

**OPINION LEADERSHIP IN TECHNOLOGY ADOPTION
AMONG RURAL MEN AND WOMEN IN MUKONO DISTRICT,
UGANDA**

by

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ABSTRACT

OPINION LEADERSHIP IN TECHNOLOGY ADOPTION AMONG RURAL MEN AND WOMEN IN MUKONO DISTRICT, UGANDA

by

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The potential importance of opinion leaders in the informal interpersonal communication is emphasised because of their unique capacity to pass ^{on the} flow of information on innovations to the farmers. The gender dimension was included to ascertain if there are gender differences in opinion leadership in farming. The study was based on the premise that peasant farmers in Uganda, particularly the women farmers do not have adequate access to extension services due to amongst others, the wide change agent to client ratio. In view of the problems faced by the farmers and the opportunities offered by opinion leaders the importance of opinion leadership justified investigation.

The main objective of the study was to explore the occurrence and importance of opinion leadership among both male and female farmers in farming. This was achieved through a research study which involved a survey of households in three villages of Buligobe, Kapeke and Lwunga in Mukono district of Uganda. Interviews were

conducted with the assistance of extension agents from the Department of Agriculture of Mukono district.

The occurrence and importance of opinion leaders, also referred to as fellow farmers, as a source of information among the rural farmers was deduced through different types of assessments. The first being by rank order assessment which was used to compare the different sources of information that are used by the farmers. This method was extended further to investigate the differences in: information source rating within the different farming enterprises, rating by the different genders and ranking in the villages. The second method of assessment involved comparing the frequency of use of the three most important information sources that were identified namely the fellow farmers, radio and extensions agents for importance. In the subsequent investigations, further emphasis was placed in establishing the following important aspects related to opinion leadership, which are: the reliability of opinion leader identification, the scope opinion leader influence and the important characteristics of the opinion leaders.

The study has shown that the fellow farmer is relatively more important than the radio and extension agents. The pattern of ranking the information sources by the male and female farmer is similar, the only difference is that the female farmers rated the fellow farmers relatively more important than the male farmers. The radio was found to be more important than the fellow farmers in terms of frequency of usage, a factor which was attributed to the routine availability of the weekly farmer's programs broadcast over the radio. The male farmers were found to make more frequent use of all the information source than the female farmers.

The results also show a wide spread existence and use of opinion leaders among both males and females in the study area. These opinion leaders were found to be a clearly identifiable individuals who have not been confused with specialists. Males were found to feature more prominently than females as opinion leaders and they were found to consult opinion leaders more frequently than the female farmers. It was also found that the common tendency among the farmers is to consult an opinion leaders on one enterprise. The respondents were found to more frequently consult the opinion leaders who were perceived to be prominent, friendly, very accessible and those who live

within close proximity to the farmers. Kinship relation was also found to be an important determinant for more frequent consultation. Both male and female farmers were found to consult the opinion leaders more frequently in enterprises that are important to them. The farmers in the study area were found to get information through opinion leaders who are not similar to them.

The fact that opinion leaders play such important roles in various agricultural enterprises has important implications for extension program planning and future research. Recognition of this role and formulation of strategies to put it in good use is recommended. It is suggested that this can be achieved by designing integrated communication strategies focused on the opinion leaders, the radio and extension agents and it is suggested that commensurate extension capacity building is necessary to support an opinion leader led extension strategy. Further recommendations were made to extend the current research to other areas of Uganda. Some areas for further research in opinion leadership were suggested.

SAMEVATTING

OPINIELEIERSKAP IN TEGNOLOGIE AANVAARDING ONDER LANDELIKE MANS EN VROUENS IN MUKONO DISTRIK, UGANDA

deur

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UITTREKSEL

Die potensiele belangrikheid van opinieleiers om op informele wyse nuwe inligting aan mede-boere oor te dra het aanleiding tot die studie gegee. Die geslagsdimensie is spesifiek ingesluit om te bepaal of daar geslagsverskille voorkom sover dit opinieleierskap aanbetref. Die studie is gebaseer op die aanname dat kleinboere in Uganda, veral die vroulike boere, nie voldoende toegang tot voorligtingsdienste het as gevolg van, onder andere, 'n wye voorligter-kliëntverhouding.

Die hoofdoel van die studie was om die voorkoms en belangrikheid van opinieleierskap onder beide manlike en vroulike boere in landbou te verken. Dit is gedoen deur 'n ondersoek wt huishoudings uit die drie dorpe Buligobe, Kapeke en Luwunga van die distrik Mukono in Uganda ingesluit het. Onderhoude is gevoer met die hulp van voorligters van die Departement van Landbou in die Mukono distrik.

Die voorkoms en belangrikheid van opinieleiers, of mede-boere, as bron van inligting vir boere is deur verskillende metodes bepaal. Ten eerste is verskillende bronne, waaronder ook opinieleiers, deur respondente in belangrikheidsvolgorde geplaas. Daarna is die relatiewe belangrikheid van opinieleiers in verskillende

boerderyvertakkings bepaal, en ook die invloed van geslag en van verskillende dorpe. 'n Tweede metode van aanslag het die beoordeling van gebruiksfrekwensie van die belangrikste inligtingsbronne, teweete mede-boere, die radio en voorligters, behels. In verdere ondersoek is gekonsentreer op aspekte van opinieleierskap, soos die betroubaarheid van opinieleier identifikasie, die omvang van opinieleierskap invloed en belangrike eienskappe wat met opinieleiers geassosieer kan word.

Die bevindings dui daarop dat opinieleiers 'n belangriker bron van inligting is as beide die radio en die voorligter. By mans en vrouens is die patroon van die belangrikheidsvolgorde soortgelyk, ofskoon opinieleiers by vrouens, in verhouding tot die radio en die voorligter, meer belangrik is as by mans. Geoordeel aan gebruiksfrekwensie het die radio ietwat belangriker as die mede-boere vertoon, maar dit moet waarskynlik aan die weeklikse roetine gebruik of beskikbaarheid daarvan toegeskryf word. Oor die algemeen het manlike boere meer toegang tot of maak meer gebruik van al die verskillende inligtingsbronne.

Daar is gevind dat opinieleiers duidelik deur respondente onderskei en nie met kundiges verwar word nie. Mans figureer baie meer prominent as opinieleiers en selfs vrouens raadpleeg meer mans as vrouens. Daar is ook gevind dat dit 'n algemene neiging onder respondente is om verskillende opinieleiers vir verskillende boerderybedrywe te raadpleeg. Respondente raadpleeg meer dikwels opinieleiers wat as prominent, vriendelik en toeganklik gepersipieer word en wat naby is of fisies meer toeganklik is. Verwantskapsverhoudings is ook geïdentifiseer as 'n belangrike faktor wat die konsultasiefrekwensie beïnvloed. Beide manlike en vroulike boere is ook geneig om meer van opinieleiers gebruik te maak in boerderyvertakkings wat vir hulle belangrik is, en hulle is geneig om hul inligting te bekom van medeboere of opinieleiers wat nie soos hulself is nie.

Die feit dat opinieleiers so 'n belangrike rol in die diffusie van inligting in alle boerderybedrywe speel, het belangrike implikasie vir die beplanning van voorligtingsprogramme. Dit is belangrik dat kennis van hulle sleutelrol geneem word en dat hulle in die beplanning van voorligtingstrategieë ingesluit word. Dit word voorgestel dat hulle effektief gebruik word deur geïntegreerde kommunikasiestategieë

te ontwerp wat op hulle, die radio en die voorligter gerig is. Ten einde die potensiële nut van opinieleiers ten volle te ontgin, is dit belangrik dat ook die kapasiteit van voorligters uitgebou word. Uiteindelik is dit belangrik dat hierdie navorsing opgevolg en na ander gebiede uitgebrei word, aangesien dit die eerste studie van sy soort in Uganda is.

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CHAPTER ONE

INTRODUCTION

Uganda is a land locked country located in East Africa. It lies between latitude 4° N 12' and 1° 29°S and longitude 29° 34' and 35° E. The population of Uganda stands at 17.8 million. Women and men comprise 51 and 49 percent of the population respectively. 89 percent of this population lives in the rural areas and are predominantly engaged in agriculture, which is the mainstay of the economy employing 80 percent of the people. Agricultural output comes almost exclusively from about 2.5 million smallholders, 80 percent of whom have less than 2 hectares each. Tea and sugar are the only crops grown on large scale on estates which total 40,000 hectares. Food production has become the leading sector in agriculture since 1980. Agricultural growth during this period has been due to expansion in cultivated area rather than increase in yields. Total area under cultivation is 4.6 million hectares of which 4.3 million are under food crops and 0.3 million hectares are under export crop cultivation. The total area under cultivation is less than 30 percent of potentially cultivable areas, this is still at levels below potential. Coffee has been the leading export crop forming 80-100 percent of the annual exports in the past 20 years. Non traditional crops (NTC) have since 1990 become an important export component. The most important products of which include sesame seeds, maize, beans, hides and skins, fish, fruits and vegetables.

The government's development objectives are to stimulate growth in the agricultural sector to meet the country's food requirements, generate foreign exchange by exporting the surplus and improve income for the rural populace. But the predominance of smallholder agriculture that is entirely underdeveloped may require an agenda for modernisation before such objectives can be fully realised. Continued growth in Uganda's agriculture will have to come from joint improvements in technology generation and dissemination, responsiveness of the capital market, availability of finance, access of services and infrastructure and improvements in the effectiveness of government services to link the widely dispersed and broadly

diversified users. It is envisaged that technological improvements will play increasingly important role in agricultural growth. The government's objective of increased output and rural incomes can not wait for gradual dissemination of technological improvements (World Bank, 1993). In spite of this great need, the agricultural extension service has neither been effective in reaching the rural resource poor farmers with technological innovations nor has the capacity to do so in the future bearing in mind the current changes that have been brought about as a result of the restructuring process. The situation is even worse among the women farmers who form the active majority of the farming population in Uganda. The major problem that has contributed to this scenario is inadequate accessibility to extension services. In view of this problem, this research is aimed at contributing to the major concern of finding alternative means to extend the agricultural extension efforts. This is proposed to be achieved through the use of opinion leaders. This is especially called for when wide extension client ratio makes it difficult to reach the larger target audience. The two step and multi flow communication theory implies a key role for opinion leaders in bridging the communication gap. In light the of the problem of limited access of extension services, and on the other hand, the opportunities offered by opinion leaders, this research explores the occurrence and importance of the phenomenon of opinion leadership among members of both gender in agriculture in a rural location of Uganda. The main hypothetical assumption underlying this investigation is that opinion leaders form an important part of the rural communication structure; and that farmers depend more on them for advice and information than the conventional channels of communication.

The findings of this study are presented and discussed in the subsequent chapters. The conclusions arising thereof form the basis for the recommendations that have been contributed for policy and research.

CHAPTER TWO

BACKGROUND SITUATION ABOUT UGANDA

2.1 GEOGRAPHICAL INFORMATION

Uganda is predominantly an agricultural country with 81 percent of its 241,000 sq. km of land being agriculturally productive; 16 percent is covered by water and about 3 percent is under forest. The country is also endowed with favourable climate for agricultural production. The climate is typically equatorial with little seasonal variation in temperature throughout the year. Rainfall averages range between 900 mm and 1,300 mm per annum with a few locations receiving as low as 500 mm annually.

The population of Uganda is 17.8 million with an annual growth rate of 2.5 percent. Over 92 percent of the people are poor having household expenditure of US\$50 per month although the household expenditure of those classified as core poor can be as low as US\$25 per month (World Bank, 1993). Over 96 percent of these rural poor people derive their livelihood from agriculture.

2.2 AGRICULTURAL INFORMATION

Agriculture accounts for 49 percent of GDP of which food crops contribute 71 percent, export crops 5 percent, livestock, fisheries and forestry sectors account for 17 percent, 4 percent and 3 percent respectively. Only about 33 percent of the food output and 60 percent of the livestock and livestock products are marketed. About 56 percent of agricultural GDP comprise of the usually non-monetised subsistence production for own consumption (World Bank, 1993).

2.2.1 Agricultural production system

The smallholder peasant farmers who live in an estimated 2.5 million-farm households in the rural areas dominate the economy by being the major producers. Agriculture

provides them with the major source of employment and income. Typically the peasant farm households, which are singly located, consists of a man, one or more wives and 3 to 10 children. The households own an average of 3 ha or less, of which some may be lying fallow at any one time.

While up to the 1970s there used to be a distinction between cash and food crops, traditional cash crops and non-traditional export crops, and subsistence and commercial farmers, but more recently these distinctions have become rather subtle. Hence it will suffice to note that the major crops grown by the peasant farmers include a combination of cereals (finger millet, maize, sorghum and rice), pulses (beans, cow peas, field peas, pigeon peas and grams), root crops (cassava, sweet potatoes, Irish potatoes and yams), oilseeds (groundnuts, simsim and sunflower), horticultural crops, fruit tree crops (mangoes, cashew nuts) and bananas. Coffee, cotton, and tobacco are still grown, as traditional cash crops while most of the other crops, to varying degrees, constitute the non-traditional cash crops. Only tea and sugarcane are estate crops.

Cattle, goats, sheep, pigs and poultry are the major animals kept on the smallholdings. It is estimated that livestock population is at 3.5 million cattle and 2.5 million small ruminants with goats dominating (Hogan, Atherton, Vernon & Curtis, 1982). Virtually every rural household has chickens and most of them have goats, cattle and pigs or some combination of these. These animals may be sold from time to time as and when felt necessary by a household.

Generally farming in Uganda is characterised by poor husbandry practices, high pre- and post-harvest losses and poor land utilisation leading to fragmentation and poor farming infrastructure. Thus, the level of technology employed is low and the number and use of purchased inputs is also limited. For instance, the use of purchased inputs is restricted to insecticides or vaccines. The use of insecticides, sprays or dips in controlling endemic livestock diseases is mainly restricted to the few farmers who keep exotic breeds and crossbreeds. In crop production, pesticides are used mostly on cash crops, exotic vegetables and bananas. Lack of use of technologies significantly contributes to the poor yields experienced by the farmers in the major farm enterprises mentioned above (Hogan, Atherton, Vernon & Curtis, 1982).

The use of rudimentary tools, which is dominated by the hand hoe and over dependence on family labour, cannot be left without mention. Only in the Northeast of the country are ox-ploughs used mainly for opening land, while a few people use them also for weeding row crops. In some areas communal work and use of hired labour and/or marrying more than one wife is used to provide labour to increase cropland. However, in the general throughout Uganda, there is a high dependence on family labour which is provided mainly by women and children. Indeed it has been reported that women provide more than 80 percent of agricultural labour force using the hand hoe to provide all the food as well as 60 percent of cash crops (UNICEF, 1993; FAO/World Bank Co-operation Program Report, 1991).

In cognisance of this fragile and low level production, the Ugandan farmers spread their risks by:

- (i) producing highly diversified crops,
- (ii) having a complex mixture of crops and livestock,
- (iii) growing more than one crop with a considerable amount of intercropping and relaying,
- (iv) keeping of more than one type of livestock and
- (v) having large families.

The Government, on its part has also endeavoured to facilitate the farmers to improve and increase the production and productivity of their farms through the provision of extension services. Hence it is pertinent to reflect here on:

- (a) the type of extension services which have been available to the Uganda farmers, and

- (b) the status of women in Ugandan agriculture as the amount of land cultivated by a household is highly restricted to that which the women can cultivate with the hoes.

2.2.2 Status of women in agricultural production in Uganda

Although they play pivotal role in agricultural production in Uganda, women have featured as a grossly neglected lot since the colonial era. Before the 1960's rural women used indigenous knowledge in food production and processing because advice was given to male household heads only even when the advice concerned women's crops or operations carried by women. The result has been loss by women of control over certain production processes, even including those considered to be the responsibility and resource of women. It has also deprived them of status and a fair income.

In 1964 the Ministry of Agriculture started home economics and young farmers programs as part of extension targeting women and youth for improved and increased food production, processing, utilisation and improved home management. However, even this apparently noble intervention was badly designed because the home economics program was construed and operated from a western concept of domestic production focusing primarily on women's reproductive, child care and home making activities (Ashby, 1981). Thus it may be stated that by 1980, most agricultural programmes were gender blind, male dominated and targeted, whether by design or default. Consequently, this led to the marginalisation of women's roles, problems and needs in major agricultural development and extension programmes. Despite the above scenario, there is still strong evidence that the responsibilities and tasks of women associated with food production and reproduction are increasing as male labour migrates to towns or take to doing other income earning activities. Thus, more and more women and children are left alone to shoulder food production and domestic tasks. UNICEF (1993) for instance lamented that although agriculture is a source of livelihood for every one in Uganda, all the greater part of farm work is left to women.

It is a fact that women produce a major part of the food supply in Uganda. They toil for long hours with no access to extension services, training, credit, inputs and information. Women are left to rely on the use of traditional and unimproved agricultural methods (FAO, 1985 and Dey, 1984). Extension programmes that are supposed to provide out-of-school educational services for rural producers with the primary objective of developing their human resources in order to increase agricultural productivity and improve rural human welfare are largely inaccessible to them. Given the evidence of women's role in agriculture, it would seem logical to find them actively participating in extension. However, the present situation is such that extension services are primarily geared towards male farmers.

In the general community, it is apparent that the status accorded to rural women, the way they are treated by members of society and the way they perceive themselves all still show that they are regarded as inferior to men and they always occupy lower positions whether in or outside marriage. Thus, women do not participate as equals in events where decisions are made. Indeed, a Uganda Women's Needs Assessment survey conducted by Natukunda & Sebina (1988) showed that the majority of women hardly attend meetings, those who do are usually members of the executive. They also found out that women's participation in decision-making is curtailed, among other things, by time constraints, refusal by husbands and heavy workloads.

Fortunately, there is currently a deliberate government policy on women focusing on raising the status of women and fostering their emancipation from socio-economic, political and cultural bondage (Ministry of Women in Development Paper, 1994). Thus, there is the affirmative action programme in higher institutions of learning (the 1.5 bonus points are awarded to girls entering Makerere University); the provision of special women representatives in Parliament (and earlier to the Constituent Assembly); the constitutional provisions preserving one-third of local council positions for women; and lately the Presidential support for articles securing women's right to land in the Land Act (Onyango-Obbo, 1998). All these policy concerns aim at a positive integration of women in the mainstream of all development processes. Consequently the Ministry of Agriculture, among others for instance, has already started gender responsive planning, programming and implementation of programmes with specific

target numbers and where possible, involving women in key policy and decision making processes. For instance, the Vice-President and Minister of Agriculture is a woman.

Notwithstanding the above, however, a very big issue that still remains is how to ensure the involvement of the bulk of the rural women in this process and indeed, in the recently launched poverty eradication programme in which agricultural modernization is central? What sort of mechanism is required to ensure their involvement in agricultural extension and other socio-economic activities in a way that is convenient to them and builds their capacity with in-built sustainability? These and many other related questions clearly bring into focus the need for a re-examination of the agricultural extension system in Uganda.

2.2.3 Agricultural extension in Uganda

It is universally acknowledged that agricultural extension can significantly accelerate the adoption of improved technology if it is properly planned, targeted and the philosophy of agricultural extension adhered to. Semana (1998) observed that agricultural extension philosophy implies that:

“Start where people are (culturally, socially and technically), with what they have (resources and climate), and help them help themselves (participatory involvement in needs assessment, problem identification, planning, intervention, educating, guiding, advising and encouraging).”

Taking the philosophy into consideration, in reviewing agricultural extension services in Uganda between the period 1890 when cash crops were introduced and 1997, Opiyo-Odongo (1996) Adupa & Botha (1997) and Ugen *et al* (1997) divided Uganda's extension service history into seven distinct periods which are presented below. During the extension through Chiefs Phase: 1890-1953, the colonial administration and commercial firms were primarily concerned with the introduction of cash crops for the purpose of export and raising taxes from the natives. Hence, because the cardinal objective of colonial extension was to ensure commodity production for export as

opposed to attempts at progressive extension for smallholder farmers, the transfer of technology was through enforcement and policing of farmers (by chiefs) to adhere to the agricultural bylaws. This had a negative impact on the producers, especially women farmers.

In the period of Extension through Chiefs and Agricultural Assistants Phase: 1954-1960, the work of chiefs was improved upon by the introduction of school leavers who were trained up to certificate and diploma levels in agriculture and hence became agricultural assistants. Demonstrations were conducted at district variety trial centres and the use of progressive farmer schemes approach in extension as well as the introduction of credit and loan schemes were emphasised. This progressive farmer extension approach, enhanced by support services like tractor hire, credit and loan schemes and agricultural subsidy to render extension effective, shifted extension to selected farmers with potential for progressive farming. The strategy however failed to yield the desired results and collapsed leaving a discernible lack of convergence between farming, research and extension (Opio-Odongo, 1989).

In the third phase of Extension through Proper Extension Methods Phase: 1960-1970, a lot of effort was made to get the farmers involved in technology transfer. Through a United States Agency for International Development (USAID) support, the extension approach became that of 'helping farmers to help themselves'. Consequently, agricultural bylaws were gradually relaxed. The Young Farmers of Uganda scheme was started, and the Information and Visual Aids Centre was established through the community-centred Extension Saturation Project whose objective was also to improve the extension staff efficiency in provision of advisory service in order to increase the overall productivity of the farmers. A Home Economics Unit was also established in 1964 for the betterment of women geared towards productive living in agriculture. A total of 18 district farm institutes were also established countrywide for facilitating training and tours. Extension methods during the period also included farm visits, demonstrations, district and farm tours, informal training of farmers and lay leaders at the DFIs. The district and regional agricultural officers started to participate in research experimental meetings; this gradually led to improved linkage between research-extension.

This period witnessed an extension methods approach based on the general extension principle which assumes that useful practical and technical information is available in the Ministry of Agriculture and the appropriate function of extension is to transfer that technology to farmers. The strategy, which involved provision of extension services, credit, controlled provision of inputs and buying of marketed surplus, was however administered from top downwards and it used only one way communication while relying on extension agents deployed at national, district and county levels to carry out demonstrations and farm visits.

In the seventies, however, extension and all other agriculture-related services were highly affected by the circumstances that prevailed in the country as a result of military rule. There were poor facilities and very limited resources (funds, information, logistics etc) for extension workers to carry out their tasks. Hence, the modest gains in extension made earlier were lost during this Non-directional phase: 1971-1979.

During the Recovery of Extension Phase: in the 1980's and early 1990's the World Bank and USAID funded the economic recovery programme of government. This included financing of agricultural projects, which emphasised on-farm adaptive trials with extension and extensive sandwiched in-service training for extension staff in farming system methodologies (Semana, 1998). Hence, during this period, extension was both advisory and service oriented as the projects also provided inputs for farmers.

During the Consolidation of Extension Phase: 1989-1991, the projects initiated in the previous phase continued to be implemented. The period became transitory because government used it to develop and negotiate for the Agricultural Extension Programme (AEP). Using participatory methods, in both training and extension, Non governmental organisations (NGOs) involved in community development work also started to provide extension services to the farming communities.

The current Decentralised Extension Phase: 1992-1998 has seen major changes in the delivery of extension services in Uganda. The Training and Visit (T&V) system, which was introduced in many countries, was adopted as the unified extension service (UES) in Uganda (Opio-Odongo, 1996) with funding from the World Bank Project in 1993.

The key features of the UES are: a unified system where an extension agent is made responsible for delivery of extension services on all aspects of livestock, crops, fisheries and natural resources for a group of farmers. A single line of command; Field Extension Workers (FEWs) are responsible for 1,000 - 1,500 farm families operating through 16 contact groups for transfer of technology to the farm families; subject matter specialists provide technical backup support to the FEWs; systematic regular training programmes are arranged for various cadres of extension personnel; regular and programmed visits to reach and teach the farmers.

Besides promoting transfer of technology through demonstrations, the extension worker is supposed to use participatory extension approaches for problem solving and technology transfer. Thus the method is centred on demonstrations, group meetings and field days; decentralised bottom up planning process with active farmer involvement; focus on farmer groups with special attention on women and youth; concentration of efforts on selected enterprises and impact points with attention to selected enterprises and messages; strengthening farmer's extension, research and marketing linkages. The approach therefore encourages interaction among all stakeholders at various levels including program planning, training programs, participation in adaptive research and on-farm trials. Through the approach, closer supervision and guidance of extension staff is also ensured and collaboration with NGOs and related agencies is encouraged. Suffice to note that during this period the National Agricultural Research Organisation (NARO) also established a Research and Extension Liaison Unit (RELU) which works closely with the district extension staff (NARO/Ministry of Agriculture, Animal Industry and Fisheries, 1996).

However, although the unified extension approach has been applied in Uganda, it has not as yet had sufficient impact. Some issues with the UES have already become evident. For instance, the use of farmer's groups for delivery of extension services has revealed that groups mobilised for provision of education and training disintegrate soon after the end of such programmes. Due to members' lack of capacity to apply what is learnt, the groups are not cohesive. Women's groups tend to last a bit longer, but the youth groups are harder to maintain. Besides, over emphasis on women and youth may lead to the danger of neglecting the male farmers. In any case, most of the

farmers do not belong to any formal groups, so the use of groups to deliver extension services precludes them from such services (Semana *et al.*, 1997).

While Government has endeavoured to provide extension services to the farming communities, many institutional and structural reforms have taken place within the last 10 years that have a considerable bearing on this effort of Government. This is elucidated below.

2.3 RECENT POLICY AND INSTITUTIONAL REFORMS IN UGANDA

Major macro-economic policy and institutional reforms have been implemented since 1986. These include the structural adjustment program (SAP), decentralisation, market liberalisation and privatisation. These reforms are already having some impact on the financing and delivery of extension services in particular and the agricultural sector as a whole in Uganda. For instance, the SAP has resulted in tremendous reduction in work force and streamlining of government departments including the extension services. This has crippled the capacity of the department of extension services to deliver services to the farmers.

The Decentralisation policy of 1993, which sought for the devolution of powers, functions and responsibilities of governance and accountability to local governments and councils to ensure that decisions are taken as close as possible to those it affects, has experienced the problem of insufficient budgets to effectively run government functions in the districts. Thus, extension services are beginning to suffer, especially in districts where by omission such services are made not to fall within priority programs of the districts.

The liberalisation and privatisation policies culminated in the removal of price controls on agricultural produce while agricultural input provision became a private sector concern. Implementation of sectoral reforms has also lead to a shift in responsibility for organising agricultural activities from the public sector to one in which agricultural business operations are organised and co-ordinated by private sector institutions (Semana *et al.*, 1997). Privatisation of government services and functions is likely to

further alienate the resource poor farmers from inputs and services because emphasis has shifted to profit maximisation rather than the traditional service delivery.

Opio-Odongo (1996) in discussing the impact, challenges and opportunities offered by the current reforms and policies, noted that "these changes caught the agricultural service organisation off guard, they have been unable to institute commensurate capacity building support to farmers, farmer organisations and professional agriculturists to maximally benefit from emergent opportunities arising from the more conducive economic and policy environment". The abilities of most farmers to benefit from the reforms were impaired because the service organisation lacked organisational flexibility and capacity to strategically support farmers. It is envisaged that further and greater impact of these reforms will be experienced within the next decade.

In view of this unfolding impact of reforms and taking cognisance of the farmer circumstances, it is imperative that a wide spectrum of opportunities need to be explored if current and future interventions are to bear fruits. For instance, the role of extension in educating the farmers in dealing with the market situation and the use of the community and community workers in extension delivery (Opio-Odongo, 1996) are palpable windows of opportunity which may need to be pursued.

To realise a transformation in Uganda's agriculture, Opio-Odongo (1996) pointed out that it is necessary to dispel the myths that: "only the educated or professional can serve as teachers to farmers which has hitherto resulted in treating farmers as mere learners who must be on the receiving end of knowledge creation and use". Evidence indicates that farmers, if properly handled are not only effective learners, but can also be effective teachers to fellow farmers. However, agricultural scientists and extension workers in Uganda have not had the humility to want to learn from farmers and let alone use them to teach their fellow farmers. The way forward proposed by Opio-Odongo (1996) includes modifications in the provision of extension services by drawing upon:

- (i) competencies of farmers as innovators, inventors of technology, teachers and being influential to other farmers in a manner that can stimulate diffusion of

innovations, herein lies the significant role opinion leaders could play in dissemination of innovations; and

- (ii) possibilities offered by partnerships between formal research, development and voluntary organisations.

