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The non-response to development programmes: a case study of sheet raising in grand cape mount country, western Liberia

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THE NON-RESPONSE TO DEVELOPMENT PROGRAMMES: A CASE STUDY OF SHEEP RAISING IN GRAND CAPE MOUNT COUNTY, WESTERN LIBERIA

BY

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DEDICATION

This work is first of all dedicated to the living memories of my dear parents, the Rev and Mrs S E Waritay who, among other unforgetable values, provided me with indefatigable strength and wisdom which has steered me to the path of making this academic achievement, the ultimate purpose of my life. May their souls rest in perfect peace.

I also doff my hat in respect of the rural poor in developing countries whose efforts to better their own living standards still have to be understood and appreciated. I join them in solidarity and pray that one day, their indigenous knowledge systems would be appreciated and merged with modern technologies/innovations.

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CERTIFICATION

I certify that this research was carried out by Mr Daniel K Waritay in the Department of Economics and Extension Education, Njala University College, University of Sierra Leone.

Signature of Supervisor

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ABSTRACT

Even though attempts have been made to fully involve the rural poor in the implementation, decision-making, benefit sharing, and evaluation processes of their own development programmes, the maximum cooperation and participation expected from the beneficiaries still remain a problem.

The main purpose of this study has been to investigate the reasons for the non-response of farmers to development programmes with special reference to sheep raising in Grand Cape Mount County, (covering Gohn Zodua, Bomboja and Fali Communities), in Liberia.

To achieve the above objective, data were collected on the personal and situational characteristics of farmer respondents and aspects relating to their agricultural systems. Information was also generated on respondents enlistment, involvement and participation in decision making and knowledge of sheep raising technologies. Such information was elicited from eighty (80) project participants who were randomly selected from three communities (Gohn Zodua, Bomboja, and Fali) in two districts, using the list of farmers who have been participating in the project.

In order to enhance the reliability of the data collected, several data collection methods were used. The main methods of data collection have been questionnaires, oral interviews, informal discussions, and the review of projects reports and documents, national and international literature.

Simple statistical techniques were used to process and analyze the data. The main findings of the study were the following:

- The majority of the respondents in the sheep raising projects were males and a sizeable proportion of them were position holders. Most of them were however still in the economically active age group.

- Almost all of them were from the Vai tribe and were affiliated with the muslim religion. Marriage was found to be an important social institution in the study area.

- The majority of the sample farmers had not received any formal schooling. Their main occupation was farming but they were also involved in other income generating activities.

- There was no evidence of sale of land. Lands in the study area belong to the community and therefore could hardly be sold to outsiders.

- Although respondents practised several farming systems, mixed upland rice farming was the dominant farming activity in the study area and generated more money/income, followed by sheep raising and vegetable production.

- Farming activities were mostly carried out by farming organizations/groups, indicating that farmers still rely on communal forms of labour. Also, there was some form of division of labour in relation to farming activities and this was based on sex and age.

- No respondent had registered with the sheep raising project for more than six years indicating that most of the respondents were not very much experienced in modern technologies of sheep raising.

- Project meetings varied from once in a week to twice in a month and most of the sample respondents attended meetings either once a week or once a month.

- Also, most of them never attended the training programmes organized by project officials because participants had to be invited or selected.

- Some had no time to attend the training sessions because they had other commitments. Respondents therefore relied heavily on their traditional methods of sheep raising.

- The assisting agency made major decisions which were endorsed or implemented by project participants. The non-involvement of project participants in the project appraisal led to unanticipated consequences.

- Although the projects were designed to meet the current and future demands of the society and ensure the economic welfare of the farming communities, the study reveals that during the life span of the projects, serious negative effects were being experienced by the project participants. These effects included frequent animal casualities, spending too much money and the destruction of crop land by the animals which led to disputes between the project participants and non-participants. Also, too much time was spent on the sheep raising project at the expense of other farming activities.

RECOMMENDATIONS

From the findings of this study, the following recommendations are being made for the improvement of future development programmes aimed at improving the living conditions of the rural poor thereby enabling them to take charge of their lives, make full use of available resources, and effectively manage their own activities.

- In the study, the sex composition indicate that the majority of the project participants were males. It is therefore not suprising that the projects were short lived and therefore not sustainable. Women must now be considered as farmers and not merely as helpers as is traditionally maintained. They must be encouraged to take part in training prgrammes aimed at improving agricultural production, given more credit facilities, provided with labour saving implements, and given the right to land ownership. If given the support and enouragement, women will immensely contribute to increasing the food supplies required in the developing world.

- Education is a major contributing factor to agricultural development. Research has shown that farmers in developing countries do not easily adopt improved technologies due to the high rate of illiteracy. In the sheep raising project, there was a high level of illiteracy among project participants. Adult education classes should therefore be conducted for participants with emphasis on literacy and numeracy.

- Conventional development strategies tend to see development as a series of technical transfers aimed at boosting production and generating wealth. Projects that have been based on this approach have

usually targeted medium to large-scale progressive producers hoping that improvement will trickle down to more backward rural groups. Unfortunately, this approach has often led to the concentration of resources, marginalization of small farmers, and increasing the landless. According to the findings of this study, the majority of the project participants never attended training programmes and as a result had very little or no knowledge of most of the modern sheep raising technologies and this lead to frequent animal casualties. This clearly shows that the trickle down approach anticipated by the assisting agency did not work out with the participants as only an insignificant proportion had very little insight into technologies introduced.

For effective rural development programmes, all project participants (both men and women) must be trained. Training efforts should be considered as part of the project implementation and should be built into the normal administrative practices of support from donors, and not only carried out once in the life span of the project. It is only when training approaches are integrated into the day to day activities of field agencies that the practical aspects of the training will receive the required attention.

In addition, extension services should include veterinary services which can be established at the county levels and provide adequate input materials for the implementation of projects at the initial stages. This will help resolve the problem of the provision of inadequate project materials by poor rural farmers and reduce the high cost of the project implementation as was experienced by the sheep raising project participants.

Chapter I

INTRODUCTION

1.1 Background To The Study

Agriculture is at the heart of African economies. Most of the population earns its livelihood from agriculture (World Bank, 1981). Agricultural development programmes have not only included the cultivation of basic foods that constitute the diets of the rural poor but cover livestock development with special reference to small ruminant production. According to a report by the International Livestock Center for Africa, meat from sheep and goat represent some 30 per cent of the meat consumed in the developing world and constitute a very important market for poor rural farmers (ILCA, 1988).

Although livestock production has been often blamed for harming the environment due to the fact that people are familiar with scences of deverstated rangeland, its production has indeed actively contributed to the sustainability of agricultural systems. Some research findings have revealed that in some countries where land tenure systems pose a problem in agricultural production, sheep and goat could be raised in small areas without constraining their productive ability (News Letter, International Livestock Center for Africa Vol. I No. 4, October 1992).

The practice of sheep raising in developing countries of the world vary from country to country. As a result of such variation and drastic changes that have occurred in the practice, it has become rather impossible to present an accurate report on the numbers of sheep produced.

Differences in land area, topography, types of agricultural enterprises, and density of human population have been indicated as some of the contributing factors in the variation in sheep raising activities (Kammlade and Kammlade, 1955).

In developing countries, the number of sheep and goats are increasing much more rapidly than developed nations. This may well reflect the particular ability of small ruminants to survive and produce on low cost feed, their adaptability to difficult and particular environments. Perhaps more importantly, it is their suitability to small, low capital family farmers who form the majority of the farmers in the developing countries, and so much in need of extra food and additional income. In many villages of the developing world, it is difficult for one to come across a family that does not keep a goat, sheep or some other animal.

Village livestock keepers incur many benefits from raising livestock. When no money is available, an animal is sold and the proceeds are used to buy what they need. Livestock offers poor rural farmers ready source of cash for such things as clothing, food, taxes, school fees for their children, and sometimes marriage expenses. In 1987 authorities in the City of Mbeya in South West Tanzania prohibited residents from keeping livestock inside town limits because of health concerns. The residents reacted swiftly. In the year's local election, they voted the Mayor and virtually every other town official out of office. As a result, the prohibition was quickly dropped. (Rogers, 1983). The above flash back clearly illustrates the importance of livestock development to both poor urban dwellers and small scale farmers in the developing world.

A sustainable agricultural system is one that maintains or enhances the quality of the environment, meets current and future demands of society and ensures the economic social welfare of the farming community (Reijntjes C, Haver Kort B, and Bayer, W.A. 1992). Research findings as reported by the International Livestock Center for Africa (Vol. 2 No. 4 October, 1992), indicate that livestock can play a vital role in this process of sustaining agricultural rural communities. More importantly, it provides an "entry point" for many practices that help promote sustainability such as introducing forage legumes in

the cropping system. The dung from different classes of livestock provides organic matter valuable for maintaining humus (organic matter) content of soil, increasing the soil bacteriological population, and raising the nitrogen, phosphate, and potassium levels. The natural cycle of nature is broken when animals are not used to return to the soil in a systematic manner part of the organic material removed by them in nutrition (Lowe, 1986). Livestock therefore is the most profitable form of husbandry.

Nutritional studies in developing countries have also indicated severe cases of malnutrition which have been attributed to the lack of high quality protein foods in most rural areas (Sue Schefield, 1979; Lowenberg et al, 1968). The raising of sheep provides a significant supply of animal protein in the form of milk and meat which becomes particularly useful to the families of low income farmers, and landless labourers who cannot afford to purchase protein products financially. In addition to milk and meat, it also provides wool and skin. Because of the productive ability of the animal, sheep, rural farmers in developing countries have equally developed a high desire for raising the animal in their thrive for socio-economic achievement.

Despite the move made by the rural poor in Liberia, especially towards the development of sheep raising projects, the people have continued to experience severe bottlenecks in this direction. The focus of this study therefore is to provide a better understanding of the problems of non-response to effective sheep raising projects in the rural areas in Liberia.

1.2 Statement Of The Problem

In developing countries, especially in the rural areas, most of the diet is usually dominated by carbohydrates or starchy foodstuffs such as rice, wheat, maize, millet, sorghum, and cassava. The concentration on one or few of the above

mentioned foods, often leads to a low protein intake or to an imbalance in which one of the amino acids is limiting in respect to the quality of protein. (Provisional Indicative World Plan For Agricultural Development, Vol I Food And Agriculture Organization of the United Kingdom, 1989).

Livestock are the key components of agriculture for many farmers in the developing countries. They provide food, fibre, manure, power for cultivation, transport, cash through sales of product, and are important for many religious and social functions. A sick animal is a problem, a dead one can be disastrous, especially for poor people with few resources.

In an attempt to effect an increase in animal protein production, and an agricultural system that will maintain or enhance the quality of the environment, meet the current and future demands of the society and ensure the economic and social welfare of the farming community, the inhabitants of Grand Cape Mount County (which includes communities of Gohn Zodua, Bomboja and Fali) through the assistance of Plan International - Liberia (an International Non-Governmental Organization) established small sheep raising projects. These projects were organized in such a way that would allow for the individual communities to get themselves totally involved in the implementation and management. Despite this fact, these projects have not received the full cooperation and participation expected from the beneficiaries. As a result, the projects died out few years after their implementation. Such failures are usually blamed on the farmers' conservativeness, ignorance, and resistance to change. However, according to Brandy, they are only part of the problem (Brandy, 1981).

