



**END TERM EVALUATION OF THE BONDOSIAYA HOUSEHOLD LIVELIHOOD
SECURITY (*LOK PACH*) PROJECT**

Report Presented

By

**Robert Omondi Oswago,
Halimu Suleiman Shauri, PhD
Willies Okul**

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LIST OF ACRONYMS

AIDS:	Acquired Immunodeficiency Syndrome
ART:	Antiretroviral Therapy
AVS&L:	Association of Village Savings and Loans
CBOs:	Community Based Organisations
CDC:	Centre for Disease, Control and Prevention
CIK:	CARE International in Kenya
CRPs:	Community Resource Persons
CSOs:	Civil Society Organisations
DFID:	Department for International Development
GoK:	Government of Kenya
GS&L:	Group Savings and Loans
HIV:	Human Immune Virus
HLS:	Household Livelihood Security
IGA:	Income Generating Activities
NGOs:	Non Governmental Organisations
NORAD:	Norwegian Development Agency
PAPLS:	Participatory Assessment and Programming for Livelihood Security
PET:	Participatory Education Theatre
PLWHIV:	Persons Living with HIV&AIDS
PMTCT:	Prevention of Mother to Child Transmission
SAPs:	Structural Adjustment Programs
UNDP:	United Nations Development Program

VCT: Voluntary Counselling and Testing

WHO: World Health Organisation

WKCDFM: Western Kenya Community Development and Flood Mitigation

EXECUTIVE SUMMARY

Bondo/Siaya household livelihood security project was initiated as a response to the social economic impacts of HIV and AIDS. The project was premised on the higher prevalence of both HIV and AIDS and poverty in the project area. The main objectives of the project were to economically empower the direct beneficiaries and members of their households and to help reduce HIV&AIDS stigma through enhanced advocacy, improved knowledge and access to psychosocial support services. Specifically, the project had two main objectives upon which all its activities were anchored while mainstreaming gender across project interventions. These were:-

1. To increase the economic capacity of the target community through improving access to credit from personal savings of up to about KES 8 Million portfolio among the 5,000 savings and lending group members in Siaya and Bondo Districts by 2009.
2. To increase HIV&AIDS Awareness among the 5,000 GS&L group members and their communities on HIV/ AIDS and gender to reduce stigma in Siaya and Bondo Districts by 2009

In order to meet its objectives the project employed three major strategies and activities. These were Group Savings and Loaning (GS&L) Methodology; Public Education on HIV&AIDS; and Partnership.

This study therefore sought to evaluate the impact the *Lok Pachi* project on the livelihood security of the populations in Bondo and Siaya in line with the project proposals. The study was guided by the following research objectives.

1. To assess the impact of *Lok Pachi* project on households livelihood security
2. To find out the role of *Lok Pachi* project on the levels of women empowerment
3. To determine the impact of the project on Knowledge, practice, and attitude towards HIV&AIDS
4. To determine the impact of *Lok Pachi* on households level of access to HIV&AIDS support services
5. To conduct a gender analysis of the organisation and outcomes of the *Lok Pachi* project
6. To document the efficiency, relevance, effectiveness and sustainability of the *Lok Pachi* Project

Outcomes of the Lok Pachi Project

The project reached a total of 7,299 direct beneficiaries against a planned target of 5,000 households. The beneficiaries had experienced significant improvements in critical indicators of the major components of the HLS approach. Specifically the proportion of respondents reporting improvements cumulatively within the ratings of slight improvements to very much improvement in selected components of livelihood securities capital were generally more than 80% in all the indicators. In human capital the selected indicators included labour capacity, access to formal education, specialised training, access to food and health of household members with improvements reported by 80.6%, 92.4%, 81.2%, 91.9 and 89.8 respectively. Women

reported improvements in formal education and specialised training than did men while men had a higher proportion reporting improvements in labour capacity and access to food. There were equal proportions reporting improvements in the health of household members. These improvements were particularly important given that human capital is crucial in empowering the individual members to participate in productive activities.

There were also impressive improvements in natural capital as was shown by higher proportions reporting slight improvements to very much improvement in access to land (80.1%), access to common pool resources (79.8%), and farm and off-farm produce (86.9%). There were slight gender variations in access to natural resources in favour of women for access to land and off and off-farm produce while men had higher proportions in access to common pool resources. Further analysis also showed improvements in access to public utilities such as in agricultural extension from 54.4% to 62% between the period preceding membership to a GS&L group and at the time of study. Similar improvements were also reported in access to health services (from 83.1% to 92.4%), access to NGO services (76.3% to 96.4%), access to workers/farmers union (54.9 to 69.8%), membership to GS&L groups (59.4% to 97.7%), veterinary services (78.1% to 84.6%) and land registry (58.6% to 65.1%) in the same period of time. This means that there were essential improvements across gender essential indicators of natural capital which translate to improved resilience at the households' level.

Improved access to financial capital, as mentioned earlier was at the core of the project activities. 95.3% of the respondents indicated improved access to credit facilities mainly through the group savings and loan. These improvements were spread to both genders with women having a marginal higher proportion of those who reported improvements. This was reinforced by the project records that showed 7,299 persons had accessed the GS&L services with a cumulative loan totalling to KShs. 189,574,504.00 in 107,167 transactions. A gender analysis showed that 81.7% of the direct beneficiaries to credit services were women, which is higher than the project planned target of 70% women beneficiaries. Further analysis showed that women had a higher mean amount of borrowed money than men at KShs 26,074.94 relative to men's KShs. 25,514.92 for the entire project period. This is particularly a major achievement given that nearly 70% of the households in the project are male headed. This implies that a good number of women were empowered economically in line with the targets of the *Lok Pachi* project.

Access to credit services improved women's economic opportunities, improved social capital by enabling them offset welfare expenses such as for burials, improved quality of life at household level by enabling them meet household expenses, enhanced access to health services and improved children's access to education through payment of school fees, in this order. The results indicated that the borrowed money from the GS&L groups was largely used expand or start businesses, defray funeral expenses, meet expenses related to domestic uses, pay for medical services and pay educational fees in that order.

The length of membership within group savings and loans is important in enhancing increased access to credit services as well as improved diversification and utilization of loans services. The results show that there were changes in the uses of the loans

between the first and the third most recent loans from the time of the study. The results showed that there were marked constant increases in the proportion of participants using their borrowed money to initiate or expand their business and to pay for medical expenses. Uses for agriculture and domestic use dropped for loan two before rising in loan three while the use education and funeral expenses increased in loan two before dropping at loan three.

The group savings and loan approach improves beneficiaries' savings capacity thereby significantly improving women's economic empowerment. The results showed that GS&L was the most used (69.4%) method of savings followed by banks (10.7%) and merry-go-round (7.5%). The cumulative savings in the GS&L groups amounted to KShs 23,290,148.00 with women having the largest proportion of KShs. 19,193,601.00 as compared to men's KShs. 4,096,547.00. The mean savings by gender also showed that women saved more than men at KShs. 3,217.16 as compared to men's KShs. 3,073.18. Again, the program was very effective in women empowerment.

Economic empowerment was aimed at improving household livelihood resilience against shocks as demonstrated by the uses of loans, as they were used for long term investments such as education, livestock, and business enterprises. This shows that the motive for savings was mainly to accumulate the required finances for long term investments, an important factor in improving the household level of resilience against shocks as a result of improved livelihoods. Women than men were likely to spend their savings on paying school fees and purchase of livestock while men tended to spend their savings in domestic use, doing business and defraying medical expenses.

The study results showed significant gains in physical capital. Improvements were reported in household's access to safe drinking water (92.7%), quality of housing (79.8%), improvement in communication equipment (mobile phones) (73.5%), access to quality seed (67.0%) and access to fertiliser (58.6%). Despite the great improvements in access to safe drinking water there were challenges with a significant proportion (30%) still accessing their drinking water from lakes, rivers, and unprotected wells. Even though it emerged in the Focus Group Discussion sessions that those sourcing water from lakes, rivers and unprotected wells used treatments methods to improve the quality, shortage of the requisite chemicals can place the households at greater risk. The gender variations in reported improvements were remarkably in favour of men for access to communication equipments, access to quality seed, and access to fertilizers with a marginal differences in access to quality housing. Women had a higher proportion in improvements in access to drinking water.

Improvements in the quality of housing was exhibited by the reduction of the proportions of households with mud walls from 75.5% to 66.7%, grass thatched houses from 38.8% to 22.9%, mud floor from 72.4% to 66.9%. At the same time, there were increases in the proportion of households with cemented walls from 10.7% to 16.7%, *mabati* roofs from 56.2% to 71.6% and cemented floors from 25.8% to 30.7%. There were, therefore major impacts in physical capital of the participants.

Social capital is one of the major entry points of the *Lok Pachi* project since the participants were organised into working groups. The results showed that the sampled participants felt there were improvements in their levels of participation in community activities (80.6%), reduction in discrimination against women (84.5%), working with family and friends (94.8%), involvement in reciprocal exchange services (86.2%), and leadership in groups (89.9%). The improvements were reported across all the gender with marginal differences in proportions in favour of women in working with family and friends and equal proportions for participation in community group activities and involvement in reciprocal exchange activities. Men had higher proportions than women in proportions reporting improvements for reduction in discrimination against women and leadership in groups. These improvements translated into improved access to fishing groups, membership in GS&L groups, membership in HIV&AIDS support groups, membership in beach management committees, participation in community services, involvement in village courts and *barazas*, access to banks, membership in school/market/church committees/boards, and membership to farmers or workers union. This was significant achievement given that the project took initiatives to train the direct participants on group dynamics among other components of GS&L training topics. Working together, as is mirrored in the names provided to some groups, is more important to the vulnerable groups and within the context of HIV&AIDS reduces social exclusion and stigma related to the disease.

The study showed gains in gender empowerment in relations to property ownership, access and control of resources. The results indicated that despite the existence of some spots of male dominance especially with ownership of assets, there were visible gains in women's ability to acquire and access essential resources. The results indicated that a higher proportion of women had relative ease than men in acquiring poultry and gas cooker. It also shows that men had comparatively relative ease than women in acquiring land, radio, sofa sets, farming equipments, houses and homes. Overall, men still retained control of most of resources but allowed women access to most of them indicating a gradual but progressive improvement in the welfare of women.

The results further show that there were changes with regard to access to the selected property items. For instances women had a higher proportion of those with relative ease in accessing capital, labour, poultry, sofa sets, education and training, health education, nutritional education, membership to organisations, income in cash, income in kind, income in food, and house. Thus even though women had difficulties acquiring some of the property items, their access levels improved significantly. Interestingly, there were equal proportions in access to radio and employment opportunities. Men only retained dominance in access to homes and land.

The results showed significant improvements in decision making among women on selected elements. Specifically, there were improvements in women's ability in making decisions with regard to wearing of condoms, asking the spouse to go for joint HIV test, use of contraceptives, asking for sexual intercourse, and determining when to have sex. This was an important gain given that the spread of HIV and AIDS has in some quarters been widely associated with the women's inability to make crucial decisions with regard to sexuality.

The project also had visible impact in knowledge levels on HIV and AIDS. The improvements were reported in critical areas of HIV prevention, methods of transmission, care and management, access to support services, and testing and counselling. Despite these gains, the results revealed that nearly 4.2% of the selected beneficiaries indicated no change in their knowledge levels on HIV and AIDS. Nonetheless, analysis of the quality of knowledge on HIV and AIDS showed significant gains with the main sources of information being media, health workers, friends and relatives, organisations and community based PET groups. The seeming latent level of HIV knowledge can be attributed to the fact that over 99% of Kenyans are well informed on HIV&AIDS.

The results also show that the *Lok Pachi* project made major gains in the fight against stigma. The proportion of respondents reporting they had ease in discussing information on HIV & AIDS with partners and family members were 84.1% and 83.3% respectively. Both males and females reported equal proportions of those willing to discuss HIV & AIDS with their spouse while more females than males found it easy to discuss HIV & AIDS with other members of their families other than their spouses. A comparative analysis with the mid-term evaluation reports showed that there were general improvements for the majority willing to discuss their status with others. Specifically, the proportion of those who showed no one else knew their HIV status dropped from 67.2% during the mid-term to 39.6% at the time of the current study. The proportion of those reporting knowledge of their HIV status increases from 32.8% during the mid-term survey to 68.9% at the time of the current study. Despite these impressive gains, the proportion reporting having gone for HIV test with their spouse was only 9.6% which is still low. This therefore implies that much still needs to be done in this area.

CHAPTER ONE: BACKGROUND TO THE STUDY

1.1 Introduction

It is now clear that the dynamics of HIV&AIDS are intimately linked to the complex ways in which people live their lives. Available statistics indicate that Africa with the highest level of poverty also houses more than two thirds of those infected with HIV&AIDS and almost equal proportions of unmet needs for Antiretroviral Therapy (ART). Indeed CARE (2006) pointed out that efforts to make livelihood in Sub-Saharan Africa more secure were likely to be affected by HIV&AIDS and at the same time a weaker livelihood would also negatively affect the efforts to reduce the spread of HIV&AIDS. This rather tautological mix thus makes a combination of approaches and strategies necessary. For CARE Kenya, the need to improve households' livelihood security and reducing vulnerabilities to HIV were seen to be the most plausible. In an effort to unlock this complex interrelationship between HIV&AIDS, CARE has adopted the Household Livelihood Security (HLS) as a framework for programme analysis, design, monitoring, and evaluation (Krantz, 2001).

According to Frankenberger (1996) HLS can be defined as the adequate and sustainable access to income and resources to meet basic household needs and full rights. These include such things as, access food, potable water, health care and access to educational opportunities while also having the ability and time to participate in community decisions and activities. Available data shows that the resilience of many a household in Africa is declining fast in the face of HIV&AIDS. This decline in resilience and its interrelatedness to HIV&AIDS varies from country to country as well as from one region to another within a country. In Kenya there is evidence of association in increase in poverty levels with high rises in cases of HIV&AIDS and vice versa and particularly so in Nyanza province which has the highest prevalence of HIV&AIDS and poverty in Kenya.

It is this high interrelationship between the high incidences of both poverty and HIV&AIDS in this region that informed the choice of Bondo and Siaya as the areas of focus in CARE Kenya's Household Livelihood Security Project (*Lok Pachi*). The project aimed at enhancing the household livelihood security of approximately 25,000 people sustainably. This was expected to be the major outcome of two major strategies that involved mobilisation of at least 5,000 persons especially women, into savings and lending groups to improve their economic capacities and improve access to HIV&AIDS information among the 5,000 household (25,000 beneficiaries), mainly women.

This study therefore sought to evaluate the impact the *Lok Pachi* project on the livelihood security of the populations in Bondo and Siaya in line with the project focus.

1.2 Statement of the Problem

The Bondo/Siaya Household Livelihood Security (*Lok Pachi*) project was initiated as an intervention strategy to the high levels of poverty in the area through economic empowerment by the use of the group savings and loans (GSL). In addition the project integrated HIV&AIDS education with the aim of reducing the levels of stigma

in the project area. The project adopted three major strategies to guide in the attainment of its objectives. These strategies included the Group Savings and Loans approach, public education on HIV&AIDS and partnership with relevant stakeholders. All these activities were implemented within CARE International's Household Livelihood Security (HLS) framework and the Kenya National AIDS Strategic Plan (KNASP). The HLS framework has been used elsewhere as an effective tool in addressing issues of poverty and HIV&AIDS (CARE, 2006). CARE (2006) showed that the approach can help improve the household income, improve the women's ability to access and control essential assets, and also enhance the levels of HIV knowledge to reduce stigma.

Despite the success of the HLS approach in Mozambique and Angola (CARE, 2006), it is not known how effective the approach would be in Kenya if implemented in the Bondo/Siaya *Lok Pachi* project. The study sought to evaluate the extent to which the *Lok Pachi* model achieved its objectives. Specifically, the study sought to establish the impact of the project on household livelihood security; women empowerment through gender mainstreaming; knowledge, attitude and practice of participants on HIV&AIDS; and access to HIV&AIDS support services. The study also sought to establish the projects relevance, efficiency, effectiveness and sustainability of its results and outcomes.

1.3 Objectives of the Study

The study was guided by the following objectives.

1. To assess the impact of *Lok Pachi* project on households livelihood security
2. To find out the role of *Lok Pachi* project on the levels of women empowerment
3. To determine the impact of the project on Knowledge, practice, and attitude towards HIV&AIDS
4. To determine the impact of *Lok Pachi* on households level of access to HIV&AIDS support services
5. To conduct a gender analysis of the organisation and outcomes of the *Lok Pachi* project
6. To document the efficiency, relevance, effectiveness and sustainability of the *Lok Pachi* Project

1.4 Significance of the Study

The relationship between poverty and HIV&AIDS has long been identified. However, studies on the best strategies to tackle the complex interrelationship between poverty and HIV and AIDS still remain scanty. This study is particularly important in at least four major ways. First, the study data may be useful in understanding the complex mix between poverty and HIV&AIDS. This study is an important addition in the search for practical solutions to the interrelationship of poverty and HIV&AIDS.

Two, the study aimed at identifying specific outcomes of the household livelihood security approach in tackling the socio-economic impact of HIV&AIDS. Specifically, it looks at the role of Group Savings and Loans in community empowerment. This may be an important finding for policy makers, development experts and stakeholders in the area of development, poverty and HIV&AIDS.

Three, since the study focused on gender mainstreaming with special emphasis on women empowerment, the findings would be particularly important in informing future interventions that enhance women's empowerment in similar regions with related characteristics. This is particularly important since women are the majority of rural dwellers and those affected and infected by HIV&AIDS. The results therefore would also be useful in planning for interventions among rural populations and for Persons affected and Persons Living With HIV&AIDS (PLWHIV).

And lastly, it is anticipated that the study results will generate more debate and spark off further studies on the relevance of intervention strategies on the impact of HIV&AIDS. This will build on the existing knowledgebase and thus provide a better understanding of HIV&AIDS and household livelihood security.

1.5 Assumptions of the Study

The study was conducted with the following assumptions

1. That the *Lok Pachi* project had an impact on the target population in the project area.
2. The direct beneficiaries provided the correct information on the issues under considerations.
3. That the secondary data obtained reflected the true picture of the activities and their requisite outcomes.

1.6 Scope and Delimitation of the Study

The study was limited to six days data collection period within Bondo and Siaya project areas with a focus on the households of randomly sampled households of direct benefactors of the *Lok Pachi* project. No comparative data was collected on the non participants.

1.7 Bondo/Siaya Household Livelihood Security Project

Household livelihood security (*Lok Pachi*) project was implemented by the Health and HIV & AIDS Sector of CARE International in Kenya (CIK) with funding from Norwegian Development Agency (NORAD) through CARE Norway. The project was implemented through the Group Savings and Loaning (GS & L) methodology which essentially focused on reducing socio-economic vulnerability of community members through increasing access to financial services. The project targeted 25,000 beneficiaries from 5,000 households of whom 70% would be women. In addition, the project integrated HIV&AIDS interventions and endeavoured to mainstream gender across its economic and HIV&AIDS interventions.

1.7.1 Objectives

The project had two main objectives upon which all its activities were anchored. These were:-

Objective 1: To increase the economic capacity of the target community through improving access to credit from personal savings of up to about KES 8 Million

portfolio among the 5,000 savings and lending group members in Siaya and Bondo Districts by 2009.

Objective 2: To increase HIV&AIDS Awareness among the 5,000 GS&L group members and their communities on HIV/ AIDS and gender to reduce stigma in Siaya and Bondo Districts by 2009

1.7.2 Strategies and Activities

The project employed three major strategies and activities. These were Group Savings and Loaning (GS&L) Methodology; Public Education on HIV&AIDS and Partnership. The **strategies** and the activities are discussed hereunder.

Group Savings and Loaning [GS&L] Methodology:

This strategy aimed at strengthening the economic capacity of the target communities as mitigation to empower the communities to effectively cope with the effects of HIV pandemic. The strategy entailed the use of voluntary group savings and loaning (GS&L) methodology to improve access to credit and income sources especially for the resource poor and vulnerable communities' members who were direct participants in the *Lok Pachi* project.

Public Education on HIV&AIDS:

The activities under this strategy aimed at strengthening public education on HIV&AIDS through facilitation of thematic debates and discussions on HIV&AIDS and gender among the members of the group savings and loaning groups and through participatory educative theatre (PET) activities. This strategy entailed the provision of accurate information on HIV prevention and stigma reduction; integration of sexual and gender based violence education and response activities as well as mainstreaming gender in the economic and HIV interventions.

Partnership:

In an effort to strengthening institutional capacities of local Strategic Partners and Civil Society Organisations (CSOs) Lok Pachi project established working relations with complementary partner organizations and facilitated sustainable linkages and networks among the project participants, their communities and the Strategic Partners and CSOs. The major partners included relevant Kenya Government line Ministries, NGOs and the community participants whose capacity have been built. The community capacity building was largely through the use of the CRPs and PLWHIVs support groups and the GS&L groups. It is anticipated that these project partners will continue to either provide economic empowerment services and/or support in HIV to vulnerable groups within their respective communities.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section reviews relevant literature focusing on related studies, project documents, and related theoretical and conceptual framework. Specifically, it provides the definition of livelihood security, a review of household livelihood security models, poverty and HIV&AIDS, gender and HIV&AIDS, access and utilisation of HIV&AIDS support services, an evaluation of the Bondo/Siaya household livelihood security project, and the theoretical and conceptual framework.

2.2 Definition of Livelihood Security

Household Livelihood Security has been defined as adequate and sustainable access to income and resources to meet basic needs (including adequate access to food, potable water, health facilities, educational opportunities, housing, and time for community participation and social integration) (Frankenberger, 1996). Livelihoods can be made up of a range of on-farm and off-farm activities that together provide a variety of procurement strategies for food and cash. Thus, each household can have several possible sources of entitlement, which constitute its livelihood. These entitlements are based on the endowments that a household has, and its position in the legal, political, and social fabric of society (Drinkwater and McEwan, 1992).

The level of a household's risk of livelihood failure may determine the vulnerability of a household to income, food, health and nutritional insecurity. The greater the share of resources devoted to food and health service acquisition, the higher the vulnerability of the household to food and nutritional insecurity. Therefore, livelihoods are secure when households have secure ownership of, or access to, resources (both tangible and intangible) and income earning activities, including reserves and assets, to off-set risks, ease shocks, and meet contingencies (Chambers 1988). Households have secure livelihoods when they are able to acquire, protect, develop, utilize, exchange, and benefit from assets and resources (Ghanim 2000).

In an effort to improve household's resilience to poverty by sustaining their livelihoods a Household Livelihoods Security Approach has been developed. The application of this approach has assumed three distinct models. The models include the Department for International Development (DFID) model, United Nations Development (UNDP) model, and the CARE International Model.

The DFID model has been referred to as Sustainable Livelihoods Security Framework which identifies five interconnected principle categories of livelihood assets. The delineated assets include physical, human, financial, natural and social assets. The model lays emphasis on enhanced poor household's access to the assets and their ability to subject these assets to productive use as key to poverty reduction. However, the DFID model is not a programming framework and only provides a way of thinking about poverty. This has given a new direction and impetus in targeted interventions especially as is reflected in DFIDs renewed focus on improvement of poor household's access to assets and support to structures and processes that are central to improving access to assets. The rationale is that if people have better access to assets they will have more ability to influence structures and

processes so that these become more responsive to their needs (Carney et al., 1999).

UNDP model focuses an asset-based approach, emphasizing the promotion of people's access to and sustainable use of the assets upon which they rely as central to poverty reduction. It stresses the need to understand the coping and adaptive strategies pursued by men and women. Coping strategies are short-term responses to a specific shock such as drought, while adaptive strategies entail long-term change in behavior patterns as a result of a shock or stress. Both are influenced by people's asset status but also have implications for the composition of the assets themselves, which could be depleted or regenerated. The model lays emphasis on the importance of technological improvements as a means to help people rise out of poverty; people's strengths, as opposed to needs; policy (macro-micro links) and governance; and sustainability. The model has been used especially at a national level as a framework for programming particularly for specific livelihood security programs. As a result, different methodological tools and guidelines have been developed and used for each of the program areas.

2.3 The CARE International Model

The CARE International model has been in use since the mid 1990s and lays emphasis on a people-centered conceptual framework referred to as the Household Livelihood Security (HLS) approach to designing, implementing, monitoring and assessing development intervention programs along the continuum from emergency relief to social and economic development. The CARE international HLS grew out of a food security perspective, but is based on the observation that food is only one basic need among several, and households may sacrifice adequate food consumption to meet other important needs. Today, HLS has become CARE's basic framework for program analysis, design, monitoring and evaluation. The CARE international's model of HLS provides a framework to analyze and understand the web of poverty and people's mechanisms for dealing with it.

CARE International's model emphasizes a capacity building approach to development, and even relief activities, treating people more as active beings in constructing their own livelihoods than as passive recipients of external help. It has grown out of three major shifts in the internal development of the organization: (i) a shift of concern from regional and national food security to a concern with the food security and nutritional status of the household and the individual. (ii) a shift from a 'food first' perspective to a livelihood perspective, which focuses not only on the production of food, but also on the ability of households and individuals to procure the additional food they require for an adequate diet. (iii) A shift from a materialist perspective focused on food production to a social perspective which focuses on the enhancement of people's capabilities to secure their own livelihoods (Drinkwater and Rusinow, 1999).

The asset box includes the capabilities of household members, the assets and resources to which they have access, as well as their access to information or to influential others, and their ability to claim from relatives, the state, or other actors. In so doing, there is a realization that production and income activities are only a means to improving livelihoods and not an end in themselves. To evaluate what changes are

taking place in the livelihood security status of households requires a monitoring focus on the consumption status and asset levels of household members (Drinkwater and Rusinow, 1999.).

The application of the CARE International's model to programming entails a dynamic and interactive process which includes: (i) identification of potential geographic areas using secondary data to find where poverty is concentrated; (ii) identification of vulnerable groups and the livelihood constraints that they face; (iii) collection of analytical data (guided by CARE's overall livelihood model), taking note of trends over time and identifying the indicators that will be monitored; and (iv) selection of the set of communities for programme interventions. (Carney et al.1999). Subsequently, CARE International programs puts particular emphasis on strengthening the capability of poor people to enable them to take initiatives to secure their Natural Resources, Infrastructure, Economic Cultural and Political Environment, Shock & Stresses, Security of: Food, Nutrition, Health, Water, Shelter, Education, Community Participation, Personal Safety, and Household Assets, Human Capital Social Capital Economic Capital, (Livelihood (Claims & (Stores & Capabilities) Access) Resources) Producing & Income Activities, Consumption Activities Processing & Exchange Activities.