2.4 OPINION LEADERSHIP IN AGRICULTURAL DEVELOPMENT

The study of opinion leadership was pioneered by (Lazarsfeld *et al.*, 1948) while investigating the role of interpersonal communication in detecting how citizens vote in elections. Important conclusions from these early studies on voting indicated that, personal influence figured prominently in voting decisions; opinion leaders were found at every social level and presumed to be very much like those they influenced; and opinion leaders were found to be more exposed to mass media than those not designated. Later, Katz (1957) is cited in (Severin & Tankard, 1979) to have studied how the mass media influenced voters' behaviour and found out that personal contacts appeared to have been both more frequent and more effective than the mass media in influencing voting decision. The researchers therefore proposed an opinion leadership theory which states that messages from the media first reach opinion leaders who then pass on what they read or hear to associates or followers who look to them as influential. This process was named the two-step flow of communication.

Since then, the central importance of interpersonal networks in influencing individuals in convincing them to adopt innovations has been well emphasised. Thus, to-date, the concept of opinion leadership has much theoretical and practical utility because of the unique capacity of opinion leaders to pass on the flow of innovations and new messages which have been shown to leave deeper and hence more recallable scratches on the minds of the receivers (Rogers, 1975). This is most pertinent and relevant in a community where the rural people have little access to the mass media and extension service like the farmers in Uganda.

In pursuit of this opinion leadership research should be extended to include studying the relationship between gender and communication behaviour (Wood, 1991). This

research in the context of a rural developing country agriculture, which is primarily dominated by women farmers, is very important. It has already been noted that rural household women throughout Uganda play critical roles in the cycles of food production and that their contribution is very substantial to agricultural development. Yet, the extension agents do not target these resource poor farmers. Hence it is a necessity to reach these rural farming household women with purposeful effort focused on efficiency, equity, productivity and sustainability.

Consequently, the challenge for extension planners in Uganda is to ensure that both men and women farmers are included as extension clientele and also to modify appropriate means of directing agricultural programmes at them. This could be done by exploring what opinion leaders and interpersonal communication networks have to offer in improving diffusion of new ideas and information. In other countries, the involvement of opinion leaders has been an essential part of most extension strategies aimed at maximising the information impact (Rogers, 1983 and Van den Ban & Hawkins, 1988).

2.5 STATEMENT OF THE PROBLEM

A lot of time and effort have been spent in Uganda on agricultural development of which agricultural extension is an important part but with limited impact on the predominantly rural smallholder farmers. To date the channels of communication that have been long in use have not effectively reached and changed the position of the majority of the rural small farmers. The case is even worse among the women farmers who form the majority of the farming community in Uganda. It may be stated that some of the major problems which have contributed to this scenario include: inadequate accessibility to extension services by rural smallholder farmers, gender insensitivity in decision making, lack of incentives among extension agents and very wide extension agent: client ratio.

- (i) Thus, the extension strategies as currently practised by change agencies are not reaching the rural small farmer especially the predominantly illiterate rural women because of the women's socio-economic status as well as their cultural

circumstances in the community. Campton (1984) also noted that in many other parts of Africa, although extension services have reached the larger, wealthier and motivated farmers, it has only done less so to smallholder farmers. Yet the smallholder farmers are the major producers of agricultural produce. Although women constitute the bulk of farm labour in the rural areas, their exclusion from main stream agricultural development programme, their lack of access to new ideas, innovation and technology compounded by their low level of literacy have significantly contributed to the slow development of agriculture in rural Uganda. Indeed, these constraints of women have tremendously affected their involvement in information sharing and social activities. Consequently it has led to their poor use of agricultural and socio-economic opportunities and dependency on peers who may even be less informed than they are.

The majority of extension delivery methods used in Uganda have had few incentives for reaching smallholder farmers. Thus, extension agents have tended to concentrate their client contact on male innovators and early adopters in the hope that they will pass on this information in a 'trickle down' process. This situation was also observed by Ashby (1981) when he reported that even if cognisant of women's agricultural roles, extension staff often does not seek contacts with women. A review of extension approaches in 1988 showed that the programmes using participatory approach were more likely to include women among the general clientele. T&V and commodity approaches were found to deal primarily with men, while the project approach was variable (Axinn, 1988). In all these approaches, knowledge did not trickle down to rural women but instead, new ideas have trickled across to people of similar status. The model farmer, contact farmer and progressive farmer extension models used in Uganda which were based on such similar principle, have had limited impact.

Even if incentives abound for extension staff to work, the very wide extension agent to client ratio in Uganda makes it difficult, slow and more expensive for extension agents and programs to reach all the farmers as the case should be. It is impossible for the very few staff to make contacts with every farmer as required. This situation has been further aggravated by the recent public service reform, which saw over 20% of the extension staff retrenched. Hence, new innovative ways need to be looked into in order to bridge the gap created.

In view of the aforesaid, it is therefore a major concern that smallholder rural farmers in Uganda, and women in particular, have little access to technological innovations because of organised extension channels or irregular contacts with the change agents. In the absence of adequate regular contacts with formal extension/change agents to reach the rural farmers, it becomes imperative that alternative means be explored to increase the flow of agricultural information to farmers if agriculture in Uganda is to be modernised. The question is how can this be achieved? This is the problem to be addressed in this study.

2.6 PURPOSE AND OBJECTIVES

In view of the limited impact of the various conventional extension delivery approaches used in Uganda, an alternative strategy has become necessary for addressing this situation. One such approach, which suggests itself, is that of using opinion leaders. In Uganda, opinion leader based strategies for diffusion of agricultural innovations have not been explored. In spite of the eminent logic and obvious rationale behind such opinion leader led strategies, there has as yet, been little diffusion research designed to determine the relative contribution of opinion leaders (Rogers, 1983). Hence, the purpose of this study.

Earlier, Abidi (1990) observed in his study that the rural women need to be assisted and their capacity built to reach a stage of being comfortable of expressing their opinions and getting fully involved in community life and that unless this is done, Uganda cannot reach its potential of agricultural and socio-economic development. Thus, development of women will be limited unless they are able to participate and get involved in decision making. This can only be achieved if research information is made available on how the capacity of rural women can be improved.

Hence, the objectives of the study are:

- a) to ascertain the occurrence and importance of the phenomenon of opinion leadership among members of both gender in a rural community of Uganda

- b) to determine how the opinion leaders are being used or could be used as agents of communication in rural communities in farming.
- c) to determine gender differences in opinion leadership, if any, in the farming situation.

2.7 SIGNIFICANCE/JUSTIFICATION OF STUDY

As early as 1963, Lionberger found that over 40 percent of major influences leading to adoption of farm practices could be attributed to opinion leaders. Stone (1952) and Petrini (1966) showed that greatest response to change agent efforts occurs when opinion leaders are adopting, which usually occur somewhere between 3 and 16 percent adoption in most systems. Focusing communication messages on certain influential in the assumption that their influence will come to bear in the further diffusion to the other members of the target audience, makes sense, especially if personal influence is called for, but large numbers or a wide change agent:client ratio makes it difficult (Düvel, 1996). The involvement of opinion leaders has been an essential part of most extension strategies aimed at maximising the information impact (Rogers, 1983 and Van den Ban & Hawkins, 1988). To launch a self-generating diffusion process in rural areas, efforts need to be concentrated on respected social models. Village opinion leaders can activate local networks to spread innovations. The farm community as a social system including the diffusion networks and opinion leaders are crucial elements in the diffusion process. Informal networks and channels are frequently gender specific, therefore, extension personnel need to know how to use these traditional networks more effectively to disseminate improved technology to women. This may require extension to give careful consideration to these informal rural networks. Findings by Van der Wateren (1996) suggests that extension approach aimed at relatively small target audiences in the belief that individuals will further the diffusion process should be reconsidered. The potential impact of opinion leaders in the diffusion process is more likely to be found in specifically selected larger target audience representing primary homogeneous group in the community.

As stated above, this research intends to examine opinion leadership among members of both genders in a rural area of Uganda with the aim of identifying and establishing the role they play in agricultural extension. The far reaching implication of using opinion leaders by using their unique influential position in different social systems could be seen in a larger context of involving the rural poor and women in a self-directing agricultural development process. This could help accelerate agricultural development in Uganda. Hence, it is envisaged that the significance of this study will include: -

- a) Facilitating the focus on the human resource development strategy to be adopted in the context of the existing social structures within which the rural farming community, especially, women live. This will enhance more participatory and effective involvement of the rural small farmers and women in self-directed extension programs through opinion leaders.
- b) A better understanding of interpersonal communication behaviour and utilisation of opinion leaders of both gender in extension programs with respect to decision making and improving innovation adoption programs.
- c) Effective guidance and directing of extension services as well as improving technology transfer and innovation dissemination. Thus, the research would also make recommendations on how to improve the traditional communication channels between research, extension and farmers and also the informal flow of information through opinion leaders in the rural communities. This is to ensure that in future, efforts will be geared to developing leaders who will later pass on the acquired ideas to the rest of the rural target audience. In doing so it is hoped to get them involved and participating in their own development. Besides, there is greater need for integration of women in agricultural development at all levels from the grassroots to the top.
- d) A better understanding of opinion leader circumstances so that their capacity can be enhanced as agents of change. It was alluded to that most extension projects have been gender blind and have subsequently resulted in exclusion of

the majority of rural women in decision making. It is hoped that finding ways of actively involving women in opinion leadership will enhance their participation in local affairs and also enhance their decision making at the community level.

- e) Identification of areas which may require more policy or investigation for enhancing information flow in view of the global, national and local policy and institutional reforms.

CHAPTER THREE

LITERATURE REVIEW

3.1 INTRODUCTION

Literature was reviewed to provide a theoretical background at the beginning so as to share with the readers the results of other studies that are closely related to the present study. It was also considered important to relate this study to a larger ongoing dialogue in the literature about opinion leadership thereby filling the gaps and extending prior studies. Review of the literature also provided a framework for the research hypothesis, justification as well as benchmark for comparing the results of this study with other findings.

This section is intended for providing some insight into the relationship between opinion leadership and network analysis. Network analysis is discussed as an approach of establishing the mode of information exchange among members of a social system. This is aimed at bringing the operations of communications research more closely in line with theoretical conceptions of opinion leadership. Hence, allowing for the conceptualisation of the dynamics of social networks centred on opinion leaders. The possibilities offered by networks in planning development are discussed.

3.2 OPINION LEADERSHIP

Rogers (1983) defined opinion leaders as those individuals who are able to influence repeatedly and informally the attitudes and observable conduct of individuals in a positive direction with relative frequency. On the other hand, Van den Ban & Hawkins (1988) defined opinion leaders as members of small groups who influence other members of their group. Thus it can be inferred that opinion leaders are individuals who lead in influencing other's opinions about innovations.

In the above context therefore, the basic tenet of diffusion research involving opinion leaders is that innovations diffuse automatically from those in direct contact with external sources of information to other members of the community, this ensures a multiplier effect for the activities of the change agent in a situation where he can have direct contact with only a few proportion of the farmers. In this regard, Rogers (1983) has demonstrated that:

- (i) diffusion campaigns are likely to succeed when opinion leaders are mobilised
- (ii) change agent success is positively related to the extent that he/she works through opinion leaders. Hence, it was concluded that opinion leaders might hasten the rate of diffusion, facilitate economy of effort, ensure fewer resources are used and rapidly multiply the efforts of change agents.

Van den Ban & Hawkins (1988) underscored the important functions opinion leaders fulfil with regard to innovation in the diffusion process as being: passing information from outside the group; interpreting outside information on the basis of his own experience; setting examples for others to follow; legitimising or rejecting changes that others want to carry; and they are influential in changing group norms. Thus, one of the crucial factors in opinion leadership is neither the mere relaying of information and ideas, nor the linking of a group to any outside context or ideas, but the endorsement and legitimisation of the new ideas they want to adopt. Opinion leaders only exist because people tend to seek advice or information from them (Wright, 1975 in Heath & Bekker, 1986). Hence, in order to optimise the use of opinion leaders in the diffusion of innovations through interpersonal communication network, it is important to know the characteristics of opinion leaders, which makes followers, seek information from them.

3.3 CHARACTERISTICS OF OPINION LEADERS

It has been established that the uniqueness of the opinion leaders revolves around the characteristics such as strategic social location, personification of values, competence,

homophily and heterophily, monomorphism and polymorphism. These are discussed below.

3.3.1 Strategic social location

Various social positions exist within a social structure from which social changes can be stimulated, controlled or be opposed. Within this, contact is important to any influential. Hence the strategic social location (i.e. the divide into whom one knows within the group in which opinion leadership is exercised and whom one knows outside the group for information on topics salient in the group) is very important (Severin & Tankard, 1979). Thus, opinion leadership is likely to occur among individuals

- (i) whose social characteristics, status and roles bring them into social situations where there is favourable climate for personal influence (Wright & Cantor, 1967:37 in Heath & Bekker, 1986) and
- (ii) who belong to the same primary groups with more homogenous values, norms and opinions (Lazarsfeld, 1955 and Kartz, 1957 in Severin & Tankard, 1979).

However, it has also been reported that opinion leaders on average have a higher social status than their followers' i.e. a follower tends to seek an opinion leader of somewhat higher status. For opinion leaders to spread messages about an innovation they must have extensive interpersonal networks with their followers and greater change agent contact than followers. They must be socially accessible: one indicator of such accessibility is social participation, which involves face-to-face communication about new ideas. Opinion leaders thus have greater social participation than their followers do and opinion leaders tend to be more cosmopolite in their communication behaviour than other group members (Rogers, 1995). Hence they provide links with sources outside their social system and provide avenues for entrance of new ideas.

3.3.2 Personification of values

Personification of values means that an influential is someone that his follower wishes to emulate. At the same time he must also be accessible to those people who are interested in the area the leadership is sought (Severin & Tankard, 1979). Opinion leaders do not act in a formal capacity or deliberately impose their opinions and advice upon others. Rather, their opinions are sought and only given on request (El-Assal, 1967 in Heath and Bekker, 1986). Opinion leaders are also more aware of their roles than other members of the social system.

Although opinion leaders are more innovative than other people, they are not necessarily innovators, sometimes they are, but often they are not. This paradox may be explained by the effect of system norms on the innovativeness of opinion leaders because the degree of their innovativeness depends mainly on their followers. In systems with more traditional norms opinion leaders are usually a separate set of people from the innovators. Rogers (1995) cites Hertzog and others (1968) as concluding that in most traditional communities neither the leaders nor their followers are innovative; consequently the community remains traditional. In the most modern communities community norms favour innovativeness, thus both leaders and followers are innovative. In the middle range communities where modernisation is just setting in, divisions occur and community opinion leaders lead the way towards modernisation by trying new ideas before the other farmers in the community. The norms of the system therefore largely determine which adopter category the opinion leaders in a system belong to.

3.3.3 Competence, expertise and accessibility

An opinion leader has to be regarded as knowledgeable or competent in the area in which opinion is sought and he must also be accessible. The opinion leader is apt to be competent if he maintains contacts outside of his group members. He in turn provides information and opinions of interest to the group members (Severin & Tankard, 1979). Heath & Bekker (1968) cite Beltinghaus (1968) having indicted that opinion leaders are better informed than other group members. This is thought to be attributed partly

to the result of extensive mass media exposure, more intensive use of specific information sources and more intensive interpersonal communication.

On the other hand, findings by Düvel 1996 indicate that competence is apparently not the key variable, but that accessibility is as important if not more important. Diffusion or flow of information between follower and opinion leader is impossible without accessibility. Accessibility, in both physical as well as psychic sense is essential for the establishment of consultative relationship (Van der Wateren, 1987). The linkage between accessibility and related variables was explored and a positive relationship was found between accessibility and features such as honesty, fairness, popularity, similarity in attitude and psychic attitude which led to the presumption that friendship may be regarded as being synonymous with or at least closely related to accessibility. Evidence of this was found in the highly significant correlation between accessibility and friendship of ($r = 0.54$; $p < 0.0001$). Accessibility, which appears to be key issue in opinion leadership, with a measure of friendship, which is closely related to accessibility, offers possibilities. Düvel (1996) also indicated that 50.7 percent of persons nominated as best friends also appeared on the list of opinion leaders.

In light of the above it is very important that in identification of opinion leaders due consideration to competence and accessibility should be made. Unawareness of this has probably contributed towards incorrect identification of opinion leaders in certain cases. For instance, incorrect identification of opinion leaders has led to the identified experts selected as opinion leader not exercising the wished for diffusion impact, a fact attributed to their inaccessibility. The likely conclusion as advanced by Düvel (1996) is that incorrect identification of opinion leaders has been a major reason for their limited impact. Thus, it is possible to infer from Düvel's conclusion that, women farmers who form the majority of the rural farming proportion have not gained much from opinion leaders although they represent a significant percentage of agricultural labour force as subsistence farmers, farm managers and female headed households.

When expertise is considered, it easily appears palpable and acceptable as an indication of opinion leadership. However, Düvel (1996) in his study showed a rank correlation of ($r = 0.85$; $p < 0.14$) indicating a significant relationship between expertise and

accessibility which points to the fact that accessibility decreases with increase in knowledge gap between opinion leader and the followers. However no knowledge gap perceived between an individual and another consulting such a person would seem pointless. Therefore some expertise in the opinion leader is probably a pre-requisite for a worthwhile consultative relationship. It would even be expected that a person, given the same perceived accessibility would prefer to choose to consult the person with a higher perceived knowledge.

3.3.4 The personal influence process

El-Assal (1967) is cited in Heath & Bekker (1986) to have raised questions regarding conditions under which a person seeks advice or information from another. Why such a person resorts to a particular rather than another and what regulates the interaction between opinion leaders and advise seekers. A favourable climate was identified as a minimum condition required for personal influence to materialise among individuals whose social characteristics, status and role bring them into social situations where advice or information is being sought on a variety of topics or related issues. Factors that create conditions for interaction or advice are: motivating factors, the mass media and homogeneity and congruity between the opinion leader and the advice seeker.

People are motivated to seek information for a variety of reasons, including lack of knowledge, lack of information, uncertainty, risk in decision making and importance to satisfy certain communication needs (El-Assal, 1967, Wright & Cantor, 1967, Fourie, 1975 in Heath & Bekker, 1988). The mass media often plays an important role in facilitating interpersonal communication and creating a climate or condition for the flow of interpersonal influence. In this context, the mass media functions as a supply of new and/or additional information; in reinforcing and confirming existing values, opinions and attitudes; and, in facilitating and stimulating change effects in opinion or overt behaviours to a certain extent. Mass media effect cannot therefore be considered solely without taking into account the dynamics of the social situations in which messages are received, thought about and decided upon. This means that response to a given mass communication is a social event in which personal influence is often exerted among group members (El-Assal, 1967 in Heath & Bekker, 1968). Finally,

homogeneity and congruity in interpersonal influence is more effective in a climate where opinion leaders and non-opinion leaders are to a certain degree homogeneous and congruent in respect of their opinions, attitudes, beliefs, interests, social status and socio-economic class (Lowe & McCormick 1956; Berscheid, 1966, Mills & Jellison, 1968, Wright, 1975 in Heath & Bekker, 1968).

3.3.5 The person as opinion leader

Another characteristic of the person chosen as opinion leader is that the person is perceived to be experienced, knowledgeable and well informed in the context of what is being sought. This person would also be perceived to share similar outlooks and orientations towards the issue in question (El-Assal, 1967 in Heath & Bekker, 1986). Interaction between opinion leader and follower is therefore governed and regulated by reciprocal role expectations. A person is sought for advice on the basis of his actions and inferred qualities. Interaction is facilitated and stimulated within an established set of expectations held by both leaders and follower. This also shows that opinion leaders are aware of their status and role as advisers in the context of what is being sought (El-Assal, 1967 in Heath & Bekker, 1968).

3.4 HOMOPHILY AND HETEROPHILY

Homophily and heterophily represent concepts of who relays messages to whom in interpersonal communication networks. A fundamental principle of human communication is that exchange of ideas occurs most frequently between individuals who are alike, or homophilous. Homophily being the degree to which individuals who communicate with another are similar (Rogers, 1995). Similarity may lie in certain attributes like beliefs, education, social status, etc. Homophily is more common because communication tends to be easier and more effective when individuals are homophilous because they share common meanings, beliefs and mutual understanding (Rogers, 1995). This is logical because talking with those who are markedly different from us requires more effort to make communication effective.

Heterophilous communication, i.e. communication between dissimilar individuals may cause cognitive dissonance because an individual is exposed to messages that are inconsistent with his existing beliefs. Besides, differences in technical competence, social status, beliefs and languages may lead to mistaken meanings causing messages to be distorted or go unheeded.

In a homophilous communication, information and ideas typically spread horizontally among people of the same status i.e. high status individuals usually share information with individuals of the same status, rather than vertically among individuals of different status which is common in a heterophilous communication (Rogers, 1983). In this regard, homophily accelerates the diffusion process. The disadvantage of homophily, however, is that it may act as an invisible barrier in information flow in the sense that information having entered a social system through a higher status person may end up circulating among high status people only thereby failing to trickle down to the lower status people in the same social system.

In a heterophilous network, even though it may be less common, communication has a higher information potential because such networks links often are especially important in carrying information about innovations as supplemented by Granovette's (1973) theory of the strength of weak ties. It is through the relatively weak ties, of less frequent contacts that new information is likely to become available, acquaintances are likely to pass new information than the close friends. The strong ties occurs among persons who are closest to each other for instance those among family, close friends, work mates producing overlapping contacts with one another. They interact often and tend to possess and pass the same knowledge. Information which leaves anyone of them is likely to reach them all. However, they are less likely to be the sources of new information from more distant parts of the network (Scott, 1993).

Consequently, a standing generalisation is that 'interpersonal diffusion networks are mostly homophilous' meaning that individuals of similar status interact most frequently with each other. Although homophily may appear to slow diffusion of innovations, it is beneficial because a higher status individual may not be an appropriate role model for another individual of lower status. Interaction between such a pair of individuals may

not be beneficial to the latter. The standing generalisation on a heterophilous diffusion networks indicates a general tendency for followers to seek information and advice from opinion leaders who are perceived as more technically competent than themselves, but not to too much a degree. Indeed based on this, it may therefore be concluded that the general pattern of interpersonal networks is one of homophily. This means followers of opinion leaders usually learn about an innovation through ties with their near-peer opinion leaders (Rogers, 1995).

It has been observed that in communities with rigid social stratification, interaction between members of different social strata can be rather limited. Therefore each stratum may need to have its own opinion leaders instead of a few persons functioning as such for the whole community. Higher status opinion leaders may not be appropriate role models for lower status followers, in such a case a high degree of homophily in which smaller farmers interact with opinion who are themselves small farmers would probably be beneficial (Rogers, 1983). It has also been observed that there is a tendency for more effective communication to occur with those who are more similar to change agents or those whose socio-cultural background are more similar to the one of change agents.

3.5 PHYSICAL ACCESSIBILITY

Rogers & Kincaid (1981) identified spatial distance in addition to homophily as another main determinant of whom is linked to whom. The general trend that has emerged is that individuals tend to be linked to others who are close to them in physical distance and who are relatively homophilous in social characteristics. Both social and spatial proximity can be interpreted as indicators of least effort. Rogers & Kincaid (1981), Festinger *et al.*, (1950) and Allen (1977) concluded that space is a very important predictor of who is linked to whom i.e. physical distance greatly affects who interacts with whom. The reason for the strong effect of physical distance is the resultant friendship. Small distances affect the rate at which people meet for network links to develop and be maintained. Longer distance network links are less stable over time, unless other social structural variables are involved, for instance kinship. The result is that at any particular point in time, shorter distance links will predominate in a

system. However, in these instances too, the two individuals who are spatially near each other are likely to be similar in socio-economic status and in other characteristics. In such a circumstance a question arises as to which variable really determines who is linked to whom? Rogers & Kincaid (1981) accede that the social structural determinant is entangled with the physical structural determinants. Consequently they concluded by stating that "both space and social homophily are important determinants of who interacts with whom, with spatial distance more important in some situations and homophily regarding social characteristics more important in others. When a system is relatively homogeneous in social characteristics spatial distance will be the main determinant of who interacts with whom; among equally close neighbours, homophily on certain social characteristics is not a main determinant of who interacts with whom, but in longer distance links, social homophily is the main determinant of who is linked to whom".

3.6 MONOMORPHISM AND POLYMORPHISM

Polymorphism is the degree to which an individual acts as an opinion leader for a variety of topics, while monomorphism is acting as an opinion leader for only a single topic. The degree of monomorphism in a given social system varies with such factors as the diversity of the topics on which opinion leadership is measured, whether system norms are innovative or not (Rogers, 1995). In less change prone societies, opinion leaders tend to be polymorphic. On the other hand, in more change prone societies, their influence tends to be monomorphic i.e. limited to matters in which they have expertise. Most individuals usually know with which of their colleagues to try new ideas and which ones are sought for advice because of their good judgement. They also know those who have reputation as persons who know what is going on (Lionberger & Gwin, 1982).

3.7 THE NETWORK APPROACH

Network analysis is a fundamental intellectual tool used to the study of social structures (Wellman & Berkowitz, 1988). According to Scott, 1991 social network analysis is seen as a specialised area of study rather than a critical alternative to

conventional sociology. The concept of network is seen by Barnes (1954) as an analytical device for investigating the varying forms of relations. Nadel (1957) is quoted in Scott (1991) to mean the interlocking of relationships whereby the interactions implicit in one determines those occurring in others.

There is now increasing awareness of the fact that people capitalise on their social relationship in order to deal with challenges of life (Engel, 1993). The idea that social networks is forming the basis of contemporary African life style is gaining interest (Bopape, 1993). It is therefore not hard to comprehend the attraction this idea has for social work practitioners and researchers. Analysis of the dynamics of social networks suggests new sets of questions about the nature of African social life which leads to certain possibilities in strategic and operational planning relating to development. Study of social networks is drawing attention of researchers anew to the description of the communities, and yielding deeper understanding of rural and urban life, community dynamics and the process by means of which social needs could be met. Social network structure are germane to planning development projects. For instance according to Bopape (1993), in South Africa, among the Africans, industry and commerce are presently exploiting these structures in organising financial and banking schemes. Another possibility as put by Bopape (1993) is that of "deinstitutionalization" that one of relieving government of the burden of running all types of institutions and encouraging community based type of services based on such structures.

Networks may be identified as either formal or informal. The informal networks do not follow the scalar or functional lines. It develops out of the social relationships that exist among people. Engel (1993) argues that networks function best when they are informal so for this reason he recommends no attempt should be made to institutionalise them.

Mitchell (1969) as referred to by Scott (1991) talks about the network concept as a pattern of personal links individuals have with a set of people and the links these people in turn have among themselves. These patterns of interaction for Mitchell are the sphere of network analysis. Such interpersonal networks are built from two different ideal types of action:-

- (1) communication which involves transfer of information between individuals, establishment of norms and creation of a degree of consensus; and,
- (2) instrumental or purposive type of action which involves transfer of material goods and services between people.

Mitchell further conceptualises the 'total network' of society as complex and ever changing set of linkages that stretches within and beyond the confines of any community. In research he recommends the selection of a particular aspect of the total network for attention based on two of the following abstractions:-

- (1) The abstraction which is anchored around a particular individual so as to generate 'ego-centred' network of social relations of all kinds.
- (2) The abstraction of overall 'global' features of network in relation to a particular aspect of social activity i.e. political ties, kinship obligations, friendship or work relations.

For Mitchell (1969) it was the individually anchored partial networks that were to be the focus of attention. In this kind of research, individuals are identified and their direct links to others are traced. Such research generates a collection of ego-centred networks, one for each of the individuals studied. Mitchell in 1969 recognises the second type of abstraction but also sees it as needing to be anchored around a particular individual. Partial networks always structured are always 'ego-centred' networks focused around particular types of social relations. Such networks involve a combination of a number of meaningfully distinct relations i.e. kinship, friendship, neighbourliness all combined into a single multi-stranded relationship which is inappropriate to break down into constituent elements.

Networks of interpersonal relations are often distinguished from structures of institutional relations. It concerns only the interpersonal sphere that is left behind after formal economic, political and other roles are extracted (Whitten & Wolf, 1973 in Scott, 1991).

Social structures can be represented as networks, that is, as sets of nodes or social system members and sets of ties depicting their interconnections (Wellman & Berkowitz, 1988). This immediately directs to the idea of thinking of social systems as collections of individuals, dyads, groups, corporations, households, nations or other collections. The ties represent flows of resources, information, symmetrical friendships, transfers or structured relationships between nodes. The very nature of social systems imply a selectivity of channels and communication acts (Katz & Hahn in Toortoriello, Blatt & DeWine, 1988).

Wellman, Carrington & Hall (1988) observed that networks as new forms of communities then come into being out of these network links. This can only be realised when analysis focuses on social ties and systems of informal resource exchange rather than on people living in neighbourhoods and villages. Communities hence transmute into social networks. Treating communities as social networks makes traditional solidarities made up of densely knit and tightly bound solidarities only one among possible patterns. Treating communities in this way is important in the following ways:-

- (1) In a sense it allows for the ways in which alternative structural patterns affect flows of resources to community members. This can be evaluated and used to channel needed resources from external sources to the community.
- (2) The shift in perspective from community to network allows for the examination of the extent to which social changes have simultaneously created new forms of associations and altered the older interpersonal bonds i.e. kinship.
- (3) It broadens and facilitates analytic linkage of community networks to other structures such as links with bureaucratic institutions.

