dynamics, the non-extension groups were found to be more sustainable than the extension groups.

The sustainability of a group provides the extension agent the opportunity to plan and teach series of lessons which together may be desired to bring about changes in the knowledge and attitudes of farmers to enhance production. When farmers' groups cannot retain
their members, some or even all group members are not likely to wholly benefit from some extension activities. This can retard progress in extension programmes.

It may be concluded that the nature of farmers' groups influence effective extension delivery.

6.2.2 Extension Interaction and Change in the Farming Activities of Farmers' Groups

It has been observed that the educational status and gender distribution of extension agents and farmers affect the quality of extension interaction with farmers' groups. In extension delivery, the contacts between extension agents and farmers either individually or in groups provide teaching and learning opportunities for the extension agent and farmers respectively.

The study revealed that the extension agents of the DAES working in the West Akim district are not able to arrange and meet farmers' groups according to the visit schedules as envisaged under the T & V System being practised by the DAES. The inability of the extension agents to do the required number of visits implies that they were unable to create the required teaching and learning opportunities.

The monthly training sessions for the extension agents was skewed towards technical topics to the neglect of sociological issues. The extension agents for their lack of knowledge in group work could not adequately help farmers' groups during their
formation and development. The acceptance and adoption of technical messages from the extension agent may be influenced by the manner in which he handles a group and the confidence the group has in him.

Though the study identified some results of extension activities with farmers’ groups, the present system of extension delivery has not achieved its potential to support farmers’ groups.

6.3 Recommendations

Based on the findings of the study, the following recommendations may be made toward the improvement of group work by the DAES and other extension organizations.

- The needs of farmers should always be identified by extension and serve as the basis of group formation and group work.
- Farmers should be encouraged to form groups while the extension agents act as facilitators and help the groups to develop qualities that will ensure their success.
- Extension agents should be trained to grasp the principles of group work to enable them offer the needed support to farmers’ groups.
- The extension agents need to develop personal qualities and relate to their communities in ways that are socially acceptable.
- In-service training must be designed by extension organizations to meet the established needs of extension agents.
- Extension supervisors should be made to understand the policies and strategies of their organizations in order to offer the appropriate supervision that will lead to the realisation of the policy and strategy objectives of
their organizations.

Extension organizations need to consider the policy formulation procedures of their organizations and give a practical attention to the bottom-up approach to policy formulation.

The DAES should identify and intensify their work with non-extension groups and closely study the factors that account for their sustainability.
REFERENCES


124


Women, Agricultural Intensification, and Household 
Food Security, Mexico City: Sasakawa Africa 
Association.


University Press.

Sciences, Vol. 5. New York: Crowell Collier and 
Macmillan, Inc.

Sierra Leone. In: I.M. Ofori. Factors of 
Agricultural Growth in West Africa. Proceedings of 
an International Conference Held at Legon, April. 
1971. ISSER, University of Ghana, Legon.

the Co-operative Structure in Selected Eastern 
European Countries. FAO, Rome.

Development (A Ghana Experience). Accra: Assemblies


APPENDIX 1

Questionnaire: Agricultural Extension Agent

(Tick or write the appropriate answer(s))

A: ORIGIN OF FARMERS' GROUPS.

1. How many operational areas are there in this sub-district? ________.

2. How many groups do you work with? ________.

3. List the operational areas in your sub-district and provide the required information in the table below.

<table>
<thead>
<tr>
<th>Operational Area</th>
<th>Number of Groups</th>
<th>Groups formed by Agent</th>
<th>Groups not formed by Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Who formed those groups?

__________________________  _______________________

______________________________________________________________________
5. Why were the groups formed?

6. What factors were considered in forming the farmers' groups?

7. What distinctions can you make between the farmers' groups you work with?

B: CHARACTERISTICS OF FARMERS' GROUPS.