The CARE International model recognizes that each household requires both personal and social empowerment in order to have a sustainable livelihood. Personal empowerment refers to enhancing people's confidence and skills while social empowerment refers to the establishment and/or strengthening of existing, representative, community-based organizations to build up the capacity for community members to plan and implement priority development activities which emerge from participatory needs assessments, and in so doing, to provide communities with the means to develop their own principles and structures of democratic representation and governance (Drinkwater and Rusinow, 1999).

Borrowing from the CARE International model, the *Bondo/Siaya Household Livelihood Security Project (Lok Pachi project)* sought to: increase the economic capacity of the target community through improving access to credit from personal savings of up to about KES 8 Million portfolio among the 5,000 savings and lending group members in Siaya and Bondo Districts by 2009; and increase HIV&AIDS Awareness among the 5,000 GS&L group members and their communities on HIV/AIDS and gender to reduce stigma in Siaya and Bondo Districts by 2009

2.3 Components of the Household Livelihood Security

The livelihood framework identifies five core Livelihood security or Asset categories or types of capital upon which livelihoods are built. Increasing access, which can take the form of ownership or the right to use; to these assets is a primary concern in support of livelihoods and poverty elimination. The five include; Human capital, Natural capital, Social capital, Physical capital and Financial capital.

2.3.1 Human Capital

Human capital represents the skills, knowledge, ability to labour and good health that together enable people to pursue different strategies and achieve both their livelihood

strategies and livelihood objectives. At household level human capital is a factor of the amount and quality of labour available; this varies according to household size, skill levels, leadership potential, health status, etc. Human capital is required in order to make use of any of the four other types of assets. It is therefore necessary, though not on its own sufficient, for the achievement of positive livelihood outcomes.

2.3.2 Social Capital

Social capital is the social resources upon which people draw in pursuit of their livelihood objectives. These are developed through, networks and connectedness, membership of more formalized groups and relationships of trust, reciprocity and exchanges. Social capital has a direct impact upon other types of capital: by improving the efficiency of economic relations, social capital can help increase people's incomes and rates of saving (financial capital); it can be effective in improving the management of common resources (natural capital) and maintenance of shared infrastructure (physical capital); and social networks facilitate innovation, the development of knowledge and sharing of that knowledge. There is, therefore, a close relationship between social and human capital.

2.3.3 Natural Capital

Natural capital is the natural resource stocks from which resource flows and services (e.g. nutrient cycling, erosion protection) useful for where livelihoods are derived. There is a wide variation in the resources that make up natural capital, from intangible public goods such as the atmosphere and biodiversity to divisible assets used directly for production (trees, land etc.). Natural capital is important to those who derive all or part of their livelihoods from resource-based activities (farming, fishing, gathering in forests, mineral extraction, etc.). However, its importance goes beyond this. None of us would survive without the help of key environmental services and food produced from natural capital. Health (human capital) will tend to suffer in areas where air quality is poor as a result of individual activities or natural disasters.

2.3.4 Physical Capital

Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods. Infrastructure consists of changes to the physical environment that help people to meet their basic needs and to be more productive. Producer goods are tools and equipment that people use to function more productively. The components of infrastructure usually essential for sustainable livelihoods include affordable transport, adequate water supply and sanitation, secure shelter and buildings, clean and affordable energy and access to information (communication). Lack of particular types of infrastructure is considered to be a core dimension of poverty. Without adequate access to services such as water and energy, human health deteriorates and long periods are spent in non-productive activities such as collection of water and fuel wood. The opportunity costs associated with poor infrastructure can preclude education, access to health services and income generation. Insufficient or inappropriate producer goods also constrain people's productive capacity and therefore the human capital at their disposal. More time and effort is spent on meeting basic needs, production and gaining access to the market.

2.3.5 Financial Capital

Financial capital denotes the financial resources that people use to achieve their livelihood objectives. The two main sources of financial capital are available stocks, which include savings and credit (from credit providing institutions) and regular inflows of money, i.e. pensions or other transfers from the state, and remittances. Financial capital is probably the most versatile of the five categories of assets. It can be converted into other types of capital, it can be used for direct achievement of livelihood outcomes and it can be transformed into political influence and can free people up for more active participation in organizations that formulate policy and legislation and govern access to resources. However, this is also the asset that tends to be the least available to the poor. It is because the poor lack financial capital that other types of capital are so important. There are, in addition, assets or desirable outcomes that may not be achievable through the medium of money (such as different components of well-being and knowledge of human rights).

2.4 Poverty and HIV&AIDS

The link between poverty and the spread of HIV&AIDS has long been recognised. A review of these materials shows that there still exist large gaps in understanding how and why the intersection and interaction of these forces differentially affect individual, household and community livelihoods. Drimie and Gandura (2005) have identified three ways in which HIV&AIDS contributes to poverty. First, they observed that HIV&AIDS reduces the productive capacity and incomes since labour is lost to sickness, caring and death. This often erodes household's capital base which reduces the level of involvement in productive economic activities.

Second, they argue that HIV&AIDS erodes household's resilience to cope with other shocks, particularly as the asset base is eroded and livelihood options are reduced. This increases the household's vulnerability and further exposing the rest of the members to dangers of infection.

Lastly, HIV&AIDS undermines the ability of institutions to effectively respond especially as the professional staffs are affected. This further reduces the overall economic performance. Many hours are lost in sick leave, funerals and some programs are temporarily halted as a result of death. Lamptey et al. (2002) concluded that HIV&AIDS is eroding the socio-economic well-being of households and thus threatening the social cohesion of communities since those most affected are at their productive and income earning years. Barmett and Rugalema (2001) noted that by killing productive adults who are key family providers, HIV&AIDS shatters the social networks that provide households with community help and support. This is particularly pronounced in rural areas where public service may be weak or absent and consequently, traditional community support systems are crucial to impoverished households. There are strong indications that HIV&AIDS may be weakening this crucial social and economic capital particularly as a result of increased deaths among adults and a growing number of orphans which potentially interrupts the flow of traditional knowledge.

Drimie and Gandure (2005) posit that resultant stress from hunger, poverty and disease forces households to adopt a range of strategies to mitigate their impact through multiple livelihood strategies. They classified these strategies into two types:

erosive and non-erosive strategies. Erosive strategies refer to the unsustainable strategies which undermine the household's level of resilience while non-erosive strategies are those strategies whose effects are easily reversible.

Drimie and Gandura (2005) further noted that there is a thin line of difference between the erosive and non-erosive strategies. According to them these strategies depends on a households assets (for example, natural capital, physical capital, financial capital, social capital and economic capital) from which a household can draw upon to make a livelihood. First line strategies such as consumption reducing and switching strategies, withdrawing children from school may be erosive since they can undermine the quality of human capital in future.

There is evidence that the relationship between HIV&AIDS and livelihoods is bi-directional; vulnerability and livelihood insecurity feed into the risky behaviour that drives the epidemic. Consequently, the impact of HIV&AIDS exacerbates livelihood insecurity which again feeds into the risk (Drimie and Gandura, 2005). This interplay of the forces increases the poverty levels and thus increases the vulnerability to HIV&AIDS.

SIDA (2002) noted that poverty deprives people of the freedom to decide and shape their own lives. It thus robs them of the opportunity to choose on matters of fundamental importance to themselves. Lack of power and choice as well as lack of material resources form the essence of poverty.

There is evidence that the interplay of these forces of poverty and HIV&AIDS is visible in Siaya and Bondo which formed the project area for the *Lok Pachi* project. In deed the project was initiated to help mitigate the effects of HIV&AIDS on the affected households. This project was therefore a tool for household empowerment and thus helps improve the household's level of resilience.

2.5. Gender and HIV&AIDS

There is a general consensus that HIV&AIDS is both a health and a social issue. Further, there are wealth of data that shows that HIV&AIDS is a gender issue. Globally there are gender differentials in the prevalence of HIV&AIDS with more females than males being infected with the virus. The KDHS (2003) for instance has demonstrated this phenomenon by showing higher prevalence of HIV among young females compared to males of similar age. The KDHS report shows an overall prevalence of HIV of 8.7% among females and 4.6% among males with the peak prevalence among women being at age 25-29 (12.9%) and men being age 40-44 (8.8%). Thus women are more susceptible to HIV particularly young women.

According to Walker (2002) the relative vulnerability of women than men to HIV infections can be attributed to a number of interlocking reasons which include female physiology, women's lack of power to negotiate sexual relationship with partners, especially in marriage, and the gendered nature of poverty, with poor women particularly vulnerable. Women therefore are thus deprived of the power and freedom to decide and shape their own lives. Drimie and Gandure (2005) argue that the observed inequalities in gender often run parallel to inequalities in income and assets. Women, it can be said, are not only vulnerable to HIV&AIDS infections but also to the economic impact of HIV&AIDS. Waterhouse and Vifjhuizen (2001)

attribute these trends to gender power relations especially in rural households. Increased economic insecurity therefore makes women vulnerable to sexual harassment and exploitation especially with regard to trading in sexual activities to secure income for household needs (Loewensan and Whiteside, 1997).

Drimie and Gandure (2005) have identified four major gendered effects of HIV&AIDS. First, is the breakdown of household regimes and attendant forms of security. Changes in economic activities especially in the wake of Structural Adjustment Programs (SAPs) and changes in gender relations have placed many women in increasingly difficult situations; including greater household responsibilities. For example more active care giving for sick and dying relatives have been added to existing workload. Children have been withdrawn from school, usually girl children first, to save both on cost and to add to labour in the household. In this way, HIV&AIDS is facilitating a further and fairly rapid differentiation along gender lines.

Two, loss of livelihoods: HIV&AIDS has made the availability of cash more problematic to women whether they are receiving remittances from men working away from home, are given “allowances” or earn income themselves. The death of the main breadwinner in the household as a result of HIV&AIDS leaves the rest of the dependants with few relatives upon whom to depend. The discretion of the relatives to help are often influenced by gender and age, which are critical determinants of social exclusion in the face of HIV&AIDS. Loss of significant numbers of members of a household or community, economic collapse and social breakdown may lead to a disintegration of the household or the community.

Three, loss of assets: Substantial investments in medical care occur in many households affected by HIV&AIDS. These costs may be met by disinvestments in assets. Household livelihoods are often affected in negative ways. Furthermore, in many parts of Africa women lose all or most household assets after the death of a husband.

And four, survival sex: Disinvestments, constrained cash flow- all place economic pressures on women. Anecdotal evidence indicates that these pressures push a number of women into situations where sex in exchange for small cash or in-kind payments is possible. This is far much complicated by deep rooted cultural practices that both restrict access to essential tools for economic empowerment and which often impose risky sexual practices to women.

The gendered effects of HIV&AIDS are more pronounced in the rural areas where there is reduced access to productive resources. In many cases women lose their rights to land upon the death of the husband. These trends cyclically put women at greater risk of HIV&AIDS infection while making them more vulnerable to its effects.

2.6. Access and Utilization of HIV&AIDS Services

The advent of Anti-retroviral Therapy (ART) has transformed HIV&AIDS into a chronic treatable condition for a significant proportion of people living with HIV (PLHIV) with access to treatment. The availability of generic ART agents at a much lower cost has led to increased use of ART in developing countries (Nischal et al., 2005). The increased use of ART has meant reduced mortality and morbidity among HIV infected individuals in developing countries. A study in South Africa showed that

the use of ART was associated with slowed disease progression and deaths (Badri et al., 2006). It was also found out that associated reductions in morbidity and mortality led to lower use of in-patient services (Badari, et al. 2006). WHO (2006) has however, pointed out that despite shared trends of mortality reductions in low-income context when compared to high-income contexts, there were reports of early mortality rates in low income contexts. For instance, in Malawi, about 70% of deaths of patients on ART happen in the first months of treatment (MMoH, 2006). These disparities could be attributed to inequalities in access and adherence in low-income contexts relative to high-income contexts.

Important to note is that, despite considerable progress made in increasing access to ART in low-income contexts, there are still massive gaps in access and adherence which raises critical issues for sustainability and equity. In fact, only one person in 10 in Africa and one in seven in Asia in need of antiretroviral treatment were able to access these life saving drugs in 2005 (UNAIDS, 2005; WHO and UNAIDS, 2005). It was however observed that in the years following 2003 the uptake of ART rose significantly from 100,000 persons to 800,000 in 2005 December.

In Kenya much progress has been achieved with more than 4,000 health workers having received ART training according to approved protocol by 2006. And at the same time Kenya had 926 sites for Prevention of mother to child transmission (PMTCT) across the country with 7,562 health workers having received PMCT training using an approved national protocol. These have been up-scaled to all health centres offering maternal health services.

Despite these high levels of up-scaling the level of awareness and utilisation of these services have still remained low compared to the actual numbers requiring these services.

2.7 Theoretical and Conceptual Framework

The study was guided by both a theoretical and conceptual framework which is discussed in the following sections.

2.7.1 Theoretical Framework

The theoretical framework borrows from the Household Livelihood Strategies (HLS) model developed by CARE in 1994. The concept of HLS derives from the classic definition of livelihoods developed by Chambers and Conway (1992), which embodies three fundamental attributes: the possession of human capabilities (such as education, skills, health, psychological orientation); access to tangible and intangible assets; and existence of economic activities. The interaction between these three attributes defines what livelihood strategy a household will pursue. Thus CARE's definition of household livelihood security lays emphasis on capacity building approach to development and even relief activities, treating people more as active beings in constructing their own livelihoods than as passive recipients of external help. This model emphasise two levels of empowerment which are personal empowerment and social empowerment. The personal empowerment refers to enhancing people's confidence and skills (i.e. their human capital) to overcome constraints, principally in the economic sphere. This may include the formation of mutual support and interest groups to commence savings activities, to improve

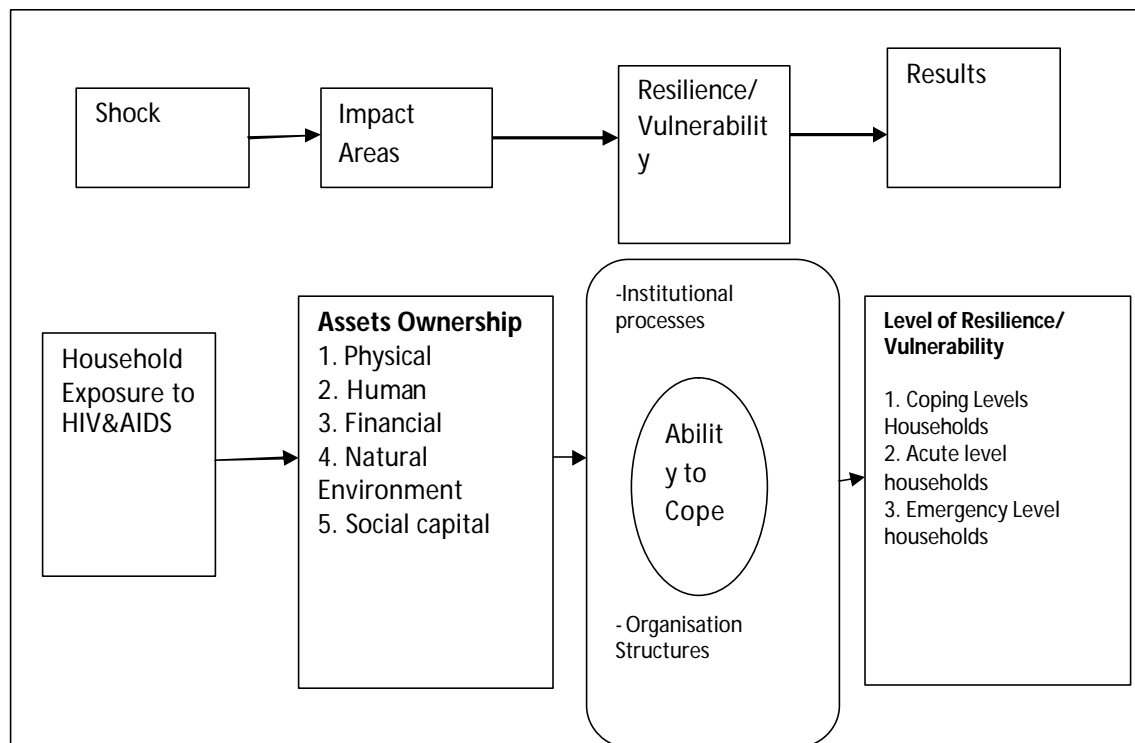
existing income-generating activities, or to identify and start –up more profitable new activities. Addressing gender relations within both the household and community may be an essential part of the strategy.

Social empowerment refers to the establishment and or strengthening of existing, representative, community based organisations to build up the capacity for community members to plan and implement priority development activities which emerge from participatory needs assessments, and in so doing, to provide communities with the means to develop their own principles and structures of democratic representation and governance.

2.7.2 Conceptual Framework

The conceptual framework to be used in the study has been largely been informed by the HLS model. In the link between HIV&AIDS and its impact on household’s livelihoods has been considered. In the figure households exposure levels to HIV&AIDS is conceptualised as a major shocker or stressor on livelihood assets that include physical, human, financial, natural, and social capital.

Figure 1: Conceptual framework on the relationship between HIV&AIDS, poverty and household livelihood security



The physical assets include such things as infrastructure (transport, secure shelter and building, water supply and sanitation, energy and communication) and tools and technology (tools and equipments for production including seeds, fertiliser, pesticides, and traditional technology). The financial assets include

savings/credits/debts, formal and informal sources, NGOs remittances, pensions, wages and cash transfers. Natural capital is conceptualised to include such items like land and produce, water and aquatic resources, trees and forest products, wildlife, wild foods, forest, biodiversity, and environmental services. The social capital include networks and connections (patronage, neighbourhoods and kinship), relations of trust and mutual support, formal and informal groups, common rules and sanctions, collective representations, and mechanisms for participation in decision making and leadership. And human capital includes health, nutrition, education, knowledge and skills, capacity to work and capacity to adopt.

The conceptual framework argues that the household's ability to maintain and maximise sustainable use of these assets is reduced by the high prevalence of HIV&AIDS. This therefore results into high levels of vulnerability and reduces the proportion of resilient households since many households have to adjust to these new developments. The ability to cope with the effects of the shock emanating from the high prevalence of HIV&AIDS can be enhanced by agricultural intensification, livelihood diversification through off-farm activities and wage labour opportunities or by migration. For the households' ability to be upheld, it requires reorientations in the institutional processes and organisation structures. These institutional processes and organisational structures includes the government policies, political and representative institutions, civil society, decision making structures, social norms and customs, and gender.

The interplay between the institutional processes and the organisation structures influences the household's resilient levels or vulnerability levels. It is conceptualised that the resultant effect could be three distinct types of households that include coping level households, acute level households, and emergency households. The coping households will tend to have more income, experience increased wellbeing, improved food security, use the available resource base sustainably and have enhanced skills development. Acute level households will have reduced and or uncertain access to the stated outcomes. This may introduced sudden and salient effects to the households. And in emergency households these outcomes may be absent and immediate external assistance may be required.

This study anticipates that the *Lok Pachi* project have played a role in rejuvenating the livelihoods of the target communities through their two pronged approach of talking poverty and HIV&AIDS to increase the number of households able to cope with the impact of HIV&AIDS in Bondo and Siaya. The study seeks to document the extent to which the adapted Household Livelihood Security approach impacted on selected key livelihood indicators for Siaya and Bondo.

CHAPTER THREE: METHODOLOGY

3.0 Introduction

The study will be an evaluation study employing the use of cross-sectional survey design. It will target the households living in Siaya and Bondo District within the catchment area of the *Lok Pachi* project of CARE-Kenya.

3.1 Study Design, Population and Sampling

The study was conducted using a cross-sectional evaluation survey design that yielded both quantitative and qualitative data. The target population were households Group Saving and Loaning group members living in Siaya and Bondo districts within the catchments area of the CARE International in Kenya *Lok Pachi* project.

3.1.1 Sample Size Determination

The sample was determined using the Fisher et al (1995) method for population below 10,000. This formula first computes the requisite sample size for population more than 10,000 before fitting it in the modified model for populations below 10,000. The Fisher et al (1995) based calculation for the first part of the sample size for population greater than 10,000 is done in equation one next.

Equation 1: For Population more than 10,000

$$n = \frac{(Z^2 \cdot p \cdot q)D}{d^2}$$

Where -:

Z -: is the corresponding standard score with the probability of error at 0.05 and a confidence level of 95%, which is 1.96

P-: is the occurrence level of the phenomenon under study and is equal to 0.5 where the occurrence level is not known

q -: is the absence of the phenomenon under consideration and is equal to 0.5 where the value is not known

D -: is the design effect and is equal to the number of groups to be compared in this case

d -; is the selected probability of error of the study corresponding with 95% confidence level in this case 0.05

Substituting for the values:

$$n = \frac{(1.96)^2 \cdot (0.5) \cdot (0.5) \cdot 1}{0.05^2}$$

$$n = \frac{(3.84)(0.25) \cdot 1}{0.0025}$$

$$n = \frac{(0.9604).1}{0.0025}$$

$$n = (384.16).1$$

$$n = 384.16.$$

$$n = 384$$

In order to determine the sample size for the study, a modified Fisher et al (1995) formula for sample size determination for populations less than 10,000 will be applied in equation two next.

Equation 2: For Populations Less than 10,000

$$nf = \frac{n}{1 + (n/N)}$$

Where:

nf = is the sample size when population is less than 10,000

n = the sample size when the population is above 10,000

N = the population of the target sub-population

Substituting:

$$nf = \frac{384}{1 + (384/6000)}$$

$$nf = \frac{384}{1 + 0.064}$$

$$nf = 361$$

Thus, a total of 361 households would be enough sample size for the study. However, for purposes of covering for attrition, a sample size of 384 households was targeted for the households' interviews.

3.1.2 Sampling Procedure

The sampling procedure commenced with a community mapping exercise to determine all the *Lok Pachi* GS&L group clusters with a view of identifying the 6,000 direct participants to the project for the period 2005 to December 2008. The households were sampled using a triangulation of sampling techniques to ensure a representative sample was selected for the study. The sampling techniques employed included multi-stage cluster sampling, stratified random sampling with proportions, systematic random sampling in combination with simple random sampling for the selection of the actual household GS&L group members for the study. The sampled household GS&L group members were later identified with the assistance of CARE International in Kenya staff and Community Resource Persons.

3.1.3 Sampling Process

The sampling process had several stages that triangulated various techniques to yield the sample size for the end term evaluation. First, the process commenced with community mapping of the entire *Lok Pachi* cluster working areas in Bondo and Siaya districts. This exercise was participatory involving the consultants, the CARE International in Kenya *Lok Pachi* Project staff and Community Resource Persons. This process yielded a sketch of the community map containing the entire project target locations and all the GS&L group clusters in Bondo and Siaya stratified by criteria of administrative division (See Appendix I).

Second, in consultation with CARE International field staff for the *Lok Pachi* project, one hundred and fifteen (115) GS&L group clusters were identified from the developed community map of the project area based on the stratified divisions. Third, simple random sampling was used to select 30% of clusters in each strata division making up a total of thirty five (35) clusters. Fourth, a list of all the GS&L groups in 35 selected clusters was compiled. Using systematic random sampling, 30% of the GS&L groups from the compiled list were selected in each strata division. Fifth, a list of GS&L group members was compiled for the 30% selected groups in each strata division. This list comprised the four hundred and fifty eight (458) households that formed the basis for the actual sampling of the 384 participants for the end term evaluation. The selection of the 384 GS&L group members who participated in the study was done using stratified random sampling with proportions. The rationale behind this was to ensure a representative sample was selected and studied. The actual identification and selection of the household GS&L group members that participated in the study was finally carried out using systematic random sampling in combination with simple random sampling technique. Details of the sampling process and figures are contained in the sampling matrix next

3.2 Data Collection

The study adopted a methodological triangulation in order to obtain the required information to measure the objectives of the study. Specifically, the data collection instruments included interview schedules, Key Informants Interviews, Observation Checklist, use of secondary data, review of project reports, review of groups savings and loan groups records, individual business records and case reviews. The interviews targeted households' heads or the direct beneficiary in the case where the households benefitted directly. The key informants' interviews targeted the persons who are considered to have more information on the study objectives. Observations check list were used to assess the asset base of the household and any changes that might have occurred between the inception of the project to the time of study. The secondary data were used for purposes of verifications and comparisons. The secondary data included project data and government data and reports. A review of the projects reports, group savings and loans groups was done to provide an in-depth understanding of the issues under considerations. A case review of purposively selected beneficiaries and non-beneficiaries were conducted in order to get more understanding of the dynamism of household livelihood in the selected populations.

CHAPTER FOUR: FINDINGS OF THE EVALUATION

4.0 Introduction

This chapter presents the study findings and provides a comparison with the already existing data on the project from inception and other reports. Specifically the section presents the background characteristics of the study participants; household livelihood security; gender empowerment; knowledge attitudes and practices towards HIV&AIDS; access and utilization of HIV&AIDS support services; gender, organization, implementation and outcomes of *Lok Pachi* project; and efficiency, relevance, effectiveness and sustainability of *Lok Pachi Project*

4.1 Background characteristics of respondents

The background characteristics reviewed in the study included gender, marital status, type of marriage, type of household, occupation, age and duration of membership in a Group Savings and Loans (GS&L) Group.

4.1.1 Gender of the GS&L Members

Gender is an important variable in the development process. This is essentially because there are often general tendencies to sideline one part of the gender in many development programs especially women. This, with time, has led to a skewed development especially in favour of men. In this study as indeed in the project efforts were made to focus on both gender with special attention to women who have been largely been marginalised.