This study argues that the failures may be due to the lack of adequate knowledge of what traditional farmers are doing and why they do things in the way they do. The research exercies was therefore designed to investigate the reasons for non-response of the beneficiaries to these small sheep raising development projects with the aim of throwing some light on the problem of adoption/rejection decision-making among small farmers in these communities.

1.3 Main Aim And Objectives Of The Study

1.3.1 Main Aim Of The Study

The main aims of the study were to investigate the participation of project beneficiaries and the reasons for non-response of farmers to sheep raising projects in Grand Cape Mount County covering Gohn Zodua, Bomboja, and Fali Communities in Liberia.

1.3.2 Specific Objectives Of The Study

The specific objectives of the study are to:

1 Investigate who are the sheep farmers.

2 Determine the extent of participation of the target population in the sheep raising projects.

3 Investigate the level of adoption of sheep raising innovations or technologies.

4 Examine what institutional, managerial, economic, and socio-cultural factors that militate against the adoption of the innovations/technologies.

5 Make suggestions for the improvement of the programme where possible.

1.4 Research Assumptions/Propositions

In order to examine the problem in depth three major working propositions have been formulated:

1 That farmers in these projects perceived the sheep raising innovations packages differently from development authorities.

2 That agriculture is viewed as a way of life and therefore any new farming practices which are not compatible with socio-economic and cultural aspects of the people may be either resisted, partially adopted, or completely rejected.

3 That the programme design, implementation and decision-making do not encourage full participation of the clientele.

1.5 Significance Of The Study

The raising of sheep in developing countries play a very important role in agriculture, which is the main occupation of most people in the rural areas of developing countries. The examination of the adoption of sheep raising innovations would therefore throw some light on the problems of partial and non-adoption of new farming ideas, crop and technologies within indigenous farming communities.

Knowledge so gained could be utilized in forming the basis for effective extension work by agricultural extension programmes in developing countries. It will further enrich the understanding of the innovation decision-making process

and be of considerable importance to the promotion of planned change. The results will also contribute to the development policy framework that will be helpful to the formulation of better techniques or strategies geared to effective sheep raising projects in the rural areas of developing countries.

It will serve as a reference material for governmental and non-governmental organizations (NGOs) wishing to undertake similar rural development programmes. It is also hoped that the findings will stimulate further research in this area which will provide a comprehensive information on sheep raising projects in developing countries.

1.6 Conclusion

The improvement of the agricultural sector in developing countries, more so in the rural areas, does not only mean an increase in the cultivation of basic foods such as rice and cassava, but should also cover the development of the livestock industry with special reference to small ruminant production. This industry provides a significant supply of animal protein which becomes particularly useful to the families of low income farmers and the landless.

Development agencies intending to assist the rural poor most now begin to look at what traditional farmers are doing and why they do things in the way they do. Development programmes will only yield positive results when the quality of parternship between developed and developing countries; aid donors and recipients are improved. (Pizzorno and Franco, 1986).

Chapter II

LITERATURE REVIEW

2.0 Introduction

In this Chapter the relevant literature on adoption/rejection of agricultural innovations are reviewed. This will provide a theoretical framework within which the results of the study will be interpreted.

2.1 Non-Adoption Of Agricultural Innovations

The elimination of hunger, malnutrition and poverty are some of the most pressing contemporary problems with which the world is faced. This situation is particularly acute in the rural areas of the developing countries which have been over the years victims of very low agricultural output. The agricultural sector of developing countries employs over 60 per cent of their populations. This sector provides funds and other accessories needed for development purposes. Unfortunately, from being exporters of food as recent as in the 1980's almost all developing countries are today net importers throwing heavy burden on their foreign exchange (Ottadike, 1988). In the last decade, developing countries were seriously faced with critical food shortages and as a result experienced a decline in their agricultural production. Although the developing countries possess a large livestock population estimated at one hundred and fifty million units in 1982, this sector has not contributed considerably to the food needs of the population (Ottadike, 1988).

In an attempt to re-awaken the agricultural sectors in developing countries, most governments in these countries have openly welcomed joint financial agricultural development programmes to operate in their various countries. Unfortunately, with all the investments made, rural development programmes

in many developing countries have failed to achieve the goal of self-sufficiency in food due to the fact that local farmers have negative attitudes towards the programmes or recommended practices (Bangura, 1983).

Non-adoption has been defined as an act of rejecting an innovation, normally an individual reaction (Jones, 1963). It has been identified as a major problem in the diffusion process (Rogers and Shoemaker, 1971) and numerous examples of it abound diffusion literature.

In the past the link between agricultural research and technology transfer in developing countries constituted major bottlenecks in agricultural technology systems. (Sands, 1988).

Within the overiding objective of increasing the quality and quantity of agricultural output in Third World countries, the primary goal is to improve the welfare of it's people through enhancing the productivity of small farms and to promote equitable access to resources, markets, and technical assistance. Unfortunately, many development experts and agricultural research scientists remain frustrated by the limited success of their improved innovations which are frequently rejected or only partially adopted. (Deborah and Sands, 1986).

According to Horton (1983), traditional farmers in a potato production project under traditional and modern farming methods in the Peruvian Andes lost interest in the recommended technology after making straight forward calculations on net returns of the project in the interest of the farm family. For them the overall benefit of the recommended technology was of primary importance for adoption. The scientists solely evaluated the improved technology in terms of its yield performance rather than taking into consideration the criteria perceived as important by the farm family.

In his work with women in Ivory Coast on an upland rice cultivation project, Dey, (1984) found out that the improved innovation was not adopted merely because the social organization of the household was not recognized during the formation of the innovation. The women farmers belonged to a traditional system in which the division of labour based on sex was very paramount.

In Northern Nigeria, a mixed cropping versus sole stands project met with little or no success in terms of adoption by local farmers only because the agricultural scientists made incorrect assumptions about what the farmers really wanted to maximize (Norman, 1980).

Studies have clearly shown that small farmers are not inherently resistant to change. However, they are selective and adaptive in their adoption of new technologies (F.A.O., 1986). Due to the failure of researchers to fully understand the role of targeted crops within a farming system in Northern Nigeria, an improved innovation on cotton technology was outrightly rejected by farmers. Farmers in the project were quick to find out that the new innovation for them was incompatable with their fundamental beliefs with regard to farming (Dag, 1984; Norman, 1980; 1982).

In India, a seed programme failed becasue it was viewed as a disgrace and sign of failure or poor management ability to borrow or buy seed. The local farmer takes pride in being able to raise enough fund to maintain his family and have enough left over to use as seed. Also, in an attempt to help ameliorate the problem of malnutrition in India, new breed goats were introduced to enhance milk and meat production. By custom, goats were only reared by the untouchable caste. The superior castes never adopted the innovation because goats were taught to be unclean. The non-adoption was a result of not understanding the socio-cultural aspects of the society (Arensberg and Neihoff, 1971).

The size of the household in the rural areas have been found to play a significant role in the adoption of agricultural innovations especially in Third World countries. Farm operators with no children at home experienced the lowest level of adoption (Gboku, 1981).

The findings of Evarett Rogers (1983), reveal that adoption of an innovation that would eventually lead to a change in a given community can be seriously affected by age. Innovativeness is associated with young age, where as old age represents some form of laggardness.

Education in whatever form plays a major contributing role in the adoption of improved technologies. Adam (1982) found out that farmers in developing countries do not easily adopt improved technologies due to the high rate of illiteracy.

The adoption of agricultural innovations sometimes have become difficult or impossible due to natural conditions. Among farmers who developed swamps in Sierra Leone 21.3% irrigated, while 10% did not. Those who did not irrigate reported that the non-availability of water in their swamps during the dry season when it was time to irrigate prevented them from adopting the technology (Gboku, 1981).

Copp (1956) investigated aspects in the life situation of farm operations considered to be influential in the adoption of recommended farm practices found out that a general predisposition to adopt recommended farm practices was significantly related to gross farm income, acres operated, acceptance of professional scientific value, and metal flexibility of the farm operators.

Basu, (1969) conducted a survey to determine the relationship of farmers' characteristics to the adoption of recommended farm practices in four villages in Western Nigeria. He discovered that for a farmer to adopt an innovation, he must perceive distinct advantages over his previous method, get needed resources easily and at the appropriate time and find a suitable market for the surplus that will accrue as a result of adopting the practice.

The cost and labour intensiveness of an introduced innovation has serious implications for it's adoption rate. Babowo (1985) indicated in his study of the Bo-Pujehun Rural Development Project that very few farmers adopted the recommended technological innovations because of the cost and labour intensiveness. Furthermore, very few of them had full knowledge of the technical know-how of some or all the introduced innovations thus affecting the rate of adoption.

Due to the complexity of agricultural technologies introduced, farmers adopt recommended practices in a varied manner. Findings have revealed that in the adoption of maize technology in Sierra Leone only 95% and 69% fertilized and carried out crop spacing respectively as recommended (Bangura, 1983). In some developing countries, even with those who adopt innovations, there appears to be no sustained increase per capital agricultural productivity and as a result no improvement in their living standards.

The rate of adoption is the relative speed with which an innovation is adopted by members of a social system (Rogers, 1983). Jones (1963) has noted that in addition to the perceived attributes (relative advantage, compatability, and observation) of an innovation, other variables affect its all rate of adoption such as the type of innovation - decision, the nature of communication channels used to diffuse the innovation at various functions in the innovation - decision process, the nature of social system, and the extent of change agents' promotion.

2.2 Participation In Development Programmes

Conventional development strategies tend to see development as a series of technical transfers aimed at boosting production and generating wealth. Projects that have been based on this approach have usually targeted medium to large - scale "progressive" producers, hoping that improvement will trickle down to more "backward" rural groups. Unfortunately, this approach has often led to the concentration of resources, marginalization of small farmers, and increasing landlessness.

Development is a complex and difficult task to undertake, especially in the developing countries. Over the past few years a growing concern has been expressed by development specialists over the lack of progress in development for the rural poor. This concern is based on the realization that over a quarter of the world's people still live in conditions of insecurity and privation and annual incomes of less than $100.00 in the rural area of Africa, Asia, and Latin America. The pressing task of development specialists in an attempt to better the living conditions for the peoples of the world, especially those in Third World countries, is to begin to reserve the present situation from poverty, the drudgery of manual labour, ill health, and early death (Cohen, Upoff, Norman, 1977).

The International Community is now seeking a new strategy to revertilize rural development. A basic element of the strategy is people's participation. Development efforts must now be aimed at releasing the energies of rural people and guaranteeing that they share fully in the fruits of their efforts (Ghonemy, 1984). Chambers, (1983) in his work on integrated rural development views the rural sector as a combination of sub-systems such as health, education, agriculture, and employment. According to him, the development of the rural poor becomes a reality only when these variables are activated. Furthermore, he

stressed the fact that in order to enhance a successful activation of these sub-systems, a broad based participation by rural residents in the administration, financial, and technical areas is required. People's participation is now recognized as central to a rural development strategy, that is, being considered both an essential means and an end in itself. The participation of the rural poor through their own organization, reinforces the favourable effects of equity and growth policies. This is buttressed by FAO (1992) thus:

"Man grows and fulfills himself as he participates in his own life.... Unless man so participates, he becomes subjected to the whims of forces which leave him socially and politically isolated and his life meaningless..... Without such participation, democracy has no life or vitality".