8. How long have the groups been in existence (Q.2)? Give the numbers that come under the following age classifications.

   More than 5 years ______ 4 years - 5 years ______.
   3 years - 4 years. _______ 2 years - 3 years ______.
   1 year - 2 years. _______ 1 year and less. ______.

9. Of the farmers groups you work with, indicate the following.

   a. Average group size. ______.

   b. Average female population. ______.

10. Which of the following farmers' groups are identifiable in this sub-district.
Autonomous groups ____  Sponsored groups ____
Short-span group ____  Long-span groups ____

11. Choose five (5) of the farmers' groups you work with and in the table below, provide the information about the farmers' groups chosen.

<table>
<thead>
<tr>
<th>NAME OF GROUP</th>
<th>Ownership of Common farm(s)</th>
<th>Membership of Other groups</th>
<th>Other occupations</th>
<th>Ownership of individual farms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. List the farmers' groups chosen in Q 11 and indicate which activities members do together in the table provided below.

<table>
<thead>
<tr>
<th>NAME OF GROUP</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. What fraction of members take part in those activities (Q.12)?

All ______
Majority _____
Minority _____

C : INTERNAL GROUP DYNAMICS.

14. Do the farmers' groups have leaders?

Yes. _____  No. _____  (If 'No', go to Q.21)

15. If 'Yes', how are the leaders chosen?

Appointed by FLS or Extension Agent. _________
Members vote to elect them. _________
The out-going leaders elect them. _________
I don't know. _________
Others (Specify). ____________________________
16. How often are the leaders changed?
   Every :1 year. ____  2 years. ____  3 years. ____
   4 years. ____  Others ________________

17. Apart from your activities with the group as a whole, do you engage in any other separate activities with the leaders?
   Yes. ____  No. ____  (If 'No' go to Q.21).

18. If 'Yes' what activities do you engage in with the leaders?

19. What topics are dealt with during the activity times?

20. Why do you engage the leaders in those activities?

21. Outline some of the things you teach your groups to help them to function well.
D : EXTENSION OPERATIONAL PROCESS.

22. Do you work with groups that were not formed by you? Yes. _____. No. _____. (If 'No' go to Q.24)

23. If 'Yes', what process(es) do you go through before you start working with such groups?

24. Why do you work with the groups?

25. How do you use the group to transfer information to the members?

26. How are groups formed in this sub-district?

27. Compare and contrast your experiences in working with groups formed by you and those not formed by you in the table below?
<table>
<thead>
<tr>
<th>Qualities</th>
<th>Formed by you</th>
<th>Not formed by you</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiative</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td>Stability</td>
<td>Large</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very small</td>
<td></td>
</tr>
</tbody>
</table>

28. Are there differences in the way you work with groups formed by you and those not formed by you? 
Yes. ______. No. ______.

29. If 'Yes', specify.

__________________________

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30. What do the group members do to ensure that their activities are always on track?

________________________________________________________________________

31. What do you also do to ensure that the group activities are always on track?

________________________________________________________________________

32. How often are you able to meet with the farmers in their groups?

Once in 2 weeks. ____.
Once in 3 weeks. ____.
Once in 1 month. ____.
Once in 2 months. ____.
Others (Specify) __________________________

33. How do you arrange your meetings with the farmers groups?

Fix date at last meeting. ____.
According to visit schedule. ____.
Send message 1 week before the meeting. ____.
Send message 2 weeks before the meeting. ____.
Call them on arrival at the meeting place. ____.
Others (Specify) __________________________

34. How do the farmers' groups get you informed of their problems?

________________________________________________________________________

________________________________________________________________________

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35. How often do the farmers' groups inform you of their problems?