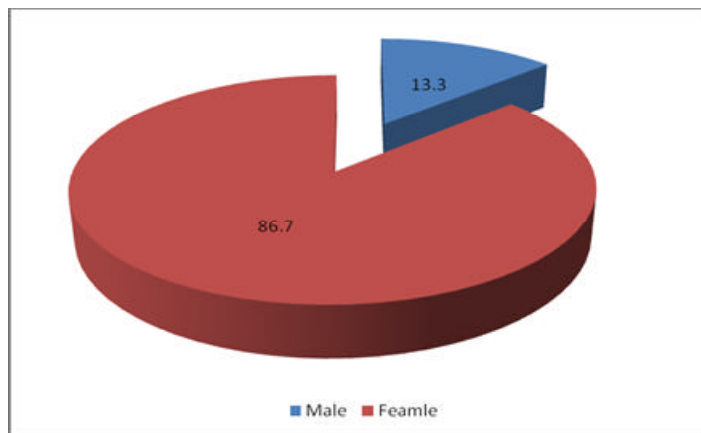


Figure 4.1: Distribution of respondents by Gender

As is indicated in Table 4.1 most of the respondents in the study were females accounting for 86.7% with males accounting for the rest 13.3%. This was considered representative since majority of the members of the GS&L groups in the study area are women.

4.1.2 Marital Status

The marital status of the GS&L members is critical in understanding the spill over effects of the benefits of *Lok Pachi* project to the spouse and other members of the

household. It is within this framework that the variable of marital status was included in the study to determine the extent of benefit of the project. Results on this variable are presented in Figure 4.2.

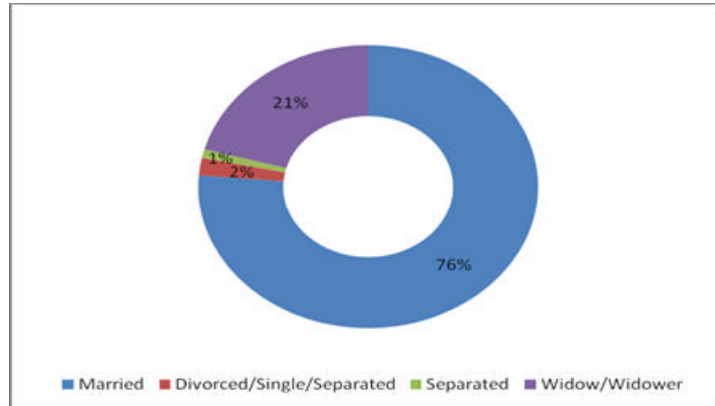


Figure 4.2: Distribution of respondents by marital status

Findings in Figure 4.2 show that over three quarters (76%) of the interviewed GS&L members were married, while slightly over one fifth (21%) were widowed, with 3% either divorced, single or separated. The higher (76%) percentage of those married GS&L members is an indication that there are some indirect beneficiaries from the project possible as spouses to the members. This probably explains, in a large way, the existence of the 25,000 beneficiaries out of the targeted 6,000 direct participants to the *Lok Pachi* Project.

4.1.3 Type of Marriage of GS&L Members

Marriage type has significant implications to the *Lok Pachi* Project. In fact, where the type of marriage is polygamous, it means that more people are likely to be indirect beneficiaries to the project. Type of marriage as a variable therefore, was key in trying to determine the number of beneficiaries to the project with possible suggestions to expand the target population and for sustainability in case CARE International in Kenya was to exit from the project. Findings of the study are contained in Figure 4.3.

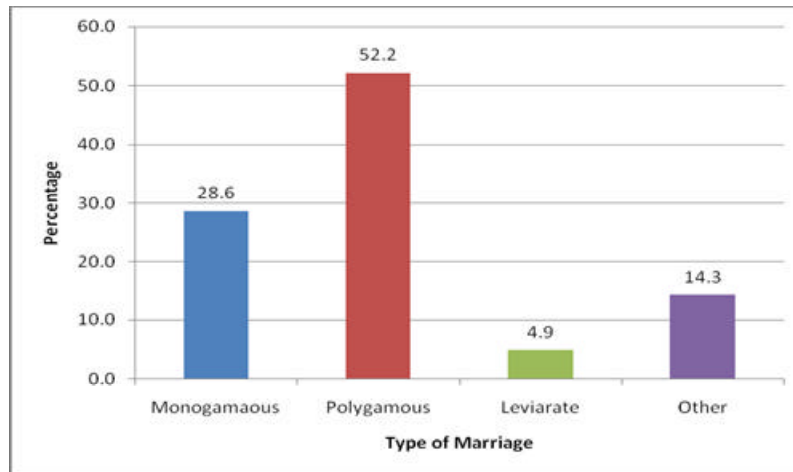


Figure 4.3: Distribution of respondents by Type of marriage

It is evident from Figure 4.3 that slightly over one half (52.2%) of the GS&L members were in polygamous marriages, while over one quarter (28.6%) were in monogamous unions. The remaining were either in levirate (4.9%) marriages or other forms of marriages (14.3%). The finding of the study on most (52.25%) of the GS&L members being in polygamous unions confirms an earlier finding of the study and project that there are more (25,000) indirect beneficiaries than the targeted population (6,000). The latter finding has implications for expansion and sustainability of the *Lok Pachi* project.

4.1.4 Type of Household Headship

The study attempted to establish the power relations within the households of GS&L members participating in the study by sourcing for information on the headship of the household.

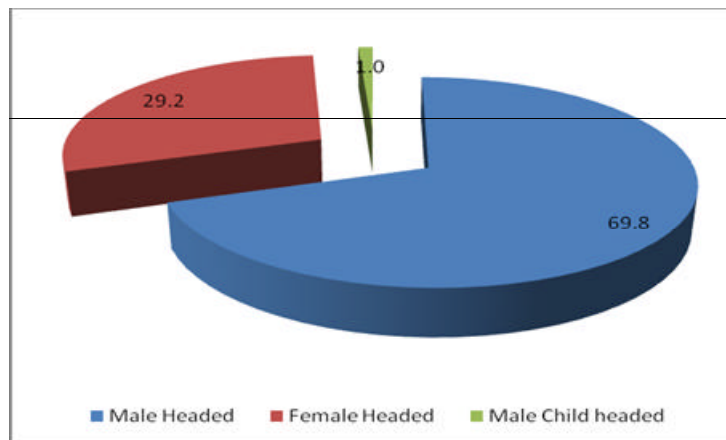


Figure 4.4: Distribution of respondents by type of household headship

This kind of information was deemed critical especially for decision making purposes regarding the running of the household and the expenditure of the proceeds

generated from the GS&L groups. Such information was also necessary for understanding gender relations and the impact of the *Lok Pachi* project on women empowerment. Figure 4.4 clearly shows that almost 70% (69.8%) of the interviewed GS&L members reported that they were in male headed households, with 29.2% and 1% saying that they were in female and male child headed households respectively. The higher (69.8%) percentage of the respondents reporting male headed households is a reflection of most African societies which are predominantly patriarchal in nature. This is probably also the reasons for the male child headed households (1%) reported in this study.

4.1.5 Occupation

The results presented in Figure 4.5 indicates that the largest proportion of the respondents were farmers (50.7%) followed by business persons (21.6%) and petty traders (20.7%). The other occupations mentioned included fishing (2.1%), teacher/civil servant (2.1%), employee of the private sector (1.8%) and agricultural wage labourer (0.7%). Thus the main occupations of the sample population are agriculture business and petty trade. These ventures are often vulnerable to socio-economic and climate variability. This therefore means that this is a vulnerable population and thus necessary mechanisms are required to increase the level of resilience to socio-economic and climatic vagaries.

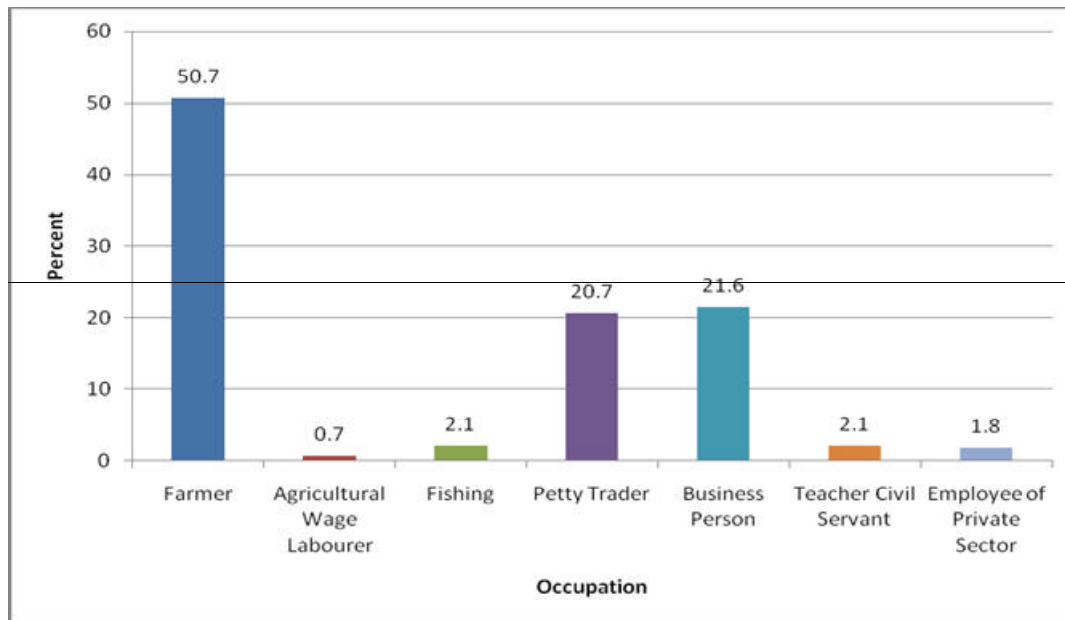


Figure 4.5: Distribution of respondents by occupation

4.1.6 Age

Table 4.1 shows that the largest proportion of the respondents were aged 31 to 35 years (15.2%) followed by 51 to 55 years (13.6%), 41 to 45 years (13.4%), 36 to 40 years, 26 to 30 years and 56 to 60 years (10.4% each), 60 year and older (8.6%) and

25 years or younger (7.1%). The lowest age was 19 years while the oldest in the sample was 82 years. The mean age of the 43.39 and a standard deviation of 12.687 meaning that there was more of an even spread in the age from the lowest to the highest. Thus the sample is largely representative of all the populations' strata including the elderly who are a growing segment of caregivers of orphaned and vulnerable children. This therefore means that the project reached a wide segment of the populations with various needs and who are often vulnerable and have no or limited access to the credit from the formal institutions.

Table 4.1: Distribution of respondents by age

Age	Frequency	Percent
25 Years or Younger	27	7.1
26-30 Years	40	10.5
31-35 Years	58	15.2
36-40 Years	41	10.7
41-45 Years	51	13.4
46-50 years	40	10.5
51-55 Years	52	13.6
56-60 Years	40	10.5
60 Years and Older	33	8.6
Total	382	100.0

4.1.7 Duration of Membership in a GS&L Group

Duration of membership to GS&L is an indicator of members' commitment to the group as well as a sign that there are benefits accruing from such membership. Findings of the study in Table 4.2 show that the largest proportion of respondents joined the GS&L groups in 2007 followed by 2006, 2008 2005 and 2009 respectively. The distribution of respondents reflects the pattern of growth in membership in the GS&L groups.

Table 4.2: Distribution of respondents by year of Membership to GS&L Group

Year	Frequency	Percent
2005	25	6.5
2006	106	27.6
2007	149	38.8
2008	91	23.7
2009	13	3.4
Total	384	100.0

4.2 Household Livelihood Security

Household livelihood security was the main focus of the *Lok Pachi Project* and its outcome are therefore important indicators of the course of the project and its achievements. As highlighted in the conceptual framework, attention was paid to selected components of the five major capital inputs in the livelihoods framework. Specifically, the discussion focuses on the gains made in crucial indicators of human capital, natural capital, financial capital, physical capital and social capital.

4.2.1 Human Capital

Human capital is a critical component of any development endeavour. In fact, human capital is responsible for wealth creation. Where there is existence of other factors of production such as capital, land and equipment but no human power, production comes to a halt. This was also true for the GS&L groups that operated on the premise of availing capital to the members to engage in productive economic activities. The issues considered under human capital included labour capacity, education, specialised training, food and health. Findings of the study in relation to the various components of human capital considered in this study are presented in Figure 4.6.

Labour capacity

Results in Figure 4.6 reveal that 33.8 percent of the interviewed GS&L members reporting that labour capacity improved very much, while 31.4% indicated that there was moderate improvement, with 20.4% reporting slight improvement and 8.4% and 6.0% saying there was no change and labour capacity worsened respectively. The finding on improved labour capacity (85.6%) is a clear indication of the benefits accruing from the *Lok Pachi* project in terms of availing capital for investment and various training programmes to enhance capacity of members to run the GS&L groups efficiently and effectively. A gender analysis of the perceived improvement in labour capacity showed a slight variation with 88.2% of males experiencing improvements¹ as compared to 85.2% of the females. The near equal proportion of both males and females reporting improvement in labour capacity shows that there was some progress made towards gender equity in the project intervention.

Access to education

Significant results were also reported on the component of human capital designated as access to formal education by the respondent's dependents. More precisely, almost 43% (42.9%) of the interviewed GS&L group members indicated that access to formal education improved very much, while 31.2% reported moderate improvement. Others reported slight improvement (18.3%), while those reporting no change and worsened access to formal education were 4.7% and 2.9% respectively. The reported improvement (92.3%) in access to formal education can actually be attributed to GS&L group benefits as most interviewed members indicated that they used the proceeds and loans borrowed from GS&L groups to pay school fees for their children. More females (93.1%) than males (88.2%) reported improvements in

¹ Including all those indicating improved slightly, moderately improved and improved very much. This will be used for all gender analysis in the subsequent variables with similar measurements.

access to formal education. This shows that the project made good progress in enhancing access to education with female members reporting much more improvements than males. This is particularly encouraging given that women form a relatively larger proportion of the poor in rural settings.

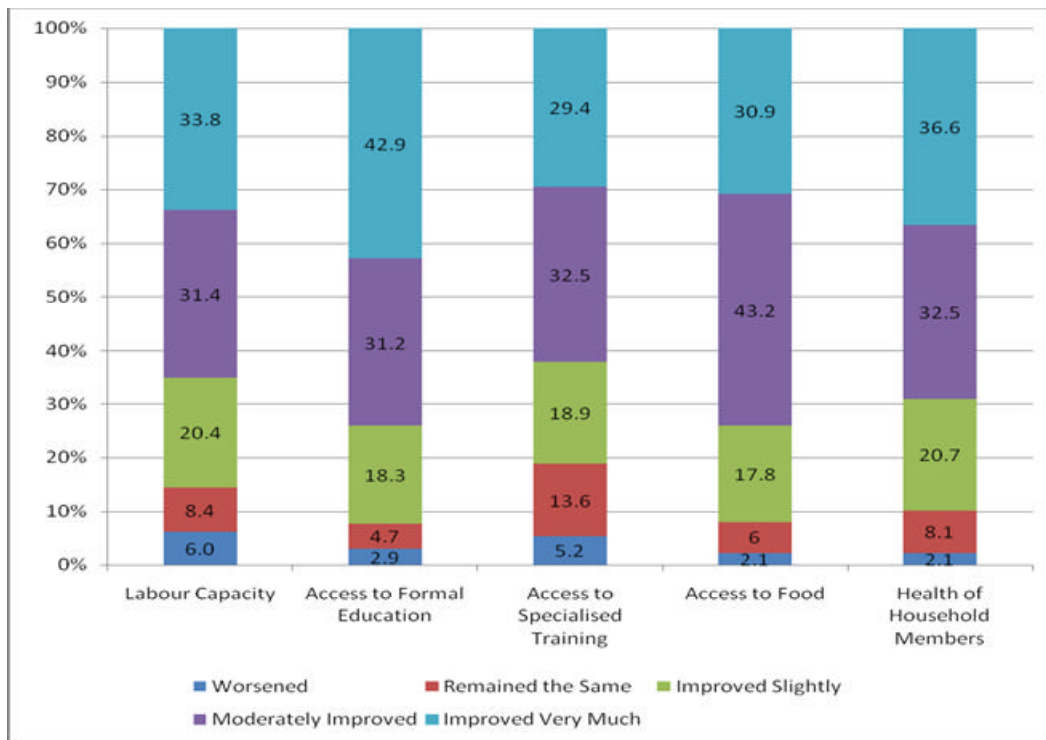


Figure 4.6: Perceived changes in selected indicators of human capital

Specialised training

With regard to access to specialised training, results in Figure 4.6 show that 29.4% of the interviewed GS&L group members said that it improved very much, while 32.5% of the members reported moderate improvement. Those reporting slight improvement were 18.9% while 13.6% and 5.2% registering no change and worsened access to specialised training respectively. Overall, slightly over four fifths (80.8%) of the interviewed GS&L group members reported improved access to specialised training further supporting an earlier finding of this study on improved access to formal education reported by the members. The specialised training referred in here included the various module covered by CARE International in Kenya to build capacity of the member in managing the various accounting books and short courses on investment and HIV&AIDS. Further analysis showed that 76% of males as compared to 81.8% of the females indicated some improvements in their level of access to specialised training. This showed a greater involvement of women in development process and thus major gains in women empowerment.

Access to Food

Another critical component of the human capital with significant implications for household livelihood security is access to food. In fact, without food there is no energy generation for the various economic activities aimed at enhancing household livelihood security by the *Lok Pachi* project. Findings of the study reveal that almost 31.0% (30.9%) indicated that access to food improved very much, while 43.2% registered a moderate improvement. Those reporting slight change, no change and worsened food access were 17.8%, 6.0% and 2.1% respectively. The reported improvement in access to food by 91.9% of the interviewed GS&L members is remarkable and a reflection of improved access to finance and an improvement in technology in food production. Comparatively, more males (98.0%) than females (90.9%) reported having experienced improvements in access to food. The gender variations perhaps showed that women than men could be more vulnerable to the effects of climate fluctuations given that at the time of study there was a widespread drought that affected the food base of many households. Nonetheless, the slight variation in the proportions indicate major gains by the project in uplifting the plight of women.

Health Status of Members of Household

The last component of human capital considered for the study was the health status of the household members. It should be noted that health is a critical component of household livelihood security in that a health household is capable of generating more wealth contributing positively to the enhancement of livelihood security as engineered by the *Lok Pachi* project. Figure 4.6 shows that 36.6% of the interviewed GS&L group members indicated that the health of household members improved very much, while 32.5% reported a moderate improvement in the health of household members. Others reported slight improvement (20.7%), no change (8.1%) and worsened (2.1%) health status of household members. The reported improvement in the health of the household members by 89.8% of the interviewed GS&L group members is a clear indication of the benefits accruing from the project. There were very slight variations by gender in the improvements of the health status of members of households with 90.2% of males indicating they experienced some improvements as compared to 89.7% of females. Thus, the benefit to the members of the participants households were reported equally by both males and females. As discussed elsewhere in this report, one of the main uses of money borrowed from the GS& L was on meeting health related expenses.

Nutrition and Health

The nexus between nutrition and health cannot be gainsaid. It was within the confines of this relation that this variable was included in the analysis. The study assessed different components of nutrition and health including the main source of food, changes in households food supplies, number of meals taken within seven days prior to the study, and patterns in food servings.

Main Source of Household Food

The results presented in Figure 4.7 shows the major sources of household food.

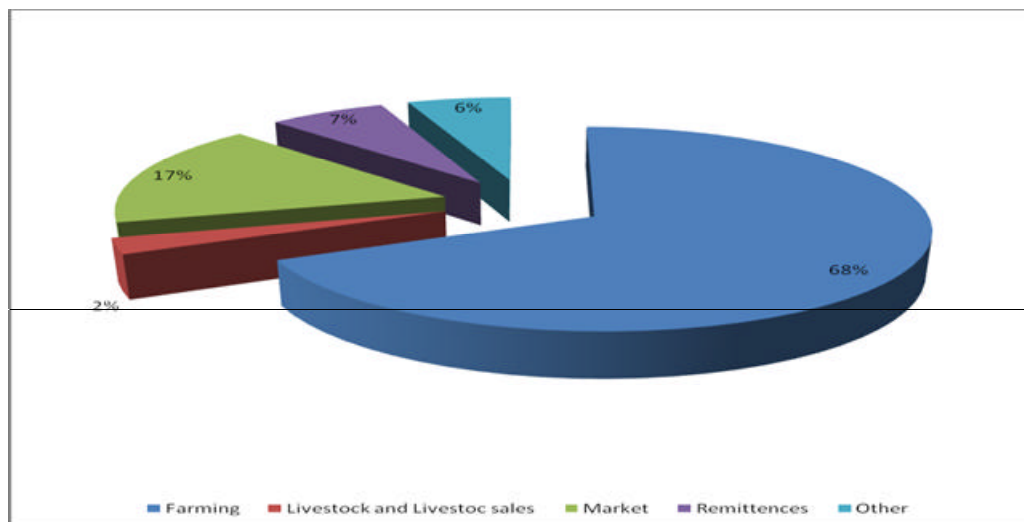


Figure 4.7: Main sources of household food

The figure indicates that the major source of households food in the study areas was farming (68%), followed by market (17%), remittances from relatives (7%) and 6% from other sources with the least contributor being livestock and livestock sales. It is therefore not surprising as discussed earlier the main occupation in the study area is farming.

Changes in Food Supplies

Food security was one of the key components of the study's livelihood security targeted by the *Lok Pachi* project. The rationale behind this is simple that food is one of the most critical basic needs in any household. Thus, changes in the supply of food was expected to destabilize the pursuant and achievement of other household livelihood security such as access to education and household health status. Findings of the study on changes in food supplies are aptly presented in Figure 4.8. From Figure 4.8 it is evident that most (33.0%) of the interviewed GS&L group members indicated that there was improvement in food supplies, while one quarter (25.0%) of the respondents reported that there was moderate change in food supplies. The remaining said that food supply improved slightly 32.0%, no change (6.0%) and that the supply of food worsened (4.0%). The registered improvements in food supply reported by 90% of the participants of the study demonstrate a significant change in food security in the area given the deepening world food crisis. More importantly, there were no major variations by gender in the reported improvements with 90.2% of the males indicating some improvements as compared to 90.6% of the females. The finding can actually be attributed to the increased cash flow that has enabled GS&L members to participate in various investment opportunities by borrowing loans to invest from the groups and hence enhancing their food purchasing power.

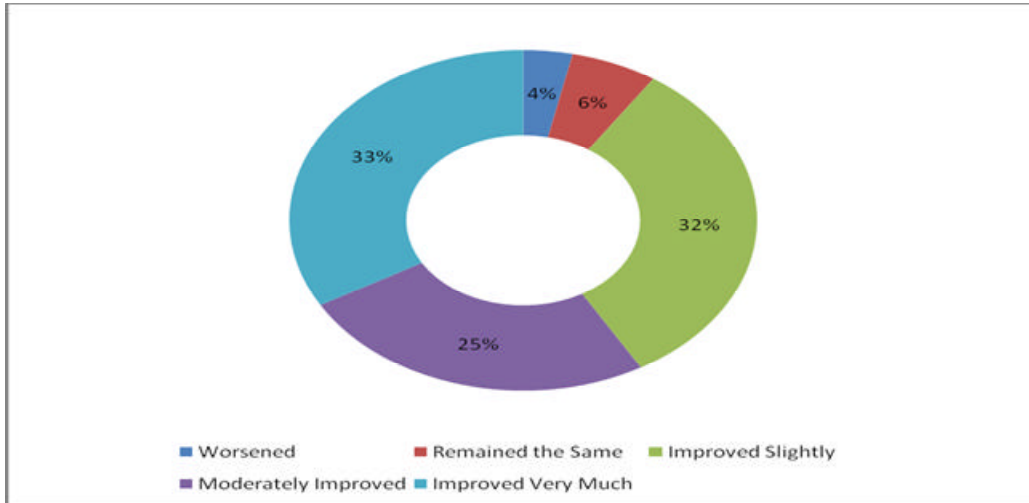


Figure 4.8: Changes in household food supplies

Number of Meals

The number of meals taken in a household is a key indicator of food security of the home. Where food intake is erratic, it compromises productivity in other key components that work to strengthen household livelihood security such as health, access to education and specialised training. Findings of the study on the number of meals taken in the household per day are presented in Figure 4.9.

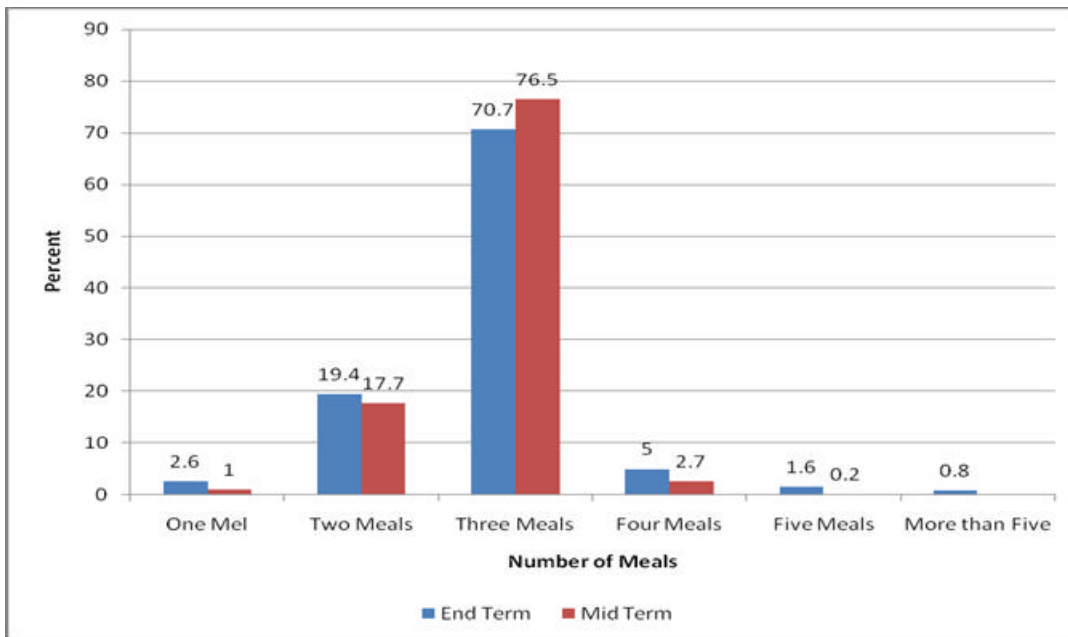


Figure 4.9: Average number of meals taken seven days prior to survey

The variable number of meals households consumed per day was compared between the mid and end term periods of the *Lok Pachi* project. Findings show that

there was a slight drop from 76.5% in the mid-term to 70.7% in the end term period of those taking three meals per day. This slight (5.8%) drop may be attributed to the two global crises namely financial and food deficiencies and the prolonged drought experienced in 2009. Further, Figure 4.9, however, shows that there was a slight improvement in those GS&L members accessing two meals a day from 17.7% in the mid-term to 19.4% in the end term period. The slight (1.7%) improvement may be a result of improved households' access to loans, a benefit accruing from GS&L membership.