Participation from the community development perspective is defined as the process by which a community's "felt needs" are elicited and responded to be its inhabitants with the help of outsiders in the identification of their needs and means to satisfy them (FAO, 1984). According to Almond and Verbal, (1963), participation under the growth model for the majority of the people meant paying of taxes, producing for export, limiting consumption and generally low or no savings. With this approach, it was assumed that nations will become more participatory, meaning generally that the political and democratic process will develop thereby moving closer to modernity.

In yet another description, it has been indicated that participation includes peoples involvement in the decision-making process about what would be done, and how; their involvement in implementing programmes, and decision by contributing various resources, or cooperating in specific organizations or activities; their sharing in the benefits of development programmes; and for their involvement in efforts to evaluate such programmes. Participation

generates crucial information about the need, preferences, and capabilities of the target groups who are to benefit from development programmes as well as on the environment in which these are carried out. (Cohen, Uphoff, and Norman, 1972). For effective rural development activities that are so much integrated in nature, the participation of the residents in the decision-making process, project implementation stages, sharing of benefits, and the evaluation of their own programmes enable the rural poor to take charge of their lives, to make full use of available resources, and to manage their own activities. In the process of rural development, efforts should be exerted to encourage the active participation of all actors involved in the project or programmes local residents, local leaders, government personnel, and foreign personnel.

An investigation into the FAO People's Participation Programme (PPP) in Liberia reveals that participation in rural development programmes is possible when the poor rural dweller form themselves into small self-help groups that allow them to pool their resources in pursuit of their own objectives. In these small self-help groups, they become more receptive to new technologies and achieve higher levels of production and income. Their contribution to project planning and implementation represent a reduction in project costs. The environment created becomes ideal for the diffusion of collective decision-making and leadership. Mansaray's (1991) study revealed that in farmer associations, leadership was dominated and controlled by only well-to-do members of the community who were considered as elites with consideable influence on the activities of the association. The poor rural farmers who formed the majority with regard to membership were devoid of leadership. As a result of this negative aspect in the association, participation readily dropped.

In developing countries major decisions are taken outside the various communities and social performance in many development programmes are totally lacking. In accessing participation in the decision-making process, it is necessary to make distinctions between direct and indirect participation so as to allow for differing extends or degrees. People can participate in various ways and with varying effectiveness. There can be participation in the decision-making process (planning, operations, and evaluation) without actually making the decision by one self. In his study, Bangura (1983) found out that the degree of involvement of beneficiaries in the decision-making process was very limited. This lack of involvement contributed to a large extent to the poor adoption of agricultural innovations by farmers.

The sustainability of rural development programmes can only become effective when the rural poor are allowed to actively participate in all aspects of the programme which include decision-making (planning, operations, and evaluation), implementation (resource contribution, enlistment in programmes, and involvement in programme administration), benefits (material, social, personal) and evaluation. Case studies of four Integrated Rural Development (IRD) projects in Ethiopia, Ghana, Tanzania, and Zambia, reveals that even though these projects produced some positive results, they were less satisfactory in other respects. In Ghana the project could not clearly state any quantifiable target to make it possible to assess progress objectivity. In Zambia, there was a heavy reliance on expatriate personnel and external donors and a failure to integrate project activities. The Tanzania project was also heavily dependent on donor financing.

Agricultural development programmes designed for rural people need support, guidance, and incentive to help them develop their capacity for self mobilization and self-reliance, it is also true that for effective rural development work in developing countries, governments and non-governmental organizations (NGOs) should develop a participatory approach during the implementation of these rural development programmes.

Rural people become proud when they have participated in the development of their own communities instead of having development forced upon them. Unless the rural poor are given the chance to fully participate in their own development programmes, they will continue to be excluded from the benefits of such programmes.

2.3 The Role Of Women In Community Development

Rice which sustains life for most Liberians and the cultivation of which forms the base of the Liberian economy is primarily produced and allocated by liberian women (Jeanette, E Carter et al, 1982). Women play an effective role in rice production and must therefore be involved in all spheres of activities concerned with the industry. They process, prepare and serve food to their families. It has been shown that in some areas, half of the rural household are permanently or defactor headed by women (Buvincim, Youset, 1978). The males mostly engaged themselves in off-farm activities, and make decisions for the home. In Sierra Leone, for example, women are a strong force to rice production and in most cases women are left completely in charge of rice farms.

Programmes to increase food production must reach women if they are to succeed. They play a very important role in the development process but very little has been learnt about their actvities. According to estimates done by the Food and Agriculture Organization (FAO) (1995) their participation in agricultural production is equal to that of men and often considerably greater. Apart from the significant contribution they make towards increasing resources and agricultural production, they take part in harvesting, storage, processing, and marketing. Even though women grow most of Africa's food and sustain rural life, they lack the critical support of land, fertilizers, credit, labour savings implements and the political clout needed to maximize their pivotal role (Karen Gellan, 1984).

Women's role in small-scale produce marketing in West Africa, the Caribbean, mountainous regions of Central and South Amercia and part of Asia have provided essential services to producers, and urban consumers by them travelling to remote areas to gather small quantities of produce which otherwise might not find their way to the market. (FAO, 1984).

Small animal production for family or market is also usually the work of the women. A study of the role of women in integrated farms at Mussia in the Koinadugu District, Northern Province of Sierra Leone in 1980 showed that women dominated pastoral activities. In the developing world most of the farmers are women and therefore agricultural development programmes can be considered to be effective only if they acknowledge the many roles of women in rural societies. Given the support women can contribute considerably to increasing food supplies available in developing countries.

The world conference on Agrarian Reform and Rural Development in 1979 pointed out the need to include women in every level in agricultural and rural development programmes and to develop programmes especially for women. In this light the FAO has developed innovative pilot programmes, prepared guidelines on how to involve women in technical projects and improve data on women.

The lack of understanding of the roles women play in integrated development programmes, many administrators in development ministries of developing countries, and Non Governmental Organizations (NGO's) find it difficult to successfully implement development programmes especially in the interest of the rural poor.

2.4 Summary Of The Literature Review

Rural development programmes in many developing countries, despite all the investments made, have unfortunately failed to achieve the goal of self-sufficiency in food production mainly because local farmers who form the bedrock of these programmes have not been adequately educated to adopt recommended practices for the success of these programmes. As a result, farmers have therefore developed negative attitudes towards the adoption of new innovations. The non-adoption of new innovations has been identified as a major problem in the diffusion process. The failure to readily adopt recommended practices has been attributed to the lack of understanding by development workers of the socio-cultural aspects of the society in which these practices are to be implemented. Also, the size of the household, age economics, cost, and labour of the beneficiaries, have serious impact on the adoption of a new innovation.

The conventional development approach which promotes the idea that development trickles down to more backward rural groups has in most cases led to the concentration of resources, marginalization of small farmers, and increased landlessness.

Development is a complex and difficult undertaking especially in developing countries. It should be aimed at utilizing the energies of those for whom it is meant and guaranteeing that they share fully in the fruits of their efforts.

The approach enhances peoples participation which is now recognized to be central to any rural development strategy that is to be considered both an essential means and an end in itself. In developing countries major decisions are taken outside the communities and social incentives, motivation, and social support are poor. This situation has led to an inefficient performance in development programmes. The rural poor should be allowed to actively participate

in all aspects of the programme which include decision-making (planning, operations and evaluations), implementation (resource contribution, enlistment in programmes, and involvement in programme administration), benefits, (material, social, personal) and evaluation.

Though rural people need support, guidance, and incentive to help them develop their capacity for self-mobilization, and self-reliance for effective rural development work, governments and non-governmental organizations (NGOs) operating in developing countries should develop a participatory approach during the implementation of development programmes. Unless the rural poor are given the chance to fully participate in their own development programmes they will continue to be excluded from the benefits of such programmes.

In developing countries women have been shown to play a very important role in the development process but unfortunately very little attention has been given them. They are faced with several constraints which prevent them from increasing their output.

Major constraints faced include access to credit, input supply and extension support.

For the successful implementation of development programmes, especially in the interest of the rural poor, administrators in development ministries of developing countries, and non-governmental organizations (NGO's) need to understand the vital roles played by women in integrated development programmes.

CONCLUSION

The biggest challenge facing government of Third World Countries and International Non-Governmental Organizations, is how to effectively carry out development programmes that will contribute towards the improvement of the living conditions of the rural poor. The rural poor who are mostly farmers are not inherently resistant to change; they are rather selective and adaptive in their adoption of new technologies/innovations. In most cases, the adoption of new technologies/innovations are based on the level of education, religion, socio-economic factors, age, cost, and incentives envisaged.

The participation of the rural poor in the implementation of rural development projects is a pre-requisite for sustainability of such programmes. Their participation should include an active role in the decision-making process, project implementation stages, sharing of benefits, and the evaluation of their own programmes.

The role of women as partners in rural development must be fully recognised by development workers, especially in the production of food for the household. Because of the important role women play in agricultural development and the sustainance of rural life, they must be given the critical support of land, fertilizer, credit, labour saving implements, and the political clout needed to maximize their role.