Wellman *et al.*, (1988) observed that each person in the community is regarded as a node of a potentially complex network of community ties. Community ties in a network involves a number of things that people do among each other such as persons with whom to visit, share information, exchange help and get advice. These ties do not

fit in the sociological criteria of the densely knit neighbourhood solidarities filled with mutual aid.

There is a need to look at the social essence of the community in neither locality nor solidarity but in ways in which networks of informal relations fit households and persons into social structures. A research approach focusing attention on the characteristics of community ties, informal links of companionship and leadership between individuals and on the patterns formed by these links offers a great deal of potential. This is because of the fact that the functionality of informal networks is based on social relationships that tend to be accurate and much faster in disseminating information through clusters than the formal network. Another advantage noted lies in the fact that informal networks can carry a great deal of information. (Toortoriello; Blatt & DeWine, 1988).

Wellman and others in 1988 examined communities defined by networks and reported the following important insights about the network approach:

- a. It gives the flexibility to discover both local solidarities and far-flung ramified communities.
- b. Most important of all, it enables to see which attributes of ties and networks best foster sociable relations, interpersonal support, informal social control and sense of personal identity.
- c. Treating communities as networks also allows small scale social structures as interpersonal networks fit into large scale division of labour.
- d. It concentrates attention on how networks channel resources to their members, locates them in small scale social structures and links them to large scale institutions.

Network analysis was further popularised by the work of Granovetter in 1974, in which he explored how people acquire information about job opportunities (Scott,

1991). His interest in the kinds of links involved in transmission of information, and how they were maintained over a long period of time led to the findings that informal contacts were the primary channels through which individuals found job opportunities. The important part of Granovetter's investigation was the fact that the explanations for his findings were drawn from the diffusion model. It is possible to track the passage of this information through a social network and discover the number of people who will acquire the information and the various locations in the network. Acquisition of this information depends on the motivation of those with the information to pass it on and the strategic location of the person's contacts in the overall flow of information (Granovetter, 1974:52 in Scott, 1991). These findings have implications for the application of network analysis to the study of opinion leadership in diffusion of agricultural innovations in particular and are important in contributing to the analytical development of social network analysis.

3.8 HYPOTHESES

In view of the various problems associated with extension in Uganda and aware of the opportunities offered by opinion leaders in dissemination of information, the following hypotheses are identified in an effort to achieve the objectives set for this study.

1. The phenomenon of opinion leadership occurs equally among members of both genders in a rural community of Uganda.
2. Opinion leadership is more important than formal leadership in the dissemination of information in the rural community.
3. Farmers predominantly seek and contact opinion leaders of the same gender.
4. Characteristics such as kinship, friendship, psychic accessibility, physical accessibility, educational level, farming efficiency, social status and cosmopolitanism are significantly important in determining whom to consult.

5. Rural communities tend to have polymorphic rather than monomorphic opinion leaders.
6. Rural communities tend to have homophilous rather heterophilous interpersonal networks.

CHAPTER FOUR

METHODOLOGY

4.1 RESEARCH DESIGN

By far the most frequently used means of obtaining network data is survey sociometry (Rogers & Kincaid, 1981). The sociometric method consists of asking respondents whom they sought or hypothetically might seek for information or advice about a given topic, such as a particular innovation. Moreno (1934) felt that, concrete rather than abstract questions yield more meaningful sociometric data. Sociometric technique is, therefore, a highly valid method of measuring opinion leadership as it uses perceptions of the followers.

In this study a quasi-sociometry was the survey method of measurement used. Quasi-sociometry uses a random sample of individuals in a representative sample of intact systems. The unit of sampling is the personal communication network attached to each of the random sample of individuals.

This method of measurement was preferred based on the advantage that large samples are possible. This method also provides for some basis for generalizability of the results; the questions are easier to administer and are adaptable to different types of settings and issues. This choice was also based on cost and time saving considerations and also because it is good at capturing an individual's own perception of his opinion leaders.

4.2 STUDY AREA AND SAMPLE SELECTION

4.2.1 Study Area

This study was carried out in Mukono district of Uganda (Map 1). Mukono district, with an average land holding of 0.5 ha per family, has 50,345 sq. km of its total land

area under cultivation. Agriculture is the main economic activity carried out by estimated 191,057 farm families in the district. The majority of the 824,604 people of Mukono, consisting of 49.8 percent and 50.2 percent men and women respectively, live in rural areas. They cultivate a variety of crops such as coffee, bananas, sweet potatoes, cassava, maize, beans and horticultural crops. Cattle, chicken, goats and pigs dominate the livestock enterprises.

Only 24.7 percent (47,230) of the farm families of Mukono are directly served by the public agricultural extension service. There are 1,312 contact farmers and 74 contact groups served by only 84 field extension workers for the entire district. This brings the extension: client ratio for the district to 1:2,274, suggesting that the majority of the farmers in the district do not have access to agricultural extension services.

Mukono district is one of the two districts where the Farm-Level Applied Research Methods Program for Eastern and Southern Africa (FARMESA) is operating. FARMESA is regional collaborative initiative of Kenya, Tanzania, Uganda, Zambia and Zimbabwe with financial and technical support of SIDA and FAO. The other district is Kumi which is over 250 kms from Kampala. Following a discussion with the FARMESA, which co-funded this study, Mukono district was selected for the study because relatively more information was available with FARMESA. Within Mukono district, FARMESA activities are concentrated in Kasenge parish.

4.2.2 Sample selection

From the twelve villages of Kasenge parish with approximately 1,500 households, a sample of three villages of Buligobe, Kapeke and Luwunga were selected to constitute the study site. The selection of the villages was based on the consideration that the villages represent a typical agricultural status of the district.

The three villages have a total of 434 households with the following distributions: Buligobe village 192, Kapeke 144 and Luwunga 98. A random sampling procedure with probability proportional to size was used to select a sample of 100 households from a previously drawn list of household heads in the villages. Thus, the sample

consisted of 44 households from Buligobe, 33 from Kapeke and 23 from Luwunga. This accounts for 23 percent of the households from each of the villages.

4.3 DATA COLLECTION

4.3.1 Instrumentation

Data was collected by means of a questionnaire, which was designed with most of the questions being structured and only a few being open-ended. A pre-test was conducted and the necessary adjustments and changes included in the final questionnaire (Appendix 1). Data collection guidelines were also developed and attached to the questionnaire to facilitate the data collection process. The final questionnaire contained four sections dealing with respondent's personal data, particulars of household activities, sources of information and persons consulted for advice respectively.

The personal biographical data section had questions on background information about the respondent; this covered areas such as village, sex, age, marital status, educational level, household decision-making, major income sources, membership in organizations and family size. The second part of the questionnaire sought information on particulars of household activities. Thus the questions were on enterprises (crop, livestock and wife's project), their types (commercial, commercial and subsistence or subsistence) and percentage income from each of them.

Sources of information on each enterprise, their individual importance rating and frequency of use were contained in section three of the questionnaire. In section four, the respondents were asked about persons in the community whom they consult for advice in agricultural enterprises. The respondents were asked to identify persons they would consult (quasi opinion leaders), knowledgeable persons (specialists), persons they actually consult (opinion leaders) and those who consulted the respondents for advice. In this section, the relationship between the respondents and individuals nominated with regards to characteristics such as their kinship, friendship, psychic accessibility, physical accessibility, education level, farming efficiency, social

status, leadership prominence and cosmopolitaness were also included. The examination of these variables was considered important in this study because it was hoped that it would be possible to identify characteristics and factors contributing to significant differences in the influence, which other people have on others. Consequently each nominated person was rated on a five point scale running from 'much lower than respondent's to much higher than respondent's' against variables such as kinship, friendship, psychic accessibility, physical accessibility, education level, farming efficiency, social status and cosmopolitaness. Other variables upon which information was collected on for each nominated person included practice adopted and frequency of consultation in the past one year.

After briefing and consulting with the District Extension Coordinator, enumerators at the rank of Assistant Agricultural Officers were selected to carry out the survey interviews using the questionnaire and guidelines developed. The selection of extension staff to work as enumerators was based on their experience with surveys, familiarity with the study area and their capability.

A two-day training for the enumerators was also conducted. The training covered

- (i) briefing and discussions regarding the research, its objectives and expectations of the researcher
- (ii) explanations of all the questions in the questionnaire
- (iii) sensitization in procedures for conducting an interview and
- (iv) discussion of the social map for the study area. Each enumerator was provided with a data collection guideline and social maps for further study and use in the survey.

Before the actual survey, a pre-survey visit was arranged for the researcher and survey team to meet with local council leaders of the survey area. The purpose was to inform

the local leaders about the research and survey in order to enlist their support and assistance, and also to formally introduce the survey team.

Data collection lasted for three weeks. The five enumerators were distributed in the three villages according to the sample size. They were facilitated with allowances to cover lunch, transport and professional fees. Local council chairmen facilitated the identification of the sampled households and also introduced the enumerators to their respective villages.

Supervision and monitoring by the researcher was an integral part of the survey. At the beginning of the survey, the researcher moved in turns with each enumerator to collect data and also to familiarize herself with the study area. Subsequent supervision methods involved three meetings in which the team met to review the progress of data collection and the researcher also used the opportunity to carry out further verification of the completed questionnaires. The questionnaires with errors were followed up in the field for corrections with the respective enumerators.

4.4 DATA PROCESSING

Most of the questions in the questionnaire were structured with coded responses. The data was then entered, using Microsoft Excell version 4.0a program. In all, there were 100 cases and 1500 variables split into 4 files. The data was printed and verified manually to ensure accuracy before analysis started.

Statistical analysis was done using SPSS/PC+ Version 4 program. Thus, each spreadsheet was translated by the program into corresponding SPSS/PC+ system files: *.SYS. The system files were then subjected to:

- a) file manipulation procedures in order to prepare the data for analysis as was required
- b) descriptive statistical analysis in order to get a general summary and features of the data

- c) inferential statistical procedures including Chi-squared analysis for studying the association between variables and analysis of variance for studying the effects of selected factors.

4.5 LIMITATIONS OF THE STUDY

A number of limitations were encountered in this study. This was particularly with regards to questions which solicited nominations of individuals respondents would consult, those who are knowledgeable, those whom he actually consults and those who consult him.

There were two limitations with this approach. Firstly, these questions were rather general and hence did not deal with more specific aspects of the enterprises. This might probably have contributed, in part, to the findings that some respondents did not provide any data about their communication links. Secondly, a disadvantage with soliciting only three sociometric contacts is that it might not have allowed for the capturing of low proximity links or weak ties. This is because the respondents were limited to three choices and hence they might have limited those choices to their strong ties only.

Another limitation was that the people in the ethnic group studied are culturally prohibited from openly discussing whom their associates are especially were mention of names are concerned. Because the questions in this study sought to elicit rather sensitive information from the respondents, the somewhat high rate of reservations, reluctance, refusal and opting for a response of not seeking anybody's advice behaviours observed could be attributed to this, leading to gaps in the data set.

This study coincided with the debate in the parliament on the new land bill, and this might have adversely influenced the respondent's level of co-operation and responses because some feared that the information being solicited would be used subsequently to assess them for tax, wealth status and land size purposes.

The personal communication network was anchored on the respondent. On this basis, it was assumed that each respondent would accurately report his or her links. However, there was no check on the accuracy of what he said in reporting his partner's characteristics. This would be regarded as another limitation of the study. However according to Lavmann (1973:35) as reported by Rogers and Kincaid (1981) these subjective perceptions are still considered to be more important than objective data.

DEFINITION OF TERMS

Opinion leadership:	Is the degree to which an individual is able to informally influence other individual's attitude or overt behaviour in a desired way with relative frequency.
Opinion leaders:	Are individuals who lead in influencing other's opinion about innovations.
Opinion seekers:	Are those individuals who have sought out someone else's views or several peoples views on either a particular issue or several issues related to a common subject or several topics. They play active role in soliciting opinions either in specific instances or in general.
Homophily:	Is the degree to which pairs of individuals who interact are similar in certain attributes such as beliefs, education, social status and the like.
Heterophily:	Is the degree to which pairs of individuals are dissimilar in the above attributes mentioned in 3 above.
Monomorphism:	Is the tendency for an individual to act as an opinion leader for only a single topic.
Polymorphism:	Is the degree to which an individual acts as an opinion leader for a variety of topics.
Change agents:	Can be described as a person who functions as a communication link between two or more systems.

Communication:	A number of definitions stress the notion of making common or sharing: It is a process that makes common to two or more that was monopoly of one person. There are also definitions, which stress intentional influence: the process by which an individual transmits stimuli to modify behaviour of other individuals. Some have defined communication as being essentially persuasion.
Mass media:	Is a plural term referring to several different means of communication like newspapers, television, radio, and magazines.
Interpersonal communication network:	Consists of interconnected individual who are linked by patterned flow of information.
Diffusion:	Is the process by which an innovation is communicated through certain channels over time among members of a social system.
Social system:	Is a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal.
Norms:	Are established behaviour patterns for members of a social system.
Innovativeness:	Is the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a social system.
Gate keeping:	Is controlling the flow of messages through a communication channel.

Sociometric method:	Consists of asking respondents whom they sought or hypothetically might seek for information or advice about a particular given topic, such as a particular innovation.
Leadership:	From the influence theory of leadership, Leadership in the context of this research will be defined to mean the successful influencing of other members of a group or social system.
Social status:	Rank, social position in relation to others relative importance.
Cosmopolitaness:	Having of a much better view or experience of the world within and out side your social system. Having a high degree of communication with the social systems environment.
Social relationship:	Is any direct or indirect linkage between people of different social positions that involves mutual but not necessarily symmetric orientations of positive, neutral or negative effectual character which (many or not involve exchange of goods, services or information.

CHAPTER FIVE

BACKGROUND INFORMATION ON KASENGE PARISH

5.1 INTRODUCTION

This chapter describes the socio-demographic and physical characteristics of the study area in order to provide background information. Mukono district located in central Uganda is regarded as a high potential agricultural area. It is categorized in the banana-coffee farming system. Most parts of Mukono lie at an altitude of 1,200 metres to 1,500 metres. It gets a mean annual rainfall of between 1,250mm - 1,500mm. The average temperatures in Mukono range between 27 to 30 degrees Celsius. The soils are mainly sandy clay loam and the vegetation is made of forested savanna and elephant grass interspersed by the remnants of the tropical high forest.

Mukono is populated mainly by the Baganda but it also has a large number of migrants of other ethnic origins from different parts of the country, hence making it a culturally more heterogeneous district. Located about 20 Km from Kampala the capital city of Uganda, Mukono is made of 6 counties and 37 sub-counties, of these, only five sub-counties are urban located (Map 2). The total population of the district stands at 824,604. The majority of this population lives in the rural areas and are engaged in agricultural activities.

5.2 CHARACTERISTICS OF THE FARMERS

Among the 100 respondents randomly selected, 54 percent and 46 percent were males and females respectively. 71 percent of the respondents were married, 11 percent were single and 18 percent were either divorced or widowed. Table 5.1 summarizes the age distribution of the respondents. The mean age of the farmers is 43 years. More than 51 percent of the farmers fall in the age group of 29-49 years. 30 percent of the farmers are over 50 years and only 19 percent are between 17-28 years. The results show that majority of the farmers in the study area are of middle age and older.

Table 5. 1: Age distribution of the respondents

Age Range	Percentage of Respondents
17-28	19
29-39	26
40-49	25
50-59	16
>60	14
Total	100

The educational profile of the population shows that the majority, 82 percent, of the farmers have at least had some formal education. 18 percent of them have not been to school. Table 5.2 is a summary of the educational profile of the respondents. It shows that 58 percent of the farmers have been to primary school, 20 percent and 3 percent have been to secondary school and tertiary institutions respectively.

Table 5. 2: Highest educational standard attained by the respondents

Level of Education	No. of Years Completed in Formal Education	Percentage (No) of Respondents
Not Been to School	0	18
Primary	1-6	38
	7	20
Secondary (Ordinary Level)	8-10	11
	11	9
Secondary (Advanced Level)	12	2
	13-14	1
Tertiary	>15	1
Total		100

When the number of years that the respondents have completed in formal education is considered, it reveals a detailed picture which shows some differences in the standards of education among the respondents. The results show that only 20 percent of the respondents completed primary education while 38 percent dropped out. As far as secondary education is concerned, only 9 percent and 3 percent of the respondents completed ordinary and advanced level of education respectively.

Only 1 percent has been to a tertiary institution. The results show that the majority of the farmers in the study area did not complete primary education and about the same number are primary and secondary school leavers. It can be concluded that the farming population is fairly literate.

5.2.1 Household decision-making

The pattern of household responsibility, consultation and decision making between members of the household were investigated. It was found that 77 percent of the households are headed by men. As far as decision making is concerned, it is evident that in most of the households (48%) decisions are made jointly by husbands and wives. In 23 percent of the households decisions are made by men and in another 23 percent it is made by the women. Table 5.3 below shows this.

Table 5. 3: Number (%) of respondent's household responsibility

Household head role	Percentage
Husband	23
Wife	23
Jointly	48
Single Women	6
Total	100

Whereas the above results give the general indication of household decision making, it does not seem to show the extent to which consultation takes place between members of the household and the role played by the partners before decisions are arrived at. Table 5.4 is a summary of the results which show the extent to which husbands and wives participate or consult each other with reference to decisions regarding production and marketing of agricultural produce. The results indicate that in 86 percent of the households consultation takes place between the partners.

In production of all the agricultural enterprises, 10 percent of the husbands and 25 percent of the wives never consult their partners.

Table 5. 4: Number (%) of husbands and wives who consult each other in the household on production and marketing of agricultural produce

Pattern of consultation in the household	Percentage of Partners Who Consult in the Household									
	Coffee		Bananas		Food crops		Livestock		Total	
	P	M	P	M	P	M	P	M	P	M
	n=71	n=67	n=76	n=59	n=85	n=69	n=55	n=45		
Husband never consults wife	14.1	23.9	9.2	15.3	8.2	10.1	9.1	8.9	10.1	15
Husband sometimes consults wife	32.4	26.9	2.6	6.8	2.4	-	16.4	8.9	12.5	15.1
Husband always consults wife	26.8	23.9	18.4	18.6	15.3	14.5	21.8	24.4	20.2	20
Wife always consults husband	5.6	1.5	22.4	15.3	18.8	21.7	18.2	22.2	16.4	14.5
Wife sometimes consults husband	5.6	6.0	18.4	18.6	24.7	26.1	12.7	3.3	15.3	16.2
Wife never consults husband	15.5	17.9	28.9	25.4	30.6	27.5	21.8	22.2	24.7	23.2

P: Enterprise production

M: marketing

In the marketing aspects of all the enterprises, 15 percent of the husbands never consult their wives compared to 23 percent of the wives who never consult. 16 percent of wives were found to always consult their husbands. In both aspects of the practices, the percentage of wives who do not consult their partners is higher.

When separate enterprises are considered, the results show that 24 percent of the husbands do not consult their wives in coffee marketing compared to 18 percent of the wives who do not consult. In banana production, 29 percent of the wives do not consult their husbands compared to only 9 percent of the husbands. 25 percent of the housewives market bananas without consulting their husbands compared to only 15 percent of the husbands. 31 percent and 28 percent of the housewives produce and market food crops without consulting their husbands respectively.

The results seem to indicate that in all the enterprises, the percentage of housewives who do not consult their partners is higher than the husbands who do not consult their wives. The husbands seem to consult their partners on coffee and livestock more than on the other enterprises, while for the wives it appears to be on bananas and food crops.

The extent to which both partners play a role in decision making is indicated in Table 5.5. It shows that 13 percent of the husbands take decisions independent of their partners in production aspects of all the enterprises, and 20 percent of them in the marketing aspects respectively compared to 27 percent and 22 percent of the housewives respectively. Table 5.5 further shows that 20 percent and 17 percent of the decisions on production and marketing are based on consensus. The results show that housewives seem to lead in making decisions independently than the husbands. It is only in coffee enterprise that husbands lead in taking decisions independent of their partners.

Table 5. 5: Number (%) of husbands and wives who take household decision in production and marketing of the enterprises

Pattern of household decision making	Percentage of partners who make decisions									
	Coffee		Bananas		Food crops		Livestock		Total	
	P	M	P	M	P	M	P	M	P	M
	n=73	n=70	n=76	n=64	n=83	n=69	n=57	n=44		
Decisions taken by husbands	17.8	35.7	10.5	15.6	10.8	13.0	10.5	11.4	12.5	19.8
Decisions sometimes taken by husbands	38.4	26.8	3.9	3.1	2.4	14.4	12.3	22.71	13.8	17.0
Decisions always based on consensus	17.8	11.4	17.1	20.3	24.1	15.9	22.8	22.7	20.4	17.0
Decisions sometimes based on consensus with husband	12.3	10.0	32.9	34.4	27.7	29.0	33.3	22.7	26.7	23.9
Decisions taken by wife alone	13.7	14.3	35.5	26.6	34.9	27.5	21.1	20.5	27.0	22.3

P: Production of enterprises

M: Marketing

5.3 ECONOMIC ACTIVITIES

Farming is the major source of income in the study area. It was found that 57 percent of the population engages in farming on full-time basis, 33 percent engage in farming and other part-time non-farm activities and 10 percent of the population practice farming on part-time basis. 90 percent of the farms are smallholdings ranging from between less than 1 to 5 hectares in size. The farmers produce a wide range of crops and livestock. Coffee and bananas are the leading enterprises produced respectively by 26 and 23 percent of the farmers. A wide range of food crops such as sweet potatoes, cassava, maize, beans and vegetables are also produced by 28.5 percent of the farmers. Cattle are the most important livestock kept by 6 percent of the farmers and other important livestock include pigs, goats and chicken which are kept by 15.8 percent of the farmers.

It was found that 28 percent of the enterprises are purely for subsistence purposes while 34 percent are for both subsistence and commercial purposes. Commercial farming accounts for 38 percent. It appears to follow that farming constitutes the most important source of income for the majority of the farmers. Table 5.6 is a summary how income is distributed in farming. It shows that farming forms a source of livelihood for the population in varying degrees. 31 percent of the farmers derive all their income from farming alone compared to only 3 percent who do not depend on farming for income. 36 percent of the farmers get more than half of their income from farming and 12 percent derive half of their income from farming.

People in the study area were found to be engaged in non-farm occupations to earn income. Trading and blue collar jobs account for the main types of employment providing income for 22 and 20 percent of the population respectively, while only 4 percent of the people have professional employment. Brewing beer, saloons, tailoring and arts and crafts were the other sources of income for 17 percent of the population.

Table 5. 6: Percentage of income coming from farming

Income from farming	Percentage
All	31
More than half	36
Half	12
Less than half	8
None	3
Total	100

5.4 GROUP ACTIVITIES

Groups have been demonstrated to be important for a larger number of farmers to make significant impact on agricultural production. Groups have been used to bring farmers with similar problems or interests together and also to channel extension service. Despite all this, many farmers in the study area do not seem to belong to groups as indicated in the table below

Table 5. 7: Groups and respondent membership

Type of Group	Percentage No of Respondents
Local Council	36.2
Women's Groups	11.4
Farmer's Group	3.8
Farmer's Association	12.4
Co-operative Society	5.7
Savings Group	6.7
Religious Organisation	13.3
Other	4.8
Total	100

The different groups found in the area were grouped into 7 types. The results show that the respondents belong to different groups. Only 36.2 percent of the farmers belong to the local councils whose membership is supposed to be open to all. Only 11.4 percent of the women were found to have membership to a women's group. The results seem to show rather low levels of group membership and participation in the study area.

CHAPTER SIX

THE PERCEIVED IMPORTANCE OF OPINION LEADERSHIP

6.1 INTRODUCTION

Opinion leadership is an informal form of leadership which is causally exercised between friends, family members, neighbours and other members of the community in a situation where someone turns to another person for advice, guidance or information on a given problem, issue or question (Heath & Bekker, 1986).

Opinion leaders fulfil an important function of passing on information from outside the social system. They interpret outside information on the basis of their experience, they set examples for others to follow, legitimising or rejecting possible changes (Van den Ban & Hawkins 1978). So opinion leaders play the crucial role of not only relaying information, but also the endorsement and legitimisation of new ideas. Rogers (1983) believes that diffusion campaigns are likely to succeed when opinion leaders are mobilised. Rogers (1983) further maintains that the change agent's success is positively related to the extent to which he works through opinion leaders. It can therefore be argued that opinion leaders hasten the rate of diffusion and facilitate economy of effort. The use of opinion leaders ensures fewer resources are used and they rapidly magnify the efforts of change agents.

In this section, the phenomenon of opinion leadership among both males and females is explored with the aim of establishing its occurrence and importance in some selected important crops and livestock enterprises in Kasenge parish. Opinion leaders as a source of information is assessed by comparing it with the other important channels or sources of information.

6.2 ASSESSMENT BY RANK ORDER

Different sources or channels used for disseminating information were rated by respondents for relative importance. This was done by requesting respondents to identify the three most important sources in order of importance. The findings summarised in Table 6.1 shows that the three most important sources are the fellow farmer, radio and extension agents which received total nominations of 210, 174 and 144 respectively. Chi-square test of ($\chi^2 = 33.75$, $df = 12$, $p = 0.0007$) indicates the differences in ranking as being statistically significant.

Table 6. 1: Ranking of sources of information for importance

Source	No. and percentage of nominations received by the sources						TOTAL	
	First		Second		Third			
	n	%	n	%	n	%	n	%
Extension Agents	46	22.3	49	24.3	49	33.3	144	25.9
Research Station	1	0.5	5	2.5	10	6.8	16	2.9
Radio	67	32.5	62	30.7	45	30.6	174	31.4
Newspapers	-	-	5	2.5	2	1.4	7	1.3
Church	-	-	1	0.5	3	2.1	4	0.7
Fellow Farmer	92	44.7	80	39.6	38	25.9	210	37.8
Total	206	100	202	100	147	100	555	100

$$\chi^2 = 33.749, df = 12, p=0.007$$

An expression of the relative importance of the three most important sources is further gained from the total nominations that the different sources received as first, second and third ranking. More important is the number of respondents who rated the various sources as most important in the different enterprises namely coffee, bananas, other crops, livestock and women's projects. In this case as shown in Table 6.2, the fellow farmers received 92 nominations while the radio and extension agents received only 67 and 46 as first choices respectively.

Table 6. 2: Comparison of the respondents ratings of the three sources of information

Source	Number (%) of respondents per category rating			Total nomination	Weighted total ¹	Weighted percentage ²
	Most Important	2nd Most Important	3rd Most Important			
Extension agents	46 22.3	49 24.3	49 33.3	144	285	25.4
Radio	67 32.5	62 30.7	45 30.6	174	370	32.5
Fellow Farmer	92 44.7	80 39.6	38 25.9	210	474	42.2
Total	205	191	132	528	1129	

1. Weighted total is based on allocation of 3 for first position, 2 for second position and 1 for third.
2. Percentage distribution of the weighted total per information source

$$\text{Chi}^2 = 11.78, \text{ df} = 4, p = 0.019$$

The fellow farmer was still ranked the second most important source by 80 nominations compared to 62 for the radio and 49 for extension agents. Extension agent was ranked the third source receiving 49 nominations. As indicated by the Chi-square test of ($\text{Chi}^2 = 11.78, \text{ df} = 4, p=0.019$), these differences are statistically significant and confirm the relative importance of opinion leaders.

Evidence regarding the importance of opinion leaders is further gained from the weighted percentage values which was calculated by allocating a weight of (3) for the highest ranking, (2) for second highest ranking and (1) for the third. The weightings are compared on percentage basis to get a more holistic picture of ranking of the three most important sources of information. The results presented in Figure 6.1 show that fellow farmers constitute the most important source of information by a weighted ranking of 42.2 percent, followed by the radio which received a weighted ranking of 32.5 percent and the extension agents which received 25.4 percent.

The result indicates that the fellow farmer is a more important source of information than the radio and extension agents which was rated third most important.