Changes in food servings

This variable was included in the study to establish the trend of change in food servings during the mid-term and end term of the *Lok Pachi* project. The idea is to gauge the impact of the project with regard to food security in the project area. Findings of the study are carried in Figure 4.10.

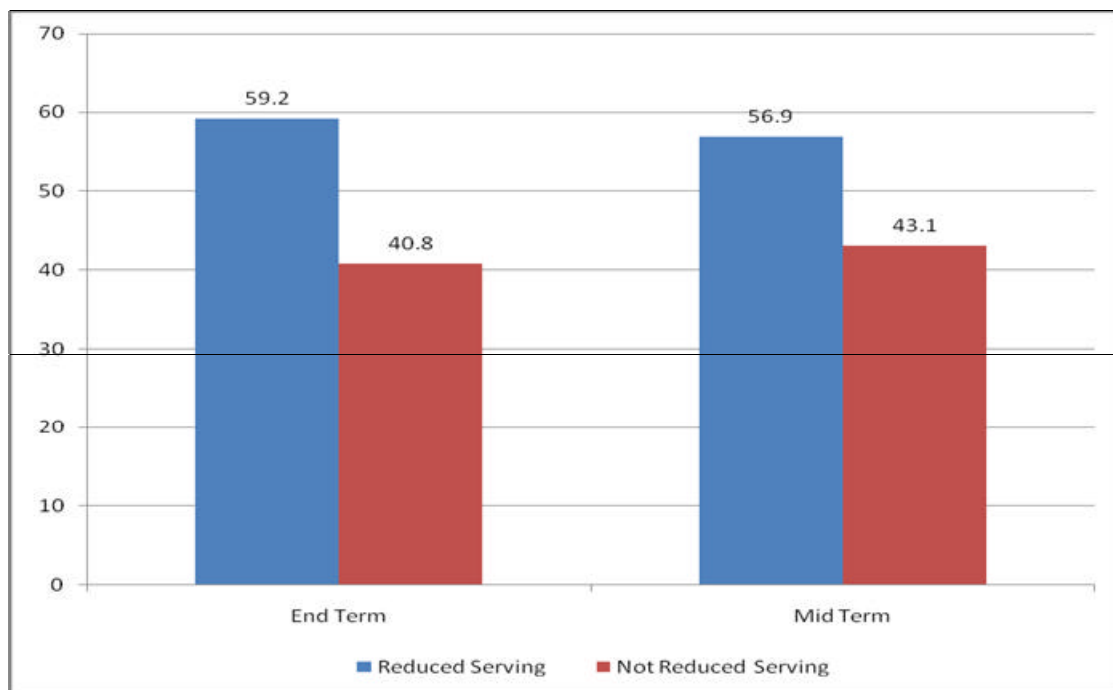


Figure 4.10: Changes in food servings by time of study

From Figure 4.10 it is apparent that there were marginal changes in the proportions of food servings between the mid-term and the end term surveys. It is shown that slightly more households reduced the servings of meals at the end-term survey than at the mid-term review. These changes could be attributed to the long drought that preceded the end term survey. Further analysis indicated that there were discernable variations by gender in the reported reductions in food servings with 58.9% of females as compared with 49.0% of males reporting reductions in food servings.

4.2.2 Natural Capital

Natural capital is one of the key resources that can be tapped for the improvement of household livelihood security. In this regard, its inclusion is fundamental in understanding its place in complementing the *Lok Pachi's* GS&L group strategy in empowering households' financial positions through a loaning scheme with no collateral needs. In fact, access to natural resources such as land enhances investment opportunities for the loans borrowed by members from the GS&L groups. Results of the study are discussed on the basis of various indicators of natural capital next.

Perceived changes in natural capital

The CARE International in Kenya *Lok Pachi* end term evaluation targeted the perceptions of the GS&L group members of the changes in natural capital as measured by various indicators. The indicators reviewed by the study included access to land, common pool resources, and farm and off-farm resources. The results are presented in Figure 4.11.

Access to land

Findings of the study with regard to the first indicator of natural capital namely land show that slightly over one quarter (26.7%) of the interviewed GS&L group members said that access to land has improved very much, while 27.5% reported that it had improved moderately. Those who reported slight improvement were 25.9%, with 16.0% reporting no change and 3.9% saying that access to land has worsened since they joined GS&L groups. The reported improvement (80.1%) in access to land is a surprising finding given the higher female composition of the GS&L members selected for the study. Moreover, a gender analysis indicated that more females (80.5%) than males (76.0%) indicated having experienced some improvements. The finding can probably be attributed to gender empowerment on the rights of the GS&L group members on their rights to access land as an investment option for their savings and loans from group affiliation.

Access to common pool resources

Figure 4.11 also depicts that 29.1% of the interviewed GS&L group members indicated that access to common pool resources² had improved very much since they joined GS&L groups, while 32.2% reported a moderate improvement. Those reporting slight improvement were 18.6%, no change 16.0% and that saying it has worsened were 4.2% of the total interviewed GS&L household group members. The reported improvement by almost 80.0% (79.9%) of the interviewed GS&L group members in the access to common pool resources can be attributed to their membership to the GS&L groups that enhanced the members' ability in working together. There were however slight variations in the reported improvements by gender with 82.4% of the males indicating improvements in comparison to 79.5% of the females. These variations were slight therefore there was general improvements in access to common pool resources across all gender.

² Common pool resources refers to shared resources like animal watering points and grazing land

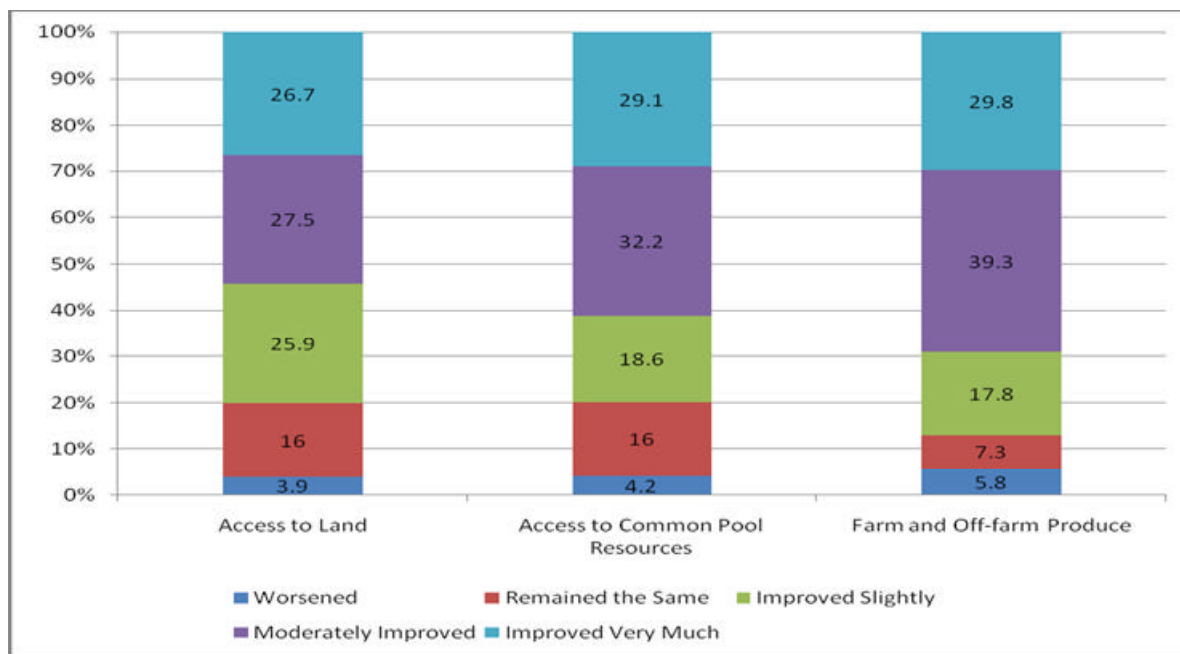


Figure 4.11: Perceived changes in selected components of natural capital

Access to Farm and Off-Farm Produce

Further, natural capital was measured using farm and off-farm produce. Findings of the study in Figure 4.11 reveal that 29.8% of the participating GS&L group members rated farm and off-farm produce to have improved very much since they joined GS&L groups, while 39.3% reported a moderate improvement. Of the total sample, 17.8% reported slight improvement, while 7.3% and 5.8% reported no change and worsened access to farm and off farm produce. There was slight variation between males (86.3%) and females (87.0%) in reported improvements in access to farm and off-farm produce. Thus, access to farm and off-farm produce improved across the gender.

Land Ownership

Land ownership has significant implications for household livelihood security with regard to the establishment of permanent housing, investment in agriculture and even use as security to secure a loan from financial institutions. Land ownership under *Lok Pachi* project was significant in availing investment opportunities for the loaned and as a measure of economic and human rights empowerment of the majority female GS&L group members as shown in an earlier finding of this work on membership of GS&L by gender. Findings of the study on the ownership of this critical resource by GS&L group members are presented in Figure 4.12. The figure indicates a marginal decline in the proportion of household heads owning land between the period prior to joining a GS&L group. As shown the proportion owning land was 82.6% before joining the GS&L group to 76.4%. The decline was largely due to older persons who had transferred ownership to their young children. The intergenerational transfer of ownership denied the old of ownership rights but they still retained access to the proportions designated to them for agricultural activities.

Gender analysis of the changes in mean land ownership showed a decline from 2.99 acres to 2.72 acres for male respondents and 2.34 acres to 2.13 acres for female respondents. The declines in land ownership are a general trend largely attributed to high population growth rate. Despite the reduction in land ownership there were indications that there was improved use of appropriate technology in agricultural activities, as discussed elsewhere, with increased access to and use of fertilizers and agricultural extension services.

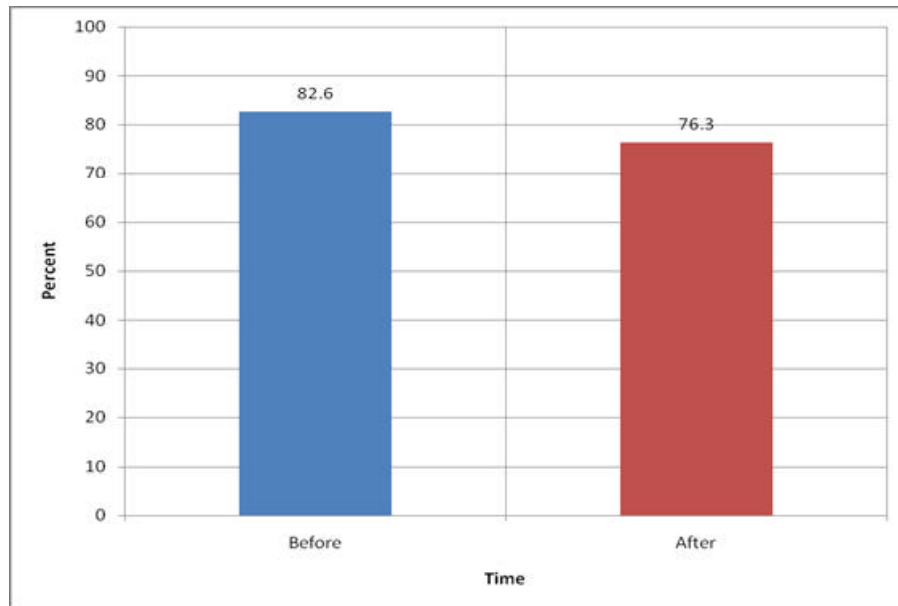


Figure 4.12: Land ownership before and after joining GS&L groups

Access to Public Utilities

Access to public utilities is a high measure to the enhancement of livelihood security and at the same time a measure of human rights standards. It is against this background that the *Lok Pachi* end term evaluation attempted to assess the access to various public utilities by the GS&L group members. The selected public utilities assessed included agricultural extension services, health services, NGO services, workers and farmers union, banking services, GS&L, veterinary Services, and land registration services.

Access to Agricultural Extension Services

Findings of the study in Figure 4.13 shows that over one half (54.4%) of the interviewed GS&L group members accessed agricultural extension services before they joined GS&L groups compared to over three fifths (62.0%) who reported to access agricultural extension services after they joined GS&L groups. The improvement can be attributed to improved access to financial resources accruing from GS&L membership in form of savings, dividends and loans. The improved access meant that the households were able to access the required farm inputs such as certified seeds and fertiliser and so they required expert advice.

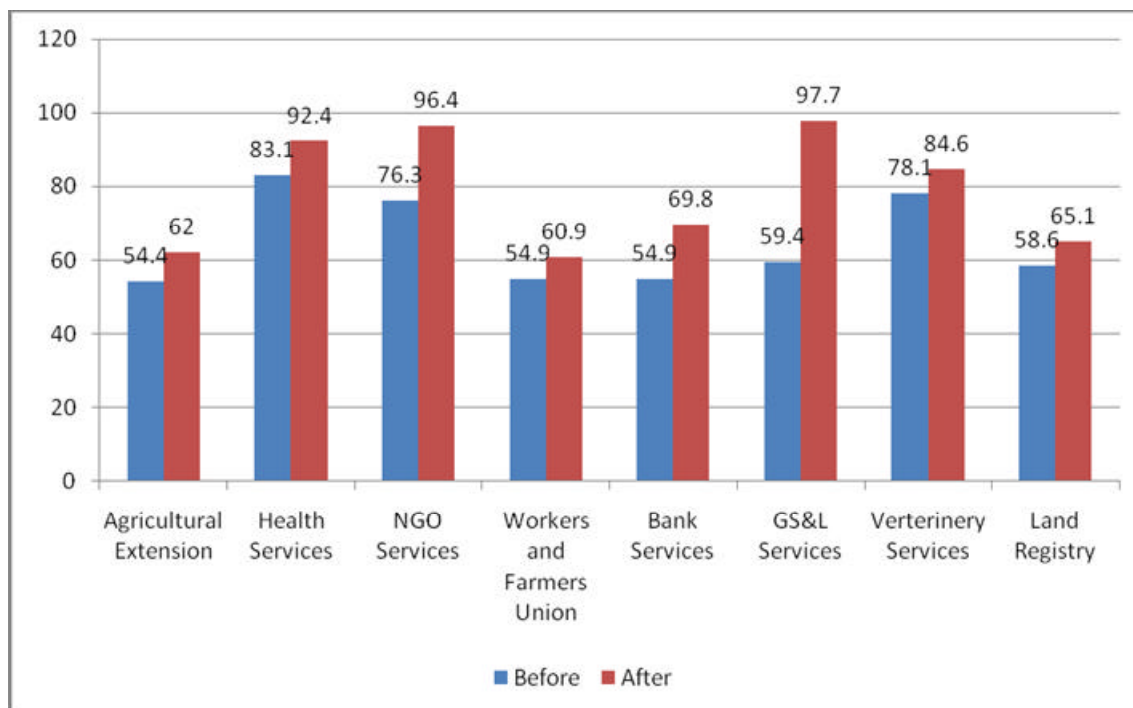


Figure 4.13: Access to public utilities by time

Health Services

Access to health services improved from 83.1% members reporting enhanced access before joining the GS&L groups to 92.4% after joining the GS&L groups. Such improvement can actually be attributed to social and economic empowerment, both consequences of group affiliation to the savings and loaning groups. This is because access to health services has financial implications in terms of transport and fees for services that affiliation to GS&L groups might have provided reprieve for the much needed resources to access health care among the members.

Workers and farmers Unions

Membership to workers and farmers unions also registered improvement from 54.9% before members joined GS&L groups to almost 61.0% (60.9%) after respondents joined the groups. The latter improvement in accessing these services may be as a result of GS&L group members seeking for investment information and opportunities for agricultural based enterprises that they would want to start from the loans that they may have obtained from their groups.

Banking Services

Figure 4.13 also contains information on GS&L group members' access to banking services. Evidently, almost 55.0% (54.9%) indicated that they had access to banking services before they joined GS&L groups. This figure increased to well over three fifths (69.8%) GS&L group members accessing banking services after they joined the groups. This increase can probably be attributed by the growing lack of risk averseness among members as a result of participating in GS&L group loaning activities.

Group Savings and Loans Groups (GS&L)

The phenomenal increase in those accessing GS&L group services from 59.4% to 97.7% before and after joining GS&L groups respectively is not surprising. The increase can be explained by the growing involvement in group activities by the members which makes them more knowledgeable of the services offered and it also improves social networks, which are avenues of sharing information about the group's capacity and extent of service provision to the members.

Veterinary Services

Further, Figure 4.13 shows an improvement in access to veterinary services from 78.1% to 84.6% before and after respondents joined GS&L groups' respectively. The increase in access to these services can be attributed to increased awareness of the services among members and the ability to pay for those services, both benefits that can accrue from being members of the GS&L groups.

Land Registry

Finally, access to services from land registry also improved from being reported to be accessible by 58.6% to 65.1% of the studied GS&L group members before and after they joined the groups respectively. Increased access to such services may be attributed to growing knowledge of GS&L members to secure their land that is strengthened by their ability through financial empowerment from GS&L group participation to pay for transport fees to the land registry or even pay land rates and charges.

Household Asset Base

Household asset base is an indicator of relative capacity of household livelihood security. More precisely, it indicates the level of household wealth or poverty that can be a sound reflection of the GS&L group members' levels of household livelihood security. The results presented in Figure 4.14 shows that there were marked changes in ownership of some essential household assets such as mobile phones, radio, bicycles and goats in that order. Similarly, the figure depicts marginal changes in the households' ownership of televisions, wheelbarrows, ox-plough, fishing gear, *jembe*, plot, cattle, poultry, donkey and sheep. It was also observed as is shown in the figure that there were reductions in the proportions of household who owned a hoe, and spade.

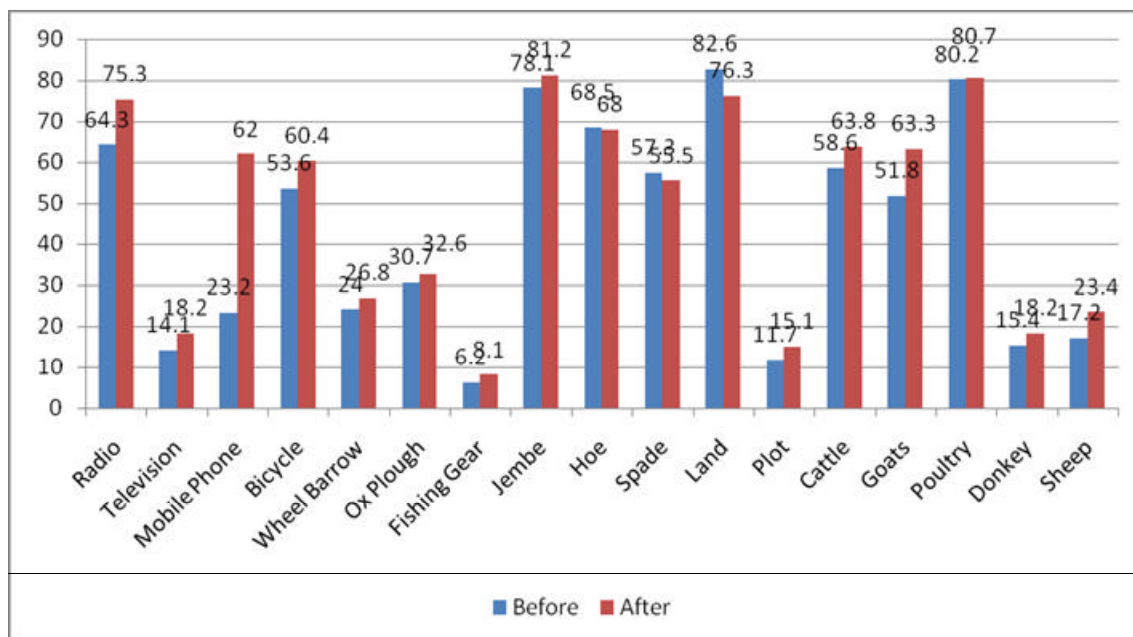


Figure 4.14: Asset ownership before and after joining GS&L

4.2.3 Financial Capital

This is a critical indicator of household asset base in any society. The level of financial capital has direct implications on household livelihood security. Its impact can be seen in housing, food, clothing and even health status of the household. The trend of this variable in this study is presented based on GS&L group members' financial capitals perception next.

Perceived Changes in Financial Capital

The variable perceived changes in financial capital was assessed to examine the level of transformation that has occurred before members joined and after they joined the GS&L groups. Findings of the study are presented in Figure 4.15. Evidence from Figure 4.15 shows that almost 37.0% (36.9%) of the interviewed GS&L group members reported that wages and income improved very much after they joined the savings and loaning groups. Of the total sample, 34.6% revealed that there was moderate change, while 16.5% reported a slight change in wages and income. The rest indicated no change (9.2%) and that the wages and income has worsened (2.9%) since they joined the groups respectively. Those reporting improvement (88.0%) in wages and income after joining the savings and loaning groups may be due to the enhanced cash flow as a result of group activity. That is members have a source of borrowing money whenever they have problems without any security and repayment terms are favourable to the members. There were marginal differences between the reported improvements by males and females at 84.0% and 89.1% respectively. The reported proportions by the females even though lower than that of males is an impressive finding given that females generally report lower access levels and any reported improvement is a move toward the empowerment of women.

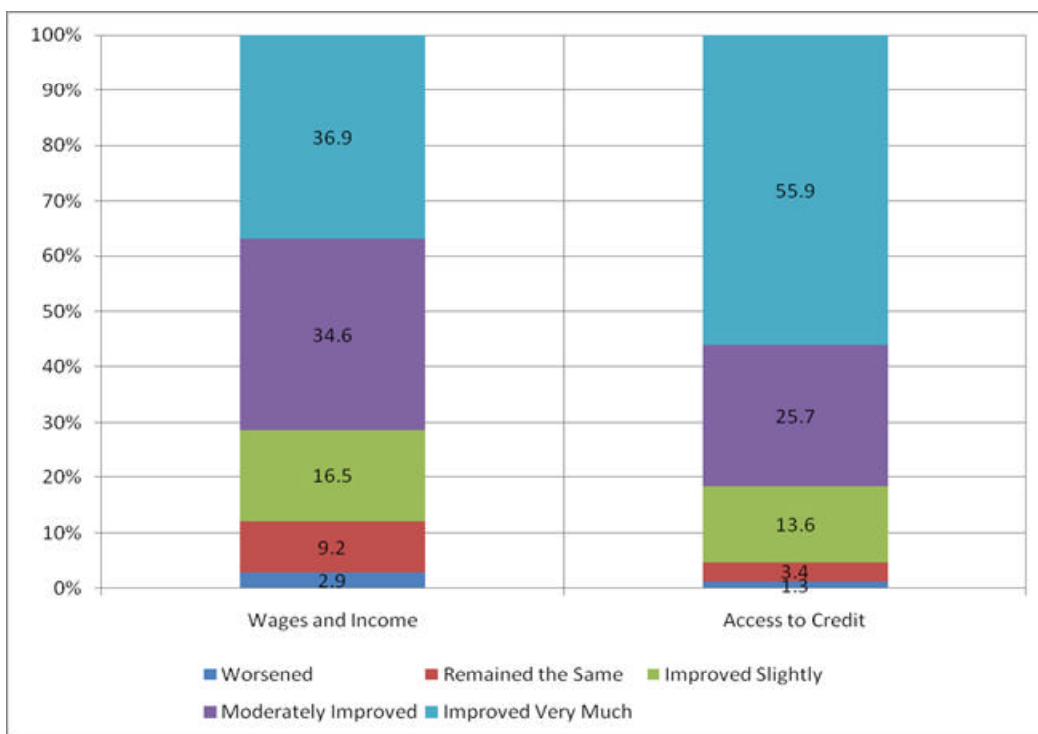


Figure 4.15: Perceived Changes in financial capital

Further, Figure 4.15 reports data trends with regard to access to credit. Findings clearly show that almost 60% (55.9%) of the studied GS&L group members said that access to credit had improved very much and slightly over one quarter 25.7% indicated that there was moderate increase in accessing credit since members joined the groups. Those reporting slight improvement were 13.6%, while other reported no change (3.4%) and that access to credit has worsened (1.3%) respectively. Field observation corroborates this finding that members of GS&L groups were seen to be happy with the ease with which they can access credit without collateral and the usual conditions characteristic of financial institutions. The reported improvements in access to credit did not show major variations by gender with a slightly higher proportion (95.5%) of females indicating improvements as compared to 94.1% of males.

Access to credit

Accessing credit was one of the key strategies of the *Lok Pachi* project in enhancing household livelihood security. This variable was assessed by analysing the mean loan for the GS&L group members for the last three years of their membership to the groups. Results of the study are contained in Table 4.3. It is evident from Table 4.3 that the mean loan for the last three years for the male GS&L group members was KShs. 14,179.02 with a standard deviation of KShs. 17,244.99 compared to females with a mean score of KShs. 11,100.78 with a standard deviation of KShs. 13,819.63. These findings show that males on average borrowed more money than females and that some men borrowed far much money than others compared to females whose

borrowing amounts seems to have been very close to each other as indicated by the relatively small value of standard deviation compared to that of males.

Table 4.3: Mean Loan in the Past 3 Years

Gender	N	Mean in KShs	Std. Deviation
Males	51	14,179.02	17,244.99
Females	327	11,100.78	13,819.63
Total	378	11,516.10	14,342.14

Overall, the mean borrowing for both males and females was KShs 11,516.10 with a standard deviation of 14,342.14. The latter finding suggests that the loans for the studied GS&L group members did have a wide variation as indicated by the value of standard deviation.

Further analysis of the records of all the groups presented in Table 4.4 indicated that they had a cumulative loan portfolio of KShs. 189,574,504 with women having the highest proportion of the portfolio. The table shows that female participants had a cumulative loan portfolio of KShs. 155,563,112 while men had a loan portfolio of KShs. 34,011,392. The Table 4.4 also shows that females had a higher overall mean loans per member (KShs. 26,074.94) than males (KShs. 25,972.67). It was however observed that gender differences in mean cumulative loans varied by location. As is shown in Figure 4.4 females had a higher mean cumulative loan in South Sakwa, East Uyoma, and South West Sakwa while males had a higher mean cumulative loan in Central Sakwa, West Uyoma, Central Uyoma, Siaya and Township. Overall, the participation of women was higher than that of men as is reflected by the higher means of loans for all the locations put together.