36. Why do you think the farmers come to inform of their problems?

37. What topics have you covered during your monthly training sessions from last year to date?

<table>
<thead>
<tr>
<th>1994 MONTH</th>
<th>TOPIC</th>
<th>1995 MONTH</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td></td>
<td>January</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td></td>
<td>February</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td></td>
<td>March</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td></td>
<td>April</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>May</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>June</td>
<td></td>
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<tr>
<td>July</td>
<td></td>
<td>July</td>
<td></td>
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<tr>
<td>August</td>
<td></td>
<td>August</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>September</td>
<td></td>
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<tr>
<td>October</td>
<td></td>
<td>October</td>
<td></td>
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<tr>
<td>November</td>
<td></td>
<td>November</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td></td>
<td>December</td>
<td></td>
</tr>
</tbody>
</table>
E : EFFECTS OF EXTENSION.

38. In which aspects of the lives of the farmers' groups do you think your activities have been beneficial? For each give reason(s) why:

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>REASON</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F : BACKGROUND INFORMATION.

39. Sub-District: __________________________

40. Name of Respondent(Optional): __________________________

41. Sex : Male. ____  Female: ____

42. Age : ________

43. Marital Status. : Single. ____ Married. ____ Separated. ____ Divorced. ____ Widow. ____ Widower. ____

44. Highest Academic Qualification: __________________________
APPENDIX 2

Questionnaire: Farmers' Groups

(Tick or write the appropriate answer(s))

A: ORIGIN OF FARMERS' GROUPS.

1. Who formed your group?
   ___ Agric. Extension Officer.
   ___ Farmers themselves.
   ___ Agent of an NGO.
   ___ Other governmental agencies.
   ___ Others(Specify). ____________________________.

2. Why was the group formed?
   ___ We wanted to receive credit/loan.
   ___ The extension officer asked us to form it.
   ___ The NGO working with us asked us to form it.
   ___ We wanted to help ourselves.
   ___ Others(specify). ____________________________.

B: CHARACTERISTICS OF FARMERS' GROUPS.

3. How long has the group been in existence?
   ___ Less than 1 year.
   ___ 2 years.
   ___ 3 years.
   ___ 4 years.
More than 4 years.

4. What is the total membership of the group? ________.

5. How many of the membership are females? ________.

6. What portion of your membership has joined other group(s) before?
   ___ All.
   ___ Majority.
   ___ Minority.
   ___ None.

7. How many people joined the group over the past year? ________.

8. How many people left the group over the past year? ________.

9. What benefits do you get from the group? (List them.)
   _____________________________________________
   _____________________________________________

10. How long do you stay together as a group in the course of the year?
    ___ Less than 3 months.
    ___ Between 3 and 6 months.
    ___ Between 6 and 9 months.
    ___ Between 9 and 12 months.

11. What are the major crops you cultivate as a group?
    _____________________________________________
    _____________________________________________

12. Which of the following activities do you do together as
a group?

___ Land preparation.
___ Sowing or planting.
___ Weeding.
___ Harvesting.
___ Others (Specify) ____________________________.

13. Do you have leaders? Yes ___. No ___. If 'No', go to Q. 16.

14. If 'Yes', fill the table below:

<table>
<thead>
<tr>
<th>Total Number of Leaders</th>
<th>Number of Female Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Apart from activities with the group, what other activities does the extension officer engage in with the leaders?

________________________________________________________________________

16. Do you have a central meeting place?

Yes ___.  No ___. (If 'No', go to Q.18).

17. If 'Yes', fill the table below:

<table>
<thead>
<tr>
<th>No. of members living in the vicinity of the central meeting place</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Longest distance a member covers to the central meeting place</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

18. What is the distance between the residencies of any two members who live farthest apart? ___________.
19. How often do you meet on your own as a group?
   ___ Once in 1 week.   ___ Once in 2 weeks.
   ___ Once in 3 weeks.   ___ Once in 1 month.
   ___ Once in 2 months. ___ Once in 3 months.
   ___ Once in 6 months.   ___ Others (Specify) _____.

20. What is the average number of members who attend your meetings? _______.

21. How many of these people are females? _______.

C: INTERNAL GROUP DYNAMICS.