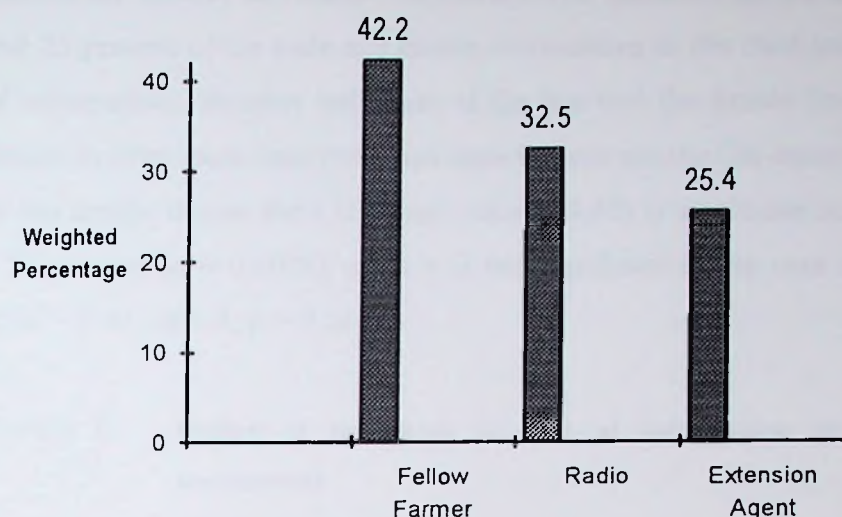


Figure 6. 1: A comparison of the three most important sources of information based on weightings according to the respondent's rank order

Having established that the fellow farmers are the most important source of information for the farmers, the question occurs as to whether this applies to both male and female farmers. This comparison is made in Table 6.3 in which the data is segregated according to the gender of the respondent in order to establish as to whether there are differences in regarding the importance of the sources. Chi -square tests indicate source rating for importance by males is not significant ($\text{Chi}^2 = 5.42$, $\text{df} = 4$, $p = 0.25$), but source ranking by females is significant ($\text{Chi}^2 = 13.84$, $\text{df} = 4$, $p = 0.008$).

The result shows the general tendency between female and male farmers in rating of the information sources is very similar. In both cases the fellow farmer was rated as most important followed by the radio and extension agents respectively. However, judging by the respondent's most important choice as well as the total number of nominations, the female farmers tended to rate the fellow farmer even more important than the males while the radio was assessed to be slightly less important. This conclusion is evident from the fact that of the total nominations for the highest rank order position by female farmers, the source of fellow farmer received 51.3 percent of the nomination as opposed to 40.8 percent in the case of male farmers. The comparative percentages in the case of the second ranking is 42.7 percent and 41.2

percent for females and males respectively. The extension agents received 26.9 percent and 25 percent of the male and female nominations as the third most important source of information. Another indication of the fact that the female farmers rate the fellow farmer as even more important than male farmers are the Chi-square values. In the case of the female farmer the Chi-square value (13.85) is significant at probability level of 0.78 percent ($p = 0.0078$) while it is not significant in the case of the male farmers ($\text{Chi}^2 = 5.43$, $\text{df} = 4$, $p = 0.246$).

Table 6. 3: Rating of the three Sources of information by male and female respondents

Source	Number (%) of respondents per rank order							
	Most Important		2nd Most Important		3rd Most Important		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
Extension Agents	27 21.6	19 23.8	28 25.7	21 25.6	29 26.9	20 25	84 26.8	60 28
Radio	47 37.3	20 25	36 33.0	26 31.7	23 21.3	22 27.5	106 33.8	68 31.1
Fellow Farmers	51 40.8	41 51.3	45 41.3	35 42.7	28 25.9	10 12.5	124 39.5	86 40.2
Total	125	80	109	82	80	52	314	214

Males: $\text{Chi}^2 = 5.4259$, $\text{df} = 4$, $p < 0.2463$

Females: $\text{Chi}^2 = 13.8483$, $\text{df} = 4$, $p < 0.0078$

The result shows that the pattern of rating by the male and female respondents is similar. However, there is a clear tendency for the female farmers to rate the fellow farmers as even more important than the male farmers. The male farmers seem to value the radio more than the female farmers. While the rating of the extension agent as the third most important source may not necessarily imply that it is not at all that important, it may rather be pointing to the possibility that these small farmers not having adequate contact with extension agents. This could mean that farmers in these villages depend a lot on the opinion leaders and the radio for new ideas and information and hence supporting the hypothetical basis of this study about the occurrence and importance of opinion leadership among both males and females in the study area.

6.2.1 Rank order of the information sources within the selected enterprises

The three important sources of information were ranked by respondents to determine their relative importance in some selected enterprises. Table 6.4 summarises the results for the rank order of the information sources for the enterprises namely coffee, bananas, livestock and women's projects. The results indicate that rating of the three sources of information for importance in the case of the more specialised enterprises of coffee shows the Chi-square value is not significant ($\text{Chi}^2 = 7.76$, $\text{df} = 4$, $p = 0.1007$). However a look into the ranking pattern shows that in first rank order, the radio was rated slightly more important than the fellow farmer and extension agents. This is indicated by 44 and 40 percent of the nominations received from the farmers respectively. With 40.7 percent of the nominations, the fellow farmer was ranked more important as a second most important source of information and extension agent was the most important in the third rank order by 41 percent of the nominations. The results show that the order of importance for the sources in coffee is the radio, fellow farmer and extension agents.

For banana enterprise, source rating is significant with ($\text{Chi}^2 = 10.21$, $\text{df} = 4$, $p=0.0371$). For the first rank order, the most important sources of information in banana enterprise is the fellow farmer, they received 48.6 percent of the nominations, followed by the radio and extension agents with respectively 35.1 and 16.2 percent of the nominations. As of second ranking the fellow farmer was still ranked first receiving 51 percent and extension agents 29.4 percent. In the third most important rank order, the radio was first receiving 38.7 percent of the nominations. In banana enterprise the fellow farmer was assessed to be more important in the first and second rank order, while the radio is placed as the third most important.

Information source ranking in livestock enterprise and women's project were not significant with ($\text{Chi}^2 = 6.0867$, $\text{df} = 4$, $p = 0.1.927$ and $\text{Chi}^2 = 5.3406$, $\text{df} = 4$, $p = 0.2541$) respectively. However, judging by the respondent's ranking of the most

Table 6. 4: Rating of the three sources of information for selected enterprises

Source/Enterprise	No. and percentage of respondents per rank order					
	First	Second	Third	Row Total	Weighted total ¹	Weighted percentage
Coffee						
Extension Agents	8 16 -5.6	15 27.8 0.3	16 41 5.4	39 27.3	70	23.6
Radio	22 44 4.9	17 31.5 -1.5	10 25.6 -3.4	49 34.3	110	37.0
Fellow Farmer	20 40 0.8	22 40.7 1.2	13 33.3 -2.0	55 38.5	117	39.4
Total					297	
Chi² = 7.76133, df = 4, p = 0.1007						
Bananas						
Extension Agents	6 16.2	15 29.4	12 16.2	33 27.7	60	19.3
Radio	13 35.1	10 19.6	12 38.7	35 29.4	94	30.2
Fellow Farmer	18 48.6	26 50.9	7 22.6	51 42.9	157	50.5
Total					311	
Chi² = 10.2071, df = 4, p = 0.0371						
Livestock						
Extension Agents	19	11	8	38	87	33.5
Radio	11 22.9 -3.8	19 43.2 5.4	7 25 -1.6	37 30.8	78	30
Fellow Farmer	18 37.5 0	14 31.8 -2.5	13 46.4 2.5	45 37.5	95 -	36.5
Total					260	
Chi² = 6.08697, df = 4, p = 0.1927						
Woman's project						
Extension Agents	2 11.1 -1.7	2 16.7 -0.5	4 44.4 2.2	8 20.5	14	16.1
Radio	5 27.8 -0.5	4 33.3 0.3	3 33.3 0.2	12 30.8	26	29.9
Fellow Farmer	11 61.1 2.2	6 50 0.2	2 22.2 -2.4	19 48.7	47	54.0
Total					87	
Chi² = 5.34064, df = 4, p = 0.2541						

important source, the first choice is extension agent which received 39.6 percent of the nominations, which made it slightly more important than the fellow farmers and the radio which received respectively 37.5 and 22.9 percent of the nominations. The importance of the extension agent in livestock is confirmed by the positive chi-square residual value of 3.8. Ranking of the sources in the second order shows that the radio is more important than the fellow farmer after receiving respectively 43.2 and 31.8 percent of the nominations. In the third order ranking, the fellow farmer received more nominations (37.5%) than the other two sources. The results show that the extension agent is a more important source for livestock enterprise, followed by the radio and the fellow farmers.

The results for the women's projects shows that the fellow farmer was rated even more important than the other sources. In the first rank order, the fellow farmer received more nominations than the radio and extension with 61.1 percent, 27.8 percent and 11.1 percent respectively. In the second rank order, the fellow still received 50 percent of the nominations and the extension agents were ranked the third most important by 44 percent of the nominations. For the women's projects, the fellow farmer is the most important source and less value was attached to the radio and extension agents.

The Chi-square test results show that the rating of the three sources of information was not significant for coffee, livestock and women's projects. The findings for coffee and livestock seem to have a relationship with the earlier results (Table 6.3) in which importance rating of the three sources of information by the male respondents was not significant, possibly implying that coffee and livestock fall under the male domain. Similarly the significant Chi-square result for banana enterprise seems to show a link with source ranking of the information sources by female farmers in the earlier results (Table 6.3). It also seems to follow that banana production appears to be mostly important to the women.

It can further be inferred that high importance is attached to the three sources of information in enterprises that are considered important income earners by both the male and female respondents. While slightly more importance is attached to the fellow farmers in banana enterprise which is produced by mainly the women for food.

Having considered the way in which the three sources are valued by the respondents, a more holistic view of ranking the sources of information is represented in Figure 6.2, the ratings are expressed as percentage weightings.

The findings in Figure 6.2 show that the fellow farmer was rated the most important source of information for all the enterprises. The highest rating was received from income generating projects run by the women and banana enterprise. The differences in source ranking are not all that big in the case of coffee and livestock enterprises. In the latter, incidentally, extension agents were ranked second in importance, while in the other enterprises it is ranked third. The overall picture within the enterprises shows that the fellow farmer is the most important source followed by the radio and then extension agents in that order.

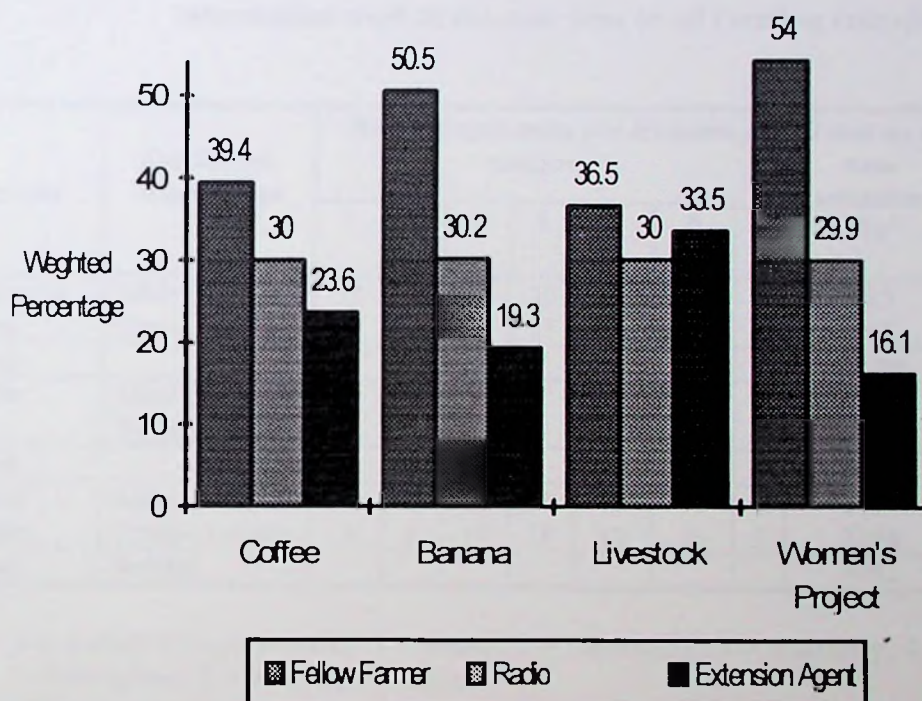


Figure 6. 2 A comparison of the three most important sources of based on weightings by the respondents within selected enterprises

6.3 ASSESSMENT BY FREQUENCY OF USE

Another indication of the importance of the sources of information is the frequency with which they were used. The relative importance of opinion leaders was deduced

from the comparison of the frequencies with which respondents reported to have used the different information sources. Table 6.4 summarises the findings which shows that the radio appears to be used more frequently than the fellow farmers. The average frequency with which the radio, fellow farmer and extension agent was used is 87.2, 79.9 and 12.8 times in a year. The result further shows that both the male and female farmers tend to consult fellow farmers slightly less often than they use the radio. In the case of male farmers, on average the fellow farmers, radio and extension agents were used on average 81.9, 90.9, and 15.1 times respectively per year. The female farmer on average consulted the fellow farmer, radio and extension agents 77.6, 82.9 and 10.1 times in a year.

Table 6. 5: Frequency of consulting the three most important sources of information used in the past year in all farming enterprises

Source	Gender/no. Respondent	No of respondents per frequency category *							Total no of consultations /Yr ¹	Av. no of Consultation/ individual/ Yr.
		1	2	3	4	5	6	7		
Extension Agent	Male (n=54)	13	7	24	30	3	5	-	815	15.1
	Female (n=46)	17	12	11	13	5	2	-	465	10.1
Total									1280	12.8
Radio	Male (n=54)	-	-	3	8	7	68	3	4910	90.9
	Female (n=46)	3	-	-	6	6	48	3	3813	82.9
Total									8723	87.2
Fellow Farmer	Male (n=54)	4	6	8	35	15	41	4	4424	81.9
	Female (n=46)	6	6	15	18	19	19	5	3568	77.6
Total	N=100								7992	79.9

* Frequency category codes: 1 = yearly, 2 = biannually, 3 = quarterly, 4 = monthly, 5 = fortnightly, 6 = weekly, 7 = daily.

1 Total no consultation/Yr. = No of respondents per each frequency category (1 - 7) respectively multiplied by conversion factors 1, 4, 12, 24, 52, 366)

The results indicate that the radio appears to be slightly more important as far as usage is concerned. A possible explanation for this importance of the radio might lie in the fact that the respondents routinely listen to the weekly farming programs broadcast over the radio. This gives added weight to the importance of the fellow farmer because they are used only slightly less frequently than the radio, whilst they are purposely

sought and not routinely available like the radio. The result shows the farmers do have fair access to extension agents, on average a farmer consulted an extension agent about once a month. Although the frequency of consulting by the male farmers was the same as for all the farmers above, it was found to be lower for the female farmers. This result seems to resemble the findings of FAO (1987, 1990, 1993) and Asby, (1981) who report that rural women continue to be neglected by extension and other services. Female farmers have slightly less contact with extension than the male farmers and the indications are that extension agents do not actively seek out contacts with female farmers. The results also indicate that the male farmers tended to consult all the three important sources of information more frequently than the female farmers. Female farmers were shown to consult the opinion leaders just about as frequently as the male farmers, which serves to indicate the importance the fellow farmers especially for the female farmers in the study area.

6.4 INFLUENCE OF PERSONAL AND ENVIRONMENTAL FACTORS

The above results show that opinion leaders, the radio and extension agents are important to the farmers in varying degrees in the study area. It is to be expected that like adoption behaviour, this behaviour to use or consult the different sources of information may be influenced by various personal or environmental factors. Table 6.6 gives an overview of the influence of some of the factors that have significant influence on the use of information sources. The main independent variables of age, gender, village, occupation and information sources were found to be significant at probability levels of ($p < 0.031$), ($p < 0.005$), ($p < 0.0001$), ($p < 0.013$) and ($p < 0.003$) respectively, education level was not significant ($p < 0.400$). However, the results of the two way interaction shows that village has the most significant influence on source ranking with ($p < 0.003$).

Rating of the three sources of information varied significantly between the three villages. Figure 6.3 is a histogrammatical representation of the findings expressed as the weighted average rating of the information sources in the three villages.

Table 6. 6: Environmental and personal factors that influence source ranking

Source of variation	Sum of Squares	df	Mean Square	F	Significance of F
Main effects:	27.894	6	4.649	8.689	0.000
Village	21.362	2	10.681	19.962	0.000
Occupation	3.746	2	1.873	3.500	0.031
Age	29940.345	4	7485.086	3.500	0.031
Gender	32013.400	1	32012.400	7.816	0.005
Education	12081.588	3	4027.196	0.983	0.400
Source of information	4.710	2	2.355	4.401	0.013
2-way interactions:	12.210	12	1.017	1.902	0.032
Village x occupation	0.567	4	0.142	0.256	0.900
Village x source	8.703	4	2.176	4.067	0.003
Occupation x Source	2.977	4	0.744	1.391	0.236
3-way interactions:	4.818	6	0.803	1.501	0.176
Village x occupation x Source of information	4.818	6	0.803	1.501	0.176
Residual	269.138	503	0.535		
Total	314.061	527	0.596		

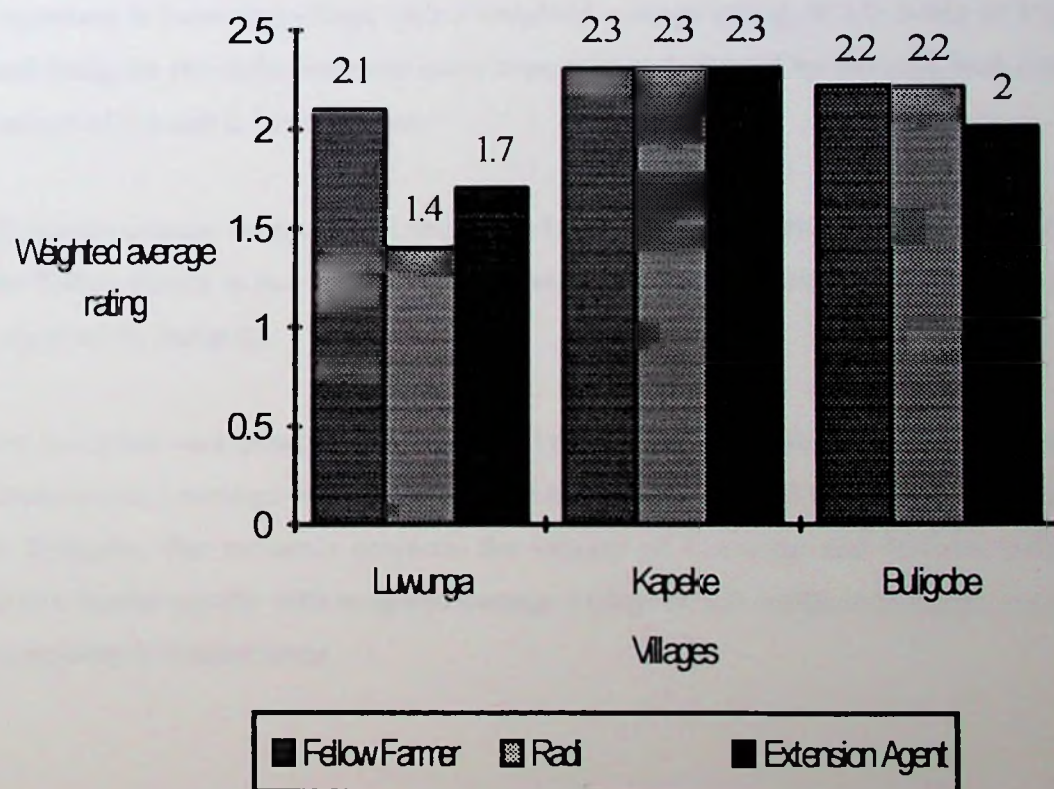


Figure 6. 3: Perceived importance of information sources in the three villages

From Figure 6.3 it is evident that the three villages rated the three sources of information differently. The fellow farmer is relatively more important in Luwunga village, but in Kapeke and Buligobe the fellow farmer assumes the same importance as the radio and extension agents. In fact in Kapeke village the three sources were rated of equal importance, while in Buligobe, the extension agent is rated only slightly less important than the other two sources. The results still project the fellow farmer as comparing very favourably as an important source of information with the conventional sources of information.

6.4.2 Influence of environmental and personal factors on selected enterprises

The influence of village on information source ranking was investigated for selected enterprises of coffee, banana, livestock and women's projects. It was found that the perceived importance of the three sources of information varies between the villages. Judging from the results from Table 6.7, the weighted average rating indicates some variation in ranking the three sources in coffee enterprise. The fellow farmer is more important in Luwunga village with a weighted average rating of 2.0, while in Kapeke and Buligobe the radio becomes more important as indicated by the weighted average ratings of 2.2 and 2.4 respectively.

Weighted average ratings of 2.2 and 2.4 in Luwunga and Kapeke villages indicates that the fellow farmer is more important for banana enterprise while the radio remains still important in Buligobe.

For livestock enterprise, the ranking for importance shows that the fellow farmer is important in Luwunga village, for Kapeke the radio was rated first and it is extension in Buligobe. For women's projects, the villages of Luwunga and Kapeke rated the fellow farmer equally with weighted average ratings of 2.6, while in Buligobe the radio maintained its importance.

Table 6. 7: Weighted average rating of information sources for selected individual enterprises

Village	Source of Information	Weighted mean rating			
		Coffee	Bananas	Livestock	Women's projects
Luwunga	Extension Agents	1.45	1.62	1.88	1.25
	Radio	1.33	1.25	1.80	1.33
	Fellow Farmer	2.00	2.16	2.00	2.60
Kapeke	Extension Agents	2.11	1.86	2.42	2.50
	Radio	2.20	2.20	2.38	2.50
	Fellow Farmer	2.07	2.40	2.28	2.60
Buligobe	Extension Agents	1.84	2.00	2.80	2.00
	Radio	2.43	2.29	2.07	2.40
	Fellow Farmer	2.21	2.18	2.00	2.33

The above results indicate that village has influence on ranking of the sources of information for importance for individual enterprises. There are differences in ranking of the sources between the villages, although the differences in ranking the sources within the villages are not very pronounced.

The findings that have emerged is that for the farmers of Luwunga village, the fellow farmer is a more important source of information for all the above major enterprises. In Buligobe village, the radio is more important for coffee, banana and women's projects, while extension agent is for livestock enterprise. The situation in Kapeke village shows that the fellow farmer is more important for banana enterprise and women's projects while the radio is more important for coffee and extension agent is for the livestock enterprise.

CHAPTER SEVEN

THE SCOPE OF OPINION LEADERSHIP

7.1 INTRODUCTION

Opinion leadership is an informal form of leadership in which an individual is able to influence other individual's attitudes and overt behaviour (Rogers 1983). Opinion leaders according to Rogers (1995) are those members of the village who are consulted for advice. The scope of opinion leadership relates to the extent to which it occurs and opinion leaders are used by the members of the community. Evidence of the use and occurrence of opinion leaders was quantified from the total nominations made by the respondents of the individuals they had actually consulted for advice on the different enterprises and the total number of the distinct individuals nominated in each enterprise.

7.2 NUMBER OF OPINION LEADERS

Respondents were given the opportunity of nominating up to 3 individuals they actually consulted when seeking advice on specific enterprises. Quantifying how many different individuals have been nominated can give an indication of the existence of opinion leaders. Table 7.1 summarises the distribution of the different opinion leaders nominated in different enterprises.

The results show the number opinion leaders who were nominated in the different enterprises. Of the individuals nominated, 175 were males and 58 were females. 62 different individuals were nominated in coffee enterprise, this is the highest when compared with the bananas, other crops, livestock and women's projects in which respectively, 50, 33, 55 and 33 different individuals were nominated. The results show widespread existence of opinion leaders among both the males and females. Gender differences are manifested in the unexpectedly low number of female opinion leaders

nominated. The findings therefore, support the hypothesis on the existence of opinion leaders in the study area.

Table 7. 1: Distribution of opinion leaders according to the farming enterprises and gender

Enterprises	Number (%) of opinion leaders nominated according to the enterprises and gender					
	Males		Females		Total	
	n	%	n	%	N	%
Coffee	53	30.2	9	15.5	62	26.6
Bananas	35	20	15	25.9	50	21.5
Other crops ¹	21	12	12	20.7	33	14.2
Livestock ²	45	25.7	10	17.2	55	23.6
Women's Projects ³	21	12	12	20.7	33	14.2
Total	175	100	58	100	233	100

1: cassava, sweet potatoes, maize and beans

2: cattle, pigs, goats and chickens

3: income generating agricultural activity carried out by women besides the family enterprises

Merely establishing the existence of opinion leaders or the number of individuals serving as opinion leaders may not give an adequate indication of the scope of their influence in the community. Opinion leadership influence was also established from the total number of nominations the opinion leaders received from the respondents in the different agricultural enterprises. Table 7.2 shows the distribution of the total nominations in the different enterprises. The results indicate that there was a total of 451 nominations spread across the enterprises.

Opinion leader nomination appears to be more concentrated in coffee, banana and livestock enterprises with 149, 105 and 88 nominations, accounting for 33 percent, 23 percent and 20 percent of the total nominations respectively. The enterprises comprising other crops and woman's projects had a total of respectively 62 and 47 (13.7 percent and 10.4 percent) of the nominations.

Table 7. 2: Distribution of nominations according to the enterprise and gender

Enterprises	No (%) of nominations per enterprise and gender					
	Male		Female		Total	
	n	%	Total	%	n	%
Coffee	139	36.5	10	14.1	149	33.0
Bananas	87	22.9	18	25.3	105	23.3
Other crop ^{s1}	47	12.4	15	21.1	62	13.7
Livestock ²	75	19.7	13	18.3	88	19.5
Women's Projects ³	32	8.4	15	21.1	47	10.4
Total	380	100	71	100	451	100

1: Cassava, sweet potatoes, maize, beans, vegetables

2: cattle, pigs, goats and chickens

3: income generating agricultural activity carried out by women besides the family enterprises

The table shows differences in the distribution of nominations between the genders in which the results are clearly indicating that opinion leadership is more concentrated among the males. As far as the enterprises are concerned, coffee enterprise had 36.5 of the nominations for males compared to 19.7 for females. Among the females, opinion leadership appears to be relatively concentrated more in the banana, other crops enterprises and women's projects which received respectively, 25.3 percent and 21.1 percent of the nominations for females compared to 22.9 percent and 12.4 percent for the male nominations. This may be an indication of their importance the different genders attach to the enterprises.

The results indicate that opinion leadership varies between the genders and the enterprises, it appears to be more prominent among the males than the females, hence further supporting the hypothesis on the occurrence and importance of opinion leadership in the study area among members of both gender.

7.3 CONCENTRATION FREQUENCY

The extent of the influence of opinion leadership can also be measured by the frequency with which the respondents had consulted the nominated opinion leaders. After nominating the opinion leaders, the respondents were requested to indicate the frequency with which they consult them. The responses were captured as to whether they occurred on yearly, quarterly, monthly, fortnightly, weekly or daily basis. The total frequencies of consulting on a yearly basis was determined by multiplying the number of nominations in the different frequency categories (1 - 6) respectively multiplied by the conversion factors of 1, 4, 12, 24, 52 and 366. Table 7.3 summarises the findings regarding the importance of opinion leaders based on the frequency with which they have been consulted.

Table 7. 3: Frequency of consulting opinion leaders of different gender by the respondents in different enterprises

Enterprise	No/Gender Respondent	No of opinion leaders consulted per category frequency *						Total no of Consult./ Yr ¹	Av. No. of Consult./ individual/Yr
		1	2	3	4	5	6		
Coffee	Male(n=46)	11	18	19	18	15	6	3719	80.8
	Female (n=34)	9	15	21	12	3	1	1158	34.1
Total									61.0
Bananas	Male (n=37)	6	9	10	22	6	3	2100	56.7
	Female (n=32)	5	11	13	13	2	0	621	19.4
Total									39.4
Other crops ¹	Male (n=43)	8	13	8	5	0	0	350	8.1
	Female (n=39)	6	8	3	3	5	0	406	10.4
Total									9.2
Livestock ²	Male (n=50)	7	16	11	16	4	0	795	15.9
	Female (n=38)	14	8	5	3	2	0	282	7.4
Total									12.3
Woman's Project ³	Female (n=42)	7	9	6	4	17	4	2559	60.9
Total		73	107	96	96	54	14	11990	

* Frequency categories: 1 = yearly, 2 = quarterly, 3 = monthly, 4 = fortnightly, 5 = weekly, 6 = daily

1: Total no of consult/Yr. = Sum of (no of nominees per frequency category (1-6) multiplied respectively by conversion factors 1, 4, 12, 24, 52, 366)

1: Cassava, sweet potatoes, maize, beans, vegetables

2: cattle, pigs, goats, chicken

3: income generating agricultural activity carried out by women

Again, coffee enterprise and women's projects had the highest consultations at an average of respectively 61 and 60.9 times in a year. This is followed by banana enterprise with an average consultation of 39.4 times per year. Male farmers compared to the female farmers consulted more frequently in coffee, banana and livestock enterprises at respective averages of 80.8, 56.7 and 15.9 consultations compared to 34.1, 19.4 and 7.4 consultations by women farmers in the same enterprises respectively. However, the only occasion in which the female farmers consulted slightly more frequently than the male farmers was in the enterprises constituting other crops and this was at an average of 10.4 consultations per female farmers in the past year.