Table 4.4: Cumulative and Mean Loans by location

Location	No. Of Groups	Membership			Cumulative Loans			Mean Loans		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
Central Sakwa	122	1217	304	1,521	50,415,445.00	12,758,488.00	63,173,933.00	41,426.00	41,968.71	41,534.47
South Sakwa	81	847	194	1,041	19,484,346.00	4,345,870.00	23,830,216.00	23,003.95	22,401.39	22,891.66
East Uyoma	73	672	110	782	26,026,784.00	2,817,509.00	28,844,293.00	38,730.33	25,613.72	36,885.29
West Uyoma	70	693	152	845	12,446,189.00	3,079,822.00	15,526,011.00	17,959.87	20,261.99	18,373.98
Central Uyoma	73	796	109	905	13,443,697.00	2,878,283.00	16,321,980.00	16,889.07	26,406.27	18,035.34
South West Sakwa	74	665	143	808	18,718,315.00	3,141,984.00	21,860,299.00	28,147.84	21,971.92	27,054.83
Siaya	41	400	130	530	5,426,844.00	1,788,939.00	7,215,783.00	13,567.11	13,761.07	13,614.68
Township	75	676	191	868	9,601,492.00	3,200,497.00	12,801,989.00	14,203.39	16,756.53	14,748.84
Total	609	5,966	1,333	7,299	155,563,112.00	34,011,392.00	189,574,504.00	26,074.94	25,514.92	25,972.67

Number of Transactions and Loans Group Dynamics

Results of the analysis of the number of loans, cumulative amount of loans and number of groups per location are presented in Table 4.5. The results in the Table show that there were a total of 107,160 transactions in the period under review with women having the highest number of (82,966) transactions compared to men (24,194).

Table 4.5: Number of loans transacted and amount per loan and group

Location	No. of groups	No. Of Loans			Mean loan amount			Loans per Group
		Females	Males	Total	Female	Male	Total	
Central Sakwa	122	19,873	4,623	24,496	2,536	2,760	2,579	517,819
South Sakwa	81	14,965	3,949	18,914	1,301	1,101	1,260	294,200
East Uyoma	73	11,770	1,511	13,281	2,211	1,865	2,172	395,127
West Uyoma	70	1,216	7,593	8,809	10,235	406	1,763	221,800
Central Uyoma	73	12,277	1,750	14,027	1,095	1,645	1,162	223,589
South West Sakwa	74	1,1647	2,025	13,672	1,607	1,552	1,599	295,409
Siaya	41	3,865	990	4,855	1,404	1,807	1,486	175,995
Township	75	7,353	1,753	9,106	1,306	1,826	1,405	170,693
Total	609	82,966	24,194	107,160	1,875	1,406	1,769	311,288

The number of transactions also varied by location with the Central Sakwa having the highest number transactions followed by South Sakwa, Central Uyoma, South West Sakwa, East Uyoma, Township, West Uyoma and Siaya in that order. Further gender analysis of the transactions per location as is shown in Table 4.5 indicated that women had higher numbers of transactions in all the locations save for South West Sakwa and West Uyoma where men had more transactions than women.

Table 4.5 also shows that the mean amount of money transacted per loan was KShs. 1,769.08. The Table also shows that the mean varied by location with Central Sakwa having the highest mean followed by East Uyoma, West Uyoma, South West Sakwa, Siaya, Township, South Sakwa and Central Sakwa respectively. A gender analysis of the amount of loan received per loan showed that women received more (KShs. 1,875.02) than the males who received a mean loan amount of KShs. 1,405.78. The gender variations also differed by location with women having higher amounts per transaction in South Sakwa, East Uyoma, West Uyoma and South West Sakwa while men had higher mean amounts per transaction in Central Sakwa, Central Uyoma, Siaya and Township.

Table 4.5 also shows that the highest mean cumulative loan per group was recorded in Central Sakwa followed by East Uyoma, South West Sakwa, Central Uyoma, West Uyoma, Siaya and Township in that order.

Uses of money borrowed

The study attempted to find out how the borrowed money was used by the GS&L members participating in the study. Findings of the study are aptly presented in Figure 4.16.

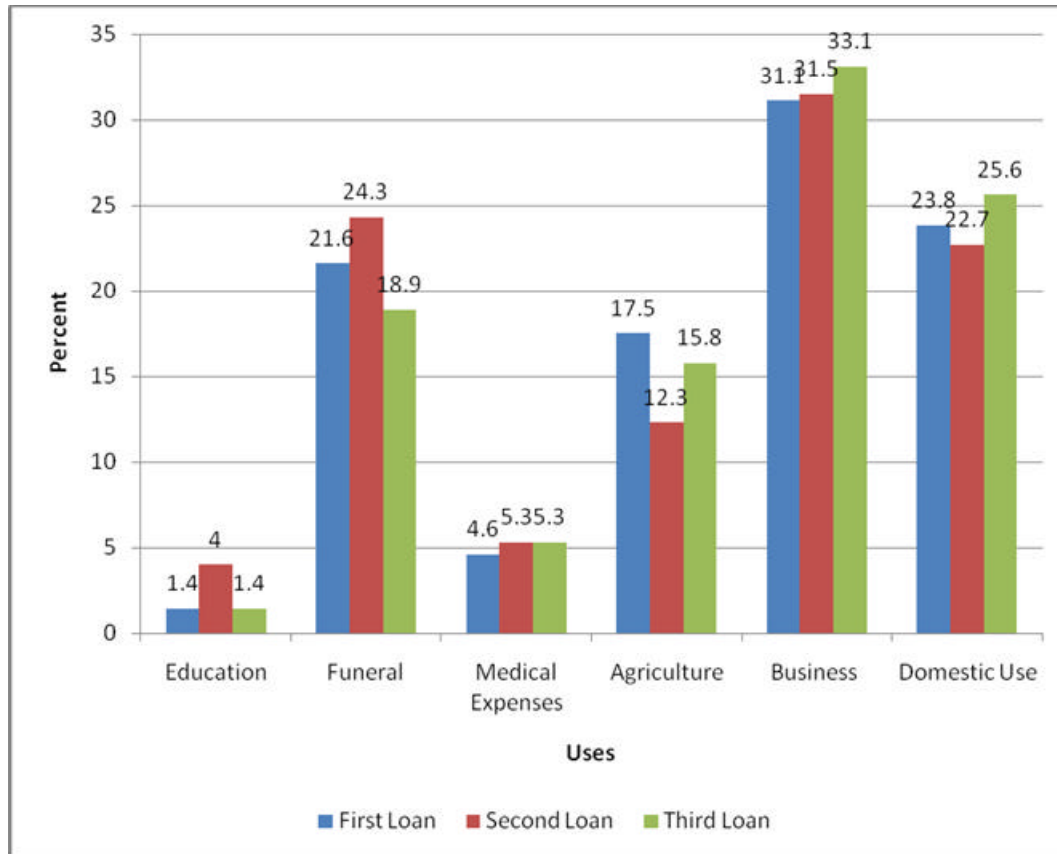


Figure 4.16: Uses of loan money borrowed

It is clear from Figure 4.16 that money borrowed for the first loan was used for business (31.1%), domestic use (23.8%), funeral (21.6%), agriculture (17.5%), medical expenses (4.6%) and education (1.4%). The slightly higher (31.1%) use of the money in business is an indication of the growing interest for investment in micro enterprises a subject stressed in GS&L information exchange between the supporting donor and the GS&L group members. The use of the funds in domestic activities (23.8%) suggests the amount benefit the household get from participating in GS&L group activities to strengthen livelihood security.

The use of the borrowed money from the second loan was high (31.5%) for business followed by funerals (24.3%), domestic (22.7%), agriculture (12.3%), medical expenses (5.3%) and education at 4.0% in that order. Again business seems to have

been favoured by most (31.5%) of the second loan borrowers probably these being the earlier borrowers interested in expanding their micro enterprises or new borrower trying to imitate their fellow members in business activities.

Finally, in the third loan business topped the list with 33.1% of the studied GS&L group members reporting to have used the money in business activities. This was followed by domestic use at 25%, funeral (18.9%), agriculture (15.8%), medical (5.3%) and education at 1.4% respectively. This finding for the use of the third confirms that the most popular use of the GS&L group loans are business, domestic use and funerals.

Level of savings

One of the key reasons for the implementation of the *Lok Pachi* project was to enhance member's financial savings through group synergy with a view of strengthening household livelihood security for at least 6000 members. The level of saving is actually an indicator of financial independence for the members and a key aspect in the access and utilization of the various components of household livelihood security such as descent housing, balanced food, clothing education and health services. The variable was assessed using a number of components presented next.

Places of Savings

As expected, Figure 4.17 shows that the most preferred place of saving was reported to be the GS&L group (69.4%), followed by banks (10.7%), traditional bank³ (9.0%), and merry go round (7.5%) among other places. The higher (69.4%) percentage of the members reporting GS&L groups was expected because these groups were formulated with the express purpose of providing a savings opportunity of the members, hitherto cut off from main stream banking services, because of their weaker financial power. The groups are preferred also because they provide loans to the members and dividends during the close of the year depending on individual members' accumulated savings. There were gender variations in the choice of the places of savings by the respondents. The results showed that more males (31.4%) than females (22.5%) used the banks while more females (80.1%) than males (78.4%). Preferences for traditional banking and merry-go-round were highest among females at 6.8% and 8.4% respectively for females as compared to 2.0% and 0.0% for males in that order. Thus, females had a preference for informal saving methods.

³ Traditional Banks were taken to mean all informal saving practices including the use of tins, granaries, under the pillow etc.

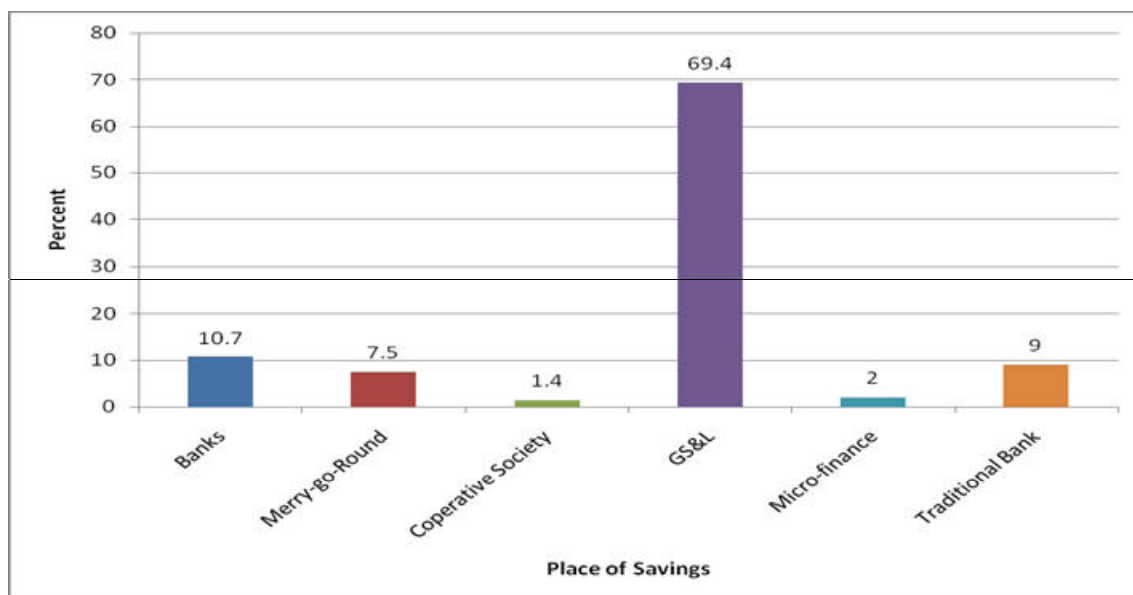


Figure 4.17: Methods of savings by the respondents

Mean Monthly Savings

The study also attempted to compute the mean monthly saving for the studied GS&L members. Findings presented in Table 4.6 show that males had a mean saving of KShs 540.20 with a standard deviation of 540.56 compared to females with a mean of 468.29 and a standard deviation of 829.09. This shows that males saved more money per month than females probably because men have more sources of income and are more aggressive in looking for money than their female counterparts.

Table 4.6: Mean Monthly Savings

Gender	N	Mean	Std. Deviation
Males	51	540.20	540.56
Females	330	468.29	829.09
Total	381	478.29	796.36

Overall, both the males and females studied GS&L group members had a collective mean saving of KShs 478.29 with a standard deviation of 796.36, an indication that there is more financial strength in collective saving than when disaggregated by gender. Even the dispersion is better for the females when combined with males as it falls from 829.09 to 796.36.

Cumulative Savings

Table 4.7 indicates that the total cumulative savings for all the GS&L group members in the project area amounted to KShs. 23,290,148 with females having a higher cumulative savings portfolio (KShs. 19,193,601) than that of males (KShs. 4,096,547). The Table also shows that the total cumulative savings varied from location to location with the highest cumulative savings being recorded in Central Sakwa followed by South Sakwa, West Uyoma, Central Uyoma, South West Sakwa, East Uyoma, Township, and Siaya in that order. Gender analysis of the cumulative savings indicated that females had a higher cumulative savings portfolio than males in all the locations.

Table 4.7 also shows that the mean cumulative savings per member was KShs. 3,190.87 with the females having a higher mean (KShs. 3,217.16) than males (KShs. 3,073.18). Further analysis presented in the table indicate that the total mean savings per member varied by locations with the highest mean savings per member being recorded in Central Sakwa followed by West Uyoma, South West Sakwa, South Sakwa, East Uyoma, Central Uyoma, Siaya and Township respectively. Table 4.7 also indicate that females had a higher mean savings in Central Sakwa, South Sakwa, South West Sakwa, and Township while males had a higher savings in East Uyoma, West Uyoma, Central Uyoma and Siaya.

The results in Table 4.7 show that the total mean cumulative savings per group was KShs. 38,243.26. It is also shown that the highest mean cumulative savings per group was observed in Central Sakwa, followed by West Uyoma, South Sakwa, Central Uyoma, South West Sakwa, East Uyoma, Siaya and Township in that order.

Table 4.7: Analysis of cumulative savings by location and per group

Location	No. Of Groups	Membership			Cumulative Savings			Mean Savings			Mean Savings per Group
		Female	Male	Total	Female	Male	Total	Female	Male	Total	
Central Sakwa	122	1217	304	1,521	6,769,100	1,383,403	8,152,503	5,562	4,551	5,360	66,823
South Sakwa	81	847	194	1,041	2,392,650	520,908	2,913,558	2,825	2,685	2,799	35,970
East Uyoma	73	672	110	782	1,829,455	299,542	2,128,997	2,722	2,723	2,723	29,164
West Uyoma	70	693	152	845	2,000,486	613,545	2,614,031	2,887	4,036	3,092	37,343
Central Uyoma	73	796	109	905	2,036,710	312,880	2,349,590	2,559	2,870	2,596	32,186
South West Sakwa	74	665	143	808	1,972,686	344,521	2,317,207	2,966	2,409	2,868	31,314
Siaya	41	400	130	530	842,711	274,392	1,117,103	2,107	2,111	2,108	27,246
Township	75	676	191	868	1,349,803	347,356	1,697,159	1,997	1819	1,955	22,629
Total	609	5,966	1,333	7,299	19,193,601	4,096,547	23,290,148	3,217	3,073	3,191	38,243

Group Liquidation

Table 4.8 shows that males had a reported mean of KShs 8,970.44 with a standard deviation of 9,331.73 after liquidation compared to females with a mean of KShs 6,114.02 and a standard deviation of 7,436.01. The overall, mean amount received after liquidation for the studied GS&L group members stood at KShs 6,418.93 with a standard deviation of 7,759.58. The combined figures for males and females improve the mean liquidation above the female figure to 6,518.93 with a standard deviation of 7,759.58 depicting a wide dispersion among members.

Table 4.8: Mean Amount Received from Liquidation

Gender	N	Mean	Std. Deviation
Males	50	8970.44	9331.73
Females	327	6114.02	7436.01
Total	377	6518.93	7759.58

Uses of money obtained from Liquidation

Figure 4.18 shows that the money that was received after the liquidation of GS&L groups was reported to have been used by the members for various reasons including paying school fees (33.6%), buying livestock (24.7%), domestic use (22.6%), and start or expand business (20.2%) among other uses. The findings confirm that most of the money was used to strengthen household livelihood security further strengthening the benefits accruing from GS&L group membership.

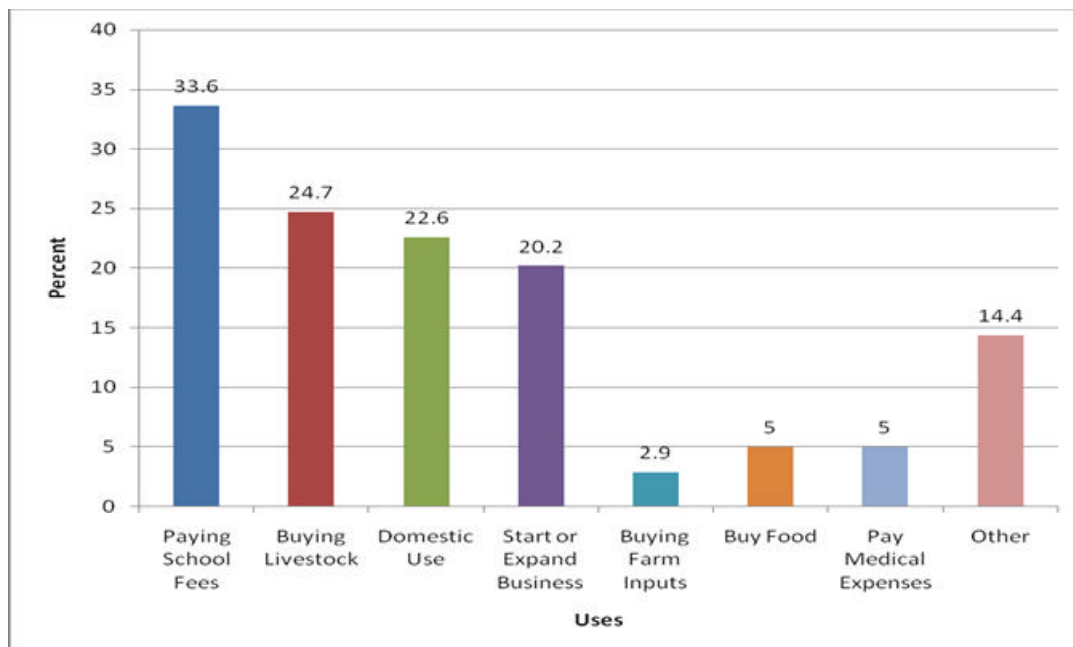


Figure 4.18: Use of money received from liquidation

4.2.4 Physical Capital

Physical capital in this study is examined using a number of indicator or components. The perception of the studied GS&L group members with regard to these components is presented in Figure 4.19. Drinking water was reported to have improved very much by almost 50.0% (49.5%) of the studied GS&L members followed by 18.3% group members who indicated moderate improvement with almost 15.0% (14.9%) revealing a slight improvement in drinking water. Slightly more than ten percent (11.0%,) said it remained the same while 6.3% indicated that it has worsened. The reported improvement in drinking water has a positive implication in the enhancement of household livelihood security especially the health of the household that more often is comprised by the quality of drinking water used. There was a marginal difference between the males and females reporting improvements in access to drinking water with 83.1% of the females as compared to 80.4% of the males indicating the improvements.

Figure 4.19 also shows that the quality of housing was reported to have improved very much by 31.4% of the respondents since they joined the GS&L groups. Those reporting moderate improvement were 34.6%, while slight improvement comprised 13.9% as was the case with those who cited no change 13.9% of the sample. Those who indicated that the quality of housing has worsened were only 6.3% of the total. The finding in improvement in housing since members joined GS&L groups is significant as it confirms *Lok Pachi's* contribution in strengthening and improving the quality of housing in Bondo and Siaya, Kenya. Slightly more males (82.4%) than women (79.5%) reported improvements in quality of housing.

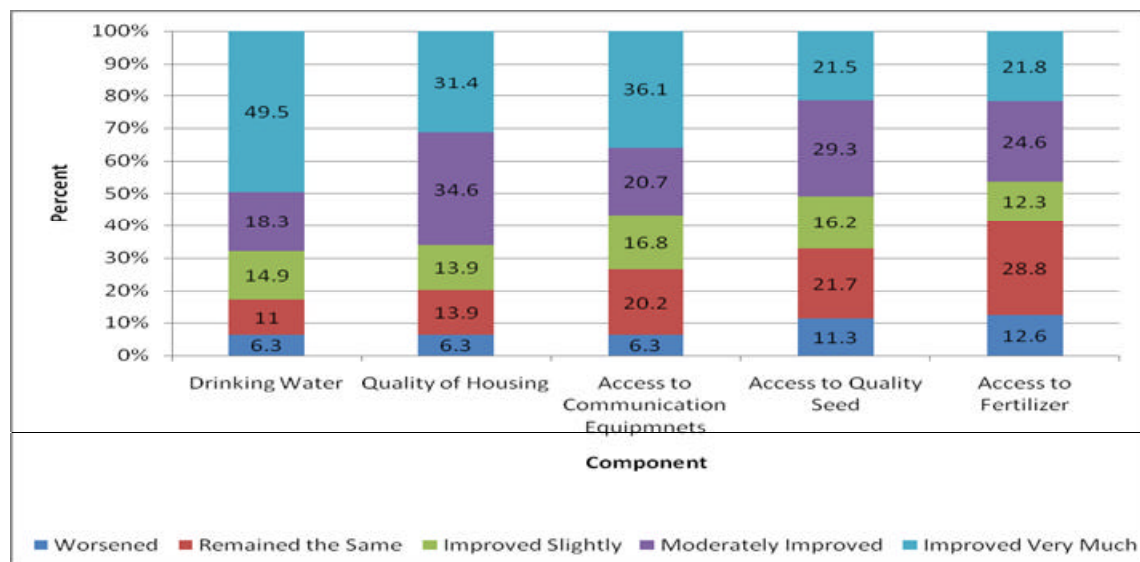


Figure 4.19: Perceived changes in physical capital

Access to communication equipment was said to have improved very much by 36.1% of the members and moderately improved by 20.7%, with 16.8% registering slight

improvement. Those reporting no change were 20.2%, while those citing worsening of access to communication equipment were only 6.3%. The improvement in access to communication may be attributed to the increased financial power of the GS&L group members enhancing their ability to purchase communication equipments such as mobile phones. Nonetheless, a larger proportion (86.3%) of males reported improvements in access to communication equipments as compared to females (71.6%).

Further, Figure 4.19 also reports access to quality seeds by members of the GS&L groups. It emerged that access to quality seeds was rated to have improved very much by 21.5% of the studied members, while 29.3% said there was moderate improvement with 16.2% registering slight improvement in accessing quality seeds. Those reporting no change were 21.7%, while only 11.3% felt that access to quality seeds has worsened. There were gender variations in access to quality seeds with females reporting a relatively lower proportion (65.6%) as compared to males (76.0%). The improved access can be attributed to members' enhanced purchasing power through savings and loans advanced by the savings and loan groups. The lower proportion of females reporting access to quality seeds indicates a slow but impressive improvement in women's involvement in decision making in modern agriculture.

Finally, access to fertilizer was also rated to have improved very much by 21.8% of the interviewed members, while 24.6% reported moderate improvement in access with 12.3% saying that there was a slight improvement. Others said that there was no change (28.8%) and access to fertilizer has worsened (12.6%) respectively. The registered improvement in access can again be attributed to the financial independence of the members as a result of GS&L group affiliations. However, males (64.0%) than females (57.7%) reported a higher proportion of those reporting improvements in access to fertilizers. Though the females proportions were low, it showed impressive advancements in women's access to modern agricultural inputs.

4.2.4.1 Water Sources and its Uses

Water is a critical household livelihood resources and its availability for various uses is important to improve household livelihood security. This resource is needed for cooking, cleaning, drinking, irrigation and even watering domestic animals. Its nexus to health makes it very critical resource in household livelihood security. Findings of the study with regard to the various uses of water among the interviewed GS&L members are presented in Figure 4.20.

Figure 4.20 the main source of drinking water to be tap water (42.0%), followed by lake water (19.7%), borehole (9.7%), river 7.1% among others. These findings show that there various sources of drinking water in the area. However, the quality of the other sources apart from tap water (42.0%) cannot be ascertained. Though majority access tap water (42.0%) for drinking hence ensuring the health of their household members is secured the health of the majority of the GS&L members using the other sources for drinking water cannot be guaranteed, threatening household health status.

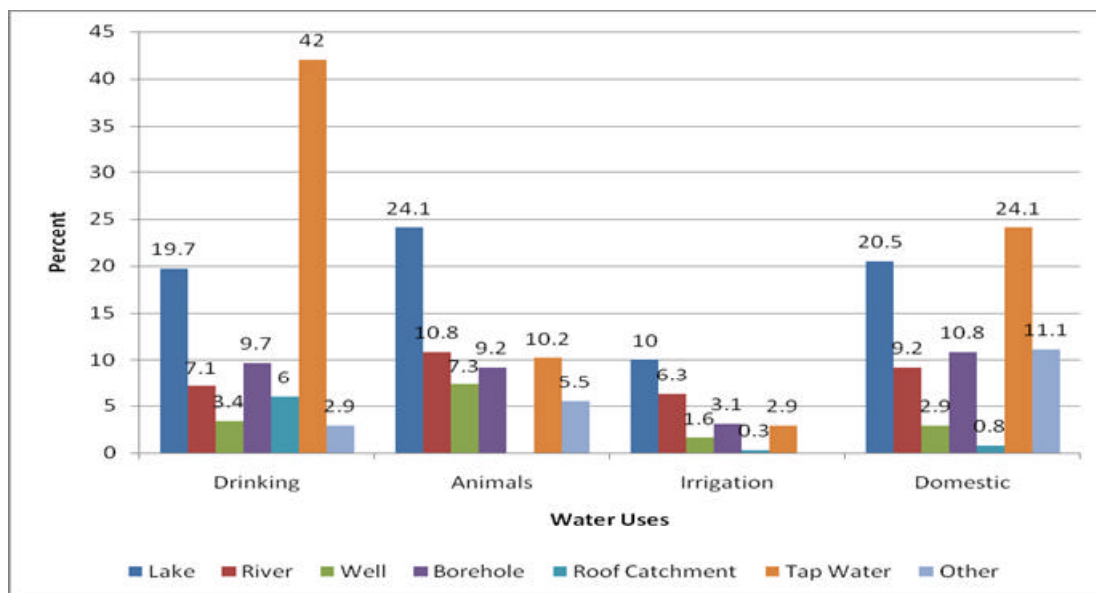


Figure 4.20: Water Sources and their uses

The results in Figure 4.20 also show that the main source of water for animals was given as lake (24.1%), river (10.8%), tap water (10.2%), and borehole (9.2%) among others. The various sources of water for animal use indicate that most households have no problems in watering their animals, ensuring animal health that is one of the key to household livelihood security.