22. How are your leaders chosen?
   ___ Appointed by the extension officer.
   ___ Appointed by the NGO working with us.
   ___ Members vote to elect them.
   ___ The out-going leaders elect them.
   ___ We don't know.
   ___ Others (Specify) ____________________________

23. How often are your leaders changed?
   Every:
   ___ 1 year. ___ 2 years. ___ 3 years. ___ 4 years___.
   Others (Specify) ________________________________

24. What do you expect of your leaders?
   ________________________________
How do you get yourselves informed of group activities and meetings?

________________________________________________________________________

D :  EXTENSION OPERATIONAL PROCESS.

26. How often do you meet with the extension officer?
    ___ Once in 1 week.    ___ Once in 2 weeks.
    ___ Once in 3 weeks.    ___ Once in 1 month.
    ___ Once in 2 months.    ___ Others (Specify) ____________

27. How does the extension officer arrange his/her meetings with your group?
    ___ Fixes date at last meeting.
    ___ According to his/her visit schedule.
    ___ Sends message 1 week before the meeting.
    ___ Sends message 2 weeks before the meeting.
    ___ Calls us on arrival at the meeting place.
    ___ Others (Specify) ________________________________.

28. During which period of the day do you usually meet with the extension officer?
    ___ Morning.    ___ Afternoon.    ___ Evening.

29. How long do your meetings with the extension officer last?
    ___ Less than 1 hour.    ___ 1 hour.    ___ 1 hour 30 minutes
    ___ 2 hours.    ___ More than 2 hours.    ___ Don't know
30. How does the extension officer communicate his/her ideas to you?

________________________________________________________________________

________________________________________________________________________

E: EFFECT OF EXTENSION.

31. Has extension been of help to your group?

Yes. ____.

No. ____.

32. If 'Yes', in what aspects of your group life have you received help from extension?

________________________________________________________________________

________________________________________________________________________

33. If 'No', in what ways have extension activities worked against the improvement in the performance of your group?

________________________________________________________________________

________________________________________________________________________

34. What should be done to make extension effective and helpful to your group?

________________________________________________________________________

________________________________________________________________________
F: BACKGROUND INFORMATION.

35. Name of Group: ________________________________

36. Sub-District: ________________________________

37. Operational area: ________________________________
APPENDIX 3

Questionnaire: Sampled Farmers

(Tick or write the appropriate answer(s))

A: ORIGIN OF FARMERS' GROUPS

1. Are you one of the founding members of your group?
   Yes _____.  No _____.

2. If 'Yes', what role did you play in the formation of the group?

3. If 'No', how did you become a member?
   ___ Introduced to the group by a relative.
   ___ Introduced to the group by a friend.
   ___ Introduced to the group by the extension officer.
   ___ Introduced to the group by the agent of an NGO.
   ___ Out of my personal conviction and action.
   ___ Others (Specify) ________________________________

4. Why did you join the group? (Check the three most appropriate)
   ___ Members of the group are respected in the society.
   ___ My friend was a member.
   ___ It could satisfy the interest of its members.
   ___ I just joined it.
I wanted to receive credit.
The extension officer/NGO agent asked me to join it.
I needed help from others.
Others (Specify)

5. Who qualifies to be a member of the group?


B: CHARACTERISTICS OF FARMERS' GROUPS

6. How long have you been a member of this group?

   ____ Less than 1 year.   ____ 1 year.   ____ 2 years
   ____ 3 years.   ____ 4 years.   ____ More than 4 years.

7. Comment on the issues raised in the table provided.

<table>
<thead>
<tr>
<th>QUALITIES</th>
<th>ALL</th>
<th>MAJORITY</th>
<th>MINORITY</th>
<th>NONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership of other groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other occupations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership of individual farm(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Does the group have a common farm(s) for its members?

   Yes ____.   No ____.

C: INTERNAL GROUP DYNAMICS

Question 9 - 25, Tick one of the letters A, B, C, D, E which represents the response you find most appropriate to the
RESPONSES

A - Definitely true.

B - Mostly true.