The results show that the male farmers consulted more frequently than the female farmers in all the enterprises with the exception of the other crops enterprises. In coffee enterprise, the opinion leaders are important in terms of both prominence and the frequency with which they are used, while in the women's projects, although the previous results (Table 7.1) had shown that few female opinion leaders had been nominated, the high frequency with which they were consulted gives a good indication of their importance for the women farmers. It can be inferred that both the female and male farmers tended to consult more frequently in enterprises that are important for them. The above results further support the hypothesis on occurrence and importance of opinion leaders in the study area.

CHAPTER EIGHT

OPINION LEADERSHIP VERSUS FORMAL LEADERSHIP

8.1 INTRODUCTION

Opinion leadership and formal leadership are not synonymous although it may be common to find formal leaders also acting in the capacity of opinion leaders under many circumstances. While opinion leadership is an informal form of leadership causally exercised between members of a social system, formal leadership is concerned with formal power structure.

According to Van den Ban (1968) opinion leadership in developing countries is frequently based to a large extent on ascribed status. A phenomenon attributed to the fact that people with status invariably have the resources which allows them to take the risks associated with the adoption of innovations in a poor subsistence community. Usually formal leaders have power in their communities such that it is virtually impolite for extension officers to ignore them when entering the communities. Steyn (1988:457) also noted that in developing countries formal leadership could overwhelmingly permeate the whole community, thereby casting a dilemma in which informal influence is most often camouflaged by formal influence. This chapter examines and compares the extent to which opinion leaders and formal leaders have influence on the farmers and farming activities in the study area.

Respondents were asked to nominate up to three individuals they consulted in the respective enterprises and they were also asked to rate the nominees on a five-point scale for leadership prominence. Prominence in this context meant a distinguished or an important person who holds a high position or plays an important leadership role in the community. Relative importance was deduced from the comparison of the number of individuals nominated in the different leadership prominence categories. The frequency of consulting the individuals nominated in the different leadership

prominence categories can give an indication of whether prominence was an important consideration for the respondents in consulting the opinion leaders.

8.2 PROMINENCE OF OPINION LEADERS

An indication of whether opinion leadership is more important than formal leadership can be established from the number individuals who were nominated by the respondents in the different prominence categories. The assumption is that some of the individuals who have been nominated could be formal leaders. Since the prominence rating scale ranked the nominees into different levels of prominence, the scale point 5 was accepted for formal leadership and hence, the individuals nominated in this category were considered to be formal leaders. In this regard, Table 8.1 summarises the ranking of the nominees in the different leadership categories in the different enterprises.

The results show that the general tendency among the farmers was to mostly consult opinion leaders who are perceived to have a high. This tendency can be observed from the results of Table 8.1 which indicate that 62.1 percent of the total nominations falls in this category. The distribution of leadership prominence among the genders indicates a similar pattern. In the overall results, 63.9 percent and 52.1 percent of the male and female opinion leaders nominated had a high prominence, while only 8.7 and 14.1 percent of them had a low prominence respectively.

Similar tendencies are found within the different enterprises. The results for coffee enterprise indicates that 64.5 percent of the opinion leaders consulted had a high prominence compared to 30.2 percent who had low prominence. The assessment of the male and female opinion leaders for prominence is also very similar and 71.9 percent and 16.7 percent of the of the male and female opinion leaders respectively had a high prominence. These results seem to indicate that some perceived degree of prominence in the opinion leader is important for consulting the opinion leaders in coffee enterprise.

Table 8. 1: Nominations according to the different leadership prominence categories and enterprises

Enterprise	Gender of Nominee	No (%) of nomination per leadership category*									
		2		3		4		5		Total	
		n	%	n	%	n	%	n	%	n	%
Coffee	Male	12	36.4	36	34.6	63	39.4	27	32.5	140	31.0
	Female	1	10	4	16.7	4	16.7	-	-	9	2.0
Total		13	30.2	40	31.1	67	36.4	27	28.1	149	33.0
Bananas	Male	7	21.1	14	13.5	43	26.9	25	30.1	89	19.7
	Female	2	4.6	6	2.5	5	20.8	2	23.1	16	3.5
Total		9	21.3	20	15.6	48	26.1	27	28.1	105	23.3
Other Crop ¹	Male	5	15.2	13	12.5	22	13.8	7	8.4	47	10.4
	Female	2	20	4	16.7	4	16.7	4	30.8	15	3.3
Total		8	18.6	17	13.3	26	14.1	11	11.5	62	13.7
Livestock ²	Male	8	24.2	33	31.7	17	10.6	17	20.5	75	16.6
	Female	-	-	7	29.2	5	20.8	1	7.7	13	2.9
Total		8	18.6	40	31.3	22	12.0	18	18.8	88	19.6
Women's Project ³	Male	1	3.0	6	7.7	15	9.4	7	8.4	31	6.8
	Female	1	10	3	12.5	6	25	6	46.2	16	3.5
Total		2	4.2	11	8.6	21	11.4	13	13.5	47	10.4
Total Male		33	8.7	104	27.4	160	42.1	83	21.8	380	
Total Female		10	14.1	24	33.8	24	33.8	13	18.3	71	
Total		43	9.5	128	28.4	184	40.8	96	21.3	451	-

* Leadership category scale: 2 = Prominence lower than respondent, 3 = prominence same as respondent, 4 = prominence higher than respondent, 5 = prominence much higher than respondent

1: sweet potatoes, cassava, maize, beans, vegetables

2: cattle, pigs, goats, chicken

3: women's income generating agriculture related projects

In banana enterprise, 54.2 percent of the individuals nominated had a high prominence. Further results show that 57 percent of the male opinion leaders nominated had a high prominence and so had 43.9 percent of the female opinion leaders. The banana farmers seem to show a tendency of mostly nominating opinion leaders who have a high prominence. This seems to indicate that prominence of the opinion leader is probably important aspect of opinion leadership in banana enterprise.

In the other crops enterprises 25.6 percent of the opinion leaders nominated had high prominence while 18.6 percent had low prominence. The results according to the gender shows that 22.2 percent of the male opinion leaders nominated had a high prominence and so had 47.5 percent of the female opinion leaders. This seems to

indicate that prominence of the opinion leader is important in the other crops enterprises.

As far as the livestock enterprise is concerned, most of the opinion leaders consulted had the same prominence as the respondents as indicated by 31.7 percent and 29.2 percent of the nominations for male and female opinion leaders respectively. Opinion leadership appears to be more important in the livestock enterprises than formal leadership.

For women's projects, with 17.8 percent and 71.2 percent of the nominated male and female opinion leaders having a high prominence respectively, it also seems to follow that prominence of the opinion leader is important.

The results within individual enterprises also indicates that farmers tended to nominate opinion leaders who had a high prominence. The female opinion leaders seem to equally feature as prominent leaders as the male opinion leaders. From these results it can be concluded that some perceived degree of prominence in the opinion leaders is important. This is supported by the fact that farmers tended to mostly nominate opinion leaders who had a high prominence than themselves.

8.3 FREQUENCY OF CONSULTING OPINION LEADERS HAVING DIFFERENT LEADERSHIP PROMINENCE RATINGS

The frequency of consultation can give an indication of whether the leadership prominence is an important consideration for the respondents for consulting the opinion leaders in the different enterprises. Table 8.2 summarises the findings. It indicates that the differences in the frequency of consulting opinion leaders of different prominence rankings is significant ($\chi^2 = 37.8$ df = 20, $p = 0.009$) in the case of all the enterprises. The result according to the gender of the nominees shows the differences in frequency of consultation is significant for the males ($\chi^2 = 37.8$ df = 20, $p = 0.009$), but not for the females ($\chi^2 = 32.2$, df = 20, $p = 0.4$). The chi-square tests indicate that the male opinion leaders seemed to have been consulted on the

Table 8. 2: The frequency of consulting male and female opinion leaders of different leadership prominence in different enterprises

Leadership prominence rating ²	No. of nominations per frequency category *												Total no of Consult./Yr ¹		Av. no of Consult./yr		
	Males (n=140)						Females (n=9)						Male	Female	Male	Female	
	1	2	3	4	5	6	1	2	3	4	5	6					
COFFEE																	
Male																	
5 (n=27)	1	7	3	10	5	1	-	-	-	-	-	-	931	34.5	-	-	-
4 (n=63)	7	11	23	11	7	3	-	2	1	1	-	-	2053	32.6	11	11	11
3 (n=36)	11	10	6	4	3	1	-	1	2	-	1	-	741	20.6	20	20	20
2 (n=14)	1	1	5	4	2	1	-	-	-	-	-	-	631	45.1	-	-	-
Total													4356	31.1	124	13.7	13.7
Chi ² = 38.3, df = 20, p=0.081																	
Chi ² = 12.0, df = 8, p = 0.15																	
BANANAS																	
Male																	
5 (n = 25)	2	3	6	9	2	1	-	1	1	-	-	-	772	31	8	8	8
4 (n = 43)	5	8	10	14	3	1	1	1	1	2	-	-	1015	23.6	17	17	17
3 (n = 14)	1	5	-	6	1	-	-	2	3	1	-	-	217	15.5	10.5	10.5	10.5
2 (n = 7)	-	1	1	1	1	1	-	-	-	-	-	-	458	65	-	-	-
Total													2462	27.7	164	10.3	10.3
Chi ² = 12.74, df = 15, p = 0.622																	
Chi ² = 15.73, df = 15, p = 0.47																	
OTHER CROP ¹																	
Male																	
5 (n = 7)	-	5	1	1	-	-	1	3	-	-	-	-	57	8.4	3.3	3.3	3.3
4 (n = 22)	4	5	7	3	3	-	-	1	3	-	-	-	336	15.3	10	10	10
3 (n = 13)	4	4	2	-	1	-	2	2	-	-	-	-	96	7.4	2.5	2.5	2.5
2 (n = 5)	2	-	1	-	1	1	1	1	1	-	-	-	432	86.4	5.7	5.7	5.7
Total													921	19.6	80	5.3	5.3
Chi ² = 21.74, df = 15, p=0.115																	
Chi ² = 12.32, df = 6, p = 0.14																	

Leadership prominence rating ²	No. of nominations per frequency category *												Total no of Consult./Yr ¹		Av. no of Consult./yr					
	Males (n=140)						Females (n=9)						Male	Female	Male	Female				
	1	2	3	4	5	6	1	2	3	4	5	6								
	Females (n=13)																			
	Males (n=75)																			
LIVESTOCK ²																				
Male																				
5 (n=17)	1	4	3	5	3	-	-	-	-	-	-	-	381	22.4	-	-	-			
4 (n=17)	3	7	2	4	1	-	1	2	-	3	-	-	203	11.9	81	13.5	-			
3 (n=33)	10	8	9	5	1	-	3	1	1	1	-	-	322	9.8	43	6.1	-			
2 (n=8)	3	2	1	2	-	-	-	-	-	-	-	-	71	8.9	-	-	-			
Total													977	13.0	124	9.5	-			
Chi ² = 15.09 df = 12, p=0.24													Chi ² = 6.47, df = 3, p = 0.37							
WOMEN'S PROJECT ³																				
Male																				
5 (n=7)	3	1	1	1	1	-	1	3	1	1	-	-	95	13.6	49	8.2	-			
4 (n=15)	3	2	3	1	5	1	1	2	1	2	-	-	697	46.5	69	11.5	-			
3 (n=9)	1	2	-	2	3	1	1	-	-	3	-	-	697	64.3	73	18.3	-			
Total													1371	44.2	191	47.8	-			
Chi ² = 13.18 df = 10, p=0.59													Chi ² = 5.67, df = 9, p = 0.78							
Total (n = 382) (n = 69)													10087	26.4	68	9.9	-			
Total (n = 451)													10770	23/9			-			

Males: Chi² = 37.8, df = 20, p = 0.00942 Females: Chi² = 32.2, df = 20, p = 0.4
General: Chi² = 37.8, df = 20, p = 0.00934

* Frequency categories 1 = yearly, 2 = quarterly, 3 = Monthly, 4 = Fortnightly, 5 = Weekly, 6 = Daily

1: Total no of consultation / Yr. = Sum of (number of nominees per frequency category (1-6) multiplied by conversion factors 1,4,12,24,52, 366) respectively

2: Leadership prominence rating: 5 = very prominent leader, 4 = prominent leader, 3 = prominence the same as respondent, 2 = prominence lower than respondent, 1 = prominence much lower than respondent.

basis of their leadership prominence but this does not seem to be the case for the female opinion leaders.

The results for the separate enterprises indicates in coffee enterprise the differences in the frequency of consulting opinion leaders of different leadership prominence is not significant for both the male and female opinion leaders ($\text{Chi}^2 = 38.3$, $\text{df} = 20$, $p = 0.08$), and ($\text{Chi}^2 = 12.0$, $\text{df} = 8$, $p = 0.15$) respectively. The general tendency seems to indicate that the prominence does not seem affect the frequency of consulting the opinion leaders. This conclusion is supported by the evidence which shows that opinion leaders of lower prominence were consulted 45 times in the past year, which is more frequent than the case in the other categories.

Similar results were obtained in the banana enterprise as shown in Table 8.2 the differences in the frequency of consultation is not significant for both the male and female opinion leaders ($\text{Chi}^2 = 12.74$, $\text{df} = 15$, $p = 0.622$ and $\text{Chi}^2 = 15.73$, $\text{df} = 15$, $p = 0.47$), respectively. This implies that differences in prominence among the opinion leaders is not important for more frequent consultations.

In other crops, male opinion leaders of low prominence were consulted 86.4 times in the year, which if compared to the frequency of consulting prominent male opinion leaders at 15.3 times in the year, is much higher. Prominent female opinion leaders were consulted 10 times in the year, which is more frequent than the other categories. Prominence of the opinion leaders does not seem to be an important factor in the case of other crops enterprises. This is supported by the chi-square tests for male ($\text{Chi}^2 = 21.74$, $\text{df} = 15$, $p = 0.115$) and ($\text{Chi}^2 = 12.32$, $\text{df} = 6$, $p = 0.14$) which shows the differences in the frequency of consulting with regards to different prominence ratings is not significant.

In livestock enterprise the differences in the frequency of consulting the different prominence categories of opinion leaders was not significant as indicated by ($\text{Chi}^2 = 15.09$, $\text{df} = 12$, $p = 0.24$) for the male, and ($\text{Chi}^2 = 6.47$, $\text{df} = 3$, $p = 0.37$) for the female opinion leaders.

In the women's projects, opinion leaders who had the same prominence as the respondents were consulted more frequently than the other categories with 64.3 consultation in a year while prominent male opinion leaders were consulted 46.5 times in the year. This result seems to support the fact that prominence of the opinion leader is not important in women's project as indicated by ($\text{Chi}^2 = 13.18$, $\text{df} = 10$, $p = 0.59$), evidence in support of this is indicated by the fact that opinion leaders of lower prominence were consulted more frequently than the other categories at 18.3 times in a year.

Although the previous results had indicated a tendency by the respondents of nominating opinion leaders having a high prominence, however, the above results seem to indicate that high prominence in the opinion leaders is not a constraint to more frequent consultation of the opinion leaders in all the enterprises. Opinion leaders of all prominence categories appeared to have been consulted without any hindrance, although the lower the prominence the more frequent the consultations tended to occur. This seems to lead to the conclusion that opinion leadership is probably more important than formal leadership in the enterprises mentioned in the study area.

8.4 FACTORS WHICH INFLUENCE PROMINENCE RATING

To get a better view of the factors that may have influence on the behaviour of the farmers in consulting opinion leaders, some personal and environmental factors, namely the leadership category of the respondent, leadership prominence of the opinion, village, gender of respondent, and gender of the opinion leader were investigated in relation to frequency of consulting opinion leaders of different prominence. Table 8.3 summarises the relationship between the independent variables and the frequency of consulting opinion leaders of different prominence rating. The findings indicate that leadership prominence of the opinion leader, respondents leadership type, gender of opinion leaders, education level of respondent and age of respondent were not significant at 5 percent level of significance.

Table 8. 3: Analysis of variance of the influence of environmental and personal factors on the frequency of consulting different categories of opinion leaders

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	158979.480	17	9351.734	2.283	0.003
Leadership prominence rating of opinion leader	28780.099	3	9593.366	2.342	0.73
Respondent's leadership type	11950.434	3	3989.478	0.973	0.406
Village	44439.592	2	22219.796	5.425	0.005
Gender of opinion leader	199.365	1	199.365	0.049	0.825
Gender of respondent	32013.400	1	32013.400	7.816	0.005
Education of respondent	12081.588	3	407.196	0.983	0.400
Age of respondent	29940.345	4	7485.086	1.828	0.123
Explained	158979.480	17	9351.734	2,283	0.003
Residual	1724299.454	421	4095.723		
Total	1883278.934	438	4299.724		

The frequency of consulting opinion leaders of different prominence categories is, however, significant with ($p < 0.005$) and ($p < 0.005$) for village and gender of respondent respectively. Table 8.4 summarises the results for the frequency of consulting opinion leaders with different prominence ratings in the three villages. It indicates that the differences in the frequency of consulting opinion leaders of different prominence category is significant in the villages of Luwunga and Kapeke with respective chi-square values ($\text{Chi}^2 = 27.03$, $\text{df} = 30$, $p = 0.028$ and $\text{Chi}^2 = 42.16$, $\text{df} = 28$, $p = 0.00037$), but this difference is not significant in the case of Buligobe village ($\text{Chi}^2 = 16.47$, $\text{df} = 30$, $p = 0.69$). Judging by the average frequency of consultation, differences exist between the villages. Opinion leaders were consulted more frequently in Buligobe and Luwunga than in Kapeke village. This is indicated by the respective average frequencies of 34.7, 25.8 and 10.2 times per year.

In Luwunga village, very prominent opinion leaders were more frequently consulted than the other categories at an average of 30.4 times per year. The pattern of consulting the male and female opinion leaders differs in the sense that very prominent male opinion leaders were consulted more than the other categories, while female opinion leaders of the same prominence were more frequently consulted.

Table 8. 4: The frequency of consulting opinion leaders of different leadership prominence and gender in the villages

Leadership prominence Rating ²	No. of nominations per frequency category *										Total no of Consult./Yr ¹	Av. no of Consult./yr		Av. no Consult /Yr.
	Males (n=100)					Females (n=16)						Male	Female	
	1	2	3	4	5	6	1	2	3	4				
LUWUNGA														
Male														
5 (n=34)	3	8	3	14	5	1	-	-	-	-	1033	30.4	-	30.4
4 (n=47) (n=10)	5	10	13	11	6	2	1	2	-	7	1509	32.1	17.7	29.6
3 (n=14) (n=4)	3	6	1	3	1	-	-	2	1	1	163	11.6	18	13.1
2 (n=5) (n=2)	3	1	-	-	1	-	1	1	-	-	59	11.8	2.5	9.1
Total	14	25	17	28	11	5	1	4	1	8	2764	30.78	14.1	25.8
Chi ² = 26.84, df = 15, p = 0.03														
Chi ² = 27.03, df = 30, p = 0.028														
KAPEKE														
Male														
5 (n=14) (n=13)	-	3	7	2	2	-	1	6	4	1	248	17.7	11.5	14.7
4 (n=36) (n=10)	6	7	14	8	1	-	1	2	4	3	446	12.4	12.9	12.5
3 (n=40) (n=15)	19	10	8	3	-	-	5	5	4	1	227	5.7	6.5	7.2
2 (n=7) (n=2)	-	1	6	-	-	-	-	1	1	-	76	10.9	9.5	10.6
Total	25	21	35	13	3	-	7	14	13	5	997	10.3	9.9	10.2
Chi ² = 34.22, df = 12, p = 0.005														
Chi ² = 42.16, df = 28, p = 0.00037														
BULIGOBE														
Male														
5 (n=33)	4	9	4	10	5	1	-	-	-	-	954	28.9	-	-
4 (n=74) (n=4)	11	16	18	14	12	3	-	2	2	-	2349	31.7	8	30.5
3 (n=46) (n=4)	5	13	8	9	8	3	1	1	2	-	1883	40.9	7.3	38.2
2 (n=21) (n=4)	3	2	2	7	5	2	1	2	1	-	1195	56.9	5.3	48.6
Total	23	40	32	40	30	9	2	5	5	-	6381	36.7	6.8	34.7
Chi ² = 20.03, df = 15, p = 0.46														
Chi ² = 14.47, df = 30, p = 0.69														

In Kapeke village, the frequency of consulting opinion leaders is generally low compared to the other villages. Very prominent opinion leaders were consulted more frequently than others at an average of 14.7 times in the year. Very prominent male opinion leaders were consulted at an average of 17.7 times in the year, while female opinion leaders having the same prominence as the respondents were consulted at an average of 12.9 times in the year. In Buligobe the differences in the frequency of consulting the opinion leaders of different categories does not vary significantly ($\text{Chi}^2 = 14.47$, $\text{df} = 30$, $p = 0.69$), although opinion leaders with low prominence were consulted 48.6 times in the year which is slightly more frequently than the others. While there are differences in the frequency of consulting female opinion leaders having different leadership prominence levels is significant ($\text{Chi}^2 = 20.93$, $\text{df} = 4$, $p = 0.05$), the average frequency of consultation indicates that prominent female opinion leader were consulted slightly more frequently. In the case of the male opinion leaders, the differences in the frequency of consultation is not significant ($\text{Chi}^2 = 20.03$, $\text{df} = 15$, $p = 0.46$) probably implying that prominence level of the male opinion leader is not important for more frequent consultation.

The results seem to clearly indicate that the higher the leadership prominence of the opinion leader the more frequent the consultation in the villages of Luwunga and Kapeke, but this does not appear to be the case for Buligobe village.

8.4 FREQUENCY OF CONSULTING OPINION LEADERS OF DIFFERENT PROMINENCE IN COFFEE ENTERPRISE IN THE VILLAGES

Coffee enterprise was selected to investigate how the frequency of consultation between respondents and opinion leaders of different leadership prominence varies between the villages. Table 8.5 summarises the findings and shows that the differences in the frequency of consulting opinion leaders of different leadership prominence is significant ($\text{Chi}^2 = 33.92$, $\text{df} = 12$, $p = 0.0035$). The results show that very prominent opinion leaders were consulted more frequently in coffee than opinion leaders of other prominence categories in Luwunga village. This is at an average of 15.3 times in the year.

Table 8. 5: Frequency of consulting opinion leaders of different leadership prominence in coffee enterprises in the villages

Leadership Rating ²	No of nominations per frequency category*						Total no of Consult./Yr ¹	Av. no of Consult./Individual/yr
	1	2	3	4	5	6		
Village: LUWUNGA								
5 (n=10)	1	3	-	4	2	-	213	21.3
4 (n=17)	3	3	7	3	1	-	223	13.1
3 (n=4)	-	3	-	-	1	-	64	16
2 (n=2)	1	1	-	-	-	-	5	2.5
Total (n=33)	5	10	7	7	4	-	505	15.3
Chi² = 33.92, df = 12, p = 0.0035								
Village: KAPEKE								
5 (n=3)	-	-	1	1	1	-	88	29.3
4 (n=21)	2	5	10	3	1	-	266	12.7
3 (n=20)	9	4	6	1	-	-	121	6.1
2 (n=3)	-	-	4	-	-	-	48	16
Total (n=48)	11	9	21	5	2	-	523	10.9
Chi² = 22.96, df = 12, p = 0.12								
Village: BULIGOBE								
5 (n=14)	-	4	2	5	2	1	630	45
4 (n=28)	2	5	7	6	5	3	1608	57.4
3 (n=15)	2	4	2	3	3	1	640	42.7
2 (n=9)	-	1	1	4	2	1	582	64.7
Total (n=66)	4	14	12	18	12	5	3460	52.4
Chi² = 18.7, df = 15, p = 0.54								

The differences in the frequency of consulting opinion leaders of different prominence on coffee in Kapeke village is not significant ($\text{Chi}^2 = 22.96$, $\text{df} = 12$, $p = 0.12$). However, judging by the average frequency of consultation, the results show that very prominent opinion leaders were consulted more frequently that is 29.3 times in the year. Chi-square test shows that differences in the frequency of consultation is not significant in the case of Buligobe village ($\text{Chi}^2 = 18.7$, $\text{df} = 15$, $p = 0.54$), hence indicating a similar tendency like the one in Kapeke village.

The general results seems to indicate that that the bigger the higher the prominence of the opinion leader the more frequent the consultations tended to be in the villages of Luwunga and Kapeke, but this does not seem to be the case in Buligobe village.

CHAPTER NINE

GENDER AND OPINION LEADERSHIP

9.1 INTRODUCTION

Similarity in social characteristics is important in determining who interacts with whom in a social system. Similarity between individuals in certain social characteristics was found to lead to more effective communication between them (Rogers and Kincaid, 1981). Other researchers have found that similarity in gender is among other social characteristics that is important in determining network links (Rogers & Kincaid, 1981).

Whether farmers will consult opinion leaders of the same gender can be established from the data that was obtained by requesting respondents to nominate up to three individuals they actually consulted for advice in a wide range of agricultural enterprises namely coffee, banana, other crops enterprises, livestock and women's projects. The data was analysed to determine the pattern of consultation between the respondents and the opinion leaders of different gender. Further more, whether the prominence of the opinion leader and the frequency of consultation accentuate the importance of similarity in gender in determining the consultative links in the study area are investigated.

9.2 IMPORTANCE OF GENDER

Whether homophily in gender is an important factor in determining consultative links between the respondents and opinion leaders is investigated. Table 9.1 summarises the distribution of the pattern of consultation between the respondents and opinion leaders in the different enterprises.

Table 9. 1: Pattern of consultation between respondents and opinion leaders in the enterprises

Enterprises	Gender of Respondent	No (%) of opinion leaders Consulted per gender category				Total
		Males		Females		
		n	%	n	%	
Coffee	Male (n=46)	82	94.2	5	5.7	87
	Female (n=34)	57	91.9	5	8.0	62
Bananas	Male(n=37)	49	84.5	9	15.5	58
	Female (n=32)	38	80.8	9	19.1	47
Other Crops ¹	Male (n=43)	29	78.4	8	21.6	37
	Female (n=39)	18	72.0	7	28.0	25
Livestock ²	Male (n=50)	49	87.5	7	12.5	56
	Female (n=38)	26	81.2	6	18.7	32
Woman's Project ³	Female (n=42)	32	68.1	15	31.9	47
Total	Males	09	7.82	9	12.18	
Total	Females	71	0.28	2	19.72	451

1: cassava, sweet potatoes, maize, beans and vegetables

2: cattle, goats, pigs, chicken

3: income generating agricultural activity carried out by women

The results show two patterns of consultation, namely: between respondents and opinion leaders of the same gender (male to male or female to female); and, across gender (male to female or female to male). In the first pattern, 88 percent of the male opinion leaders were consulted by male respondents compared to 20 percent of the female opinion leaders consulted by female respondents. As far as consultation across gender is concerned, 80 percent of the male opinion leaders were consulted by female respondents compared to only 12 percent of the female opinion leaders consulted by male respondents.

When the enterprises are considered separately, the male opinion leaders still feature more prominently than the female opinion leaders. For instance on coffee enterprise 94 percent of the opinion leaders consulted by male respondents were male and only 6 percent were female. 92 percent of the opinion leaders consulted by female respondents were male and only 8 percent were female. Even in projects run by women, 68 percent of opinion leaders they consulted were male compared to 32

percent who were female. The results show that consultation between respondents with opinion leaders occurred between members of same gender and also across genders. The male to male and female to male patterns of consultation were the most prominent in all the enterprises. The male to female pattern of consultation was less prominent than the female to female. Both male and female respondents tended to consult male opinion leaders more than the female opinion leaders. As far as consultation across gender is concerned, it is evident that the part played by female opinion leaders is not very prominent. These results show that the males feature as opinion leaders more prominently than the females. This conclusion is supported by the fact that the female respondents tended to consult male opinion leaders rather than female opinion leaders. The findings show that similarity in gender is not an important factor in determining consultative links in farming in the study area.

9.2 THE INFLUENCE OF OPINION LEADER PROMINENCE ON GENDER

Whether the prominence of the opinion leader is gender related is investigated. Table 9.2 summarises the distribution of the pattern of consulting opinion leaders with different genders and leadership prominence by respondents of different genders.