Further, findings of the study in Figure 4.20 show that the bulk of irrigation is done using lake water (10.0%), followed by river (6.3%), tap water (2.9%) among other sources. The minimal percentages giving the various sources of water for irrigation purposes is a clear indication that GS&L group members have not been involved very much in irrigation agriculture. The potential of investment in agriculture, especially irrigation agriculture to household food and nutritional status cannot be gainsaid.

Finally, the main source of water for domestic use (cleaning utensils, washing clothes and the house) happens to be tap water (24.1%), followed by lake water (20.5%), borehole (10.8%) among others. The several sources of water for domestic use serve to confirm limited water problems for domestic use in the area.

4.2 Housing and Shelter

The types of houses GS&L members have is an indicator of household livelihood security. In fact, housing is one of the key basic human needs and a critical social service. Findings of the study on the types of houses for the studied GS&L members are presented in Figure 4.21. Figure 4.21 shows that the materials used to build the walls of the houses of the GS&L group members was mostly (75.5%) mud compared to brick at 11.0% and iron sheets (*mabati*) at 2.1% before they joined the groups. The situation has improved slightly with 66.7% houses of the members still having mud walls and an increase in brick walled houses to 12.8% after the members joined GS&L groups. There is therefore an improvement, albeit gradual, of the walling of the GS&L members studied.

With regard to roofing of the houses, it is clear in Figure 4.21 that iron sheets (*mabati*) was the main (56.%) material used to thatch houses compared to grass (38.8%) before the respondents joined GS&L groups. The situation further improved to 71.6% GS&L members citing use of iron sheets in making roofs of their houses compared to grass thatching (22.9%). The improvement in the use of iron sheets is an indicator of enhanced purchasing power of the GS&L members possible because of their group membership.

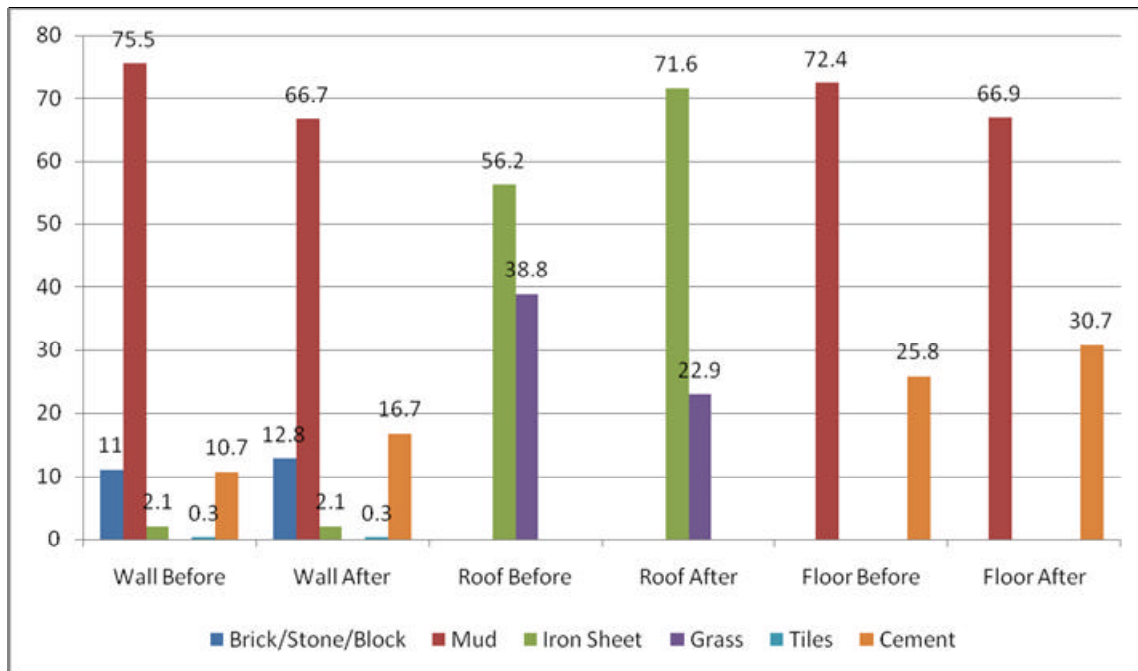


Figure 4.21: Changes in housing and shelter

Finally, it is shown in Figure 4.21 that mud (72.4%) was the most used flooring material for the house compared to cement (25.8%) before the respondents joined GS&L groups. However, there was an improvement in the flooring material used after members joined the savings and loaning groups with a reduction in the number with mud floors to 66.9% and an increasing in houses with cement floor to 30.7%. This improvement has enhanced the hygiene and aesthetics of these houses as evidenced by field observations, further confirming the key role of the *Lok Pachi* project in enhancing housing in the project area

4.2.5 Social Capital

Social capital which has been loosely defined as the quantity and quality of social resources which encompass: networks; membership in groups; social relations; and access to wider institutions in society. It is from these social resources that individuals draw their safety net mechanisms to meet shortfalls in consumption needs. Shared norms and the level of trust are often considered the direct outcomes of the quality of networks within the networks of members. These emerging networks act as an essential buffer against risks and in many instances increases the possibility of accessing essential services. The study assessed the levels of households' access to

social networks, patterns of leadership and the level of women’s involvement and empowerment.

Perceived changes in social capital

The major indicators of social capital assessed included participation in community and group activities, progress in reduction of discrimination against women, linkage to family and friends, involvement in reciprocal exchange services and leadership in groups. The results are presented in Figure 4.22.

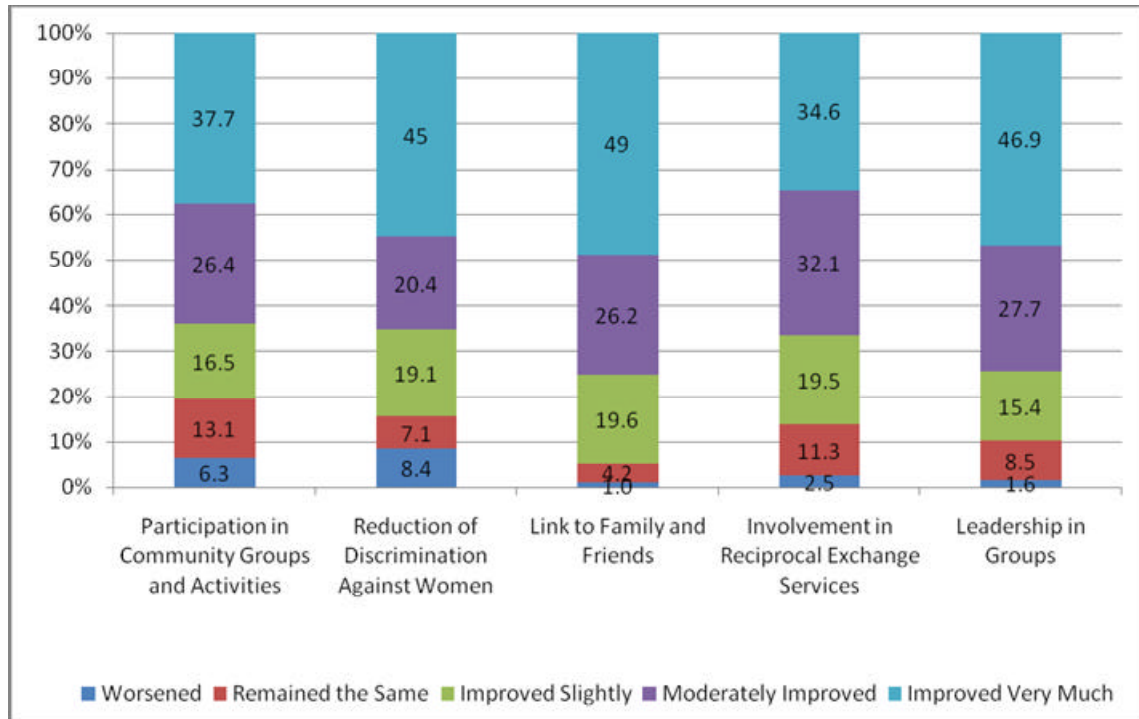


Figure 4.22: Perceived changes in components of social capital

Participation in Community and group Activities

Figure 4.22 shows that there were significant improvements in participation in community and group activities. From the figure it is shown that only 6.3% of the respondents felt that their levels of participation in community and group activities worsened in the past four years with a further 13.1% indicating their levels of participation reduced slightly. It is also shown that a larger proportion (37.7%) of the respondents indicated they experienced very much improvement in their levels of participation in community and group activities with 26.5% reporting much improvement, and 16.5% indicated slight improvement. Overall, 80% of the respondents indicated that they had experienced some improvement (excluding those indicating worsened or remained the same) in their levels of participation in community and group activities in four years prior to the survey. This therefore means that the *Lok Pachi* project had a positive impact in the operations of the target groups in participation in community and group activities. Moreover, there were no variations

between the genders with 80.4% of the males reporting improvements as compared to 80.7% of the females.

Status of Women

In order to establish the changes in the status of women the study sought to establish whether there were any gains in reducing the levels of discrimination against women. The results in Figure 4.22 indicate that 7.1% did not experience any change in discrimination against women while 6.3% felt that the discrimination against women had worsened. The Figure also indicates that 16.5% felt that there were slight improvement, 26.4% reported much improvement and 37.7% indicated that there were very much reduction in the levels of discrimination. This therefore means that slightly above 84% of the respondents noted that there were reductions in discrimination against women. This is perhaps evidenced by the overwhelming participation of women in the GS&L activities discussed earlier. However, a larger proportion (96.1%) of male respondents than females (83.0%) reported reductions in the levels of discrimination against women.

Link to Family and Friends

Social networks with friends, relatives and family members are an important part of social capital. The results presented in Figure 4.22 shows that there were significant improvement in the link to family and friends with nearly 95% indicated they observed slight improvement or much improvement, or very much improvement. It is only 5.2% who indicated they either experienced similar levels (4.2%) of linkage with family members and friends or had such relationships worsening (1.0%). Thus there were observable gains in the social relationship between the respondents and the members of their families and their friends. These changes can partly be attributed to the trainings received in the GS&L groups that emphasised on the benefits of working together and also offered capacity strengthening on group dynamics. A gender analysis indicated that the improvements in links with family and friends were reported by a slightly higher proportion (95.2%) of females as compared to 92.2% of the males. The level of empowerment felt by females was thus critical in fostering better relationship with other family members and friends.

Involvement in Reciprocal Exchange Services

Involvement in reciprocal exchange services remained the same for 11.3% and worsened for 2.5% of the respondents as is shown in Figure 4.22. Figure 4.22 also shows that 19.5% had slight improvement, 32.1% had much improvement and 34.6% had very much improvement in their involvement in reciprocal exchange services. The improvements were equal across the genders with 86.1% of males and 86.2% of females reporting improvements. The participation in the GS&L groups improved the chances of involvement in reciprocal exchange services.

Leadership

Figure 4.22 indicates that the leadership status in groups where the respondents were members remained the same or worsened for 8.5% and 1.6% respectively. Significant improvements were reported with 15.4% experiencing slight improvement, 27.7% much improvement and 46.9% very much improvement. This therefore means that an overwhelming majority had observed improvements in the leadership status

of their groups. Marginal variations were observed between the genders with 91.7% of the males relative to 89.7% of females who reported improvements in leadership status in groups.

Household's access to social networks

The results presented in Figure 4.23 indicate there were improvements in access to all the selected indicators of social networks between the periods prior to joining a GS&L group and the time of survey. Specifically, the figure shows that there were improvements in access to fishing groups, GS&L groups, HIV&AIDS support groups, participation in community services and village barazas, membership to a bank and leadership in school/church/workers committees, and farmers union. This therefore shows that there were significant gains in social capital in the participating communities.

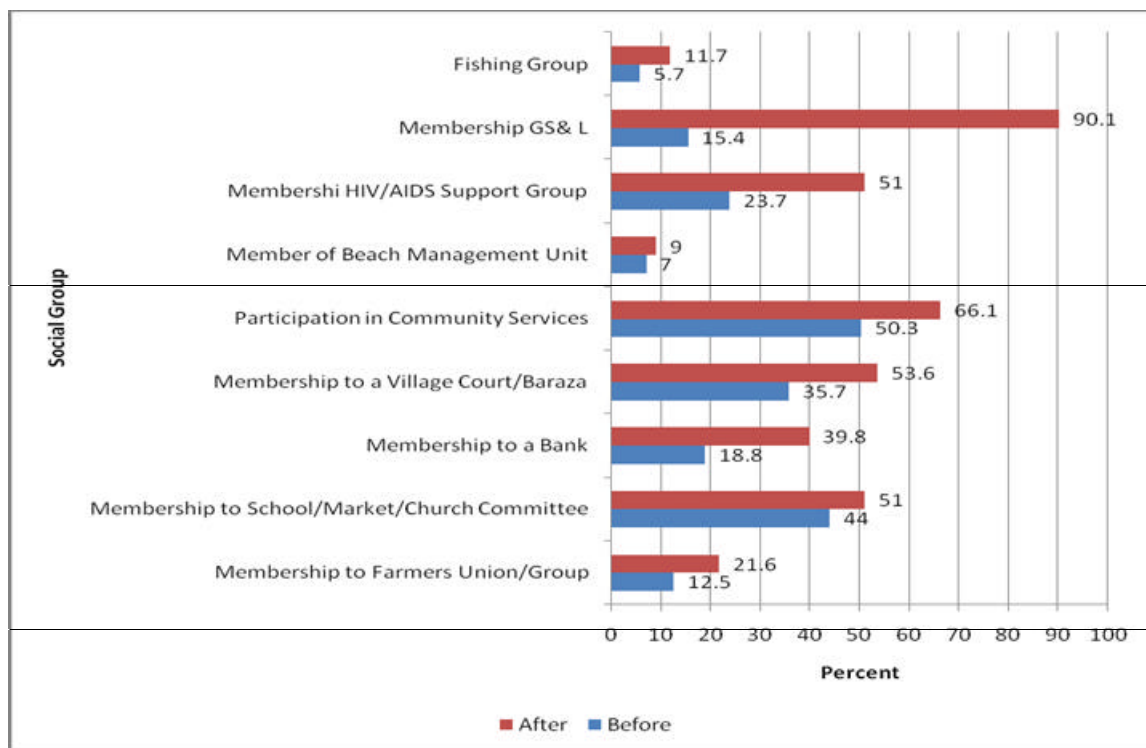


Figure 4.23: Access to social networks

4.3 Gender Empowerment

Gender equity is an important component of livelihood strategy. The study explored the changes that occurred in this respect for the period of time *Lok Pachi* project operated in the study area. The major components assessed included gender and the acquisition and control of property, and gender and decision making on sexuality.

4.3.1 Gender and Acquisition of Property

The results presented in Figure 4.24 shows that there were significant differences between men and women in the acquisition of property. The Figures indicates that

males had relative ease in acquiring land, labour, radio, farming equipments, house and home than their female counterparts in the study area. The Figure also shows that females had much ease than males in acquiring poultry.

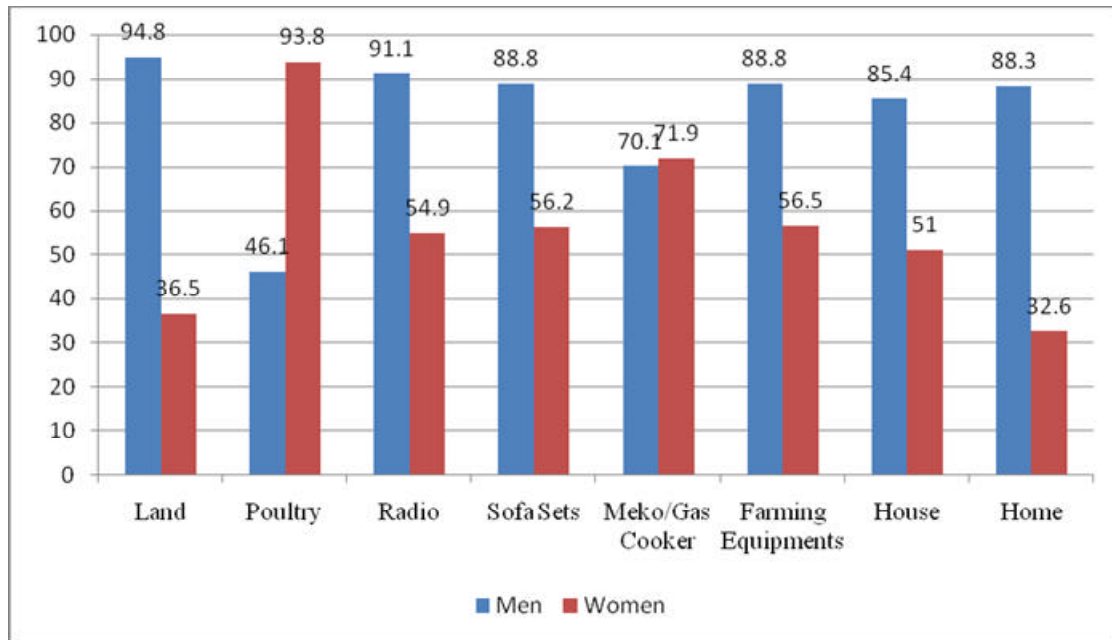


Figure 4.24: Gender and acquisition of property

4.3.2 Gender and Access to Property

Access to property and services is an essential tool in livelihood security. The results presented in Figure 4.25 shows that women had better access to relatively more assets under review than men. Specifically, it is shown that men had comparatively better access to land, farming equipments and home while women had comparatively better access to poultry, sofa sets, meko/gas cooker, and house. Thus even though men had much ease in acquiring more assets, women had comparatively better access in more assets than the ones they have relative ease in acquiring. This could be attributed partly to the gender advocacy component in the *Lok Pachi* project.

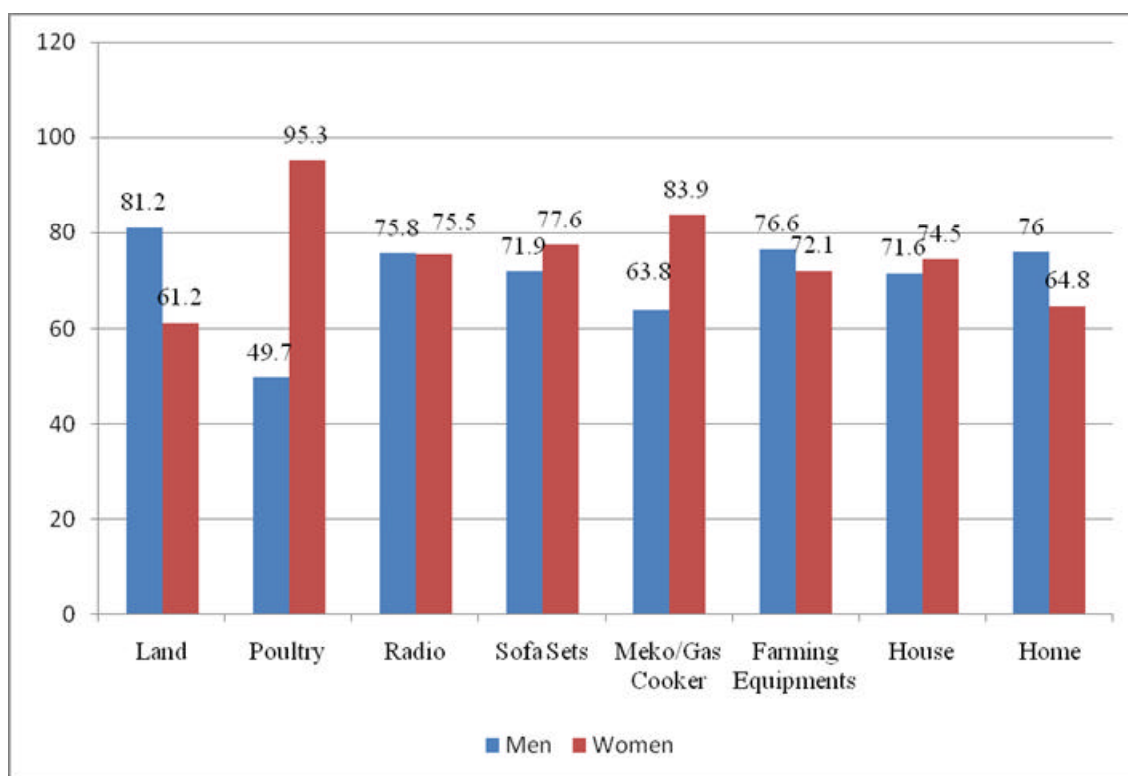


Figure 4.25: Gender and ownership of property

4.3.3 Gender and Control of Property

The results presented in Figure 4.26 indicate a major shift in gender roles with regard to control of essential property. The Figure shows that men had control in comparatively more assets than women. It is shown that men had higher control on land, radio, farming equipments, house and home while women controlled assets such as poultry, and meko/gas cooker. This therefore means that women only had control in software assets while men more control on material assets.

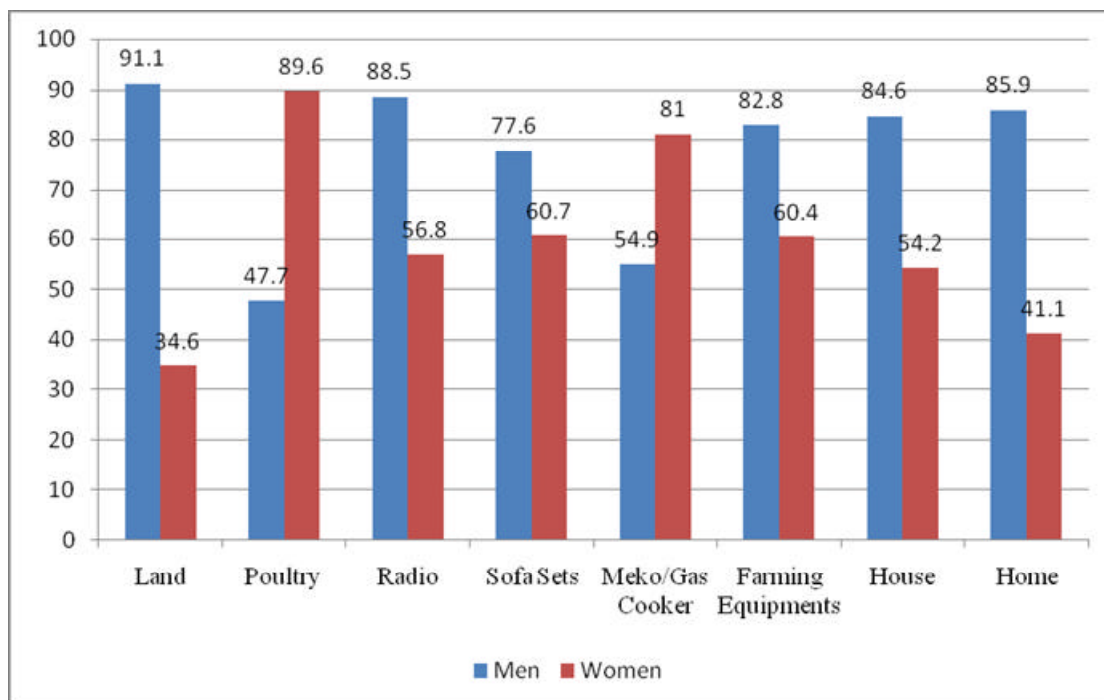


Figure 4.26: Gender and control of property

4.3.4 Gender and Decision on Sexuality

Decision on matters of sex is very crucial especially in safeguarding the health of both partners. The results presented in Figure 4.27 depicts that a large proportion of the respondents reported it was difficult to make decision on matters relating to use of condoms, going for test together with spouse, use of contraceptives, asking for sex and timing of sex before being involved in the *Lok Pachi* Project. These trends were nearly reversed with large proportions reporting that they found it easy or very easy to make decisions on the stated items. As is shown, the difficulties in making decision on the cited issues on sexuality were reported by a higher proportion of females than males. There was a general male dominance on the decision making on the issues before the inception of the project. There were however, significant improvements in decision making by females as compared to males with regard to wearing of condoms during sexual intercourse, asking spouse to go for HIV test and the use of contraceptives. Impressive progress was also made on women's ability to ask for sex and when to have sex even though visible male dominance still remained. The observed changes were considered significant given the sensitive of the issues regarding sexuality and the associated masculine values.