Chapter III

METHODOLOGY OF THE STUDY

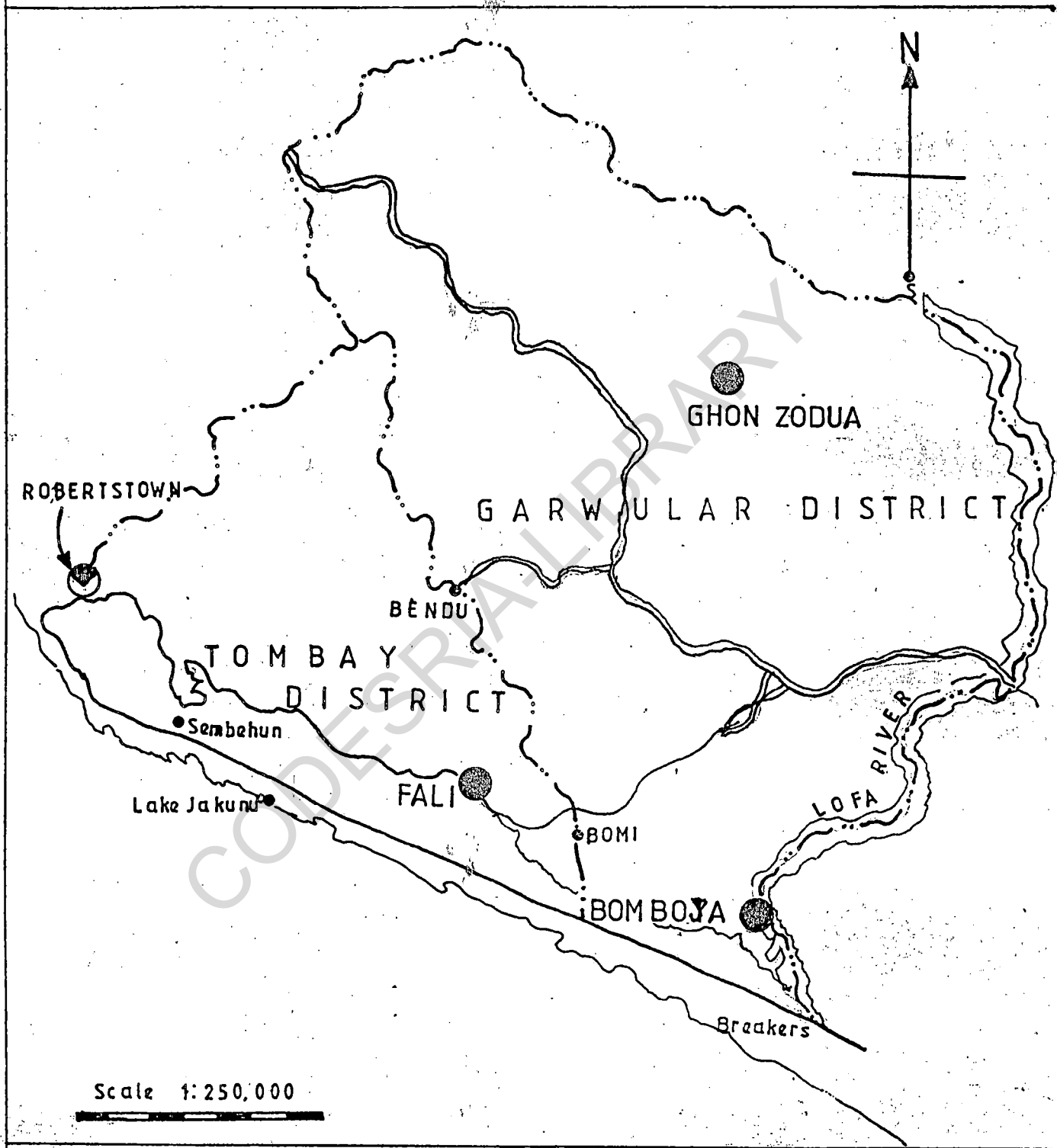
3.0 Introduction

The cultural setting, types of data required, facilities for the processing of the data, time available, and the purpose and objective of any study, should help the researcher design a methodology to be employed in his/her research (William, 1985). These factors influenced considerably the methodology selected for this study. The main objective of this Chapter is to indicate the source of data, describe the sampling procedure, the operationalization of variables, data collection, and the statistical techniques used in analyzing the data.

3.1 Study Area And Selection

The study area covers Grand Cape Mount County, one of the 13 Counties of the Republic of Liberia (Fig. 1). It is one of the smallest counties in the Republic of Liberia embracing an area of 2,282 sq miles. The county is inhabited mainly by the Vias, one of the ethnic groups in Liberia. The specific area selected is the Garwular and Tombay District of Grand Cape Mount County, Western Liberia. The selection of these areas were influenced by several justifications. The researcher is a Liberian and hails from Grand Cape Mount County. He worked for several years with the people of the County as an extension personnel in agriculture and gained experience and some knowledge over a long period of personal contact with the entire county. As a result, problems of an outsider investigator was virtually non-existent. Secondly, sheep raising activities were implemented by community members only in these villages (Gohn Zodua, Bomboja, and Fali) of the two districts. The two districts involved are typically agricultural areas where local farmers carry out subsistence farming and other agricultural activities. In

Figure: 1. MAP SHOWING STUDY AREAS IN GRAND CAPE MOUNT COUNTY, WESTERN LIBERIA



MAIN MOTOR ROAD	
DISTRICT BOUNDARY	
STUDY AREA	

/LS

view of the above, the selected study area provides a good environment to study. "The problem of non-response of clients to Development Programmes: The case of sheep raising projects in Grand Cape Mount County, Western Liberia".

3.2 Field Work

In general, the objective of the field researcher was to collect a body of information, qualitative and quantitative, so as to enable the researcher gain insight into non-response of clients to development programmes with particular reference to sheep raising projects, and to arrive at suggestions for the improvement of subsequent programmes.

Data for this study was collected between the months of November 1992 and March 1993. Interviews were conducted by the researcher with the assistance of two experienced social workers from the county who were members of the respondents' ethnic group. Due to the busy schedules of the respondents, the bulk of the data collection was done at night.

3.3 Techniques/Methods Of Data Collection

The data for the study was collected by using a number of data collection techniques. The techniques were used in combination to re-inforce each other and to enhance the reliability of the data. Techniques used included the following:

(a) Questionnaires

(b) Oral interviews and informal discussions.

(c) Review of international material, regional and project reports.

3.3.1 Questionnaires

The use of structured questionnaire was one of the data collection instruments employed to obtain quantitative data from each farmer as well as statements about various farming practices. The questionnaire obtained a mixture of both pre-determined (highly structured) and open-ended questions. The advantages of using a mixture of both types of questions has been discussed by Adam (1982). Structured questions are easy to collate while the open-ended questions permit access to more information which cannot be easily obtained from structured questions.

3.3.2 Oral Interviews And Informal Discussions

Owing to the high level of illiteracy in not too advanced communities such as the study area, it is sometimes difficult to ascertain precise information such as the dates of certain events or activities.

However, due to value placed on oral tradition and memory, (Magbaily-Fyle, 1981) it is possible to compare happenings and timing events in relation to one another. Interviews and informal discussions was one of the techniques used during the period of collecting such information.

3.3.3 Review Of International, National, Regional, And Project Documents

A good deal of literature relevant to the study is available in the libraries and reading rooms. The researcher made reference to some of these collections so as to obtain enough material principally intended to augment information drawn from observation/oral interviews, and mostly needed to act as a background to various aspects of the study. A complete list of works consulted in the preparation of this work and quoted in the text is found in the bibiliography.

3.3.4 Sample Size And Selection

A total of 80 project participants were randomly selected from a list of sheep raising farmers from the selected villages of Gohn Zodua (40), Bomboja (20), and Fali (20) using random numbers during the selection exercise.

3.5 Variables and Other Measurements

3.5.1 Personal And Situational Characteristics

The personal and situational characteristics of each respondent were obtained to give an idea of the types of farmers involved in the sheep raising project. These variables include age, religious affiliation, educational level, household size, political standing/position holding, social status, occupation, and marital status.

3.5.2 Project Involvement And Participation

The variables measured covered aspects such as project enlistment, aspect(s) of project involved in sheep raising technologies introduced and adopted, decision-making within the project, training programmes organized and attended by project farmers, and their perception of the project.

3.6 Data Processing And Analysis

The type of data collected for this study were both qualitative and quantitative. As a result, the method of analysis used was mainly descriptive in processing and analyzing some aspects of the data. In this case, frequency counts were made to arrive at raw scores which were converted into percentages. These are presented in tabular form. Also, measures of central tendency such as mean and mode and measures of dispersion such as the range were calculated. The results are presented in Chapter 4.

3.7 Problems And Limitations Of The Study

The researcher encountered a number of problems during the data collection exercise. These include:

- the problem of memory re-call,
- political instability,
- the problem of transportation, and
- the busy schedule of the farmer respondents.

3.7.1 The Problem Of Memory Re-call

One of the problems encountered in the field related to remembering project beginning dates and even beneficial farming activities. Consequently, events of such nature were compared to period of historical happenings which could easily be remembered by respondents as a baseline for making estimates. Such events included World War I (1914-1918), World War II (1944-1947), and others (See Appendix).

3.7.2 Political Instability

Due to the political atmosphere at the time of data collection, some respondents at certain stages became reluctant in releasing information. However, because of the frequent contacts and rapport with respondents by the researcher and assistants, their cooperation was solicited. Also, it was sometimes difficult to interview respondents alone without large followings. In such cases the problem was solved by removing the respondents away from the crowd after explaining to them the purpose of the interview.

3.7.3 Transportation Problem

The unavailability of transport was a serious problem and that made transport fares to double. The researcher and his assistants had to content with high transport costs during the data collection exercise. This made personnel to walk on foot sometimes. Also the period of the field work (rainy/wet season) made assessibility to some of the sample villages very difficult. Sometimes it required travelling on foot over long distances, using alternative routes to reach such settlements.

3.7.4 Busy Schedule Of The Farmer Respondents

Farmers were busy with their rice farming activities and therefore they could only entertain interviews at night. In some instances, it was difficult to get farmers interviewed during the first visit because of their farming commitments and other activities. In order to solve this problem, appointments were made which necessitated return visits.

3.7.5 Limitations Of The Study

The main limitation of this study was its scope. The study was confined to three villages in two districts out of the five districts forming Grand Cape Mount County. Grand Cape Mount County comprises Garwular, Tombay, Tawor , Porkpa, and Kola Conneh districts. For wider coverage and comparative purposes, there is a need to undertake similar studies in more districts in the county.

3.8 Conclusion

The foregoing described how the sample for this study was selected, methods employed in the data collection exercise and how data collected were analysed. The next Chapter focuses on the presentation of the results.

Chapter IV

PRESENTATION AND DISCUSSION OF RESULTS

4.0 Introduction

This chapter focuses on the presentation and interpretation of the results of the study. The presentation is arranged into two sections. The first section describes the project participants in terms of their personal and situational characteristics and prevailing farming systems. The second section is concerned with project participation and adoption of sheep raising technologies by participants.

4.1 Personal And Situational Characteristics Of Respondents

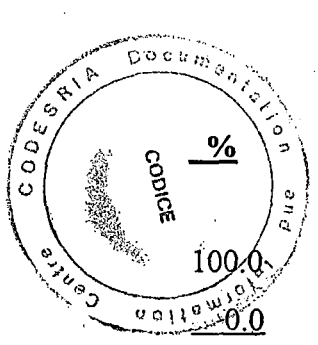
The success and failure to adopt new farm practices have been better explained by investigating certain personal characteristics of the grower as well as the social and economic featues of the farm situation in which the farmer makes his decision (Fliegel and Kivlin, 1967; Rogers and Shoemaker, 1969). The variables examined in relation to non-adoption in this study included sex, age, ethnicity, religion, marital status, education, and occupation. All these are seen to influence the growers adoption behaviour (Jones, 1963).

4.1.1 Sex Composition Of Respondents

The sex composition of respondents was assessed and the results are presented in Table 4.1a. From the Table, it could be seen that the majority of the respondents (78.8%) were males and the rest (21.2%) were females. This indicates a high male participation in the sheep raising project. This is not surprising because traditionally, women are considered as helpers and not as farmers but they perform most of the

Table 4.1 Distribution of Respondents by Personal and Situational Characterisitics

Selected Characteristics		Respondents	(N = 80)
a)	**Sex**	**No**	**%**
	Male	63	78.8
	Female	17	21.2
		80	**100.0**
b)	**Age**	**No**	**%**
	Below 20	0	0.0
	20 - 24	0	0.0
	25 - 29	2	2.5
	30 - 34	7	8.8
	35 - 39	16	20.0
	40 - 44	15	18.7
	45 - 49	10	12.5
	50 +	30	37.5
		80	**100.0**
c)	**Ethnicity**	**No**	**%**
	Vai	79	98.8
	Dei	1	1.2
		80	**100.0**



d) **Religion of Respondents**	**No.**	**%**
Islam	80	100.0
Christianity	0	0.0
	80	100.0

e) **Marital Status**	**No.**	**%**
Married	72	90.0
Single	1	1.2
Divorced	2	2.5
Widow	4	5.0
Seperated	1	1.3
	80	100.0

f) **Types of Marriage**	**No.**	**%**
Polygamous	17	21.3
Monogamous	55	68.7
Others	8	10.0
	80	**100.0**

g) **Number Of Wives In Polygamous Marriages**

	Mentions	
	No.	**%**
2 - 3	16	94.1
4 - 5	1	5.9
5 - 6.	0	0.0
	17	**100.0**

(N = 80)

h) **Educational Status of Respondents**

	No.	%
No formal schooling	64	80.0
Primary	5	6.2
Secondary	1	1.3
Vocational/Technical	2	2.5
University	0	0.0
Vai script	6	7.5
Arabic Education	2	2.5
	80	100.0

I) Occupation of Respondents

	No.	%
Farming	76	95.0
Trading	1	1.3
Carpentry	3	3.7
	80	100.0

farm work (Johnny, 1979). For example, in Rwanda, Democratic Yemen, Indonisia, and Haiti, women are responsible for the raising of livestock including fowl, rabbits, and goats. These animals are considered very important for both family nutrition and income generating purposes (UNDP, 1984).