Table 9. 2: The effect of prominence of the opinion leader on the pattern of consultation between respondents and opinion leaders

Consultation Pattern	No (%) of nomination per leadership prominence								
	2		3		4		5		Total
	n	%	n	%	n	%	n	%	n
Males: Male	22	10.3	52	24.5	82	38.7	56	26.4	212
Females: Male	13	7.6	52	30.6	78	45.9	27	15.8	170
TOTAL	35	9.1	104	27.2	160	41.9	83	21.7	382
Male: Female	5	17.8	9	32.1	10	35.7	4	14.3	28
Female: Female	4	9.8	15	36.6	13	31.7	9	21.9	41
TOTAL	9	13.0	24	34.8	23	33.3	13	18.8	69

The results show that of the 382 consultations received by the male opinion leaders, 63.6 percent was received by male opinion leaders who have a high prominence. 61.7 percent of the male opinion leaders consulted by female farmers have a high

prominence, while 65.1 percent of the male opinion leaders consulted by the male respondents have a high prominence. In the case of the female opinion leaders, the situation is similar, a total of 69 female opinion leaders were consulted by the respondents, and of these, 28 were consulted by the male respondents and 41 were consulted by the female respondents. 50 percent of the female opinion leaders consulted by male respondents are prominent opinion leaders, while 53.6 percent of the female opinion leaders consulted by females have a high prominence. The results seem to indicate that the tendency among both male and female respondents was to consult opinion leaders who have a high prominence without regard for similarity in gender of the opinion leader.

The results according to the separate enterprise shows that 140 and 9 of the total nomination was respectively for male and female opinion leaders in coffee enterprise. Of the males nominated by the male respondents, 81.4 percent have a high prominence, but they tended to nominate female opinion leaders without regardless of their prominence. On the other hand, the female respondents tended to nominate male and female opinion leaders who have high a prominence as indicated by 56.8 percent and 28.7 percent of the nominations respectively. The results seem to indicate that the prominence of the opinion leader is a more important consideration in consulting the opinion leaders than similarity in gender for the coffee farmers.

Table 9. 3: The pattern of consultation between respondents and opinion leaders of different gender and leadership prominence in different enterprises

Enterprise	Gender of respondent	No (%) of nomination per leadership prominence							
		Males							
		2		3		4		5	
		n	%	n	%	n	%	n	%
COFFEE	Male	7	31.8	20	38.5	36	43.9	21	37.5
	Female	7	53.8	16	30.7	27	34.6	6	22.2
		14	10	36	25.7	63	45	27	19.5
		Females							
	Male	1	20	2	22.2	2	20	-	-
	Female	-	-	2	13.3	2	15.4	-	-
		1	11.1	4	44.4	4	44.4	-	-

Enterprise	Gender of respondent	No (%) of nomination per leadership prominence							
		Males							
		2		3		4		5	
		n	%	n	%	n	%	n	%
BANANAS	Male	Males							
		5	22.7	9	17.3	23	28.0	15	26.8
		2	15.4	5	9.6	20	25.6	10	37.0
	Female	7	7.8	14	15.7	43	48.3	25	28.1
		Females							
		2	40	3	33.3	2	20	1	25
	Male	2	50	3	20	2	15.4	1	11.1
		4	25	6	37.5	4	25	2	12.5
OTHERCROPS	Male	Males							
		4	18.2	8	15.4	11	13.4	5	8.9
		1	7.7	5	9.6	11	14.1	2	7.4
	Female	5	10.6	13	27.5	22	46.8	7	14.9
		Females							
		2	40	1	11.1	3	30	2	50
	Male	1	25	3	20	1	7.7	2	22.2
		3	20	4	33.3	4	26.6	4	26.6
LIVESTOCK	Male	Males							
		6	27.3	15	28.8	12	14.6	15	26.8
		2	15.4	18	34.6	5	6.4	2	7.4
	Female	8	22.9	33	31.7	17	10.6	17	20.5
		Females							
		-	-	3	33.3	3	30	1	25
	Male	-	-	4	26.7	2	15.4	-	-
		-	-	7	53.8	5	38.5	1	7.7
WOMEN'S PROJECT	Females	Males							
		1	7.7	8	15.4	15	19.2	7	25.9
	Females	Females							
		1	20	3	20	6	46.2	6	46.1
Totals: male : male		22		52		82		56	
Female : Male		13		52		78		27	
Male : Female		5		9		10		4	
Female : Female		4		15		13		13	

In banana enterprise, the results show that 54.8 percent of the male opinion leaders nominated had a high prominence. 45 percent of nominations of the female opinion leaders nominated by the male respondents have a high prominence. On the other hand, the female banana farmers mostly nominated male opinion leaders who have a high prominence as indicated by 62.6 percent of the nominations, while 50 percent of the female opinion leader nominated have low prominence.

These results seem to generally indicate that prominence was a more important factor in deciding whom to consult, although it appears that similarity in gender was more important for the female respondents who consulted female opinion leaders.

In other crop enterprises, respectively, 22.3 percent and 80 percent of the male and female opinion consulted by male respondents have a high prominence. 21.3 percent and 29.9 percent of the male and female opinion leaders consulted by the female respondents have a high prominence. These results seem to indicate that for both the male and female opinion leaders leadership prominence but not similarity in gender appears to be more important.

In the livestock enterprises, the male respondents tended to consult both male and female opinion leaders of a high prominence as indicated by 41.1 percent and 55 percent of the nominations respectively. The female respondents tended to mainly consult both male and female opinion leaders of the same prominence as themselves as respectively indicated by 34.6 percent and 31.7 percent of the nominations. These results seem to indicate that prominence of the opinion leader was important for the male respondents in deciding whom to consult, while for the female respondents it still seems to appear that similarity in gender was especially important in deciding on the female opinion leaders they consulted.

In the women's projects, the women farmers tended to mostly consult both male and female opinion leaders who have a high prominence as indicated by 45.1 and 92.2 percent of the nominations respectively. Prominence seems to be more important in deciding whom to consult in both cases.

In conclusion the general impression that can be gained from the results of the separate enterprises is that leadership prominence rather than similarity in gender between the opinion leaders and respondents is more important in determining the pattern of consultation within the enterprises. However, exceptions were found in the banana and livestock enterprises where female respondents tended to consult the opinion leaders on the basis of similarity in gender rather than leadership prominence.

9.3 FREQUENCY OF CONSULTING OPINION LEADERS OF DIFFERENT GENDERS

The frequency of consultation between respondents and opinion leaders of different gender can give an indication of whether it is gender related. Figure 9.1 represents the summary of the comparisons of the frequency of consultation based on gender as derived from the main Table 9.4. The figure indicates that the male to male pattern of consultation had the highest number of consultations at an average of 32.8 times in a year. This is followed by the female to male pattern of consultation with an average of 20.3 consultations the year. The male to female and female to female had the least number of consultations at an average of 4.2 and 3.5 per year respectively.

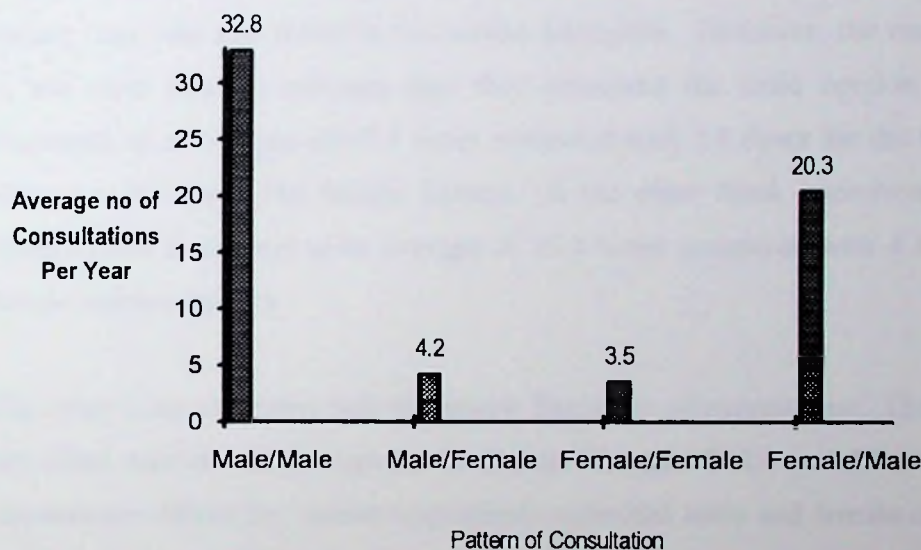


Figure 9. 1: Gender based frequency of consultation

From the results it can be concluded that the male opinion leaders were more frequently consulted than the female opinion leaders by both the male and female respondents. The males feature more prominently in opinion leadership than the women. The results also show that the male respondents are relatively more active than the female respondents in advice seeking. It therefore appears that gender similarity is not so important in determining the consultative links between the

respondents and opinion leaders. This conclusion is further supported by the fact that the female to female pattern had the lowest frequency of consultation.

Similar tendencies are found within the different enterprises. The results in Table 9.4 shows that in coffee enterprise, the farmers tend to consult the male opinion leaders more frequently than the female opinion leaders. As far as the gender aspect is concerned, the male respondents consulted male and female opinion leaders at an average of 71.1 and 9.8 times in a year respectively. The female respondents consulted the male opinion leaders more frequently than the female opinion leaders, this was at an average of 32 compared to 0.4 times in a year respectively.

A similar tendency of consulting the male opinion leader more frequently than the female ones was also found in the banana enterprise. However, the results according to the male farmers indicates that they consulted the male opinion leaders more frequently at an average of 47.5 times compared with 2.8 times for the female opinion leaders in the year. The female farmers, on the other hand, consulted male opinion leaders more frequently at an average of 15.3 times compared with 4.1 times for the female opinion leaders.

The other crop enterprise had the lowest frequency of consultation. The male farmers consulted male and female opinion leaders an average of 12.9 and 2.1 times in the year respectively. While the female respondents consulted male and female opinion leaders an average of 6.4 and 1.0 times in the year.

In the livestock enterprises, male farmers consulted male and female opinion leaders an average of 14.9 and 1.8 times in the year. While the female respondents consulted male opinion leaders at an average of 6.2 times in the year, while the female opinion leaders were hardly consulted as indicated by the average frequency of 0.8 times in the year.

Table 9. 4: Frequency of consulting male and female opinion leaders by respondents of different genders in different enterprises

Gender of Respondent	No of Nominations Per Frequency category *												Total Consult./Yr. ¹	Av. Consult./ Individual./ Yr.		
	MALES						Total Consult./Yr. ¹	Av. Consult./ Individual/Yr	FEMALES							
	1	2	3	4	5	6			1	2	3	4	5	6		
COFFEE Male (n=46) Female (n=34) Total	11	16	19	17	14	5	3269	71.1	-	2	-	1	1	1	450	9.8
	9	13	18	12	3	1	1087	32.0	-	1	3	-	-	-	13	0.4
								54.5								5.8
BANANA Male (n=37) Female (n=32) Total	3	8	8	18	6	3	1757	47.5	1	2	2	3	-	-	105	2.8
	5	9	9	12	1	-	489	15.3	-	2	4	1	1	-	132	4.1
								32.6								3.4
OTHERCROP ¹ Male (n=43) Female (n=39) Total	7	9	8	2	-	1	553	12.9	1	4	-	3	-	-	89	2.1
	1	3	5	3	2	-	249	6.4	3	3	-	1	-	-	39	1.0
								9.8								1.6
LIVESTOCK ² Male (n=50) Female (n=38) Total	7	14	9	13	5	-	743	14.9	-	2	1	3	-	-	92	1.8
	10	7	6	3	1	-	234	6.2	4	1	-	1	-	-	32	0.8
								11.1								1.4
WOMEN'S PROJECTS ³ Female (n=42) Total Male : Male n=176 Total Female : Male n=185	7	5	4	2	9	3	1689	40.2	-	3	5	2	6	-	432	10.3
							5769	32.8	Total Male : Female n=176						736	4.2
							3748	20.3	Total Female : Female n=185						648	3.5

* Frequency categories: 1 = Yearly, 2 = Quarterly, 3 = Monthly, 4 = Fortnightly, 5 = Weekly, 6 = Daily

1: Total no. of consultation / Yr. = Sum of (no of nominations per frequency categories (1-6) multiplied respectively by conversion factors of 1,4,12,24,52,366)

1: Sweet potatoes, cassava, maize, beans, vegetables

2: cattle, pigs, goats, chicken

3: income generating agricultural activity carried out by women

Female farmers consulted male and female opinion leaders on their projects an average of 40.2 and 10.3 times in a year respectively. The female farmers consulted male opinion leaders more frequently than the female opinion leaders.

The results show that the male opinion leaders were consulted more frequently than the female opinion leaders by both the male and female farmers within the separate enterprises. The frequency of consultation in all the cases was higher between the male farmers and male opinion leaders than that between the female farmers and the female opinion leaders. It was also found that both the male and female farmers seldom consult the female opinion leaders. It can be concluded that gender does not seem to have a strong influence on the frequency of consultation between the farmers and opinion leaders. This is indicated by the fact that female farmers tended to consult the male opinion leaders more frequently than the female opinion leaders in their own projects as well as in all the other enterprises. These findings further confirm the finding that the female opinion leaders are less prominent in opinion leadership than the males.

CHAPTER TEN

DETERMINANTS OF CONSULTATION LINKS

10.1 INTRODUCTION

Understanding the nature of communication flows through interpersonal networks is enhanced by the concepts of homophily and heterophily because they bring out the structure of who relays messages to whom in a network. Homophily and heterophily respectively refer to the degree to which individuals who interact are similar or dissimilar (Rogers, 1995). Homophilic communication tends to occur more frequently because people talk to others like themselves more often and more effectively than when the communicating parties are dissimilar. Talking with those who are markedly different requires more effort to make communication more effective (Rogers, 1995). Opinion leaders and their followers have been found to be very similar and usually belong to the same groups.

The limit on an individual's choice of whom to ask for advice may be imposed by a number of factors. Both spatial and social factors have been found to be important. Different social factors can be important depending on the basis of the content of such links. A review of studies by Rogers & Kincaid (1981) indicate that the content of network links also determines who interacts with whom.

To investigate the extent of similarity or dissimilarity between the respondents and opinion leaders, the respondents were requested to rate the opinion leaders with respect to the similarity or differences they might have with regards to the variables namely education, farming efficiency, social status, leadership prominence and cosmopolitaness. This assessment is based on comparative scales which rate the opinion leaders relative to the respondents. The assumption is that for the communication links to be homophilous the respondents are expected to have more frequently consulted opinion leaders who are similar to them in the above variables.

10.2 EDUCATION

A person is chosen as an opinion leader when he/she is perceived to be experienced, knowledgeable and competent and well informed in the context in which advice is being sought. According to Rogers (1983) individuals who interact tend to be similar in education. It is expected that respondents will more frequently consult opinion leaders with similar perceived education than those having different education.

Chi-square test and Spearman's rank correlation were used to establish the significance of the relationship between the frequency of consulting the opinion leaders falling in the different categories on the determinant variables. The frequency of consultation was calculated by respectively assigning the weights of 1, 2, 3, 4, 5 and 6 to the total number of nominations that fall under the frequency categories (1 - 6). Table 10.1 summarises the results.

Table 10.1: The frequency of consulting opinion leaders with different perceived level of education

Education Rating Relative to Respondent	Nominations per Frequency Category*						Total Frequency of Consult./Yr ¹	Average Frequency of Consult./Yr.
	1	2	3	4	5	6		
Much higher (n=114)	16	33	24	22	16	3	340	3.0
Higher (n=200)	41	46	35	51	21	6	583	2.9
Same (n=61)	8	16	21	11	3	2	164	2.7
Lower (n=64)	6	11	19	12	12	4	217	3.4

* Frequency categories: 1 = yearly, 2 = quarterly, 3 = monthly, 4 = fortnightly, 5 = weekly, 6 = daily

1: Total frequency of consultation/Yr. = Sum of (no of nominations per frequency categories (1-6) respectively multiplied by weights of 1, 2, 3, 4, 5, 6)

$\chi^2 = 26.00$, $df = 20$, $p = 0.17$

$r = -0.055$, $p = 0.25$

In Table 10.1 the Chi-square test ($\chi^2 = 26.00$, $df = 20$, $p = 0.17$) suggests that the differences between the education categories regarding the frequency of consultation is not significant. The Spearman's rank correlation ($r = -0.055$, $p = 0.25$) seems to show that education and frequency of consultation are not related. However, judging by the

average frequencies there is a tendency of increased consultations with higher levels of education. This contradicts the assumption that homophily in education is associated with more frequent consultations. In fact it appears as if the opposite is true, namely the bigger the difference in education between the opinion leader and respondent, the more frequent the consultations tend to be.

10.3 FARMING EFFICIENCY

Whether an opinion leader will be consulted more frequently because of having a similar perceived level of farming efficiency as his followers is investigated. Farming efficiency was subjectively judged by the farmers based on their own criteria since there were no set standard criteria for this assessment. Table 10.2 summarises the findings regarding the frequency of consulting opinion leaders having different perceived levels of farming efficiency.

Table 10.2: The frequency of consulting opinion leaders with different levels of perceived farming efficiency

Farming efficiency rating relative to respondent	Nominations per frequency category*						Total frequency of consult./yr. ¹	Average frequency of consult./yr.
	1	2	3	4	5	6		
Much higher (n=113)	15	27	22	30	15	4	354	3.1
Higher (n=244)	46	52	56	55	30	5	718	2.9
Same (n=62)	8	24	17	6	2	5	171	2.8
Lower (n=20)	2	3	4	5	5	1	75	3.8

* Frequency categories: 1 = yearly, 2 = quarterly, 3 = monthly, 4 = fortnightly, 5 = weekly, 6 = daily

1: Total frequency of consultation/Yr. = Sum of (no of nominations per frequency categories (1-6) respectively multiplied by weights of 1,2,3,4,5,6)

$\chi^2 = 57.66$, $df = 15$, $p = 0.00002$

$r = 0.0504$, $p = 0.2921$

In Table 10.2 the Chi-square test ($\chi^2 = 57.66$, $df = 15$, $p = 0.00002$) indicates that the differences in the frequency of consulting the opinion leaders having different farming efficiency rating is highly significant. However the rank correlation ($r = 0.0540$, $p = 0.2921$) seems to indicate that this relationship is not significant. Judging on the average frequency of consultations, it actually appears that the differences

between the farmers and opinion leaders in farming efficiency is more desirable because the consultations tend to be more frequent. These results do not support the hypothetical assumption that similarity in farming efficiency is associated with more frequent consultations. It can be concluded that the farmers tend to more frequently consult opinion leaders who are different in farming efficiency.

10.4 SOCIAL STATUS

The frequency of consulting opinion leaders of different social status ratings was compared to establish whether the respondents would more frequently consult opinion leaders who are similar to them in social status. Social status in the context of this study meant the rank or social position or relative importance of one person to another. Table 10.3 summarises the findings.

Table 10. 3: The frequency of consulting opinion leaders with different social status

Social status rating relative to respondent	Nominations per Frequency Category*						Total frequency of consult./yr. ¹	Average frequency of consult./yr.
	1	2	3	4	5	6		
Much higher (n=110)	10	23	16	33	24	4	380	3.5
Higher (n=225)	53	59	52	39	16	6	599	2.6
Same (n=63)	4	12	26	16	4	1	196	3.1
Lower (n=40)	4	11	5	8	8	4	137	3.4

* Frequency categories: 1 = yearly, 2 = quarterly, 3 = monthly, 4 = fortnightly, 5 = weekly, 6 = daily

1: Total frequency of consultation/Yr. = Sum of (no of nominations per frequency categories (1-6) respectively multiplied by weights 1, 2, 3, 4, 5, 6)

$\chi^2 = 69.66$, $df = 15$, $p = 0.0000$

$r = 0.0593$, $p = 0.2158$

The differences in the frequency of consulting opinion leaders of different social status rating is highly significant as indicated by the Chi-square test ($\chi^2 = 69.66$, $df = 15$, $p = 0.0000$). Judging by the average consultations, it appears that the bigger the differences in social status between the respondents and opinion leaders, the higher the frequency of consultation. The assumption that more frequent consultation is

associated with similarity in social status is not supported in this case. It can be concluded that similarity in social status is probably not so important.

10.5 LEADERSHIP PROMINENCE

Whether having a similar level of perceived prominence with the opinion leaders will lead respondents to seek for advice more frequently is investigated. The findings are summarised in Table 10.4.

Table 10. 4: The frequency of consulting opinion leaders of different leadership prominence

Leadership prominence rating relative to respondent	Nominations per frequency category*						Total frequency of consult./yr. ¹	Average frequency of consult./yr.
	1	2	3	4	5	6		
Much higher (n=94)	8	26	18	27	13	2	299	3.2
Higher (n=181)	24	39	49	43	21	5	556	3.1
Same (n=123)	32	36	23	17	11	4	320	2.6
Lower (n=41)	7	5	9	9	7	4	139	3.4

* Frequency categories: 1 = yearly, 2 = quarterly, 3 = monthly, 4 = fortnightly, 5 = weekly, 6 = daily

1: Total frequency of consultation/Yr. = Sum of (no of nominations per frequency categories (1-6) respectively multiplied by weights 1,2,3,4,5,6)

$\chi^2 = 37.80$, $df = 15$, $p = 0.00934$

$r = 0.09329$, $p = 0.050$

Both the Chi-square ($\chi^2 = 37.80$, $df = 15$, $p = 0.009$) and the Spearman's rank correlation ($r = 0.09329$, $p = 0.050$) seem to indicate that the differences and relationship between the leadership prominence and the frequency of consultation is significant. The average frequencies show a tendency of more frequent consultation with higher level of leadership prominence. This result is again contrary to the expectation that similarity in leadership prominence is associated with more frequent consultation. It can be concluded that a high leadership prominence is probably more desirable.

10.6 COSMOPOLITENESS

Cosmopolitanism according to Rogers (1995) is important because opinion leaders gain the perceived competency by serving as avenues for entrance of new ideas from the environment of the community. Cosmopolitanism was defined to mean having a much better view or experience of the world. Whether opinion leaders who are more frequently consulted are similar to the respondents in cosmopolitanism is investigated. Table 10.5 summarises the findings.

Table 10. 5: Distribution of the frequency of consulting opinion leaders of different cosmopolitanism

Cosmopolitanism Rating Relative to Respondent	Nominations per Frequency Category*						Total Frequency of Consult./Yr. ¹	Average Frequency of Consult./Yr
	1	2	3	4	5	6		
Much higher (n=73)	9	18	10	18	15	3	240	3.3
Higher (n=202)	36	48	46	39	27	6	597	3.0
Same (n=99)	15	22	28	26	3	5	292	2.9
Lower (n=65)	11	18	15	13	7	1	215	3.3

* Frequency categories: 1 = yearly, 2 = quarterly, 3 = monthly, 4 = fortnightly, 5 = weekly, 6 = daily

1: Total frequency of consultation/Yr. = Sum of (no of nominations per frequency categories (1-6) respectively multiplied by weights 1,2,3,4,5,6)

$$\text{Chi}^2 = 32.47, \text{df} = 15, p = 0.093$$

$$r = 0.076, p = 0.113$$

The results show that there is no relationship between the frequency of consulting and cosmopolitanism. This is indicated by both the chi-square test ($\text{Chi}^2 = 32.47$, $\text{df} = 15$, $p = 0.093$) and the Spearman's rank correlation of ($r = 0.076$) at probability level ($p = 0.113$). There is, however, when judged by average frequency of consultation a tendency of increased consultation with high cosmopolitanism.

In conclusion the consultations tend to be more frequent when the perceived differences with regards to the variables namely education, farming efficiency, social status and cosmopolitanism are bigger. This probably means that farmers learn about

CHAPTER ELEVEN

TYPES OF OPINION LEADERSHIP

11.1 INTRODUCTION

Opinion leaders are usually identified on the basis of an inquiry into the consultative relationships between members of a social system. One approach of measuring opinion leadership is by focusing on the features that have significant influence on opinion leadership (Düvel, 1996). According to Rogers (1962) the wording of the sociometric question can be decisive in determining the degree of leadership concentration. He reports how altering the wording of the questions resulted in the identification of three sets of opinion leaders. This implies that different types of opinion leaders may be identified in a social system and that different problem situations may activate different advice and information relationships (Van den Ban, 1968).

Based on the above views of Rogers (1962) and others, Düvel (1996) is of the view that the influence of opinion leaders can be diminished if they are not correctly identified. This he concluded from the fact that different types of influential leaders can be identified and may be confused with opinion leaders. Hence, in this study an attempt is made to identify the different types of leaders from the nominations. This was achieved by first requesting the respondents to nominate those individuals whom they would consult with regards to various agricultural enterprises (quasi opinion leaders). Then in subsequent questions, the respondents were asked regardless of their previous nominations to distinguish between the knowledgeable persons (specialists) and those they actually consulted (opinion leaders).

The description of the different types of influential leaders who may be identified according to Düvel (1996) include the quasi opinion leaders these are individuals identified by the commonly used sociometric method of requesting respondents to nominate other individuals whom they would consult with regards to the various enterprises. It is assumed that they are not necessarily the true opinion leaders, but are

mainly nominated on the basis of their knowledge and expertise. Consequently, this group may include individuals judged to be knowledgeable, of which some may have been consulted as true opinion leaders, while others may not be consulted at all (Düvel, 1996).

Specialists is the category of individuals specifically identified as experts, and could include individuals not consulted and individuals consulted. The latter group may be referred to as expert opinion leaders.

Opinion leaders are the actual people consulted and they are the true opinion leaders.

The different nominations were compared to establish whether the opinion leaders nominated were correctly identified (Düvel, 1996). All the nominees were also assessed by the respondents in respect of the variables of kinship relations, friendship, psychic accessibility, physical accessibility, education level, farming efficiency, social status and cosmopolitanism on five point scales designed to measure these variables.

11.2 THE RELIABILITY OF OPINION LEADER IDENTIFICATION

Whether and to what degree opinion leaders are confused with specialists can be concluded from a comparison of the different types of nominations. The results summarised in Figure 11.1 are based on the questions which were aimed at identifying persons whom the respondents would consult, persons the respondents regard as specialists and persons whom they actually consulted. This request resulted in the identification of different categories of individuals. Considerable differences were brought about by the overlapping in the respondent's nominations. Basing on the assumption of Düvel (1996), that if respondents are inclined to nominate specialists rather than opinion leaders, the overlapping between specialists and quasi opinion leaders will be greater than in the case of opinion leaders and quasi opinion leaders. Figure 11.1 is a pie chart which represents the findings related to the overlapping in the respondent's nominations.

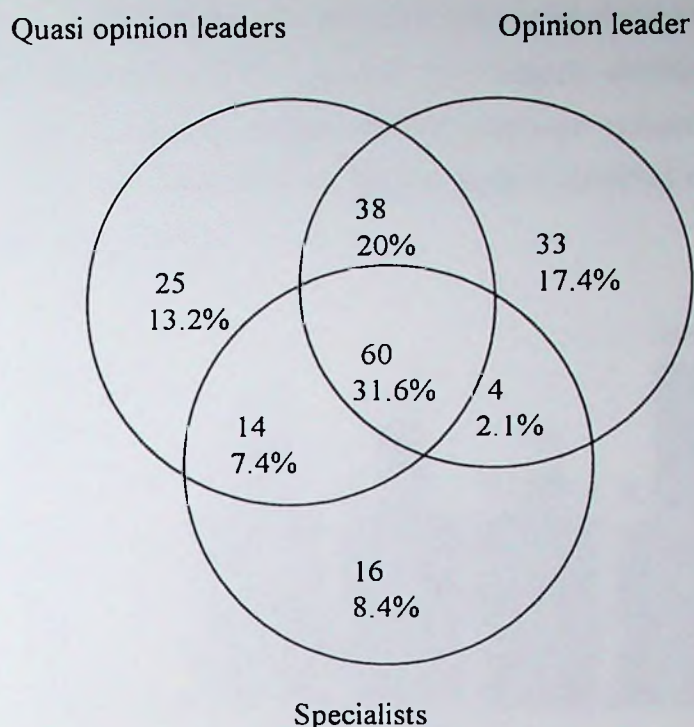


Figure 11. 1: Overlapping in the respondent's nominations of opinion leaders

In general the assumption does not seem to hold. Fig. 11.1 shows that the overlapping between opinion leaders and quasi opinion leaders is greater than the one between the specialists and quasi opinion leaders as indicated by 51.6 percent and 39 percent of the nominations respectively. The results show that respondents tended to nominate opinion leaders rather than specialists. In contradiction to Düvel's (1996) findings, the general result does not indicate that opinion leaders were incorrectly identified.

The same analysis for the separate enterprises represented in Fig. 11.2 seems to, in general, indicate bigger overlapping between the quasi opinion leaders and opinion leaders than the one between specialists and quasi opinion in the case of each of the enterprises. The overlapping is big in the individual enterprises although it is much bigger in the women's projects.