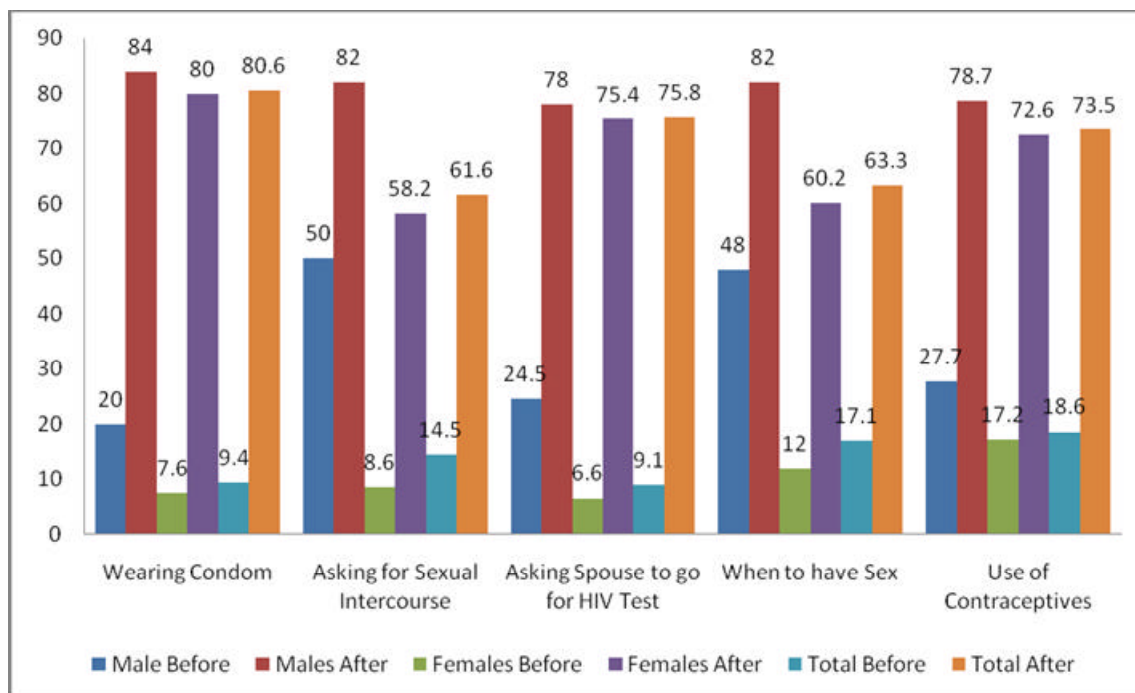


Figure 4.27: Gender and decision making on sexuality

4.4 Knowledge, Practice and Attitude towards HIV&AIDS

The livelihood security approach used in the CARE International in Kenya *Lok Pachi* project had an in-built component to help mitigate the spread and impact of HIV&AIDS in the target GS&L groups. One of the main areas evaluated was the levels of knowledge and practices on HIV&AIDS as presented next.

4.4.1 Levels of Knowledge and Practice on HIV&AIDS

Level of HIV&AIDS knowledge and practice is critical for household livelihood security as it has implication for infections and sick health, which compromises the socio-economic stability of the household. The *Lok Pachi* project had the GS&L groups that were formulated with a view of enhancing household livelihood security. Part of the component of the project was to strengthen HIV&AIDS information of the participating households. This section provides the rating of HIV&AIDS information of the sampled households on selected components before and after they joined GS&L groups.

Transmission

Results from Figure 4.28 show that slightly over four fifths (81%) of the study respondents rated information on HIV&AIDS transmission before joining GS&L group to be either low (40.4%) or very low (40.6%). Those who rated information to be moderate to high comprised of 18.5% of the total sample, while those who rated information to be the same were only 0.5% of the total. Interestingly, Figure 4.28 shows that out of 384 households interviewed, most (85.1%) rated information on transmission of HIV&AIDS to be either moderate (15.4%), high (39.8%) or very high (29.9%). Those who rated HIV&AIDS information on transmission to be low (7.8%),

very low (2.9%) and no change (4.2%) were the least (14.9%) indicating a positive change in the area of information on HIV&AIDS transmission after households had joined the GS&L groups.

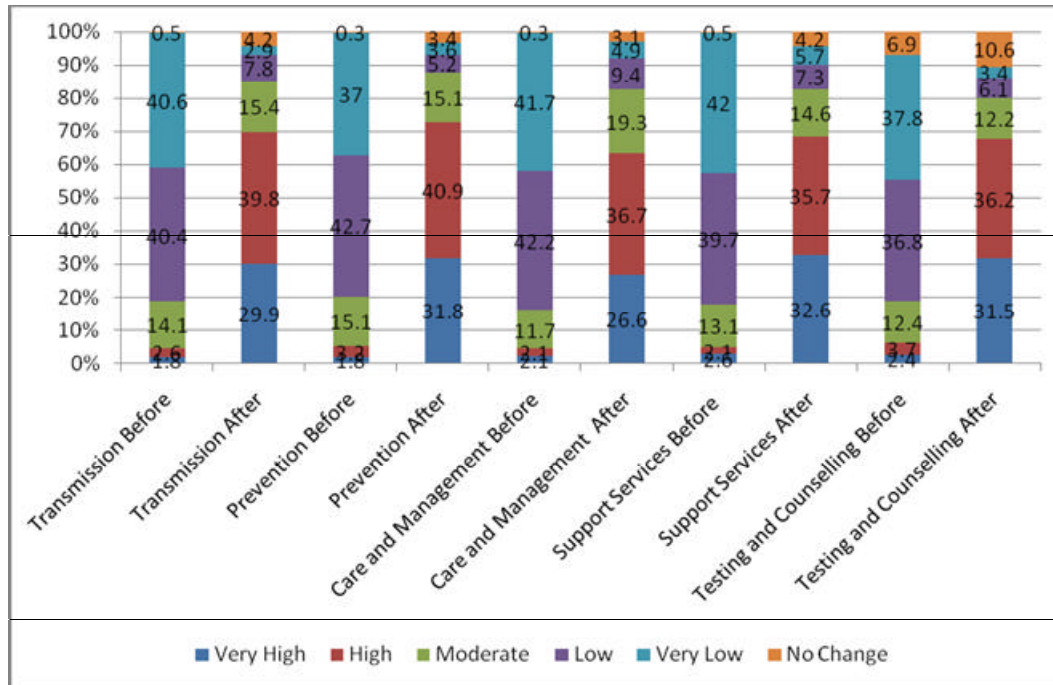


Figure 4.28: Rating of levels of knowledge on various components of HIV

Prevention

Findings of the study in Figure 4.28 show that almost four fifths (79.7%) of the study respondents indicated that information on HIV&AIDS prevention was either low (42.7%) or very low (37.0%) before they joined GS&L groups. Those who reported moderate to very high level of HIV&AIDS prevention information were only 20% of the total sample (384). Further, it is shown in Figure 4.29 that only 0.3% of the study households reported no change in information about HIV&AIDS prevention before they joined GS&L groups. The rating of information on HIV&AIDS prevention improved remarkably after household members joined GS&L groups. Evidently, Figure 4.29 shows the rating to be 15.1%, 40.9% and 31.8% for moderate, high and very high rating respectively of information on HIV&AIDS prevention.

HIV Care and Management

Figure 4.28 further reveals that majority (83.9%) of the GS&L members rated information on care, treatment and management of HIV&AIDS to be either low (42.2%) or very low (41.7%) before they joined GS&L groups. Those members' who rated information on care, treatment and management of HIV&AIDS to be moderate to very high were almost 20% (15.9%) of the total sample. Out of the total sample (384), only 1(0.3%) person reported that there was no change in information on care,

treatment and management of HIV&AIDS. Findings of the study on the rating of HIV&AIDS information on the care, treatment and management of the pandemic after households joined GS&L groups shows a positive change. Interestingly, 19.3%, rated information on HIV&AIDS care, treatment and management to be moderate, while 36.7% and 26.6% rated it high and very high respectively. Those who reported no change were only 3.1% of the total sample.

Testing and Counselling

Testing and counselling are critical components of HIV&AIDS care and management. Findings of the study in Figure 4.28 show that slightly over four fifths (81.5%) of the study households reported low (39.6%) to very low (41.9%) rate of information on HIV&AIDS testing and counselling before joining GS&L groups. Of the sample (383), only 17.8% said that information on HIV&AIDS testing and counselling was either moderate (13.1%), high (2.1%) or very high (2.6%) respectively. Those who reported that there was no change in information on HIV&AIDS testing and counselling were only 2 (0.5%) of the total sample. Conversely, results in Figure 4.29 also show that an overwhelming majority (82.9%) of the respondents rated information on HIV&AIDS testing and counselling to be either moderate (14.6%), high (35.7%) or very high (32.6%) after joining the GS&L groups. Those who rated it low (7.3%), very low (5.7%) or constant (4.2%) were the minority, showing a remarkable improvement in the rating of information on HIV&AIDS testing and counselling.

Household HIV&AIDS Knowledge

One of the objectives of the study was to find out the HIV&AIDS knowledge levels of the GS&L participating households. The rationale behind this is that the health of an individual household member has implications for household livelihood security. It was in this view that the study reports on various components of HIV&AIDS knowledge among household members as reflected in various statements next.

Results in Figure 4.29 show that almost 80% (78.9%) said that a good diet does not protect against HIV&AIDS. Those who said it is true that a good diet protects against HIV&AIDS were 17.7%, while those who did not know were 3.1%. It also shows that an overwhelming majority (85.4%) of the sampled households agreed that staying with one faithful partner protects against HIV&AIDS. Those who did not agree with the statement were 13.0%, while those who did not know comprised of only 1.6% of the total (383)

Figure 4.29 reveals that almost 75% (74.7%) of the respondents disagreed with the statement that avoiding public toilets protects against HIV&AIDS. Those who agreed with the statement were 19.3%, while those who did not know were only 6.0% of the total sample. It is also shown that that over four fifths (84.4%) of the sampled households GS&L members agreed that using condoms during sexual intercourse protects against HIV&AIDS. Those who agreed with the statement were 8.3%, while those who did not know were 7.3% of the total studied households.

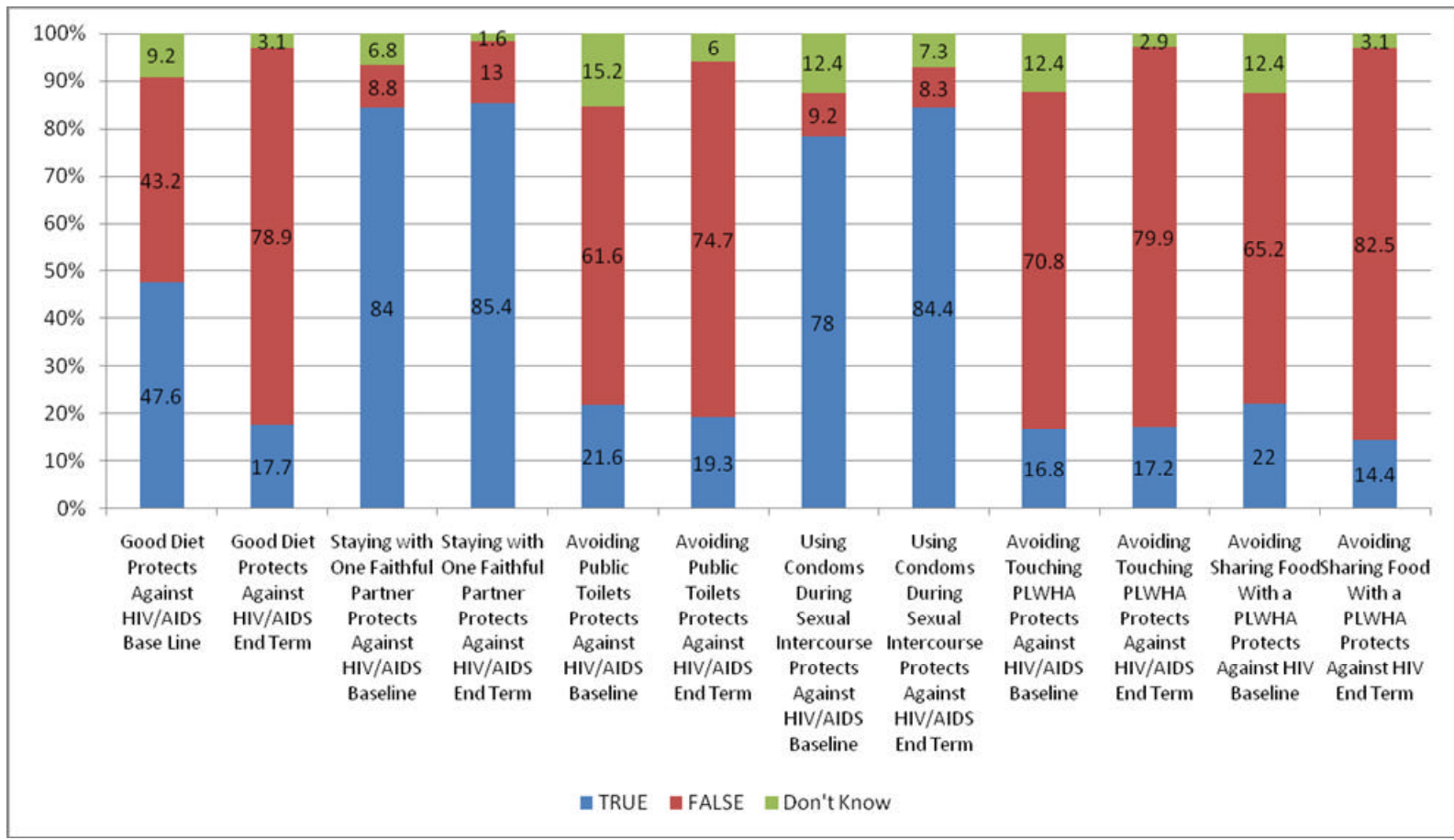


Figure 4.29: Changes in Knowledge between baseline and end term surveys

Findings of the study presented in Figure 4.29 depicts that almost 80% (79.9%) of the 383 studied households disagreed that avoiding touching a person with HIV&AIDS protect against the disease. Those who agreed with the statement were 17.2%, while those who indicated that they did not know were 2.9% of the sample.

Figure 4.29 also shows that over four fifths (82.5%) of the interviewed households disagreed with the statement that avoiding sharing food with HIV&AIDS infected persons protects against the disease. Those who indicated agreement with the statement were 14.4%, while those who did not know constituted only 3.1% of the 383 respondents' who attempted this question.

4.4.2 Sources of HIV&AIDS Knowledge

The results presented in Figure 4.30 shows that the major sources of information were shown to be the media (43.2%), health workers (40.4%), friends (16.4%), organisations (10.9%), relatives (5.7%), participatory education theatre (3.9%), ambassadors of hope (3.9%), and billboards (1.6%). Thus the media and health workers remain the major sources of HIV&AIDS information.

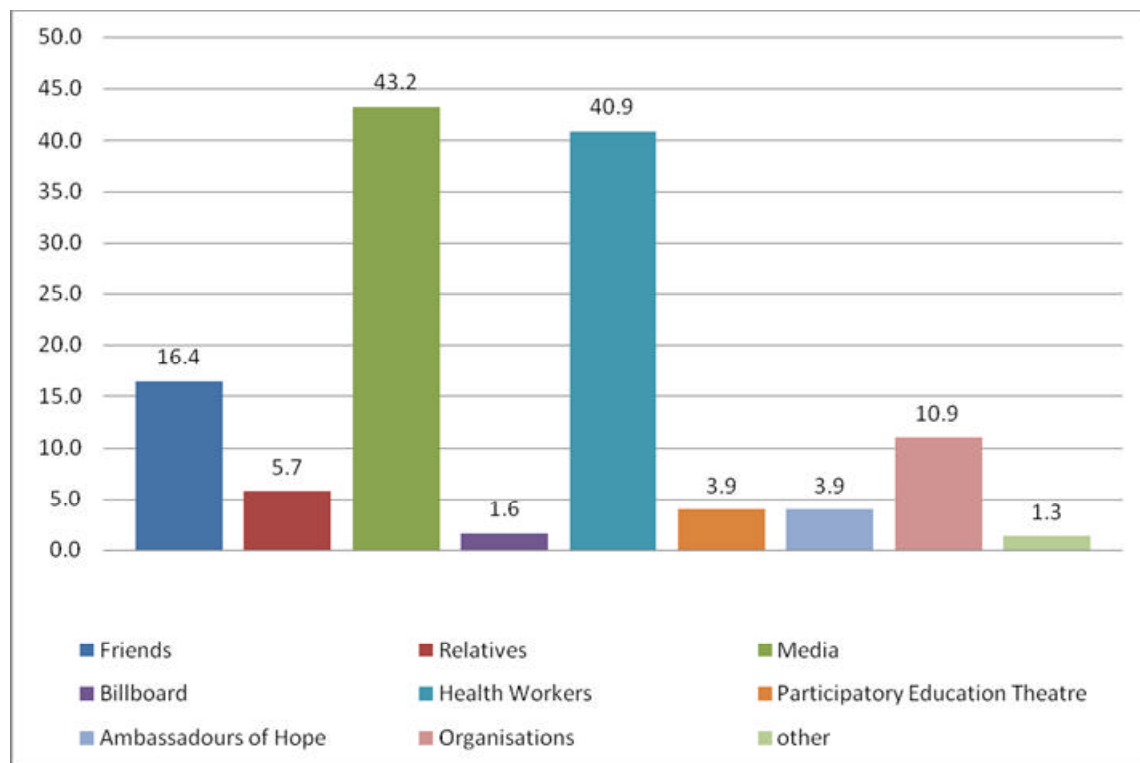


Figure 4.30: Sources of information on HIV&AIDS

4.4.3 Stigma and HIV&AIDS

Respondents were asked whether they find it easy to discuss with their spouses about HIV&AIDS. Findings of the study in Figure 4.31 shows that out of 352 respondents who attempted this question, most (84.1%) reported in the affirmative, while only 14.6% indicated that they don't find it easy to discuss HIV&AIDS with their partners. Similarly, GS&L Members were asked whether it was easy to discuss

HIV&AIDS with any member of their households. Findings of the study in Figure 4.31 show that over four fifths (83.3%) agreed that it is easy to discuss HIV&AIDS with a member of the household. Those who said that it was not easy to discuss HIV&AIDS with a member of the household were only 16.7% of the 372 respondents who provided an answer to this question item of the study. A gender analysis showed that nearly equal proportions of both males (84.8%) and females (84.0%) found it easy to discuss HIV&AIDS with their spouses. However, a higher proportion (82.3%) of females than males (70.6%) reported they found it easy to discuss HIV&AIDS with another family member other than the spouse. Thus females are more likely to open up about HIV&AIDS with other household members than their male counterparts.

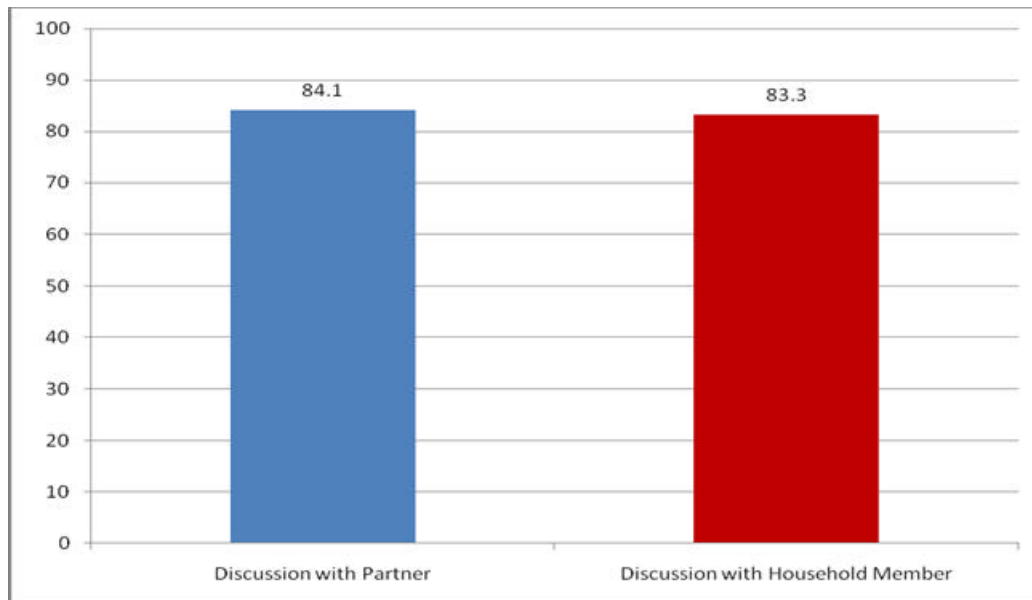


Figure 4.31: Ease of discussion of information on HIV&AIDS

Changes of Sharing HIV&AIDS Information

The respondents were asked to rate the evolution of the ease of discussing information on HIV&AIDS with partner and household members. The results in Figure 4.32 shows that, three quarters (75.0%) of the studied households indicated that the sharing of HIV&AIDS information among household members has improved within the past four years. Those who indicated that the situation had not changed were almost 15% (14.8%), those who indicated that the situation has worsened comprised of 4.8% of the 372 respondents who answered this research question. Those who couldn't tell the difference of the past four years were 5.4% of the 372 households responding to this question. Further analysis showed that a higher proportion of males (79.5%) than females (75.4%) indicated that there were improvements in their ability to share HIV & AIDS information with their spouses. Conversely, a higher proportion of females (77.3%) than males (60.0%) felt that their ability to share information on HIV & AIDS with other family members had improved in four years prior to the survey.

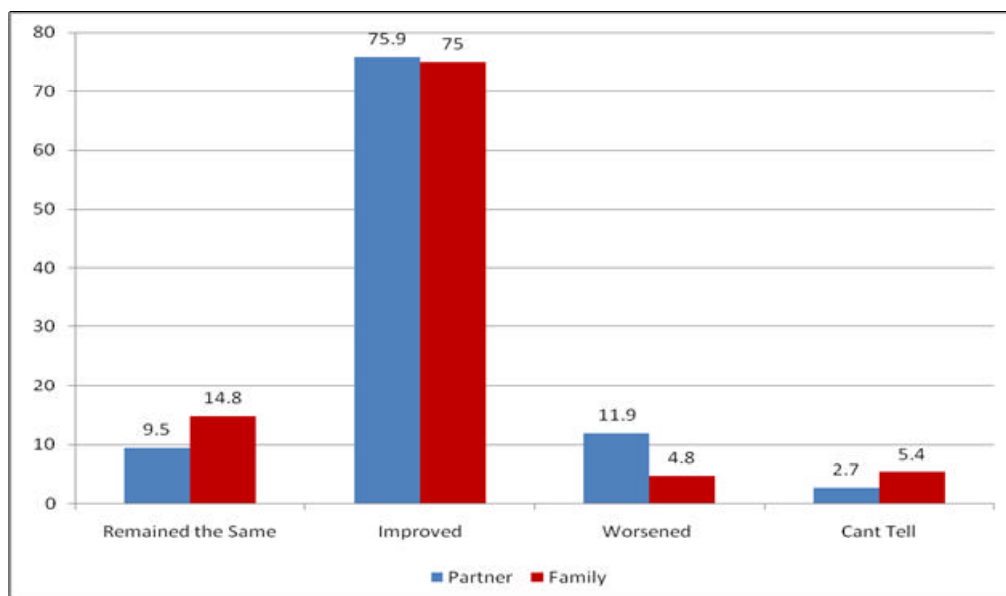


Figure 4.32: Changes in sharing of information on HIV status

Knowledge about HIV&AIDS Status

The household GS&L group members were asked if they knew their HIV status. Results of the study show that over three fifths (68.9%) of the members knew their HIV&AIDS status, while 31.1% indicated not knowing their status. This was a significant improvement from 32% during the mid-term review. It is therefore apparent that the program upped had an improved impact on promotion of HIV testing after the mid-term review. There were also no significant gender variations in the respondents knowledge of their HIV status with 58.8% of males and 58.9% of females indicating they knew their HIV status.

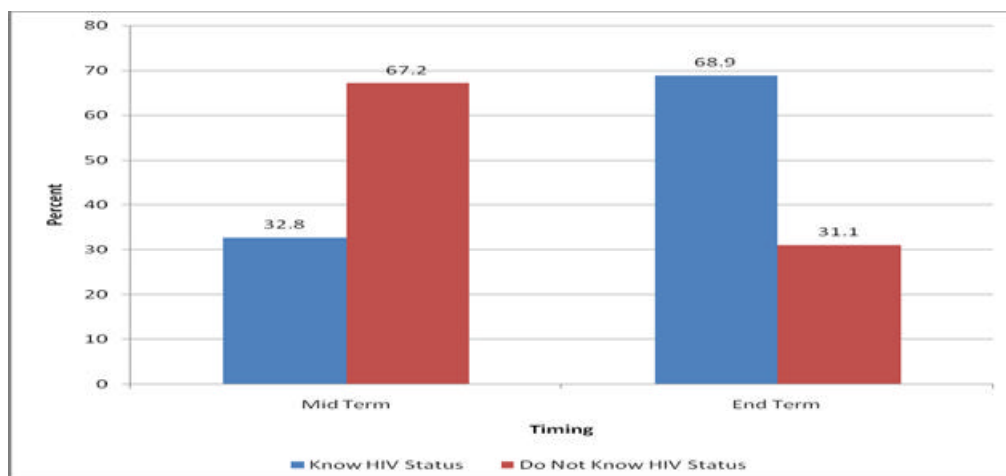


Figure 4.33: Knowledge of HIV status

Knowledge of Respondents HIV Status by Others

The results presented Figure 4.34 shows that there were significant changes in the proportion of respondents telling others about their HIV status. As is shown, the proportion who indicated that no one else apart from themselves knew their HIV status reduced from 67.2% to 39.6% between mid-term and end term evaluation.