4.1.2 Age of Respondents

In the culture of the Mende's of Sierra Leone, the age of members in the community mostly farmers, play a very important role in their activities. For example, a younger person had to speak with difference to an elder member of the community. Age was also a very significant factor in determining the selection of members for high political offices (Allie, 1990). The ages of respondents were investigated in that light and the results indicate that the majority of the respondents were still in the economically active age group of 25 to 49 age range (Table 4.1b). None of the respondents were below 25 years of age, indicating that very few people start farming at an early age on their own (SLG: Agricultural Statistical Survey - 1970/71). Josiah's study (1988) also revealed that very few of his sample farmers were under 25 years of age. Half of the sample farmers (50.0%) were above 45 years also suggesting an ageing population on farms.

4.1.3 Ethnicity of Respondents

Almost all the respondents (98.8%) were from the Vai tribe. The remainder (1.2%) came from the Dei tribe. The prepoderance of the Vai respondents in the sample would not be uncorrected with the fact that the study area is mostly inhabited by the Vai people.

4.1.4 Religious Affiliation Of Respondents

The adoption of innovations have been shown to be affected by religious beliefs and differences in rituals. A study conducted on the Mendes of Sierra Leone showed that this conception governs and determines their reaction and adjustments in almost every aspect of their life (Little, 1967). In another study conducted by Bajrachary and cited by Agarwal (1983) revealed that while the Rias and Gurunas, who were indigenous caste groups with different religious beliefs and rituals, resisted the adoption of the use of wood-stove, the Brahim and Chetri, who had migrated from outside accepted the use of the stoves. The religious affiliation of sample project participants were investigated in that light and the results obtained revealed that all the sample farmers (100%) were muslims, indicating a very strong Islamic influence in the study area. The implication of this finding is that because of the muslim culture (they value sheep more for muslim festivities), there is likely to be a high adoption of sheep raising activities in the study area.

4.1.5 Marital Status of Respondents

The data on marital status of respondents reveal that 90 per cent of them were married (Table 4.1e). The rest were either single (1.2%), divorced (2.5%), widow (5.0%), or separated (1.3%). The high proportion of married respondents indicate that marriage is still regarded as an important social institution in the study area.

With regard to the type of marriage being practiced, the majority of the respondents (68.7%) were found to be practicing monogamy

(Table 4.f). This finding is rather suprising for a muslim dominated area. Slightly above one fifth (21.3%) reported polygamous marriages. Of those reporting polygamous marriages, about 4 percent of them had between 2 and 3 wives, and the rest (about 96 percent) had 4-5 wives (Table 4.1g). The implication of this is that those with more wives would have more labour available for agricultural work, especially work in African context where women are regarded as sources of labour and perform most of the agricultural activities.

4.1.6 Educational Status Of Respondents

Education has been shown to make people more amenable to the adoption of new farming practices (Jones, 1963). The educational level of sample farmers was therefore measured and the results are presented in Table 4.1h. Most of the respondents (80.0%) had not received any formal schooling i.e they did not go to school. Small proportions claimed to have acquired primary (6.2%), secondary (1.3%) and vocational/technical (2.5%) education. No respondent had University education. About 8 percent of the respondents reported that they could read and write the Vai script and about 3 percent claimed to be literate in Arabic. This result however shows a high illiteracy level among sample project participants.

4.1.7 Main Occupation Of Respondents

The main occupation of most respondents (95.0%) was farming; and in-significant proportion reported carpentry (3.7%), and trading (1.3%) as their main occupations. Those reporting carpentry and trading may be regarded as part-time farmers. The results, however, indicated that farming is an important economic activity in the study area.

4.1.8 Other Income Sources of Respondents

In rural areas people engage themselves in several income generating activities in order to augment what is derived from their main occupations . Sample project participants were therefore asked to state their additional sources of income. The additional sources of income given are presented in Table 4.2.

Table 4.2 Distribution of Respondents According To Other Income Generating Activities

	Mentions	
Activity	**No**	**%**
Fishing	19	23.5
Hunting	12	14.8
Gardening	5	6.2
Coal making	10	12.3
Gari making	14	17.2
Carpentry	5	6.2
Tailoring	3	3.7
Teaching	6	7.5
Arts & Craft	7	8.6
	81	**100.0**

From the Table, the four most important additional income sources of respondents were fishing (23.5%), gari making (17.2%), hunting (14.8%), and coal making (12.3%). Arts and craft, teaching, gardening and tailoring, as additional income sources, accounted for 8.6, 7.5, 6.2, and 3.7 percentage points respectively.

4.1.9 Position Holding of Respondents

The social status of an individual in his environment has been shown to have considerable influence on the type and extent of control that can be exerted as an individual (Arensberg, and Niehoff, 1971; Williams, 1985). The position holding of respondents in their environment was therefore investigated and the results are given in Table 4.3.

Table 4.3 Distribution Of Respondents According to Position Holding

(N = 80)

Positions	No	%
Paramount Chief	0	0.0
Chiefdom Speaker	2	2.5
Town Chief	4	5.0
Town Crier	3	3.8
Ordinary Citizen	60	75.0
Elder	11	13.7
	80	**100.0**

The data indicated that aboout one-fourth of the respondents were position holders and were occupying positions of Chiefdom Speaker (2.5%), Town Chief (5.0%), Town Crier (3.8%), and Elder (13.7%). The majority of the respondents were non-position holders, i.e. they were ordinary citizens (75.0%).

The sizeable proportion of position holders in the sheep raising project may suggest that control among project participants was in the hands of these few who may make major decisions on behalf of the majority of the project participants.

4.1.10 Methods Of Acquiring Land By Respondents

Studies have shown that the importance of the land question to the African people cannot be overemphasised Morphey (1994). Land is a supportive pillar to the communities and is regarded as property of the dead, living, and those yet to be born (Little, 1967). The allocation of land for farming and other activities is usually done by the chief of the community or family head who acts as a trustee in the disposal of land with the approval of the community (Lowe, 1986). In that light, the method of acquiring land by sample project participants was investigated, and the results are presented in Table 4.4.

Table 4.4 Methods of Acquiring Land By Respondents

(N=80)

Land Source	No	%
From the village head	9	11.3
From family head	58	72.5
Communal land	13	16.2
Purchase	0	0.0
	80	**100.0**

From the data, it could be seen that the majority of the sample project participants (72.5%) claimed to have acquired land from their family heads. A smaller proportion indicated that they acquired land from either the village head (11.3%) or from the community. No respondent reported purchasing land for farming. The implication of this finding is that because land is regarded as a family or community property, its out right sale to outsiders is usually not allowed.

When asked whether it was possible for them to acquire more land if they needed it, the majority of the sample farmers responded in the affirmative. However, reasons advanced for non-availability of land for cultivation were that there was not enough land to go around, and almost every suitable piece of land in towns or family possession were now under cultivation.

4.1.11 Farming Systems Practiced By Respondents

Farming systems practised by sample participants were assessed and the results are presented in Table 4.5.

Table 4.5 Distribution Of Respondents According to Farming Systems Practised

	Mentions	
Farming Systems Practised	**No**	**%**
Mixed upland rice farming	72	41.4
Swamp rice farming	22	12.6
Sheep raising	51	29.3
Cattle rearing	0	0.0
Poultry	4	2.3
Vegetable gardening	25	14.4
	174	**100.0**

The most important farming systems practised by sample project participants was upland rice farming (Table 4.5). This accounted for about 41 per cent of all mentions made in relation to the various farming practices reported. The second most important farming system undertaken by respondents was sheep raising, accounting for about 29 per cent of all mentions. This was followed by vegetable gardening, swamp rice farming and poultry farming in that order. Mixed upland rice farming however remains the dominant farming activity in the study area.

4.1.12 Farming Organizations of Respondents

Sample farmers affiliation to farming organizations was tested and the results are given in Table 4.6.

Table 4.6

Distribution of Respondents According to (a) Farming Organizations (b) Reasons for Joining and (c) Length Of Time With Organisation

(N = 80)

Positions	Mentions No.	Mentions %
(a) **Organization**		
Co-operative	8	9.1
Farmer Association	5	5.7
Osusu	8	9.1
Work Group	67	76.1
	88	**100.0**
(b) **Reasons For Joining**	**Mentions No.**	**Mentions %**
To bring unity	24	28.6
To help each other	18	21.4
To speed up work	13	15.5
To increase income	29	34.5
	84	**100.0**

(N= 80)

(c) **Number Of Years With Organization**

Year	No.	%
Below 1 year	0	0.0
1 - 3 years	28	35.0
4 - 6 years	15	18.7
6 +	32	40.0
None members	5	6.3
	80	100.0

From the Table, it could be seen that the most important organization that respondents belonged to was the work group. This scored about three-fourths (76.1%) of all mentions made of organizations by respondents who were members. Of less importance percentage-wise were cooperative, osusu and farmer associations. Reasons advanced for their membership of the various organizations included the foregoing of unity (28.6%); help each other (21.4%); speed up farm work (15.5%); and to increase income (34.5%) (Table 4.6b).

Table 4.6c further indicates that a sizeable proportion of the sample participants (40.0%) have been members and working in these farming organizations for over six years. About 19 per cent reported to have worked in such organizations for 4 to 6 years. A small proportion (6.3%) however did not belong to any group. The results suggest that within the project area farming activities are mostly carried out by farming organizaions. The implications of such group membership is cohesiveness among respondents working as groups and the completion of farming activities on time.

4.1.13 Types Of Labour Used By Respondents

The sources of labour utilized by sample participants was assessed and the results are showin Table 4.7.

Table 4.7 Types Of Labour Used By Respondents In Farming

	Mentions	
Types of Labour	**No**	**%**
Family labour	72	46.5
Hired labour	1	0.6
Work group (Kuu)	74	47.7
Communal	8	5.2
	155	**100.0**

The type of labour mentioned most by respondents was the work group. This accounted for about 48 per cent of all mentions made in relation to the labour types used by sample farmers in their farming activities. Work group was closely followed by family labour scoring about 47 percent of all the mentions. Communal and hired labour types were less mentioned by respondents but more so hired labour. These results show that respondents relied heavily on family labour in addition to other communal forms of labour such as the work group. The implication of these findings is that no matter what help the farmer gets, he still relies on family labour.

4.1.14 Organization Of Household For Farming Activities

The organisation of household for farming activities in the rural areas of developing countries is a very important exercise. Development studies have shown that labour operations in rural areas are usually governed by the custom of labour division with respect to farming operations (Dey, 1984).

The cultivation of a particular crop is the responsibility of one sex with little or no help from the other (Rutherberg, 1980). Against this background, the way in which sample farmers organised their household for farming activities was investigated and data are presented in Table 4.8.