C - To an equal degree both true and false.

D - Mostly false.

E - Definitely false.

9. The group has a well understood but unwritten rules concerning member conduct.

   ____ A.     ____ B.     ____ C.     ____ D.     ____ E.

10. Members fear to express their real opinions.

    ____ A.     ____ B.     ____ C.     ____ D.     ____ E.

11. The only way a member may leave the group is to be expelled.

    ____ A.     ____ B.     ____ C.     ____ D.     ____ E.

12. No explanation need be given by a member wishing to be absent from the group.

    ____ A.     ____ B.     ____ C.     ____ D.     ____ E.

13. An individual membership can be dropped should he/she fail to live up to the standards of the group.

    ____ A.     ____ B.     ____ C.     ____ D.     ____ E.

14. Members of the group work under close supervision.

    ____ A.     ____ B.     ____ C.     ____ D.     ____ E.

15. Only certain kinds of ideas may be expressed freely.
within the group.

16. A member may leave the group by resigning at any time he wishes.

17. A request made by a member to leave the group may be refused.

18. A member has to think twice before speaking in the group's meeting.

19. Members are occasionally forced to resign.

20. The members of the group are subject to strict discipline.

21. The group is rapidly increasing in size.

22. Members are constantly leaving the group.

23. There is a large turnover of members within the group.

24. Members are constantly dropping out of the group but new members replace them.

25. During the entire time of the group's existence no member has left.
26. Comment on the issues raised about your group in the table below.

<table>
<thead>
<tr>
<th>QUALITIES</th>
<th>ALWAYS</th>
<th>NOT AT ALL</th>
<th>SOMETIMES</th>
<th>DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support from outside</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliation to other groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal consideration of opinions of all members</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal enjoyment of group privileges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question 27 - 39. Tick one of the letters A, B, C, D and E which represents the response you find most appropriate to the statement made.

RESPONSES
A - Definitely true.
B - Mostly true.
C - To an equal degree both true and false.
D - Mostly false.
E - Definitely false.

27. Each member's personal life is known to other members of the group.

____ A. _____ B. _____ C. _____ D. _____ E.
28. Members of the group lend each other money.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

29. A member has the chance to get to know all other members of the group.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

30. Members are not in close enough contact to develop likes and dislikes for one another.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

31. Members of the group do small favours for one another.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

32. All members know each other very well.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

33. Each member of the group knows all the other members by their names.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

34. Members are in daily contact either outside or within the group.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

35. Members of the group are personal friends.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

36. Certain members discuss personal affairs among themselves.
   ____ A.   ____ B.   ____ C.   ____ D.   ____ E.

37. Members of the group know the family background of other members.
38. Members address each other by their first names.

39. The group is made up of individuals who do not know each other well.

40. Provide the information on your group as in the table below.

<table>
<thead>
<tr>
<th>QUALITIES</th>
<th>VERY MUCH</th>
<th>MUCH</th>
<th>LITTLE</th>
<th>VERY LITTLE</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disrespect of some members by others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tension among members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interference of tension with group work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect of members by outsiders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Members feel honoured</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

41. How can one become a member of the group?

42. What are the group's expectations of its members?
Question 43 - 52. Tick one of the letters A, B, C, D and E which represents the response you find most appropriate to the statement made.

RESPONSES
A - Definitely true.
B - Mostly true.
C - To an equal degree both true and false.
D - Mostly false.
E - Definitely false.

43. There is a high degree of participation on the part of members.
   __ A.   __ B.   __ C.   __ D.   __ E.

44. If a member of the group is not productive he is not encouraged to remain.
   __ A.   __ B.   __ C.   __ D.   __ E.

45. Work of the group is left to those who are considered most capable.
   __ A.   __ B.   __ C.   __ D.   __ E.

46. Members are interested in the group but not all of them want to work.
   __ A.   __ B.   __ C.   __ D.   __ E.

47. The group has a reputation for getting much done.
   __ A.   __ B.   __ C.   __ D.   __ E.

48. Each member of the group is in one or more active committees.
49. The work of the group is well divided among members.
   ____ A.  ____ B.  ____ C.  ____ D.  ____ E.