In coffee enterprise, the overlapping between quasi opinion leaders and opinion leaders is 51.8 percent and that between quasi opinion leaders and specialists is 38.5 percent. A similar trend was found in the banana enterprise indicating respectively 51.5 percent

and 33.3 percent of overlapping. In livestock enterprise, the respective overlapping is 42.6 percent compared to 35.3 percent. The biggest overlapping was, however, found in women's enterprise which was 61.9 percent compared to 33.3 percent respectively. This clearly indicates the opinion leaders identified by women are largely the farmers actually consulted.

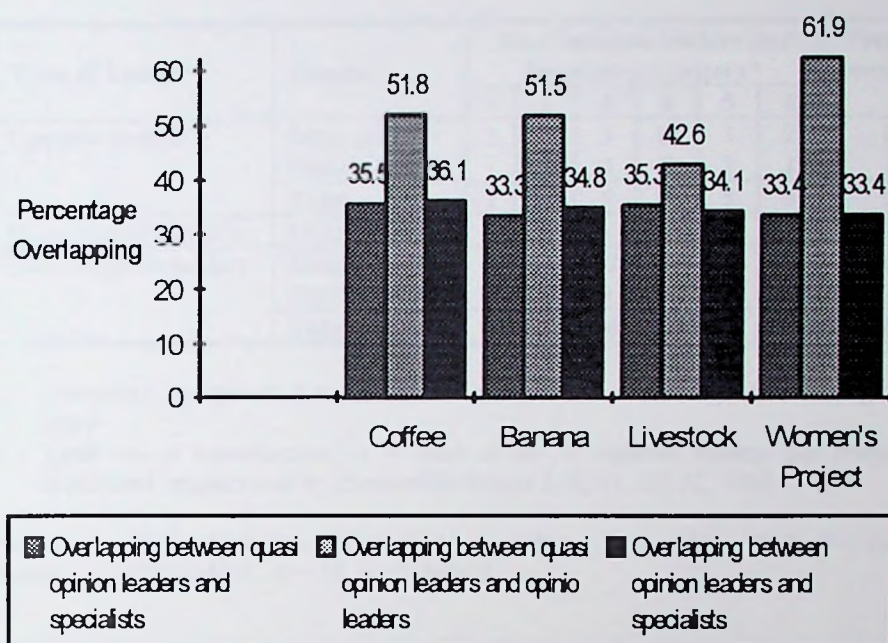


Figure 11. 2: Overlapping between opinion leaders, quasi opinion leaders and specialists within the enterprises

There are indications of correct identification of the actual opinion leaders in all the enterprises mentioned. The fact that the differences are so pronounced implies that the opinion leaders are clearly identifiable individuals who have not been confused with the specialists.

11.3 FREQUENCY OF CONSULTING THE DIFFERENT TYPES OF OPINION LEADERS

The frequency with which the different types of opinion leaders are consulted is investigated. The findings are summarised in Table 11.1. The results show that 119 distinct individuals were nominated as opinion leaders. Of these 82 and 37 were

respectively males and females. Three types of opinion leaders were identified namely actual opinion leaders, expert opinion leaders and quasi opinion leaders. The results show that females do not feature as expert opinion leaders.

Table 11. 1: Frequency of consulting the different types of opinion leaders

Type of Leader	Gender	No of opinion leaders per frequency category*						Total no of consult./Yr ¹	Av. no of Consult./Yr
		1	2	3	4	5	6		
Opinion leaders	Male (n=29)	1	8	3	12	3	2	1245	42.9
	Female (n=15)	-	3	2	7	2	1	674	44.9
	Total	1	11	5	19	5	3	1919	43.6
Expert opinion leaders	Male (n=14)	1	5	-	1	-	7	2607	186.2
Quasi opinion leaders	Male (n=39)	3	11	12	7	3	3	1613	41.4
	Female (n=22)	1	8	8	-	5	-	389	17.7
	Total	4	19	20	7	8	3	2002	32.8

* Frequency categories: 1 = yearly, 2 = quarterly, 3 = monthly, 4 = fortnightly, 5 = weekly, 6 = daily

1: Total no. of consultations/yr. = Sum of (no of opinion leaders per frequency category (1-6) multiplied respectively by conversion factors 1, 4, 12, 24, 52, 366)

Males: $\chi^2 = 29.6$, df = 15, p = 0.013; Females: $\chi^2 = 27.7$, df = 10, p = 0.002

Total: $\chi^2 = 42.8$, df = 15, p = 0.00017

The table indicates the differences in the frequency of consulting the different types of opinion leaders is highly significant ($\chi^2 = 42.8$, df = 15, p = 0.00017). The expert opinion leaders were the most frequently consulted at an average of 186.2 consultations in the year and they all happen to be males. The opinion leaders were consulted on average 43.6 times in the past year and closely followed by the quasi opinion leaders who were consulted 32.8 times. As far as the frequency of consulting by the gender is concerned, the chi-square tests show that the differences in the frequency of consulting the different types of opinion leaders is statistically significant for both males and females ($\chi^2 = 29.6$, df = 15, p = 0.013 and $\chi^2 = 27.7$, df = 10, p = 0.002) respectively. The male opinion leaders and quasi opinion leaders were consulted were consulted 42.9 and 41.4 times in the year respectively, while for the female opinion leaders it was at an average of 44.9 and 17.7 times in the year respectively. The frequency of consulting the male quasi opinion leaders does not vary very much from that of the male opinion leaders. The results clearly show that expert opinion leaders were the most sought out types of opinion leaders.

11.4 DETERMINANTS OF OPINION LEADERSHIP

Opinion leaders can be identified by certain attributes that sets them apart from the other members of the social system. An individual's choice of whom to ask for advice can be influenced by these factors.

The respondents were asked to assess the leaders they nominated on the variables of friendship, psychic and physical accessibility, kinship relations, education, farming efficiency, social status and cosmopolitaness. The Chi-square test shows that the differences in rating of the different categories of nominees on the attributes of education ($\text{Chi}^2 = 14.06$, $\text{df} = 8$, $p = 0.080$), farming efficiency ($\text{Chi}^2 = 12.27$, $\text{df} = 8$, $p = 0.139$), social status ($\text{Chi}^2 = 13.635$, $\text{df} = 8$, $p = 0.092$), and cosmopolitaness ($\text{Chi}^2 = 5.903$, $\text{df} = 8$, $p = 0.658$) are not statistically significant. But the differences were found to be significant for the variables of friendship, psychic and physical accessibility and kinship relations. The results of this analysis are discussed below.

11.4.1 Friendship

Düvel (1996) found a strong positive relationship between friendship and opinion leadership when he investigated the possibility of using friendship as an indication of opinion leadership. Friends are known to constitute a clique or informational network groups where members interact with each other more than they do with outsiders. This clique can play a central role in diffusion of information.

Respondents were asked to rate individuals they nominated for friendship on a five-point scale. The scale points of best friend, good friend, a friend, acquaintance and fellow farmer was used to assess the degree of friendship relations. In an attempt to improve the ratings and reduce sensitivity reactions that might have arisen from asking direct questions such as 'who are not your friends' among member of the ethnic group in the study area, the fellow farmer point of the scale was indirectly supposed to rate nominations that do not involve friendship relations. Friendship relationships are expected to be higher between the respondents and opinion leaders than between the respondents and the specialists.

This expectation is supported by the findings in Table 10.3 which shows that there is a strong association between friendship and the three opinion leadership categories ($\chi^2 = 36.19$, $df = 8$, $p = 0.0001$). Judging by the percentage of nomination, the results show that 44 percent of the opinion leaders consulted were regarded as friends, good friends and best friends of the respondents compared to 29 percent of the specialists.

Table 11. 2: Distribution of nominees on the basis of friendship rating and type of opinion leaders

Friendship Rating	No and percentage nomination per opinion leader category			Total
	Opinion Leaders	Quasi Opinion Leaders	Specialists	
Fellow Farmer (1)	206 45.8	218 62.8	207 55.8	631 48.8
Acquaintance (2)	46 10.2	38 10.9	55 14.8	139 10.8
Friend (3)	39 8.7	49 14.1	19 5.1	107 8.3
Good Friend (4)	109 24.2	127 36.6	57 15.4	293 22.7
Best Friend (5)	50 11.1	40 11.5	33 8.9	123 9.5
Total	450	347	371	1293
Percent	34.8	36.5	28.7	100
Weighted Av.	2.4	2.4	2.0	

$\chi^2 = 36.19$, $df = 8$, $P = 0.0001$

Again judging by the weighted averages opinion leaders and quasi opinion leaders were rated the same of friendship viz. 2.4 while the specialist received an average rating of 2.0.

Again the similarity in friendship rating between quasi opinion leaders and opinion leaders emphasises the fact that the respondent's nomination of opinion leaders is reliable unlike Düvel's (1996) findings.

From the results, it is fairly evident that friendship is an important but not a crucial factor for choosing whom to consult. This is indicated by the large number (56%) of individuals consulted who were not friends (fellow farmers and acquaintances). Although multiple relationships may exist between people, the emphasis on context of friendship as being practically oriented to specific farm enterprises might have also influenced who is consulted for advice on practical matters. This result is further supported by the fact that even the weighted average friendship rating for the opinion leaders is low. However, the relatively high percentage of opinion leaders consulted on the basis of friendship warrants support for the assumption that some perceived or real degree of friendship is important for establishing and maintaining a consultative relationship between opinion leaders and their followers.

11.4.2 Psychic accessibility

Düvel in 1996 alluded to the fact that accessibility is essential for effective flow of information. Rogers (1983) notes that flow or diffusion of information is unthinkable without accessibility between the follower and opinion leader. The expectation is that opinion leaders are more accessible than the specialists.

A five-point scale was used by respondents to rate nominees for accessibility in terms of how approachable they are. Approachable in this context meant being accessible and easy to talk to.

Table 11.2 summarises the distribution of nominations of different accessibility ratings. The chi-square test shows a highly significant association between the opinion leadership categories and accessibility ($\text{Chi}^2 = 25.46$, $\text{df} = 8$, $p = 0.0013$). The quasi opinion leaders and opinion leaders seem to be more accessible than the specialists. This is supported by the weighted averages of 3.83 in the case of specialists and 4.09 and 4.05 for the quasi opinion leaders and opinion leaders respectively. 30.7 percent and 29.8 percent of the quasi opinion leaders and opinion leaders were rated as highly accessible (very easy to approach), while only 22.2 percent of the specialists fell into this category.

Table 11. 3: Distribution of nominees on the basis of psychic accessibility rating and leadership category

Psychic Accessibility Rating	No and percentage nominations per leader category			Total
	Opinion Leaders	Quasi Opinion Leaders	Specialists	
Very Difficult to Approach (1)	9 2	8 1.7	16 4.6	33 2.6
Difficult to Approach (2)	6 1.3	7 1.5	16 4.6	29 2.3
Fairly Easy to Approach (3)	69 15.3	64 13.6	52 15	185 14.6
Easy to Approach (4)	232 51.5	248 52.5	185 53.4	665 52.4
Very Easy to Approach (5)	134 29.8	145 30.7	77 22.2	356 28.1
Total	450	472	346	1268
Percent	35.5	37.2	27.3	100
Weighted Average	4.05	4.09	3.83	

$\text{Chi}^2 = 25.46$, $\text{df} = 8$, $p = 0.0013$

In spite of these differences, which support the research hypothesis that (one of the characteristics that determine opinion leadership is psychic accessibility), it is noteworthy that all nominees including the specialists are perceived to have a high accessibility. Only 9.2 percent of the specialists were seen to have low accessibility. This would be an indication that psychic accessibility is not a serious problem or constraint in the dissemination of information in the study area.

11.4.3 Physical accessibility

Physical accessibility was found to be an important dimension. Rogers & Kincaid (1981) report that the general finding from almost every network study that has included space as a variable is that spatial distance is one of the main determinants of who talks to whom, and usually it is the main determinant.

The results summarised in Table 11.2 show that physical distance is strongly associated with opinion leadership ($\chi^2 = 133.50$, $df = 12$, $p = 0.00001$). The likelihood of communication occurring between people on the basis of close physical proximity is indicated by the results in which 80 percent of the opinion leaders and 77 percent of the specialists nominated live within a distance of 1 Km from the respondents.

Table 11. 4: Distribution of nominees on the basis of physical distance and opinion leader category

Distance (Km)	Percentage nomination per leader category			Total (N=1291)
	Quasi Opinion Leaders (N=471)	Specialists (N=370)	Opinion Leaders (N=450)	
>5	6.8	14.3	10.4	10.2
4-4.9	6.2	3.8	2.9	4.3
3-3.9	4.0	1.6	2.9	2.9
2-2.9	18.3	3.8	3.1	8.8
1-1.9	21.2	20.5	16.0	19.2
0.1-0.9	21.0	35.7	31.3	28.8
<0.1	22.5	20.3	33.3	25.6

$\chi^2 = 133.5$, $df = 12$, $p = 0.0000$

This result shows that shorter distance links predominates in the study area. This is a clear indication that close proximity determines the opinion leaders and specialists who are consulted.

11.4.4 Kinship relations

The findings of whether the nominees were consulted on the basis of kinship relations with the respondents is summarised in Table 11.3. The distribution of nominees in the different leadership categories clearly indicates the association between the leadership categories and the type of relationship is significant ($\chi^2 = 21.22$, $df = 8$, $p = 0.007$). Majority of the individuals who were reported to have been consulted are not related to the respondents this is respectively indicated by 90 percent and 82.9 percent of the specialists and opinion leaders nominated. The number of close and distant relatives nominated as quasi opinion leaders and opinion leaders is also higher than the case of

the specialists. This is indicated by 12.3 percent and 14.2 percent compared to 8.6 percent of the nominations received by the categories respectively. The number of spouses nominated in the leadership categories is very low only 1.8 percent and 1.3 percent of the husbands were nominated as opinion leaders and specialists respectively, while only 1 percent of opinion leaders nominated were wives.

Table 11. 5: Distribution of nominees on the basis of relationships and opinion leader category

Type of Relationship	No. and percentage of nominations per opinion leader category			Total
	Quasi Leaders	opinion Specialists	Opinion Leaders	
Husband (4)	3 0.6	5 1.3	8 1.8	16 1.2
Wife (4)	- -	- -	5 1.1	5 0.4
Close Relative (3)	41 8.7	27 7.3	43 9.5	111 8.6
Distant Relative (2)	17 3.6	5 1.3	21 4.7	42 3.3
None (1)	411 87.1	334 90.0	373 82.9	1118 86.5
TOTAL	472	371	450	1293

$$\text{Chi}^2 = 21.22, \text{df} = 8, p = 0.007$$

The results show that very few husbands and wives nominated their spouses as opinion leaders. This seems to suggest that consultation between the husbands and wives on the agricultural enterprises mentioned is based on the marital relationship rather than opinion leadership. Kinship relations seem to play some significant role in determining consultative links.

In conclusion, the attributes of friendship, psychic accessibility, physical accessibility and kinship relations were found to be determinants of opinion leadership in the study area. The explanation for the attributes of social status, education, farming efficiency and cosmopolitaness not being important may be explained by Düvel's (1996) findings in which he concluded that opinion leadership is situation specific particularly with

regards to individuals, geographic environment, social environment and the subject. May be with difficult psychic accessibility and longer distance between opinion leaders and followers the attributes of education, social status and cosmopolitaness could probably become important.

11.5 INFLUENCE OF THE DETERMINANTS OF OPINION LEADERSHIP ON FREQUENCY OF CONSULTATION

In this section the attributed of friendship, psychic and physical accessibility and kinship relations are investigated with regards to their influence on the frequency of consultations between the respondents and opinion leaders. The results are summarised in Table 11.6.

Friendship between individuals exerts different sets of expectations and obligations. It may refer to frequency of contact (Muller, 1987). The frequency of consulting opinion leaders of different friendship ratings by the respondents is investigated. The results in Table 11.6 indicates that the differences in the frequency of consulting opinion leaders of different friendship rating is highly significant ($\text{Chi}^2 = 81.9$, $\text{df} = 20$, $p = 0.0000$). The Spearman's rank correlation also indicates that the relationship between friendship and frequency of consultation is significant ($r = 0.278$, $p = 0.00000$). Opinion leaders rated as best friends were consulted more frequently at an average of 73.3 times in the year, this is followed by good friends who were consulted 26.6 times in the year.

Psychic accessibility clearly appears to be a crucial factor that may facilitate the process of continuous consultations between the opinion leaders and their followers. The chi-square test shows that the differences in the frequency of consulting opinion leaders with different accessibility ratings is significant ($\text{Chi}^2 = 37.8$, $\text{df} = 20$, $p = 0.011$). Judging by average consultations, the frequency of consulting opinion leaders who are very easy to approach is 36.7 times in a year, as opposed 1.8 times in a year for those who are very difficult to approach. The Spearman's rank correlation ($r = 0.183$, $p = 0.00012$) indicates a highly significant relationship between the frequency of consulting opinion leaders having different accessibility ratings. It shows that the

frequency of consulting the opinion leaders tends to increase with increased accessibility.

Table 11. 6: Frequency of consulting opinion leaders with different personal and social attributes

Opinion leadership determinant ratings	No. of opinion leaders per frequency category*						Total no of consult./Yr ¹	Av. no. of consult./Yr
	1	2	3	4	5	6		
Friendship:								
Best friend (n=48)	-	9	8	16	8	7	3510	73.1
Good friend (n=108)	7	21	32	26	20	2	2871	26.6
Friend (n=39)	7	4	17	9	2	-	651	16.7
Acquaintance (n=42)	7	16	10	7	2	-	463	11.0
Fellow farmer (n=202)	50	56	32	38	20	2	3342	16.5
Chi² = 81.9, df = 20, p = 0.0000 r = 0.2778, p = 0.00000								
Psychic Accessibility:								
Very easy to approach (n=129)	8	29	34	32	19	7	4730	36.7
Easy to approach (n=228)	47	51	48	48	28	6	5631	24.7
Fairly easy to approach (n=67)	9	21	16	16	3	2	1557	23.2
Difficult to approach (n=6)	3	2	1	-	-	-	23	3.8
Very difficult to approach (n=9)	4	3	-	-	-	-	16	1.8
Chi² = 37.8, df = 20, p = 0.011 r = 0.183, p = 0.00012								
Physical Accessibility in Km:								
<0.1 to 0.9 (n=288)	44	56	67	73	34	14	9716	33.8
1 to 1.9 (n=70)	17	16	11	14	12	-	1173	16.8
2 to 2.9 (n=14)	5	6	2	-	1	-	105	7.5
3 to 3.9 (n=12)	1	8	2	1	-	-	81	6.7
4 to 4.9 (n=13)	2	6	2	1	2	-	178	13.7
5> (n=42)	2	14	15	8	3	-	586	13.9
Chi² = 80.6, df = 25, p = 0.0000 r = 0.162, p = 0.0007								
Relations:								
Husband (n=8)	-	1	-	1	3	3	1258	157.3
Wife (n=5)	-	1	-	-	2	2	840	168
Close relative (n=42)	4	8	8	10	10	2	1624	38.7
Distant relative (n=20)	2	4	1	8	4	1	796	39.8
No relationship (n=364)	65	92	90	77	33	7	7639	20.9
Chi² = 82.7, df = 20, p = 0.000 r = -0.218, p = 0.00000								

* Frequency categories: 1 = yearly, 2 = quarterly, 3 = monthly, 4 = fortnightly, 5 = weekly, 6 = daily.

1: Total no. of consultations/yr. = Sum of (no of opinion leaders per frequency categories (1-6) multiplied respectively by conversion factors 1, 4, 12, 24, 52, 366).

Physical accessibility is an important factor for consultation. The results in Table 11.6 indicates that physical distance is significantly associated with frequency of consultation (Chi² = 80.59, df = 25, p = 0.00000). The rank correlation of (r = 0.162, p

= 0.0007) also appears to suggest that proximity between the opinion leader and followers encourages more frequent consultations. This is evident from the results which show that opinion leaders who live within a distance of under 1 Km were consulted more frequently at an average of 38.3 times in the year. The results show that the closer the opinion leaders are to the respondents, the more frequent the consultations tend to be.

Kinship relationship between the opinion leaders and their followers seems to play an important role in facilitating consultations. This is supported by both the Chi-square values ($\chi^2 = 82.7$, $df = 20$, $p = 0.0000$) and the highly significant rank correlation ($r = -0.219$, $p = 0.00000$). The closer the relationship, the more frequent the consultations tend to be. This is indicated by the very high frequency of consultation between wives and husbands in the household at an average rate of respectively 168 and 157.3 times in a year. Close and distant relatives also appear to be a vital links of frequent consultations.

In conclusion, friendship, psychic and physical accessibility and kinship relations appear to be very important and crucial for maintaining continuous and frequent consultations between the respondents and opinion leaders in the study area.

CHAPTER TWELVE

POLYMORPHISM AND MONOMORPHISM

12.1 INTRODUCTION

A typical distribution of opinion leadership in a community will indicate a few individuals receiving a great deal of opinion leadership while most of the individuals have none or very little (Rogers, 1995). Polymorphism is the extent to which an individual acts as an opinion leader for a variety of topics, the opposite phenomenon of, monomorphism is when an individual acts as opinion leader for only a single topic (Rogers, 1995). The degree to which opinion leaders are influential across various topics in a system varies from situation to situation some of such is the diversity of the topics and innovativeness of the system. An opinion leader in one area is unlikely to be opinion leader in another unrelated area (Tankard & Severin, 1979).

Measurement of polymorphism and monomorphism was measured based on the number of different agricultural enterprises the opinion leaders were consulted on by the respondents. The enterprises in which the opinion leaders were evaluated include coffee, bananas, other crops (cassava, sweet potatoes, beans, maize), livestock (cattle, chicken, piggery) and women's income generating agriculture related projects.

12.2 ASSESSMENT BY NUMBER OF ENTERPRISES

Whether the individuals nominated as opinion leaders had been consulted on one or various enterprises is investigated in two ways, firstly, by establishing the number of enterprises in which the respondents consulted an opinion leader, and secondly, by determining the number of enterprises in which a single opinion was consulted by the respondents. Table 12.1 summarises the findings of the number of enterprises and the number of the occurrence of the consultations between the respondents and the opinion leaders. The Chi-square test ($\chi^2 = 55.71$, $df. = 1$, $p = 0.0001$) shows that occurrence of an opinion leader being consulted on one enterprise by respondents is

more significant than the case in which an opinion leader would be consulted on various enterprises. In 234 (70.5%) of the cases, the respondents had consulted an opinion leader on only one enterprise as opposed to 98 (29.5%) of the cases, in which a respondent had consulted an opinion leader in more than one enterprise. The results show that the maximum number of enterprises on which a single respondent had consulted an opinion leader is four.

Table 12. 1: The number of enterprises in which the respondents consulted opinion leaders

No. of enterprises	No of occurrence of the consultations	Percentage
1	234	70.5
2	80	24.1
3	15	4.5
4	3	0.9
Total	332	

$$\chi^2 = 55.71, df = 1, P = 0.0001$$

The result shows that the most common practice in the study area is for the farmers to consult one opinion leaders on one enterprise.

Having established the tendency among the respondents, the opinion leaders nominated were also investigated to establish the number of enterprises they were consulted in by the respondents. The results in Table 12.2 further appears to agree with the above findings and it shows that the number of opinion leaders of both genders who were consulted on only one enterprise is more than those consulted on more than one enterprise. For the total of 135 individual opinion leaders that were nominated, 83 (61.5%) had been consulted on only one enterprise and the rest on more than one enterprise ranging from 2 - 5.

Table 12. 2: Distribution of opinion leaders and the number of enterprises they were consulted on by the respondents

No. of Enterprise	No. (%) of opinion leaders and no. of enterprises according to gender				Total	
	Male		Female			
	n	%	n	%	n	%
1	61	62.2	22	59.5	83	61.5
2	17	17.3	11	29.7	28	20.7
3	9	9.2	2	5.4	11	8.1
4	4	4.1	2	5.4	6	4.4
5	7	7.1	-	-	7	5.2
Total	98	100	37	100	135	100

The results show that 5.2 percent of the opinion leaders were consulted by different respondents on a maximum of five enterprises. Of the opinion leaders who were consulted on only one enterprise, 61 were males and 22 were females. Of those who were consulted on more than one enterprise, 37 and 15 of them were males and females respectively.

The results seem to show that the occurrence of one opinion leader to one enterprise is more significant than one opinion leader to more than one enterprise. The respondents tend to mostly consult one opinion leader on only one enterprise. The results according to the genders also indicates a similar pattern in which more of the male and female opinion leaders were consulted on one enterprise. It can be concluded that both phenomena occur among the opinion leaders of both genders, but there seems to be more monomorphic rather than polymorphic opinion leaders. The results do not seem to support the hypothesis about traditional societies tending to have polymorphic opinion leaders. The explanation for this might lie in the fact that the study area is not a typical traditional society.

CHAPTER THIRTEEN

SUMMARY, CONCLUSION AND RECOMMENDATIONS

13.1 INTRODUCTION

The aim of the study was to determine whether the opinion leaders are being used as a source of information in agriculture in a rural location of Uganda and to ascertain the occurrence, importance and gender differences in opinion leadership.

The study covered three villages of Buligobe, Kapeke and Luwunga located in Kasenge parish of Mukono district in central Uganda.

Emphasis was placed on establishing the importance of opinion leaders as a source of information and advice for the farmers with regards to different types of agricultural enterprises namely coffee, bananas, other crops (i.e. cassava, sweet potatoes, beans, maize and vegetables), livestock enterprises consisting of cattle, goats, chicken and piggery and women's income generating projects.

The opinion leaders, who were sometimes referred to as fellow farmers, were compared with other sources of information using different ways of assessment:

- (1) Rank order assessment was used to rank the different sources of information that the farmers reported to use to obtain advice on farming. Assessment by rank order was extended to establish the differences in regarding the importance of the different sources of information: by the male and female farmers, within the different enterprises and in the villages.

Emphasis was also placed on investigating the relationship between gender and opinion leadership and the aspects related to opinion leader identification, determinants of opinion leadership and interpersonal communication links. An

attempt was further made to establish the degree of polymorphism and monomorphism among the opinion leaders.

- (2) Another method which was used involved the assessment of the importance of opinion leaders and the other sources in terms of their frequency of usage.

13.2 SUMMARY AND CONCLUSIONS

The results indicate that the fellow farmer was rated relatively more important than the radio and extension agents. Further evidence regarding the importance of opinion leaders gained from the weightings clearly confirms the above order of importance.

The pattern of information source ranking by the male and female farmers was similar. However, there was a tendency for the female farmers to rate the fellow farmer relatively more important than the male farmers. The ranking of extension agents as the third most important source of information may not necessarily imply that it is not important. It seems to point to the possibility that peasant farmers, and the women farmers in particular, do not have adequate contact with extension agents. This could imply that peasant farmers in these villages also use some other sources for information.

In general, information source ranking within the enterprises indicates some differences. In coffee and livestock enterprises the differences in rating the three sources for importance was not all that big. In both enterprises the fellow farmer was rated relatively more important although incidentally, in the livestock enterprises the extension agent was rated second while in coffee enterprise it was the radio. The highest ranking for the source of fellow farmer was received from the women's projects followed by the banana enterprise. The overall picture within the different enterprise shows that the fellow farmer is relatively more important source of information followed by the radio and extension agents as third.

The only environmental factors that were found to have an influence on source ranking are village and gender of the farmer. The three villages rated the three sources

differently. The source of fellow farmer was rated relatively more important than the radio and extension agents in Luwunga village, while in Kapeke village it assumed the same importance as the radio and extension agent. In Buligobe village, the extension agent was rated slightly less important.

The radio was found to be slightly more important as far as frequency of usage is concerned. This importance of the radio was explained by the fact that farmers routinely listen to the weekly agricultural programs broadcast over the radio. The fact that the fellow farmer is purposefully sought and not routinely available like the radio makes them more important and gives added weight to them even though they were consulted slightly less frequently than the radio. It was found that the male farmers tended to consult all the important sources of information relatively more frequently than the female farmers. The male farmers were found to have fair access to extension agents as indicated by the frequency of contact of once a month. However, the female farmers were found to have less contact with extension agents than the male farmers. It was concluded that extension agents do not actively seek out contacts with female farmers.

The fact that the importance of the various sources varies between the enterprises, genders and villages does indicate that the fellow farmers are not necessarily the most important source in all situations, but they appear to be generally important and comparing very favourably as an important source of information with the conventional channels.

Having established the relative importance of the fellow farmers, further investigations showed wide spread existence of opinion leadership among both male and females in the study area. The distribution of nominations showed that more males than females were nominated as opinion leaders. Within the individual enterprises opinion leader nomination appeared to be more concentrated in coffee, banana and livestock enterprises, while the other crops enterprises and women's projects had relatively low concentration of opinion leader nominations.