Table 4.8 Ways Of Organising Household For Farming Activities

	Mentions	
Organization	**No**	**%**
Family work together as a group	55	53.3
Family members are divided into small groups	8	7.8
Members work individually	5	4.9
Adult members do the farm work	3	2.9
Males work separately	21	20.4
Women and children do the light jobs	11	10.7
	103	**100.0**

As seen in Table 4.8, slightly over half of the mentions (53.3%) related to the family working as a group while about one-fifth of the mentions were in connection with males working separately. About one-tenth of the mentions (10.7%) advanced were in relation to women and children working together to do the light jobs. This finding confirms previous one which showed that women and children carry out most of the farming activities from planting to harvest (Johnny, 1979). A small proportion of the mentions (7.8%) indicate that family members are usually divided into small groups to carry out specific activities, while family members working individually accounted for 4.9 percent of the mentions. Adult members in the family doing the farm work accounted for 2.9 per cent of the mentions advanced by sample farmers. The findings show that farmers do organize their household for farming and there is a division of labour in relation to farming activities usually based on sex and age.

4.1.15 Annual Income Got From Farming Practised By Respondents

In order to find out why sample project participants give priority to selected farming practices, they were asked to state their annual incomes as against the farming systems practised. The results are given in Table 4.9.

Table 4.9 Percentage Distribution Of Respondents Annual Income In L$ Got From The Farming Practised

Income in Liberia Dollars (L$)

Farming Practised	L$100-200	L$300-400	L$550+
Mixed upland rice	12.5	43.5	22.5
Swamp rice	16.3	78.8	11.3
Plantation cropping	0.0	3.8	0.0
Vegetable gardening	17.5	13.3	5.0
Poultry	0.0	12.5	0.0
Sheep raising	0.0	33.8	30.0
Cattle	0.0	0.0	0.0

From the Table, it could be seen that respondents generated more income from upland mixed rice farming followed by sheep raising, swamp rice farming, and vegetable gardening. It is therefore not suprising that upland mixed rice farming was the dominant farming practice carried out in the study area.

4.2 Project Participation And Knowledge Of Sheep Raising Technologies

4.2.0 Introduction

Participation from the community development perspective has been shown to mean the process through which the needs of the community are brought forth by they themselves with the assistance of village level workers (V.L.W.). It would therefore entail the participation of the community members in decision-making, planning, implementation, distribution of benefits, and evaluation stages. This section of the interpretation will assess the part played by sample project participants in the areas of decision-making, planning, implementation, benefit sharing, and evaluation of the sheep raising project.

In order to obtain information on the above, the respondents were asked to indicate responses to questions relating method of selection, aspect involved in, attendance of project meetings, attendance at training programmes, contributions made towards project implementation, awareness of sheep raising technologies, decision-making, and positive and negative changes experienced.

4.2.1 Method Of Selection Of Respondents For Project Participation

The method of selection of farmers to participate in the sheep raising project was investigated and the results are given in Table 4.10a.

Table 4.10 Distribution Of Respondents According to (a) Method Of Selection For Project Participation (b) The Reasons For Joining The Project And (c) Length Of Time With Project

(N = 80)

(a)	**Method Of Selection**	**No**	**%**
	Community	50	62.5
	Volunteered	17	21.2
	Social Promoter	13	16.3
		80	**100.0**

(b)	**Reasons For Joining The Project**	**Mentions**	
		No.	**%**
	To raise more sheep	60	25.6
	To buy sheep cheaper	39	16.7
	To encourage other farmers	27	11.5
	To generate income for developing the town, and improve standard of living	89	38.0
	To increase knowledge in sheep raising through training	19	8.2
		234	**100.0**

(N = 80)

(c)	**Length of Time With Project**	No	%
	1 - 3 years	43	53.8
	4 - 6 years	37	46.2
	6 + years	0	0.0
		80	**100.0**

The results revealed that the majority of them (62.5%) were selected by the community. Slightly above one-fifth (21.2%) said they themselves volunteered and the rest (16.3%) were selected by extension workers for paticipation in the project. The community had a considerable say in the selection of farmers although this could have been highly influenced by position holders who formed a sizeable number of respondents on the project.

Several reasons were advanced by respondents for joining the sheep raising project (Table 4.10b). The most important reason (percentage-wise) put forward for joining the project was to generate income for the improvement of their standard of living and the development of the community. This reason scored 38 percent of all mentions of reasons given. While raising more sheep, as a reason for project enlistment, accounted for about 26 per cent, to buy sheep cheaper and to encourage other farmers were relatively of less significance percentage-wise. The need for training in sheep raising was least advanced as a reason for project enlistment.

With regard to their length of time with the project, 54 per cent of the respondents had spent between one and three years with the project while the rest (46.0%) indicated spending four to six years (Table 4.10c). The mean duration was three years; there was none who had stayed with the project for more than six years. The short time period spent by the majority of respondents with the project suggest that most of them were not very experienced in modern techniques of sheep raising.

4.2.2 Aspects Of Sheep Raising Respondents Were Involved In And Considered To be Very Important

The aspects of sheep raising which sample farmers were involved in were investigated and the results are shown in Table 4.11a.

Table 4.11 Distribution Of Respondents According To (a) The Aspects Of The Project They Were Involved In Individually, (b) The Most Important Aspect(s) To Them

(a) Aspects Farmers Are Involved In	Mentions No	Mentions %
Feeding of sheep	20	15.3
Site selection for sheep raising	17	12.9
Shelter construction for sheep	15	11.5
Selection of breeding stock	7	5.3
Proper fencing	20	15.3
Provision of treatment for sheep	12	9.2
Management of animal	32	24.4
Feed storage	8	6.1
	131	**100.0**

(b) The Most Important Aspect	Mentions No	Mentions %
Shelter construction for sheep	19	20.0
Provision of treatment for sheep	11	11.6
Management of the animal	46	48.4
Site/fence construction	9	9.5
Co-ordinating available resources for Project	10	10.5
	95	**100.0**

It can be seen from the Table that sizeable proportions of mentions were advanced in relation to the involvement of respondents in the following sheep raising activities: feeding (15.0%), site selection for gracing (12.9%), shelther construction (11.5%), proper fencing (15.3%), and the management of the animal (24.4%). The provision of treatment (9.2%), the selection of breeding stock (5.3%) and feed storage (6.1%) as aspects respondents were involved in were less mentioned. These results suggest that significant proportions of respondents were not involved in or carrying out some of the above sheep raising activities.

The most important aspects of the sheep raising project, as perceived by the respondents, (in order of importance) were management of the animal (48.4%), shelter construction (20.0%), treatment of the sheep (11.6%), and the coordination of resource materials for the project (10.5%). These findings suggest that respondents got involved in aspects of sheep raising which they perceived as most important activities to them. This may have been one of the factors for the non-adoption or rejection of some of the sheep raising innovations or technologies advanced by extension workers.

4.2.3 Project Meeting Attendance By Respondents

In order to find out whether project sample participants held meetings among themselves relating to the activities of the project, a list of alternative meeting times was presented to them and they were asked to check and select an option (Table 4.12).

Table 4.12 Project Meeting Attendance By Respondents

(N = 80)

	No	%
Frequency of Holding Meetings		
Once a week	32	40.0
Twice a week	15	18.7
Once a month	31	38.8
Twice a month	2	2.5
	80	**100.0**

From the Table it can be seen that 40 per cent of the sample project participants indicated that they attended meetings once a week. While about 19 per cent attended meetings twice a week, about 39 per cent did so once a month. An infinistesimal proportion of the respondents (2.5%) attended meetings twice a month. The findings show that meeting attendance of respondents varied from once in a week to twice in a month but more respondents attended meetings once a week and once a month. Meeting attendance was fairly regular indicating a measure of participation of the respondents in project meetings.

4.2.4 Attendance of Project Training Programmes

A large number of people, especially in the rural areas of developing countries, still lack basic education and training opportunities. However, despite the increasing demand for training, quality improvement has to take precedence over programme expansion (UNDP,1989). To acertain the extend to which sample project participants were prepared for the implementation of the sheep raising project technically, sample farmers' attendance at training programme was investigated. The data generated on this aspect are presented in Table 4.13.

Table 4.13: Attendance at Project Training Programmes By Respondents

Training Programmes	Respondents No	%
(a) **Attended**	6	7.5
Did not attend	74	92.5
	80	**100.0**

(b) **Reasons For Not Attending**	Respondents No	%
Was not invited	65	87.8
Had other commitments	5	6.8
Only selected people attended	4	5.4
	74	**100.0**

An insignificant proportion of the sample respondents (7.5%) reported attending training programmes on sheep raising techniques. The majority (92.5%) stated that they never attended any training programmes.

The reasons given by respondent for non-attendance of the training programmes organised by the project are presented in Table 4.13b. Three main reasons were advanced for non-attendance of such training programmes. These were non-invitation of sample respondents (87.8%). Only those selected were to attend (5.4%); and some respondents (6.8%) did not have the time because of other commitments.

The results show that attendance at training was considerably influenced by the training organizers. People who attended the training programmes were those who were invited or selected. These were very few in number. This may not be unconnected with the policy of the project.

4.2.5 Project's Resources and Cost

For local farmers to adopt recommended farm practices, they have to perceive distinct advantages of previous methods, the availability of needed resources and at the appropriate time, and a suitable market for the surplus that will accrue as a result of adoption (Basu, 1969). The resources and cost of project materials were assessed in that light.

Table 4.14 Community And NGO Contribution to Sheep Raising Project.

Community			NGO		
Resource	**Mean Quantity**	**Costs**	**Resource**	**Quantity**	**Cost (L$)**
Land	6 acres	L$ 360.00	Sheep	15	L$7,500
Stick	750 pieces	2,200.00			
Nail	30 pkts	30.00			
Cement	25 bags	1,450.00			
Zinc	3 bundles	1,620.00			
Materials for fence construction	1,600 sticks	4,800.00			
Food		2,160.00			
Medication		75.00			
		L$12,745.00			**L$7,500**

The result in Table 4.14 indicate that the respondents almost spent twice (L$12,745.00) as much as the assisting agent (L$7,500.00) in the provision of project materials. The assisting agent only provided the animals (sheep). From the findings even though the respondents somehow carried out the project, the possibility of providing adequate imported materials on time, especially taking into consideration the economic status of the respondents, could have posed some problems in the efficient implementation of the entire project.

4.2.6 Knowledge Of Sheep Raising Technologies

Respondent's knowledge of the technological know-how of the sample Sheep Raising Technologies were investigated under the sub-headings of housing, feeding, health, and breeding. The results are given in Table 4.15.