50. Every member of the group does not have a job to do.
   ____ A.  ____ B.  ____ C.  ____ D.  ____ E.

51. The work of the group is frequently interrupted by having nothing to do.
   ____ A.  ____ B.  ____ C.  ____ D.  ____ E.

52. There are long periods during which the group does nothing.
   ____ A.  ____ B.  ____ C.  ____ D.  ____ E.

53. Are group goals clear to members?
   ____ Very clear.
   ____ Somewhat clear.
   ____ Not clear.
   ____ Don't know.

54. Is it possible for the group to change some of its decisions under changing circumstances?
   Yes. ____  No. ____

55. How do members communicate their ideas to the group?
D : EXTENSION OPERATIONAL PROCESS.

56. Mention five (5) of the things taught by the extension officer during his/her initial meetings with you

57. Do the times you meet the extension officer convenient to the group?
   ___ Convenient.
   ___ Somewhat convenient.
   ___ Not convenient.

58. How does the group find the duration of your meetings with the extension officer.
   ___ Too long.
   ___ Alright.
   ___ Others.

59. What issues do your discussions with the extension officer cover (List).

60. What does the extension officer do about the problems you present to him.
   ___ Encourages us to forget about them.
Discusses with us to find solutions to them.
Shows no concern about them.
Tries to suggest solutions to them.
Others (Specify) __________i__________

61. Who decides on what lessons to be taught during your meetings with the extension officer?

E: EFFECT OF EXTENSION.

62. What lessons have you learnt from the extension officer which in your opinion have helped the improvement of your group?

63. What characteristics of the extension officer do you think have enhanced the group's interaction with him?

64. What characteristics of the extension officer do you think do not facilitate the development of the group?
What effects has your interaction with extension had on your farming activities?

F: BACKGROUND INFORMATION.

66. Name of respondent (Optional) _____________________________

67. Sex: Male. ____  Female. ____

68. Age. __________

69. Marital Status: Single __  Married __
    Separated __  Divorced __
    Widow __  Widower __

70. Level of Education:
    Primary ____
    Middle ____
    Secondary ____
    Technical ____
    University ____
    Nil ____
APPENDIX 4

Questionnaire : Extension Supervisors.

( Tick or write the appropriate answer(s) ).

A: OVERVIEW.

1. What are the objectives of your organisation ?

2. At what target(s) do you direct your activities ?

3. Why do you choose those targets(Q. 2) ?

4. What activities do you engage in to realise your objectives(Q. 1) ?

5. What is the predominant extension teaching method
5. How are your activities supervised?

6. Do you work with farmers' groups?
   Yes _____.  No _____.

7. If 'No', why don't you work with farmers' groups?

8. If 'Yes', what distinctions can you make between the farmers' groups you work with?

9. What have been your experiences as an organisation in working with farmers' groups?
11. Has any of your farmers' groups failed before?
   Yes ____.  No _____. (If 'No', go to Q. 14)
12. If 'Yes' what factors contributed to the failure?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
13. Have you ever had successful farmers' groups?
   Yes ____.  No _____. (If 'No' go to Q.17)
14. If 'Yes', what factors contributed to the success?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
15. What aspects of your organisation's operational life do you think should be improved to make it work more effectively and efficiently with farmers' groups?
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

B: BACKGROUND INFORMATION.
18. Name of Organisation: ________________________________
19. Name of Respondent: _________________________________
21. Position: __________________________________________
21. Rank: ________________________________

22. Sex: Male ___. Female ___.

23. Marital Status: Single ___ Married ___ Separated ___
   Divorced ___ Widow ___ Widower ___


   ____________________________________________
   ____________________________________________
   ____________________________________________

25. How long have you worked with your organisation?
   ________.