Opinion leaders were identified by the commonly used sociometric method of requesting respondents to nominate individuals they consulted. The different types of opinion leaders nominated included actual opinion leaders, quasi opinion leaders and expert opinion leaders. Specialists were also another type of influential leaders nominated. It was found that the respondents tended to consult opinion leaders rather than specialists in contradiction to Düvel's (1996) findings. The expert opinion leaders, who were apparently all males, were consulted relatively more frequently. The results showed that the opinion leaders were correctly identified which seems to imply that opinion leaders are a clearly identifiable individuals who have not been confused with specialists.

As far as interpersonal communication is concerned, it was found that consultation between the farmers and the opinion leaders occurred between members of both gender and across the genders. The male to male and female to male patterns of consultation were found to be relatively more prominent. Both male and female farmers tended to consult male opinion leaders more than the female opinion leaders. As far as across gender consultation was concerned, the males featured more prominently as opinion leaders than the females. This conclusion was supported by the fact that the female respondents tended to consult male opinion leaders rather than female opinion leaders.

The results also indicated a relatively more frequent consultation in the male to male pattern of consultation, followed by the female to male pattern. It was found that the male opinion leaders were consulted more frequently than the female opinion leaders. This still serves to confirm that males feature more prominently as opinion leaders than females. It is quite evident that male respondents were found to be more active in advice seeking than the female respondents. Within the separate enterprises, the male farmers were found to consult opinion leaders more frequently than the female farmers in all the enterprises with the exception of other crop enterprises. It was also evident that both the male and female farmers tended to consult opinion leaders more frequently in enterprises that are important to them. It was concluded that opinion leadership is more prominent among the males than the females. The male farmers were found to consult opinion leaders more frequently than the female farmers. The

fact that female farmers do not feature prominently as opinion leaders and users emphasises the marginalised position of the females in opinion leadership.

The general tendency found among the farmers was that of consulting mostly opinion leaders who were perceived to have a high prominence. A similar tendency was found in the enterprises of coffee, banana, other crops and women's projects. While in livestock enterprise opinion leader prominence was not important. Opinion leaders of a high prominence were found to be equally distributed among the males and females. Leadership prominence was found to be an important consideration for consulting the male opinion leaders in all enterprises, however, probably not so important for the female opinion leaders. In the separate enterprises, it was found that opinion leaders of a high prominence were relatively more frequently consulted with the exception of livestock enterprises.

The only factors that were found to influence the frequency of consulting opinion leaders of different prominence levels were village ($p < 0.005$) and gender of the respondent ($p < 0.005$). Chi-square tests indicated significant differences in consulting opinion leaders of different leadership prominence in the villages of Luwunga and Kapeke, but not in Buligobe village. In the general, in Kapeke and Luwunga villages, opinion leaders of a high prominence were consulted relatively more frequently. But the results showed that the majority of these were the male opinion leaders.

In conclusion, some perceived degree of leadership prominence in the opinion leader was found to be an important factor for consulting the opinion leaders. It was also found to influence the nominations of opinion leaders of different genders. A high leadership prominence was also found to be an important factor for more frequent consultation of the opinion leaders in the villages of Luwunga and Kapeke, but not in Buligobe. This was found to be emphatic for the male opinion leaders.

It was found that leadership prominence is not gender related as indicated by the tendency among both male and female respondents to consult opinion leaders who have a high prominence regardless of their gender. A similar tendency was found in the enterprises of coffee, other crops and women's projects. While the results for banana

and livestock enterprises showed that for both the male and female farmers leadership prominence was more important than gender of the male opinion leaders they consulted. But the decision by the female farmers to consult female opinion leaders appeared to have been based more on similarity in gender. These results seem to confirm that leadership prominence is more important in consultation links. The only exceptions were in banana and livestock enterprises when similarity in gender between respondent and opinion leaders is important only for the females.

It was found that prominence of the opinion leader but not similarity in gender appears to influence the frequency with which the opinion leaders were consulted. This was indicated by the fact that the female respondents consulted male opinion leaders in their own enterprises more frequently than the female opinion leaders. The findings show that similarity in gender is not an important factor in determining the consultative links in farming. It was also found that consultations tended to be more frequent when the perceived differences between the respondents and opinion leaders was bigger in other social variables of education, farming efficiency, social status and cosmopolitaness. It was concluded that the farmers learn about new ideas through their links with opinion leaders who are different from them. It was further concluded that interpersonal communication links in the study area are mostly heterophilous.

Both Spearman's rank correlation and chi-square test indicated that friendship, psychic accessibility, physical accessibility and kinship relations are important determinants of opinion leadership. Friendship was found to be an important but not a crucial factor for establishing and maintaining a consultative relationship between opinion leaders and respondents. Both opinion leaders and specialists were perceived to have high accessibility which seemed to indicate that psychic accessibility is not a serious constraint in the dissemination of information in the study area. Short distance links were found to predominate in the study area, which clearly indicated that close proximity was important in determining most of the opinion leaders and specialists who were consulted. Close proximity was also found to encourage more frequent consultations. Kinship relation appeared to be of some importance in opinion leadership. Although the number of close and distant relatives, wives and husbands who were nominated as opinion leaders was relatively low. It was found that on

average they were consulted more frequently than the opinion leaders who have no kinship relations with the respondents.

It was found that the common practice among the farmers was to mostly consult one opinion leader in one enterprise. Both polymorphic and monomorphic opinion leaders were found to exist in the study area, however, the monomorphic opinion leaders were found to be more prevalent among both males and females. The results did not seem to support the hypothetical premise that traditional societies tend to be polymorphic rather than monomorphic. The explanation for this was found lie in the fact that the study area is a typical traditional society.

13.3 RECOMMENDATIONS

The fact that opinion leaders play and facilitate such important roles in agriculture and various other topics concurrently has important implications for developing our understanding of the role of personal influence in the communication process. The concept of opinion leadership therefore has much theoretical and practical utility because of this unique capacity of passing on the flow of innovations.

This study should find relevant applicability in the study area. This is especially so in the context of the current macro-economic policy and institutional reforms which have ushered in changes and opportunities conducive to explore alternative ways to argument government efforts in delivering extension services to the farmers. It is suggested that the role of opinion leaders in agriculture should be recognised and deliberate strategies should be put in place to utilise them. In order to effectively utilise opinion leaders in the dissemination of agricultural innovations and information, the following recommendations arising from the main findings of this study could be of practical value for formulating extension strategies:

1. Opinion leaders should be the focus of disseminating agricultural innovations and information. This research has found that there is widespread existence of opinion leadership among both men and women and these opinion leaders are used being used as a source of information and advice by the farmers from

Buligobe, Kapeke and Luwunga villages who are not being adequately and effectively contacted by government extension agents. Accessibility was found not to be a constraint in dissemination of information which implies that the opinion leaders could be targeted to effectively pass on innovations and information to the larger target audience.

2. Building of opinion leadership among the women by taking them into the main stream of opinion leader led extension program development. As of now the results show that males feature more prominently as opinion leaders and as users opinion leaders more than females. Male opinion leaders are being consulted more frequently than the female opinion leaders. The need is to recognise women as equals in opinion leadership so as to give impetus to the diffusion process in the rural areas.
3. Modifications of extension delivery in ways which draw upon the potential of the radio in supporting the information base of the opinion leaders and in disseminating information to the rural farmers. This can be done by purposeful radio program development and timing. Since different communication channels play different roles in the various stages in the innovation-decision process, it would benefit to utilise the opinion leaders, radio and extension agents in the correct time and sequence in the innovation-adoption process
4. Mobilisation of opinion leader participation would require commensurate support from professional extension and support services to benefit the emergent local leadership.

13.3.1 Areas for further research

There is need to extend and refine the concepts of opinion leadership to achieve a fuller understanding of their role in the process of diffusion of innovations in agriculture in the rural areas. It is recommended that:

- a. Since this is an isolated study which does not apply to larger parts of Uganda, this study should be repeated in other areas to see if these findings are localised or specific
- b. This research should be further extended to include production of sociograms of the network links for the study area as a possible means of designing interventions.
- c. More research should be done to determine whether opinion leadership would increase with decrease in extension service delivery.
- d. Research should look into the flow and quality of the information that is passed on. This should include the aspect of visual flow of information.
- e. Research should look into the negative aspects or impact of opinion leadership.
- f. More current investigations in gender differentiation in interpersonal communication is called for. It would benefit by fuller understanding of issues such as the different nature of male and female opinion leadership if any, conditions that impede and advance women's chances for effectively communicating in farming. An important question to be asked is would women opinion leaders have impact on adoption different from that of men?

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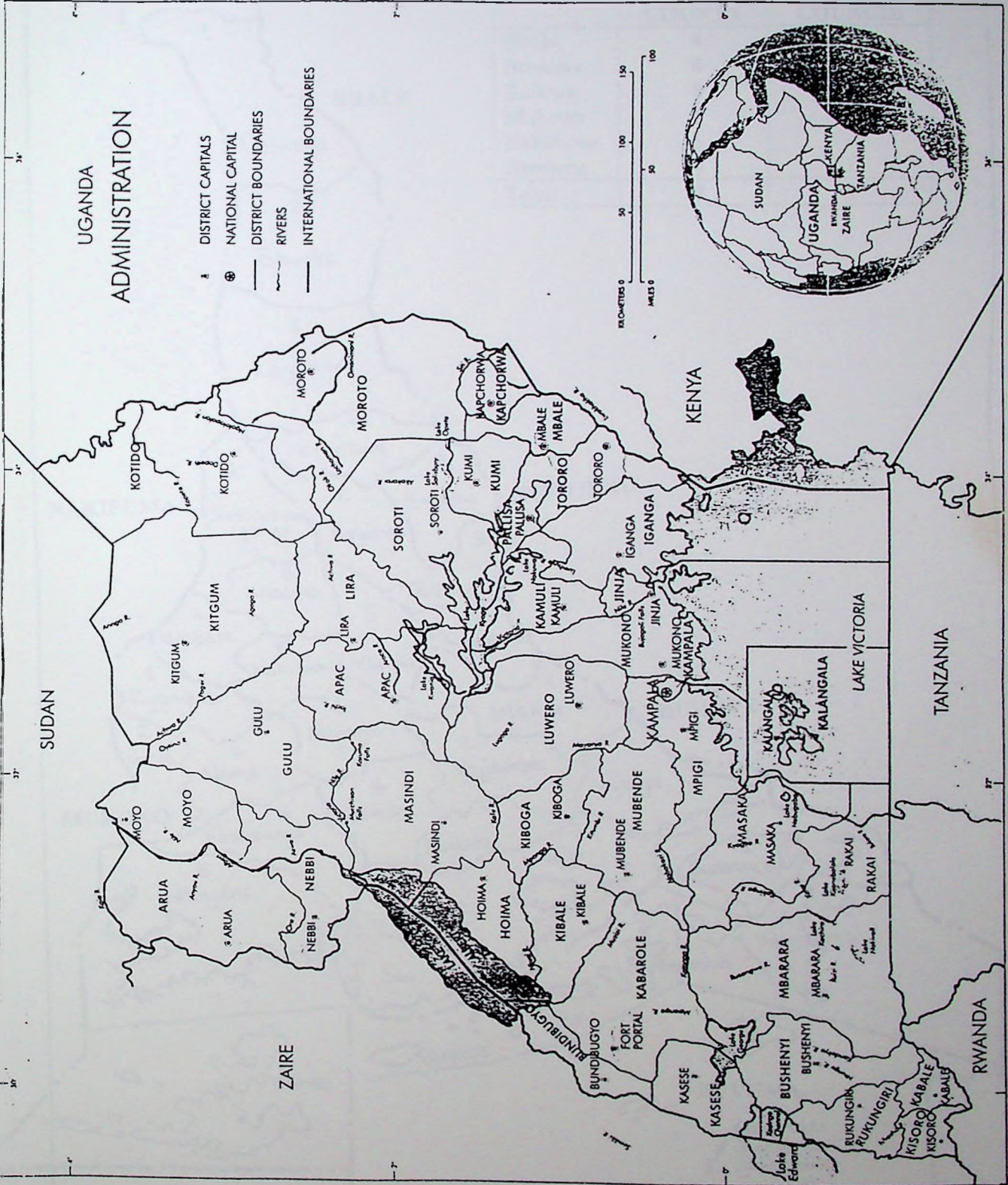
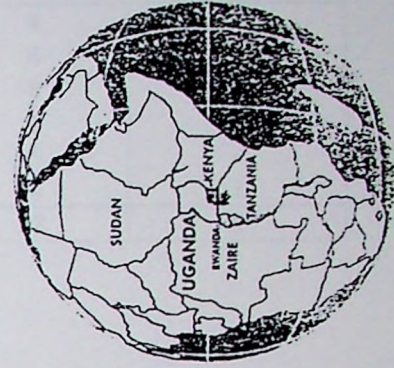
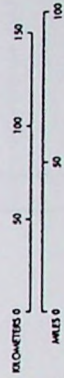
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APPENDICES

UGANDA ADMINISTRATION

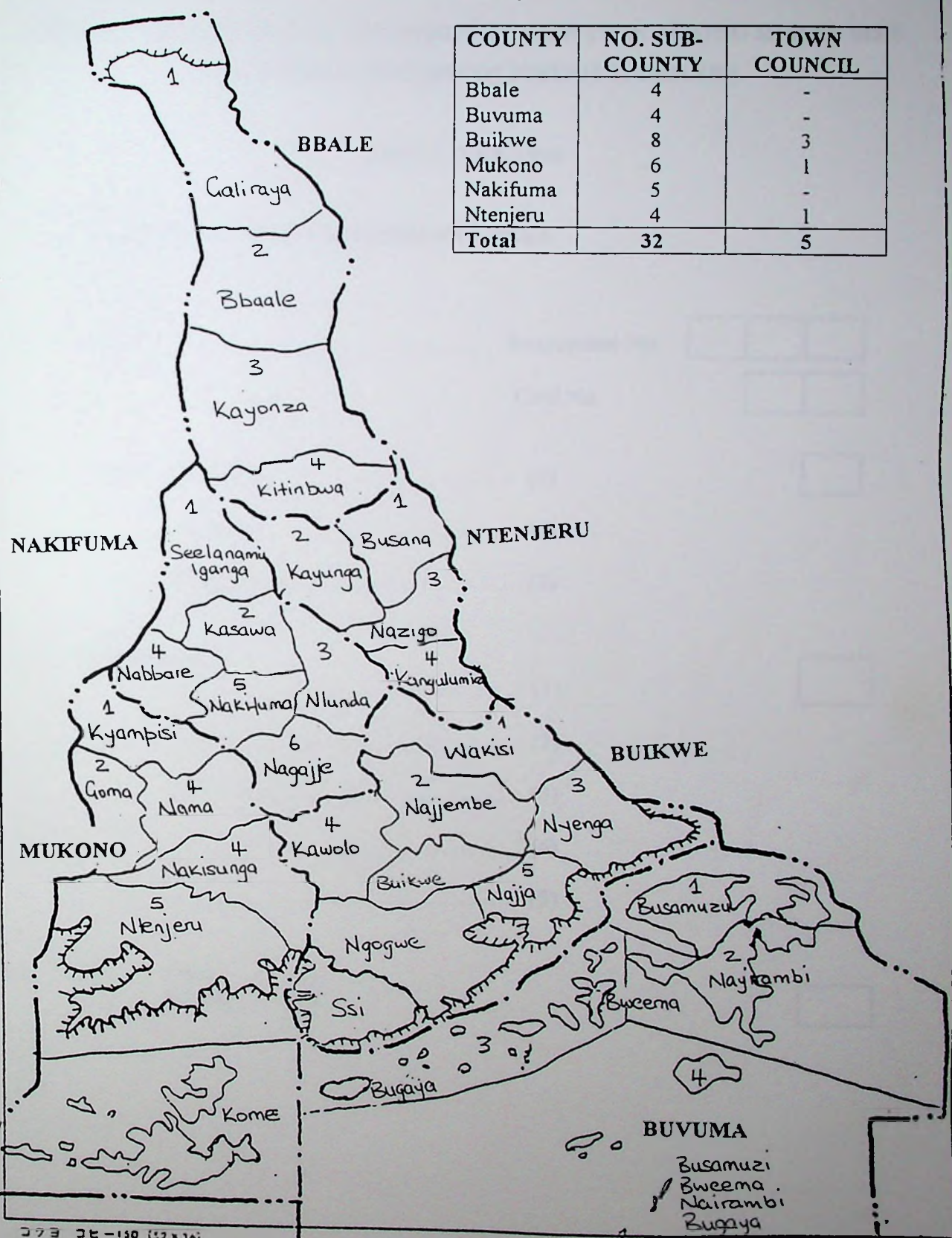
- DISTRICT CAPITALS
- ⊙ NATIONAL CAPITAL
- DISTRICT BOUNDARIES
- ~ RIVERS
- INTERNATIONAL BOUNDARIES



MAP 2: MUKONO DISTRICT

KEY:

COUNTY	NO. SUB-COUNTY	TOWN COUNCIL
Bbale	4	-
Buvuma	4	-
Buikwe	8	3
Mukono	6	1
Nakifuma	5	-
Ntenjeru	4	1
Total	32	5



SURVEY QUESTIONNAIRE

OPINION LEADERSHIP IN TECHNOLOGY ADOPTION AMONG RURAL MEN AND WOMEN IN MUKONO DISTRICT, UGANDA

MAY - JUNE 1998

A. PARTICULARS OF RESPONDENTS/AREA

1. Name Respondent No.

--	--	--

Card No.

--	--

1.1 Village: Luwunga..... (1)

--

Kapeke..... (2)

Buligobe..... (3)

1.2 Enumerators:

..... (1)

..... (2)

..... (3)

..... (4)

..... (5)

--

1.3 Sex: Male (1)
Female (2)

--

1.4 How old are you

(Also indicate age in category below)

- 1.4.1 > 60 (5)
50 - 60 (4)
39 - 49 (3)
28 - 38 (2)
17 - 27 (1)

(Indicate how age was obtained)

- 1.4.2 Knows age (1)
Uncertain (2)
Does not know - judged (3)
Refused - judged (4)

1.5 What is your marital status?

- Married (1)
Divorced (2)
Widow (3)
Widower (4)
Single (5)

1.6 How many years of formal education have you completed?

1.6.1 What is the highest school standard you have completed?

- University (6)
Other tertiary institutions (5)
"A" level (4)
"O" level (3)
Primary (2)
Not been to school (1)

1.7 Are you the head of this household?

- Yes (1)
No (2)

1.8 Who makes decisions in the house ?

- Husband (1)
Wife (2)
Jointly (3)

1.8.1 To what extent do you and your partner consult each other on the practices below?

Use the scale below to rate the extent to which you and your partner participate or consult each other on the practices below.

- Husband never consults wife (6)
- Husband sometimes consults wife (5)
- Husband always consults wife (4)
- Wife always consults husband (3)
- Wife sometimes consults husband (2)
- Wife never consults husband (1)

	Practices	Rating
1.	Coffee production	
2.	Coffee marketing	
3.	Banana production	
4.	Banana marketing	
5.	Food production	
6.	Selling of food crops	
7.	Livestock production	
8.	Livestock/Livestock products selling	

1.8.2 What role do you and our partner play in decision making in the household?

Use the scale below to rate the extent to which you and your partner play a role in household decision making in the practices below.

- Decisions taken by husband alone (5)
- Decision sometimes based on consensus with wife (4)
- Decisions always based on consensus with wife (3)
- Decisions sometimes based on consensus with husband (2)
- Decisions taken by wife alone (1)

	Practices	Rating
1.	Coffee production	
2.	Coffee marketing	
3.	Banana production	

4. Banana marketing

5. Food production

6. Selling of food crops

7. Livestock production

8. Livestock/Livestock products selling

1.9 What is your current major occupation of source of income?

Farming (1)

Farming and part-time occupation (2)

Part-time farming and full-time occupation (3)

1.9.1 What percentage of your income comes from farming?

All the income (100%) (8)

Most of the income (75%) (7)

More than half (>50%) (6)

Half (50%) (5)

Less than half (<50%) (4)

A quarter (25%) (3)

Less than a quarter (<25%) (2)

None (1)

1.9.2 What is your other source of income?

Professional employment (1)

White collar job (2)

Blue collar job (3)

Trading (4)

Arts and crafts (5)

Brewing (6)

None (7)

Other(8)

2. Do you belong to a local group or organisation? Name the type and indicate the office you hold in the group or organisation with 1

Office = 1

Type of group or organisation	Patron	Chairman	Office bearer	Member	Other
1.					
2.					
3.					
4.					
5.					
Total					

Formal leadership rating (Please leave this to be completed by the researcher)

(a) Number of organisations

(b) Leadership score

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Patron = 4
Chairman = 3
Office bearers = 2
Member = 1

B. PARTICULARS OF HOUSEHOLD ACTIVITIES

3. What is the total size of your farm? Use the scale below to indicate

>21 Ha (1)
16-20 (2)
11-15 (3)
6-10 (4)
1-5 (5)
<1 Ha (6)

4. What are the main or most important enterprises you have on your farm?
What are their sizes? Indicate scale of your operation using the scale below.

Commercial	(3)
Both commercial and subsistence	(2)
Subsistence	(1)

<u>Size in Ha</u>	<u>% Income</u>
<21 (1)	All (100%) (8)
16-20 (2)	Most (75%) (7)
11-15 (3)	More than half (>50%) (6)
6-10 (4)	Half (50%) (5)
1-5 (5)	Less than half (<50%) (4)
<1 Ha (6)	Quarter (25%) (3)
	Less quarter (<25%) (2)
	None (1)

<u>Enterprise</u>	<u>Type</u>	<u>Size in Ha</u>	<u>Nos. of livestock</u>
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1. Coffee			
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2. Bananas			
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Others: (main crops if not the above)

3.			
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4.			
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Livestock: (Fill only 2 most important)

6. Beef cattle				
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7. Dairy cattle				
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Respondent No.

Card No.

8. Pigs				
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9. Goats				
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10. Chicken				
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Woman's Enterprise:

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C. ASK PERSONS FOR SOURCE OF INFORMATION

4. If you need advice on your most important enterprises from where or from whom do you get it?
- (a) Indicate your sources and rate them according to importance of use; and
 (b) Indicate actual frequency or number of times you have used them in the past year.

Sources:

Extension agents	(1)
Research Institution	(2)
Radio	(3)
Newspapers	(4)
Printed materials	(5)
Mosque/church	(6)
Fellow farmer	(7)

Importance rating

Most important	(3)
2nd most important	(2)
3rd most important	(1)

Frequency of use

Daily	(7)
Weekly	(6)
Fortnightly	(5)
Monthly	(4)
Quarterly	(3)
Biannually	(2)
Yearly	(1)

	Importance rating			Frequency of use		
	3	2	1	3	2	1
1. Coffee						
2. Bananas						
Others: Crops if not above						
.....						
.....						

Livestock:

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Woman's enterprise

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D. ASK PERSONS WHOM THEY CONSULT

Attachment 1: Rating scales for table 5. Use attachment 1 to get the rating for heading i-xii to complete table 5.

(i)	Sex:	Male (1) Female (2)	(ii) Relationship:	Husband (4) Wife (4) Close relative (3) Distant Relative (2) None (1)
(iii)	Friendship:	Best friend (5) Good friend (4) Friend (3) Acquaintance (2) Fellow farmer (1)		
(iv)	Accessibility (psychic):		Very easy to approach (5) Easy to approach (4) Fairly easy to approach (3) Difficult to approach (2) Very difficult to approach (1)	
(v)	Accessibility (physical):		5Km > (1) 4.0-4.9 (2) 3.0-3.9 (3) 2.0-2.9 (4) 1.0-1.9 (5) 0.1-0.9 (6) <0.1Km (7)	
(vi)	Education level:		Much higher than respondent (5) Higher than respondent (4) Same level as respondent (3) Lower than respondent (2) Much lower than respondent (1)	
(vii)	Farming efficiency:		Much better than respondent (5) Better than respondent (4) Same as respondent (3) Lower than respondent (2) Much lower than respondent (1)	
(viii)	Social status:(rank, social position in relation to others relative importance)		Much higher than respondent (5) Higher than respondent (4) Same as respondent (3) Lower than respondent (2) Much lower than respondent (1)	
x)	Leadership:		Very prominent leader (5) Prominent leader (4) Prominence same as respondent (3) Prominence lower than respondent (2) Prominence much lower than respondent (1)	
(x)	Cosmopolitaness: (Having of a much better view or experience of the world)		Much higher then respondent (5) Higher than respondent (4) Same as respondent (3) Lower than respondent (2) Much lower than respondent (1)	
(xi)	Practice adopted: (Only for persons actually consulted:		Chemical control (pest & diseases) (1) Biological control (pest & diseases) (2) Cultural control (pest & diseases) (3) Chemical weed control (4) Management and agronomy (5) Fertiliser (6) New varieties/Hybrids-seeds, clones, seedlings (7) Exotic breeds/livestock (8) Animal/Chicken production (feeds, housing, management, disease control (9)	
(xii)	Frequency of consultation in : the past one year		Daily (6) Weekly (very often) (5) Twice/month (quite often) (4) Once/month (often) (3) Once in 3 months (rarely) (2) Once in a year (seldom) (1)	

Respondent No.

Card No.

D. ASK PERSONS WHOM THEY CONSULT FOR ADVICE

5. Who of your fellow farmers (both men and women) would you consult; are knowledgeable; and those who consult you in your most important enterprise. Nominate 3 of each of them and provide the rest of the information about them on the table. Use attachment 1 to get details of ratings of heading i-xii. (Please do not fill the boxes for names)

Enterprise	Names	(i) Sex	(ii) Relation- ship	(iii) Friend- ship	(iv) Accessi- bility (Psychic)	(v) Accessi- bility (Physic al)	(vi) Educa- tion level	(vii) Good farmer	(viii) Social status	(ix) Leader- ship	(x) Cosmo- polite- ness	(xi) Practice adopted	(xii) Freque ncy of consult a-tion in past 1 year
I Coffee	(a) You would consult	1. 2. 3.											
	(b) Knowledgeable	1. 2. 3.											
	(c) Those you really consult	1. 2. 3.											
	(d) Those who consult you	1. 2. 3.											

Respondent No.

Card No.

Enterprise	Names	Respondent No.			Card No.												Frequency of consultation in past 1 year		
		(i) Sex	(ii) Relationship	(iii) Friendship	(iv) Accessibility (Psychic)	(v) Accessibility (Physical)	(vi) Education level	(vii) Good farmer	(viii) Social status	(ix) Leadership	(x) Cosmopolitaness	(xi) Practice adopted	(xii)						
2. Bananas	(a) You would consult	1.																	
	2.																		
	3.																		
	(b) Knowledgeable	1.																	
	2.																		
	3.																		

		Respondent No.			Card No.														
(c) Those you really consult	1.																		
	2.																		
	3.																		
(d) Those who consult you	1.																		
	2.																		
	3.																		

Respondent No.

Card No.

(i) Sex (ii) Relationship (iii) Friendship (iv) Accessibility (Psychic) (v) Accessibility (Physical) (vi) Education level (vii) Good farmer (viii) Social status (ix) Leadership (x) Compo-polite-ness (xi) Practice adopted (xii) Frequency of consultation in past 1 year

Other crops: (a) You would consult

1.

2.

3.

(b) Knowledgeable

1.

2.

3.

Respondent No.

Card No.

(c) Those you really consult

1.

2.

3.

(d) Those who consult you

1.

2.

3.

Respondent No.

Card No.

Enterprise

Names

(i) Sex

(ii) Relation-ship

(iii) Friend-ship

(iv) Accessi-bility (Psyche)

(v) Accessi-bility (Physical)

(vi) Educa-tion level

(vii) Good farmer

(viii) Social status

(ix) Leader-ship

(x) Econo-politi-neess

(xi) Practice adopted

(xii) Frequen-cy of consulta-tion in past 1 year

.....

(a) You would consult

1.

2.

3.

(b) Knowledgeable

1.

2.

3.

Respondent No.

Card No.

(c) Those you really consult

1.

2.

3.

(d) Those who consult you

1.

2.

3.

Respondent No.

Card No.

(i) Sex (ii) Relation-ship (iii) Friend-ship (iv) Accessi-bility (Psychic) (v) Accessi-bility (Physical) (vi) Educa-tion level (vii) Good farmer (viii) Social status (ix) Leader-ship (x) Cosmo-polite-ness (xi) Practice adopted (xii) Frequen-cy of consulta-tion in past 1 year

Woman'se Enterprise

(a) You would consult

1.

2.

3.

(b) Knowledgeable

1.

2.

3.

Respondent No.

Card No.

(c) Those you really consult

1.

2.

3.

(d) Those who consult you

1.

2.

3.