Table 4.15: Distribution Of Respondents According To Awareness Of Improved Sheep Raising Techniques

Sheep Raising Technologies	Respondents			
	Aware		Unaware	
	No	%	No	%
(a) **Housing of Sheep**				
Site selection	68	85.0	12	15.0
Shelter construction	66	82.5	14	17.5
Provision of adequate light and ventilation in shelter	33	41.2	47	58.8
Proper fence construction	61	76.2	19	23.8

		Respondents			
		Aware		Unaware	
		No	%	No	%
(b)	**Feeding of Sheep**				
	Feeding and Water Provision	63	78.8	17	21.2
	Identification of food materials	22	27.5	58	72.5
	Good against spoiled food	36	45.0	44	55.0
	Selecting food materials	19	23.8	61	76.2
	Movement of sheep to clean pasture	22	27.5	58	72.5
	Construction of feeding troughs	18	22.5	62	77.5
	Feed storage	24	30.0	56	70.0
	Rotation of sheep in pasture for feeding	14	17.5	66	82.5
	Growing of pasture	15	18.8	65	81.2
(c)	**Health Requirements**				
	Deworming	17	21.3	63	78.7
	Foot Bath	29	36.3	51	63.7
	Spraying	20	25.0	60	75.0
	Tick protection	11	13.8	69	86.2
	Dipping	13	16.2	67	83.8
	Medication	18	22.5	62	77.5

(d) **Breeding Sheep**

Selection of breeding stock	20	25.0	60	75.0
Selection of breeding method	19	23.7	61	76.3
Feeding during gestation	20	25.0	60	75.9
Delivery techniques	20	25.0	60	75.0
Care of sheep(ewe) after birth	28	25.0	52	45.0
Management of new born lambs	54	67.5	26	32.5
Management of growing lambs	63	78.7	17	21.3
Culling techniques	6	7.5	74	92.5

From the Table, it could be seen that a significant proportion of the respondents had very little or no knowledge of most of the modern sheep raising technologies advanced by the project. However, under housing, very high proportions of respondents claimed that they were aware of the technologies in site selection (85.0%), shelter construction (82.5%), and proper fencing (76.2%). About 78 percent of the respondents reported being aware of feeding and the provision of water for the animals. In the area of health and breeding, the majority of the respondents were unaware of most of the technologies except for management of both new born lambs and growing lambs. These two technologies/innovations accounted for awareness percentages of respondents of 54 and 63 respectively.

It is therefore not suprising that the respondents relied heavily on traditional sheep raising methods. This suggest that information dissemination on sheep raising technologies has not been effective and may have contributed to the failure of the project.

4.2.7 Respondents Involvement In Decision-Making Of Project Activities

The involvement of respondents in the decision-making process in relation to the project activities was investigated. The results are presented in Table 4.16.

Table 4.16: Distribution Of Respondents According To Their Involvement In the Decision Making Process And Who Takes Project Decisions

(N = 80)

(a) Level Of Involvement	No	%
Not involved	28	35.0
Partly involved	7	8.8
Completely involved	45	56.2
	80	**100.0**

(b) Who Takes Project Decisions	No	%
NGO decides alone	11	13.8
NGO decides jointly with project members	45	56.2
Project members decide alone	15	18.7
NGO and few project members	9	11.3
	80	**100.0**

The results obtained revealed that more than half of the respondents (56.2%) were completely involved in the decision making process of the project activities. An insignificant proportion maintained that they were partly involved (8.8%), while 35 percent were completely left out of the decision making process.

When asked how major decisions were arrived at or taking in the project, about 56 per cent of the respondents reported that decisions were jointly taken by the project participants and the assisting agency. Decisions made by the assisting NGO alone; by project authorities alone; and NGO in conjunction with few project members; accounted for 13.8 per cent, 18.7% and 11.3% respectively. These still indicate that a sizeable proportion of the respondents were not involved in decision-making in relation to the sheep raising project.

These findings suggest that the assisting agency played a dominant role in the decision-making process of the project instead of encouraging more involvement of project participants in decision making.

4.2.8 General Effects Of The Sheep Raising Projects

Table 4.17 presents the data on positive and negative effects as experienced by the respondents during the life span of the sheep raising project.

Table 4.17 General Effects Of The Sheep Raising Projects

General Effects	Mentions No	%
Positive		
Good management of financial returns from sheep sales	19	9.1
Brought unity among project members	36	17.1
Encouraged hard work and self commitment	25	11.9
Increase income	21	10.0
Introduced improved sheep raising techniques	20	9.5
Sub Total	**121**	**57.6**

Negative

Experienced frequent sheep casualties	24	11.4
Spent much money on project	23	11.0
Destruction of crop land by sheep	20	9.5
Initiated dispute between project members and non-members	10	4.8
Spent much time on project leaving out other farming activities	12	5.7
Sub Total	**89**	**42.4**
Grand Total	**210**	**100.0**

In Table 4.17a, the most important positive effects or benefits mentioned by respondents were the forging of unity among project members (17.1%), encouragement of hard work and commitment (11.9%), and increased income (10.0%). Other benefits mentioned were improved financial management and the introduction of new technologies in sheep raising activities scoring 9.1 per cent and 9.5 per cent respectively. In the area of negative effects the three dominant effects percentage-wise were frequent animal casualties during the life span of the project (11.4%), spending of too much money on the project (11.0%) and the destruction of crop land by the animals (9.5%). Other negative changes as a result of the sheep raising project were that the project initiated dispute between project participants and non-participants due to the crop destruciton (4.8%) and spending too much time on project at the expense of other farming activities (5.7%) Table 4.1b. The negative effects overall accounted for slightly over two-fifths (42.4%) of all mentions of general effects of the sheep raising projects. The implication of the finding is that the social aspect of the programmes were not properly appraised leading to the unanticipated consequences.

Chapter V

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.0 Introduction

The last chapter dealt with the presentation and interpretation of the study results. In this chapter the threads of the arguments are drawn together and conclusions and recommendations made.

5.1 Summary

The research study has been undertaken with the view to making contributions to the effective implementation of income generating projects for the rural poor especially in small ruminant production in developing countries. Emphasis has been placed on the investigation of the reasons for non-response of farmers to development programmes with special reference to sheep raising in Grande Cape Mount County of Liberia covering Gohn Zodua, Bomboja, and Fali Communities.

In Grand Cape Mount County, Western Liberia, the majority of the population depend more on plant protein to provide their nutritional requirements. Plants however provide low quality - protein and lack some essential Amino Acid. The introduction of sheep meat into the diet of these people highly characterized by plant protein and large amount of carbohydrate foods would go a long way in meeting the necessary protein requirement.

A sheep raising project was instituted in Grand Cape Mount County, This project has been operating for over three years but no study had ever been conducted to assess farmers participation and non response to technologies advanced to them. Hence, this study.

The specific objectives of the study were to:

- Investigate who were the sheep farmers

- Determine the extent of participation of the target population in the sheep raising projects.

- Investigate the level of adoption of sheep raising innovation or technologies.

- Examine institutional, managerial, economic and socio-cultural factors that militated against the adoption of the innovations/ technologies, and

- Make suggestions for the improvement of the programme where possible.

The study included respondents from two districts in Grand Cape Mount County (Garwular, and Tombay), Western Liberia. The total sample of 80 respondents were selected randomly from the villages of Gohn Zodua (40), Bomboja (20), and Fali (20). Data for this study were collected between November 1992, and March 1993 covering a period of five months. Questionnaires, oral interviews, informal discussions, and review of related literature formed the basic instruments and techniques for the investigation.

In order to examine the research problem using the objectives as a guideline, the following working propositions were formulated:

(a) Farmers in the project area perceived the sheep raising innovation packages differently from development authorities.

(b) Agriculture in the study area is viewed as a way of life and therefore any new farming practice which is not compatible with the socio-economic and cultural aspects of the people may be either resisted, partially adopted, or completely rejected, and

(c) The programme design, implementation, and decision-making process do not encourage full participation of the clientele.

The type of data collected for the study were both qualitative and quantitative. The method of analysis used was mainly descriptive in processing and analysing some aspects of the data. Frequency counts were made to arrive at raw scores which were converted into percentages. Also, measures of central tendency such as mean and mode and measures of dispersion such as the range were calculated.

The major findings of the study are the following:

- The majority of the respondents were males, and most of them were still in the economically active age group - 25 to 49 age range. Almost all of them were from the Vai tribe and belonged to the Islamic religion. The majority of the respondents were non-position holders.

- Most of the respondents had not received any formal schooling i.e. they did not go to school. The main occupation of most of the respondents was farming, and labour was being provided by the farmer, his wife/ wives, child-children, and other relatives and strangers staying with the farmer. Insignificant proportions reported using additional labour which was either communal or hired.

- With regard to the organisation of households for farming there was some form of division of labour in relation to farming activities, and this was based on sex and age. Upland mixed rice farming was the farming system from which respondents generated more income followed by sheep raising and vegetable gardening.

- The community had a considerable say in the selection of farmers for the sheeep raising project. Respondents joined the project for many reasons and these covered the generation of income for the improvement of the standard of living of the respondents and the community; the desire to raise more sheep; to see sheep meat been bought at a cheaper rate; and to receive training in sheep raising.

- Most of the respondents were not very experienced in modern techniques of sheep raising. The most important aspect of the sheep raising project, as perceived by the respondents, were management of the animal, shelter construction, treatment of the sheep, and the co-ordination of resource materials for the project.

- The majority of the respondents never attended any training programme because they were either not invited, selected, or had no time due to other commitments. The policy of the training organizers precluded the majority of the respondents from attending training programmes. The majority of the respondents therefore were unaware of modern technologies of sheep raising.

- A significant portion of the respondents had very little or no knowledge of most of the modern sheep raising technologies. Most of the respondents therefore relied heavily on traditional sheep raising methods.

- The assisting agency only provided the animals (sheep) and the rest of the project cost (which was mainly two times that provided by the agency) was borne by the project farmers.

- The majority of the respondents were not involved in the decision-making process of the project activities. The few who reported joint decision-making with project officers only endorsed or agreed with what project officers presented to them.

- The most important benefits mentioned by respondents included the initiation of unity among project members, encouragement of hard work and commitment, and increased income. Other benefits mentioned were improved financial managment and the introduction of new technologies in sheep raising activities.

- Despite these positive changes, farmers had some negative perceptions of the project. They experienced frequent animal casualities, destruction of crop land and other household materials by the animals initiating disputes between project and non-project members and spent too much money and time on the project as against other farming activities.

5.2 Conclusion

The challenge to help build the capacity of developing countries maintain their own beneficial development projects is to be considered of utmost importance to both African Governments and International Non-Governmental Organizations representing the donor community in Africa.

This study has clearly shown that the project participants involved in the modern sheep raising projects in the various project areas (Gohn Zodua, Bomboja, and Fali Communities) were not well trained; despite their economic

status, they were requested to provide the bulk of the project materials at the initial stages. As a result, this move might have given rise to the improper input supply for the successful implementation of the projects. Furthermore, project participants played an insignificant role in the decision -making process on matters dealing with the projects. Finally and most importantly, the projects did not appear to have been implemented within the accustomed traditional frame work of the various communities.

The failure of these projects simply indicate that traditional assistance approaches should be radically re-emphasised and re-oriented towards strengthening future development projects. The main objective of African Governments and Development Agencies must not only be to transfer improved productive skills but rather modern technologies/innovations that will achieve self-sustaining development projects in the various communities of Third World countries. Well defined and oriented capacity building should therefore be a priority to be included in every development activity of Africa.

5.3 Reccommendations

From the findings of this study, the following recommendations are being made for the improvement of future development programmes aimed at improving the living conditions of the rural poor thereby enabling them to take charge of their lives, make full use of available resources, and effectively manage their own activities.

- In the study, the sex composition indicate that the majority of the project participants were males. It is therefore not suprising that the the projects were short lived and therefore not sustainable. Women must now be considered as farmers and not merely as helpers as is traditionally maintained. They must be encouraged to take part in training programmes aimed at improving agricultural production, given

more credit facilities, provided with labour saving implements, and given the right to land ownership. If given the support and enouragement, women will immensely contribute to increasing the food supplies required in the developing world.

- Education is a major contributing factor to agricultural development. Research has shown that farmers in developing countries do not easily adopt improved technologies due to the high rate of illiteracy. In the sheep raising project, there was a high level of illiteracy among project participants. Adult education classes should threfore be conducted for participants with emphasis on literacy and numeracy.

- Conventional development strategies tend to see development as a series of technical transfers aimed at boosting production and generating wealth. Projects that have been based on this approach have usually targeted medium to large-scale progressive producers hoping that improvement will trickle down to more backward rural groups. Unfortunately, this approach has often led to the concentration of resources, marginalization of small farmers, and increasing the landless. According to the findings of this study, the majority of the project participants never attended training programmes and as a result had very little or no knowledge of most of the modern sheep raising technologies and this lead to frequent animal casualties. This clearly shows that the trickle down approach anticipated by the assisting agency did not work out with the participants as only an insignificant proportion had very little insight into technologies introduced.

For effective rural development programmes, all project participants (both men and women) must be trained. Training efforts should be

considered as part of the project implementation and should be built into the normal administrative practices of support from donors, and not only carried out once in a life span of the project. It is only when training approaches are integrated into the day to day activities of field agencies that the practical aspects of the training will receive the required attention.

In addition, extension services should include veterinary services which can be established at the county levels and provide adequate input materials for the implementation of projects at the initial stages. This will help resolve the problem of the provision of inadequate project materials by poor rural farmers and reduce the high cost of the project implementation as was experienced by the sheep raising project participants.

5.4 Suggestions For Further Studies

- A study providing the basis for statisitics inferences thus reflecting a complete economic analysis of sheep raising projects must be conducted in order to blend with the socio-cultural findings for better planning.

- Work is recommended on the production traits and performance characterisistics of local sheep breeds commonly found in developing countries.

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APPENDIX I

DATES OF IMPORTANT EVENTS IN LIBERIA

DATE	ACTIVITIES
1822	Founding of Liberia by black freemen of America.
1822 - 1828	Jehud Ashman Days.
1828 - 1839	Richard Randall Days.
1834 - 1835	John B. Pinney Days.
1841 - 1847	Joseph Jenkins Robert Days.
July 26 1947	Liberia Independence Day.
1914 - 1918	World War I.
1944 - 1947	World War II.
1944 - 1971	Tubman Days.
April, 12th 1980	Assasination of President William Tolbert.
April, 12th 1980	Inception of Peoples Redemption Council Government in Liberia (PRC).
April, 1980 - 1985	Peoples Redemption Council Government Days.
1983	The Establishment of Plan International in Liberia.
1985	Second Republic of Liberia.
1986	Implementation of Sheep Raising Projects in Grand Cape Mount, Western Liberia.

APPENDIX II

NJALA UNIVERSITY COLLEGE
UNIVERSITY OF SIERRA LEONE
FACULTY OF AGRICULTURE
DEPARTMENT OF AGRIC. ECON. AND EXTENSION

This is a questionnaire designed for local farmers once engaged in sheep raising projects in the Community towns of Gohn Zodua, Bomboja, and Fali, Grand Cape Mount County, Western Liberia.

INTRODUCTION

Good morning/afternoon/evening. My name is Daniel K Waritay, a graduate student in the Department of Agricultural Economics, and Extension of Njala University College, University of Sierra Leone. I am presently interested in studying farming activities, and the response of local farmers with regards to farmer sheep raising projects undertaken by them.

The study is being carried out in order to help promote effective extension work, and act as a reference for both government and non-governmental organizations (NGOs) operating in developing countries. It is also expected to identify bottlenecks to rural development programmes particularly in the area of innovation rejection decision-making leading to the problems of adoption among small scale farmers.

The success of this research study will depend considerably on your willingness to supply the correct information. Please be assured that whatever information you provide will remain confidential. The time taken off your busy schedule to provide answers to this questionnaire will be acknowledged and in due course mean a lot to you and your fellow countrymen. Thank you very much for your patience and understanding.

Survey for A: Personal and Situational Characteristics

Sample No. _____

Date of Interview _____ Village/Town _____ District _____

County _____

1 Sex _____ Age _____ Ethnicity _____

2 Religion _____

3 Marital Status

(a) Married _____ (d) Widowed _____

(b) Single _____ (e) Separated _____

(c) Divorced _____ (f) Others (Specify) _____

4 If married, type of marriage, (a) Polygamous _____

(b) Monogamous _____

5 If polygamous, number of wives?

6 What is your main occupation?

7 If farming, how many members of your household are actively involved?

(a) No. of male _____ (b) No of female _____

8 Beside farming, what else do you do to help generate income

(a) _____ (e) _____ (h) _____

(b) _____ (f) _____ (I) _____

(c) _____ (g) _____ (j) _____

(d) _____

9 Educational Level

(a) Non formal _____ (e) Teaching Training _____

(b) Primary _____ (f) University _____

(c) Secondary _____ (g) Others (specify) _____

(d) Vocational/Technical _____

10 What position(s) do you hold in this Village/Town?

(a) Paramount Chief _____ (d) Town Crier _____

(b) Chiefdom Speaker _____ (e) Ordinary Citizen _____

(c) Village Headman _____ (f) Others (specify) _____

11 Which of these local organizations do you belong to, and how long have you been with the organization?

Organization	How long (yrs)
Cooperative	
Farmer Association	
Osusu	
Work Group	
Others (specify)	

12 Why did you join the local organization or group

A _____

_____

13 What type of farming system(s) do you operate?

(a) Mixed upland rice _____ (e) Vegetable gardening _____

(b) Swamp rice _____ (f) Poultry _____

(c) Sheep and goat raising _____ (g) Others (specify _____

(d) Cattle rearing _____

14 Which type(s) are most profitable to your house, and what is/are the scale(s) of operation?

Farming System	Farm Size Number	Annual Income (Estimate)
Mixed upland rice		
Swamp rice		
Plantation cropping		
Vegetable gardening		
Poultry		
Sheep/Goat raising		
Cattle rearing		

15 If you operate a mixed upland rice, what other crops do you grow?

(a) _____ (e) _____ (I) _____

(b) _____ (f) _____ (j) _____

(c) _____ (g) _____ (k) _____

(d) _____ (h) _____ (i) _____

16 Do you live in this community permanently?

(A) Yes _____ (b) No _____

17 If no, why? (A) _____

Land Tenure

18 How do you get land for farming?

(a) From Village head _____ (d) Purchase _____

(b) Family Head _____ (e) Begging _____

(c) Self Ownership _____ (f) Others (specify _____

19 Do you have enough farm land?

(a) Yes _____ (b) No. _____

If No, Why? _____

20 If you wanted more land for farming could you get it?

(a) Yes _____ (b) No _____

If no, why _____

If yes, how _____

21 What is the quality (suitability) of the land you are cultivating?

(A) Suitable (fertile) _____

(b) Unsuitable (infertile) _____

22 What types of labour do you use in your farming?

(a) Family _____ (d) Work Group (KUU) _____

(b) Hired _____ (e) Others (Specify) _____

(c) Communal _____

23 If you want labour, could you easily get it?

(a) Yes _____ (b) No _____

24 If no, why? _____

If yes how? _____

25 If no, what do you do to solve the problem?

(A) _____

26 Household/group composition

Who is the head of

(a) Household _____

(b) Group _____

(a)	Member	Sex	Age	Relationship to Head
(a)	_____	_____	_____	_____
(b)	_____	_____	_____	_____
(c)	_____	_____	_____	_____
(d)	_____	_____	_____	_____
(e)	_____	_____	_____	_____
(f)	_____	_____	_____	_____
(g)	_____	_____	_____	_____
(h)	_____	_____	_____	_____
(i)	_____	_____	_____	_____
(j)	_____	_____	_____	_____
(k)	_____	_____	_____	_____
(l)	_____	_____	_____	_____

27 How is the household/group organized for farming?

(a) _____

28 How is income distributed within household/group?

(a) _____

Survey Form B: Project Participation

Sample No. _____

Date of Interview _____ Village/Town _____

A Project Involvement

1 From whom and where did you learn of the project

(a) Whom _____ (b) Place _____

(c) Others (specify) _____

2 How were you selected to be a participant in the project?

(a) _____

_____

3 How long have you been with the project

(a) _____

4 Give reasons for joining the project

(a) _____ (d) _____

(b) _____ (e) _____

(c) _____ (f) _____

5 What aspects of the project are you involved in?

(a) _____

6 Which is the most important aspect(s) to you?

7 Why do you consider it to be the most important?

8 How often were project meetings held?

(a) Once a week _____ (c) Once a month

(b) Twice a week _____ (d) Others (specify)

9 Did you attend any meeting called by the NGO assisting the project?

(a) Yes _____ (b) No _____

If yes, where? _____

10 Did you attend a training programme dealing with the project?

(a) Yes _____ (b) No _____

If no, why? _____

11 Who provided the following for the project?

Resources	Provider		Quantity	Price
	NGO	Comm		
Land				
Sticks				
Nails				
Cement				
Zinc				
Material for fence				
Animal				
Feeding trough				
Feed				
Management				
Medication				

B **Sheep Raising Technologies**

12 Which of the following sheep raising practices introduced through extension agents you are aware of?

	Housing	**Aware**	**Unaware**
(a)	Site Selection	_____	_____
(b)	Shelter Construction	_____	_____
(c)	Maintaining adequate light and ventilation	_____	_____
(d)	Proper fencing	_____	_____
	Feeding		
(e)	Watering facilities	_____	_____
(f)	Proper gracing	_____	_____
(g)	Guard against spoil food	_____	_____
(h)	Selective gracing	_____	_____
(i)	Remove to clean pasture	_____	_____
(j)	Feeding trough	_____	_____
(k)	Feed storage	_____	_____

	Feeding (contd)	Aware	Unaware
(l)	Rotate pasture	_____	_____
(m)	Grow pasture	_____	_____
	Health		
(n)	Deworming	_____	_____
(o)	Foot bath	_____	_____
(p)	Spraying	_____	_____
(q)	Tick protection	_____	_____
®	Dipping	_____	_____
(s)	Medication	_____	_____
	Breeding		
(t)	Selection of breed stock	_____	_____
(u)	Selection of breeding method	_____	_____
(v)	Feeding during gestation	_____	_____
(w)	Delivery techniques	_____	_____
(x)	Care of ewe after birth	_____	_____
(y)	Management of new born lambs	_____	_____
(z)	Management of growing lambs	_____	_____
(a)	Culling	_____	_____

C Decision Making

13 To what extent were you involved in planning the project?

(a) Not involved _____ (b) Partly involved _____

(c) Completely involved _____

If partly involved, in which aspect(s)?

_____

14 Who takes major decisions on behalf of the project?

(a) NGO decides along _____

(b) NGO and community discuss together to arrive at a decision _____

(c) Community alone _____ (e) Others (specify)

Benefit Derived from Project

15 What benefits have you derived from the project?

(A) More sales made on sheep _____

(b) Increased meat supply _____

(c) Increased income _____

(d) Increased knowledge in sheep raising _____

(e) Ability to generate funds for projects _____

(f) Others (specify) _____

16 Has your standard of living improved over the last (5) five years?

(A) Yes _____ (b) No _____

If no, what else has contributed to improvement of your standard of living

_____

17 What changes in general have occured as a result of the project?

Positive Changes

(a)	_____	(d)	_____	(g)	_____
(b)	_____	(e)	_____	(h)	_____
(c)	_____	(f)	_____	(I)	_____

Negative Changes

(a)	_____	(d)	_____	(g)	_____
(b)	_____	(e)	_____	(h)	_____
(c)	_____	(f)	_____	(I)	_____