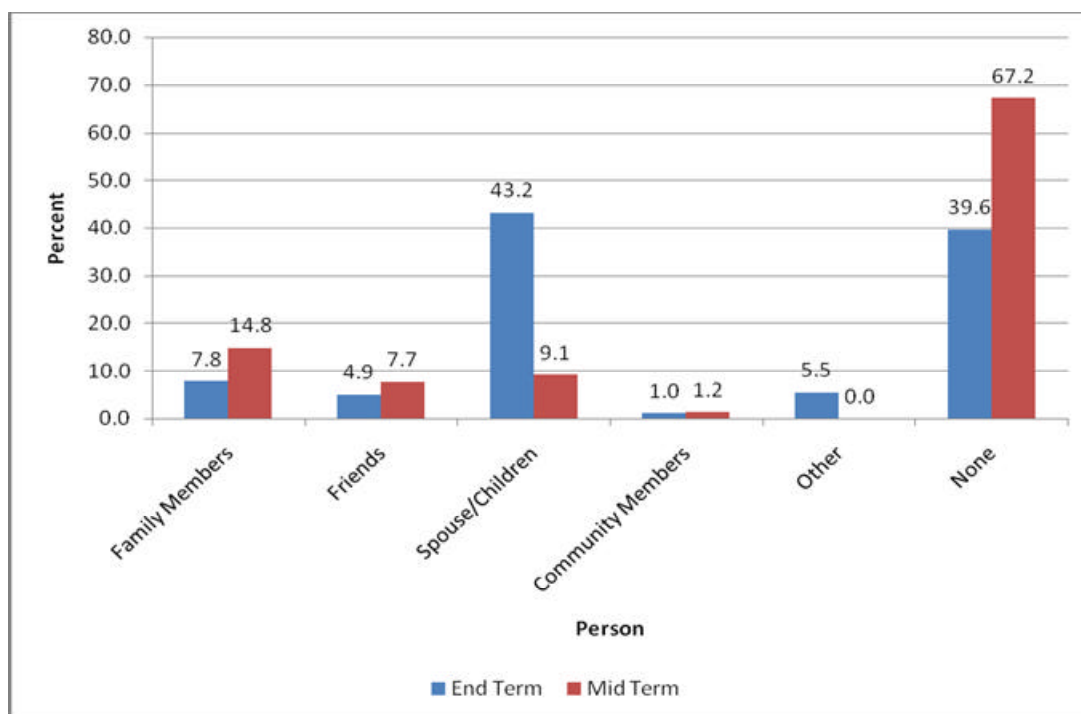


Figure 4.34: Knowledge on HIV by others

There were increases in the proportion of households mentioning that their spouse or children knew about their HIV status from 9.1% to 43.2% between mid-term evaluation and end-term evaluations respectively. This indicates that there were important gains made in the fight against HIV stigma. However, as is depicted in the Figure, it was also noted that there were reductions in the proportion of respondents mentioning that their family members knew about their HIV status from 14.8% to 7.8% and friends from 7.7% to 4.9% between mid-term and end-term evaluations. It was not clearly established what could have caused reductions in the proportions of close family members and friends knowing the HIV status of respondents.

Joint HIV Testing With Spouse

The study respondents were asked to indicate whether they undertook an HIV test together with their spouses. The results revealed that only 9.6% of those who had ever undertaken HIV test did so together with their spouses. It is therefore important that this be followed further and more advocacy done to help upscale this important practice. The proportion of joint testing with the spouse was higher for males (41.2%)

than females (22.2%) meaning that women are least likely to ask their spouses for a joint HIV test. This finding is surprising given that more than 70% indicated that they had felt relative ease in asking their spouses to go for HIV test. This perhaps shows that there could be a widespread reluctance by some spouses especially men to consent to HIV test. The low levels of joint HIV test with couples could have negative impact in the fight against HIV and AIDS.

Behaviour towards PLWHIV

Household GS&L members were asked if they could do some common activities for the PLWHIV. The results are presented in Figure 4.35. The results showed that majority 95.3% answered affirmatively, that they would shake hands with People Living with HIV (PLWHIV) while only 4.4 said that they could not shake hands with PLWHIV.

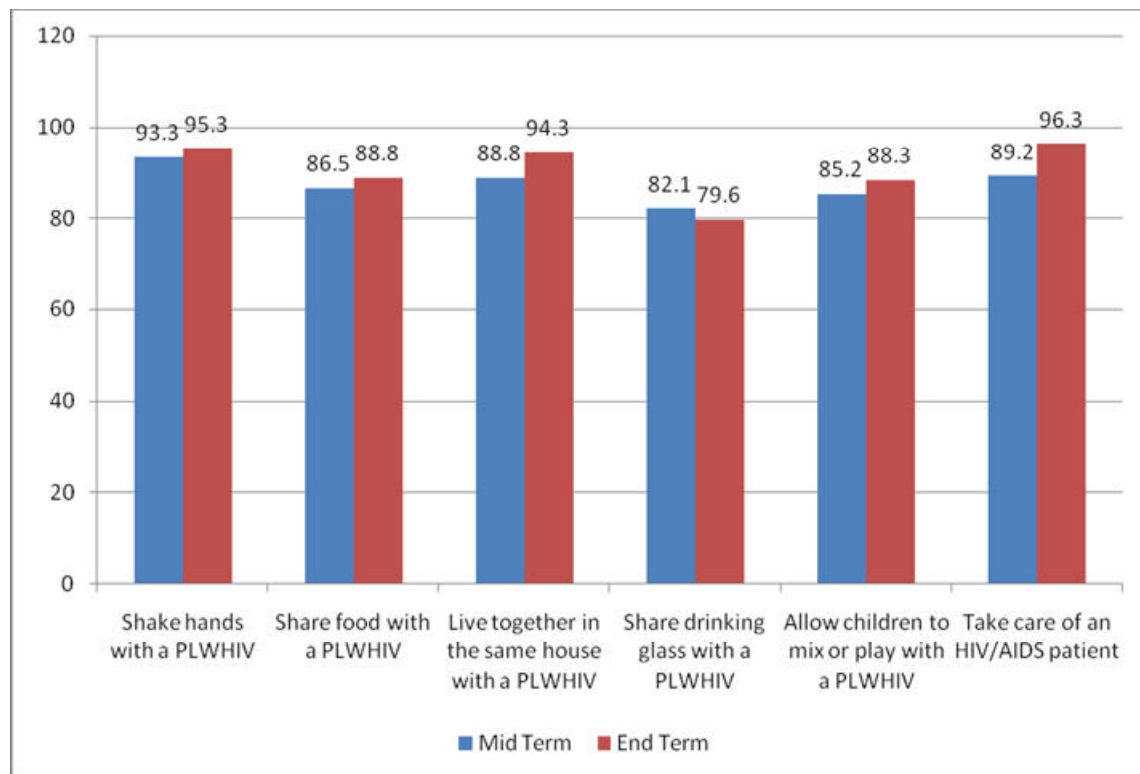


Figure 4.35: Changes in indicators of stigma on HIV&AIDS

Findings of the study in Figure 4.35 show that well over four fifths (88.8%) of the studied household GS&L group members said that they would share food with PLWHIV. Those who indicated that they could not share food with PLWHIV constituted only 11.2% of the 383 respondents who attempted this question of the study. The figure also shows that majority (94.3%) of the sampled GS&L group members agreed that they can live together with PLWHIV in the same house. Those

who indicated that they cannot live together with PLWHIV in the same house were only 5.7%

It is clear in Figure 4.35 that almost 80% (79.6%) of the household GS&L members interviewed for the study agreed that they would share a drinking glass or cup with Persons Living with HIV&AIDS. Those who disagreed with the statement were 20.4% of the 383 household GS&L group members who provided responses to this question of the study.

It also emerges that over four fifths (88.3%) of the studied household GS&L group members agreed that they would allow children to mix with PLWHIV, while only 11.5% disagreed, Figure 4.35.

The figure also shows that an overwhelming majority of the interviewed household GS&L group members agreed that they would take care of an AIDS patient, while only 3.1% indicated that they would not take care of such a patient. The categories not applicable and don't know were represented by 0.3% each of the 383 household GS&L group members answering this question.

4.5.4 Psychosocial Support

Psychosocial support is a critical tool in the management and care of HIV&AIDS. The respondents were asked to indicate the ease of accessing the psychosocial services. The results presented in Figure 4.36 show that 37.2% of the interviewed household GS&L group members indicated that the easiness of accessing pre-test counselling had improved very much compared to five (5) years ago within their communities. Those who said it had moderately improved were 25.3%, while those who reported a slight improvement accounted for 16.8% of the 376 household GS&L group members who attempted this survey question. Further, those who indicated no change for the past five years were 9.8%, while those who said pre-test psychosocial support was not accessible and those who did not respond were 7.5 and 3.4 respectively. There was marginal gender variation in the respondents' accessibility to pre-test counselling with 81.6% of males reporting improvements as compared to 80.4% of the females. The marginal gender variations show how widespread the services are to VCT clients.

The ease with which household GS&L group members would access post-test counselling was indicated to have improved very much by 34.8% of the respondents, while those who said that it had moderately and slightly improved were 22.1% and 18.4 respectively. Figure 4.36 also shows that those members who indicated no improvement were 10.4, while those who reported lack of access were 10.9 of the 376 members who answered this question out of the sampled 384 household GS&L group members. A slightly larger proportion of males (79.6%) indicated having experienced improvements as compared to 76.0% of the females.

Figure 4.36 clearly shows that those household GS&L group members who cited moderate improvement in the easiness of accessing follow-up counselling services compared to five years ago were 32.1%, while 23.0% and 22.4% reported slight improvement and very high improvement respectively. Those who reported no change were 9.1% and those who said that such services were not accessible comprised of 7.1% of the 383 household GS&L group members answering this

research question. Discernible gender variations were noted in reported access to follow-up counselling with a higher proportion of males (85.7%) than females (79.8%) indicating they observed improvements in access to the service within their communities.

As shown in Figure 4.36, almost 38% (37.9%) indicated that the easiness of accessing support for Income Generating Activities (IGAs) had moderately improved, while 21.9% and 17.0% said that it slight improved and improved very much respectively. Those who indicated lack of access were 9.9%, while those who reported no change were 8.3% of the 383 interviewed household GS&L group members who attempted the question. Only 5.0% of the respondents did not answer the question. A higher proportion of males (78.8%) than females (78.2%) reported improvements in access to support for IGA activities.

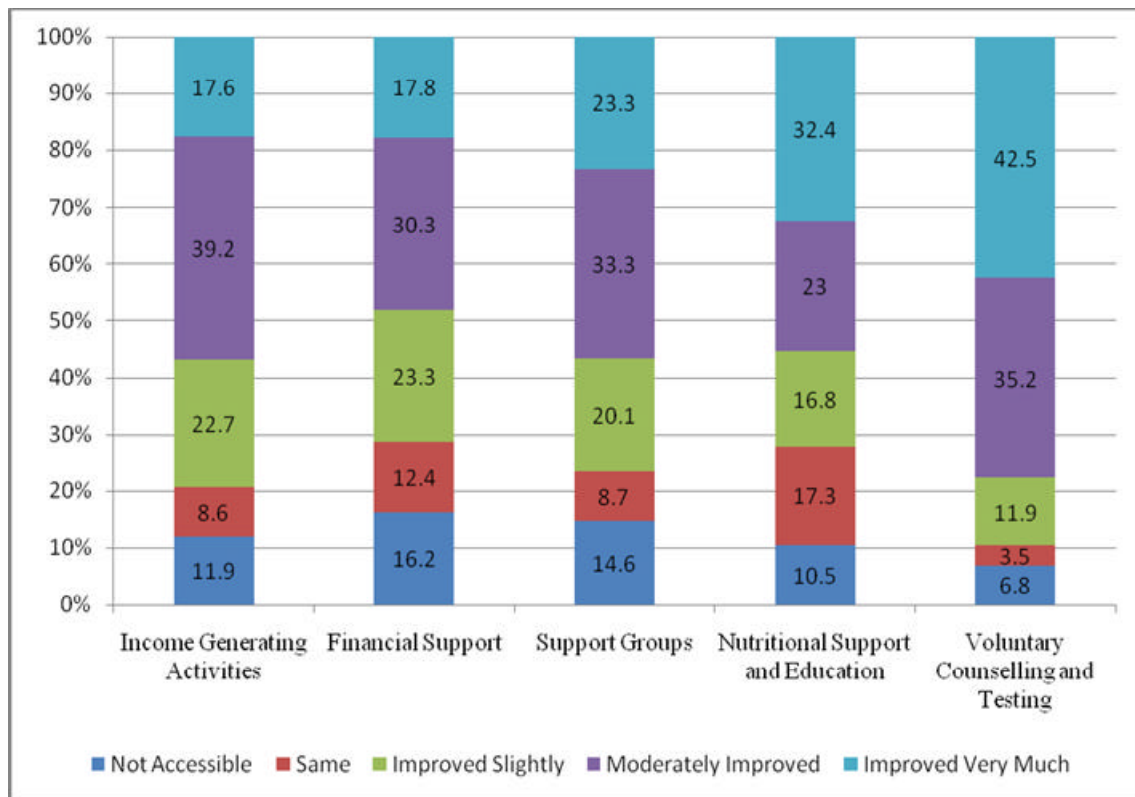


Figure 4.36: Rating of changes in access to HIV&AIDS psychosocial services

Figure 4.36 show that well over one fifths (29.2%) of the studied household GS&L group members reported moderate improvement in the easiness of accessing financial support among members. Those who indicated significant improvement were 17.2%, while those reporting slight improvement were 22.4%. The household members reporting lack of access to financial support were 12.2% and those who reported no change were 12.0% of the 383 interviewed members answering this survey question. Only 6.8% members did not attempt to answer the question. A

higher proportion of males (89.8%) indicated they had experienced improvements in access to financial support as compared to 70.7% of females. This variation by gender indicates that there are some more barriers to be overcome to bring males and females at the same level in accessing support to financial support.

Figure 4.36 shows that 32.81% of the interviewed household GS&L group members indicated that there was moderate improvement of the easiness of accessing psychosocial support from support groups compared to five years ago. Those who reported high improvement were 22.93%, while slight improvement was cited by 19.73% of the respondents. Those citing no change were 8.53%, while only 12.27% said that such services were not accessible. There were marginal variations between males and females in reporting improvements with reported proportions of 75.5% and 76.9% respectively.

Results of the study in Figure 4.36 show that 32.4% of the studied household GS&L group members indicated that the easiness of accessing nutritional support and education has improved very much compared to five years ago. This was followed by those who reported moderate improvement (23.0%) and slight improvement (16.8%). Those who reported that the situation is still the same were 17.3%, while those members who said that such services are not accessible were only 10.5%. A higher proportion of females (73.2%) reported improvements in accessing nutritional education and support as compared to their male counterparts (65.3%).

GS&L group members who reported that the easiness of accessing VCT services has improved very much compared to five years ago were 41.0%. Of the 383 respondents who answered the question, 33.9% said that there was a moderate improvement, while 11.5% reported a slight improvement in the easiness of accessing VCT services. Others said that VCT services are not accessible (5.2%), easiness of access has remained the same (3.4%), while others chosen not to respond to the question (5.0%). A slightly higher proportion of females (90.3%) than males (85.7%) reported improvements in accessing VCT services within their communities.

4.7 Efficiency, Relevance, Effectiveness and Sustainability of *Lok Pachi* Project

The study also sought to assess the *Lok Pachi* project relevance, efficiency, effectiveness and sustainability using the guidelines provided by the Association of Village Savings and Loan (AVS&L). The results are discussed hereunder.

4.7.1 Relevance of *Lok Pachi*

The *Lok Pachi* project as stated earlier was conceived with the main aim of tackling the interrelated problem of poverty and vulnerability to HIV&AIDS with a view to reduce the side effects of the of the HIV pandemic. The choice of Bondo and Siaya was strategic given the high prevalence of HIV and poverty levels. The relevance of the project was reflected in the names provided to the different groups in the project area.

Table 4.9: Names of selected GS&L groups

Group Name	English Equivalent	Group Name	English Equivalent
<i>Be I Jing</i>	Are You Strong	<i>Ukweli</i>	The Truth
<i>Ngwono</i>	Mercy	<i>Onyalo Biro</i>	It is good it came
<i>Teko odago le</i>	Animals live by strength	<i>Together B</i>	Together
<i>Hera</i>	Love	<i>Rid Wiyi</i>	Think Deeply
<i>Konyrwok</i>	Helping one another	<i>Owila</i>	Exchanger
<i>Rieko loyo teko</i>	Wisdom is better than Strength	<i>Tim Kinda</i>	Persevere
<i>Osiepe</i>	Friends	<i>Riwruok e Teko</i>	Together we are strong
<i>Yaw Pachi</i>	Open your mind	<i>Nyi Alego</i>	The Daughters of Alego
<i>Cham Luchi</i>	Consume your Sweat	<i>Sinani</i>	Perseverance

The overwhelming response to the initiative far beyond the expectation shows the need of the initiative among the target community. As discussed earlier and as is revealed in the testimony of the members the GS&L initiative was very helpful in business initiatives, and payment of school fees. In addition, it provided a pool of cash for emergency needs for community members who otherwise did not have access to any credit facilities.

4.7.2 Efficiency of Lok Pachi Project

Efficiency refers to project performance with regard to input delivery, cost control and activity management. According to the AVS&L the efficiency is measured as the ratio of field staff to total staff, number of associations per field officer, members per staff, members per Field Officers, total cost per member, and mean annual cost per member.

The results showed that there were 15 members of staff of whom 7 were field officers. This means that 46.7% of the staff were field officers. This therefore means that the number of field officers was significantly higher in relation to other category of staff. This is particularly so given that they got support from the two project officers and overall technical support from the project manager.

There were a total of 609 GS&L associations in the project area as at June 2009 split between the 7 Field Officers. This means that on average there were 87 GS&L groups per Field Officer. This also implies that each Field Officer handled an average of 17 GS&L groups per year. This numbers per officer appear to be adequate workload per field officer given the extent of success.

The project enlisted 7,408 members of the GS&L groups who were the direct beneficiary. This was higher than the anticipated 5,000 members and direct beneficiary. This therefore meant that there were 494 members per project staff (7408/15) and 1,058 members per Field Officer (7408/7). This is an impressive achievement.

Lok Pachi project had a total budget of US\$ 2,294,387 for the five years of its operations. This means that the cost per member was US\$ 309.72 (2,294,387/7408) and a mean annual cost per member of US\$ 61.9 (458,877.4/7408).

There was therefore good mechanisms put in place to ensure good performance with regard to input delivery, cost control and activity management. This can provide a good beginning point for future project planning.

4.7.3 Effectiveness of *Lok Pachi* Project

Project effectiveness refers to the project performance with regard to delivery of outputs and progress towards achieving the purpose of the project. The AVS&L recommends that the major indicator here should include the percentage of women members of the GS&L groups and the rate of growth of membership among others.

The results showed that of the 7,408 members 81.87% (6,065) were women. This was far above the projected proportion of 70% of the direct beneficiaries to be women. The composition of the project team was also gender sensitive with very good representation of women in the staff. The overall sector manager of the project was female as was the project manager. The project field officers had five females of the total seven field officers and one of the two field officers was also female. Overall, 7 of the 10 technical project staff were female. The project therefore gave gender considerations right from the planning, through to the implementation stage. This was perhaps very instrumental in reaching out to more women than was initially anticipated.

The results presented in Table 4.9 indicates that within the first two year of its implementation the *Lok Pachi* project had registered 21.2% of the attained direct beneficiaries and reaching 56.4% in the third year of its operation. In the fourth year the project had reached 87.5% of the direct beneficiaries. The project moved at an additional proportion of approximately 20% per year. This is a well spread gain meaning that the workload for the staff was evenly spread in all the years. The slow start at the initial years was expected given the magnitude of awareness creation required to ignite the requisite change.

Table 4.10: Annual growth pattern in membership of GS&L groups

YEAR	MEMBERSHIP			Cumulative Membership	Cumulative Frequency
	WOMEN	MEN	TOTAL		
2005&06	1196	353	1549	1,549	21.2
2007	2197	373	2570	4,119	56.4%
2008	1839	428	2267	6,386	87.5%
2009	734	179	913	7,299	100.00
TOTAL	5966	1333	7,299	7,299	

4.7.4 Sustainability of *Lok Pachi* Project

Sustainability refers to the extent to which the project actors possess the capacity to retain the results and advantages of the project. This entails the methodology and strategies put in place to ensure that the project results and advantages are not lost at the end of the project. The study evaluated two sets of indicators of the project

sustainability. The first set concerns the CIK proposed strategies and their implementations while the second sets looks at the operational indicators in selected GS&L groups.

CIK Sustainability Strategies

Recognising the importance of sustainability the *Lok Pachi* project conceived relevant strategies at the initial stage of the project. The planned strategies for sustainability included capacity building of direct beneficiaries on business skills; formation of GS&L Cluster Groups, Strengthening the capacity of participating CSOs on HIV&AIDS knowledge, care and management; the use of Community Resource Persons (CRPs); and strengthening partnerships.

Analysis of the strategies revealed that they were viable in enhancing the sustainability of the project results and gains. The survey results also showed that frantic efforts were made to actualise the strategies. The results showed that the participants were well trained on selection, planning and management of business. This improved the quantity and quality of investments in Income Generating Activities (IGAs).

The results also showed that there were 154 GS&L clusters that were formed in the entire project area. This was an improvement from the proposed three clusters. The number of clusters was increased after the inputs of the community members. In the formation of the clusters considerations were made to both the geographic areas and the genealogical history of the groups. In some cases both strategies were used while in others only one guided the formation.

The reports indicated the capacity building of Civil Society Groups (CSOs) on HIV&AIDS related information was conducted with essential components to tackle stigma included. There were training of a total of 11 PLWHIV (4 men and 7 women) on public speaking and positive living. This has yielded much fruits as is discussed earlier in increasing the number of persons knowing their status and subsequently sharing with others. The spiral effect is expected to continue as individuals become more confident to mention their HIV status and thus live positively with the virus.

The Community Resource Persons (CRPs) was an important addition to the *Lok Pachi* project. The CRPs were very helpful in mentoring and coaching of mature GS&L groups, data collection, training on GS&L concept, community mobilisation and sensitization, and important liaison between the community and the project staff. The CRPs were recruited from among the participants and thus were well versed with the social, cultural, economic and political dynamics of their communities. This made it easy for them to provide the requisite services to the members. A total of 62 CRPs were trained but at the time of the study there were 54 CRPs 27 males and 27 females. The number reduced because 4 CRPs got alternative jobs and 4 voluntarily withdrew due to other commitments.

Partnership is an important principle of the HLS strategy. The project fostered strong partnership in the three tire levels identified in the project proposal. There were good working relationships between the project and the CRPs, CSOs and the complementary partners (NGOs and relevant government departments). The major NGOs and Government departments collaborating with the *Lok Pachi* project

included, Ace Communications, IMPACT International, Ministries of Health, Provincial Administration, Department of Social Services, Centre for Diseases, Control and Prevention (CDC), *Rafiki wa Maendeleo*, Plan-International, FRACODEP, MILO MAY, CARE-Kenya (PMTCT project), and Western Kenya Community Development and Flood Mitigation (WKCDFM). These organisations provided essential back up in areas related to the projects focus areas of poverty and HIV&AIDS. The major CSOs collaborating included Participatory Education Theatre (PET), and Community Development Committees. The participant was linked with these groups who have some related programs and it is anticipated that the initiatives were of essential value to add to the gains and results of the study. It is anticipated that the continued linkages to the organisations will help retain the gains and results.

GS&L Group Level Indicators

The study sought to assess the level of record keeping of the relevant books in the operations of the GS&L groups and also the operational mechanisms of the groups. The results are discussed under.

Keeping of Relevant Records

The results presented in Table 4.11 indicate that not all organisations kept the records of the relevant books. From the table it is clear that it is only the loans record book that was updated in all the sampled GS&L groups. The other books: members register, savings record, profits record, and liquidation records were kept by 8 of the 9 organisations. It is important to note that most of the organisations kept and updated almost all the requisite books only faltering in one at any given time. Only one organisation faltered in updating of two of the requisite books. This shows that the GS&L groups have the necessary skills to help them keep records and thus operate for a long time with minimal or no supervision at all. The possession of such skills is important in sustainability of the GS&L groups.

Table 4.11: Status of relevant books

Type of Book	Well Kept (n=9)
Members Register	8
Loans Record	9
Savings Record	8
Profits Record	8
Liquidation Records	8

Operational Indicators

The results presented in Table 4.12 reveals that all sampled GS&L groups indicated their group leaders assess financial records regularly, they report groups profits and distribute, they have democratic decision making structures, have monthly meetings, experienced improvement in capacity to understand options and make decisions. It also shows that all but one GS&L indicated they conduct risk analysis well and have by-laws. Annual meetings and regular internal audit were conducted in 8 of the 10 GS&L groups. Major challenges appear to be in the areas of regular training, smooth loan repayment, and linkages to other organisations that were operating well in 7, 6

and 4 GS&L groups respectively. Overall, the areas that need more attention are in linkage with other organisations, loan and debt recovery and methods of conducting regular training. These three areas may be a threat to GS&L sustainability.

Table 4.12: Operational practices of GS&L groups

Indicator	Done (n=10)
Group leaders assess financial records regularly	10
Groups profits is reported and distributed	10
Loan repayment good	6
Risk analysis done well	9
Internal audit conducted regularly	8
Have group by-laws	9
Have democratic decision making structure	10
Regular training sessions held	7
Monthly meetings held	10
Annual meetings held	8
Group's capacity to understand options and make decisions increased	10
Group making linkages to other organisations and social services	4

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This Chapter provides the summary, conclusions, and recommendations of the study. It draws largely from the project documents, the results of the survey and the major lessons learnt.

5.1 Summary

Bondo/Siaya household livelihood security project was initiated as a response to the social economic impacts of HIV&AIDS. The project was premised on the higher prevalence of both HIV&AIDS and poverty in the project area. The main objectives of the project were to economically empower the direct beneficiaries and members of their households and to help reduce HIV& AIDS stigma through enhanced advocacy, improved knowledge and access to psychosocial support services. The results showed that the project reached a total of 7,741 direct beneficiaries which is more than the anticipated 5,000 persons. Among the direct beneficiaries, 6,363 (82%) were as compared to 1,378 (18%) men.

The results also showed the respondents indicated they had experienced significant improvements in critical indicators of the major components of the HLS approach. Specifically, the proportion of respondents reporting slight improvements to very much improvement in selected were generally more than 80% in all the indicators. In human capital the selected indicators included labour capacity, access to formal education, specialised training, access to food and health of household members with improvements reported by 86.6% (Males-88.2%, females-85.2%), 90.6 % (Males-88.2%, females-93.1%), 78.9% (Males-76%, females-81.8%), 94.4 % (Males-98%, females-90.9%) and 89.9% (Males-90.2%, females-89.7%) respectively. This was particularly important given that human capital is crucial in providing strength for the individual members to participate in productive activities.

There were also impressive improvements in natural capital as was shown by higher proportions reporting slight improvements to very much improvement in access to land-78.2%(Males 76%,Female -80.5%), access to common pool resources-80.9%(Males-82.4%,Females-79.5%), and farm and off-farm produce-86.6%(Males-86.3%,Females-87%). Further analysis also showed that there were improvements in access to selected indicators of public utilities. Improvements were reported in agricultural extension from 54.4% to 62% between the period preceding membership to a GS&L group and the time of study. Similar improvements were also reported in access to health services (from 83.1% to 92.4%), access to NGO services (76.3% to 96.4%), access to workers/farmers union (54.9 to 69.8%), membership to GS&L groups (59.4% to 97.7%), veterinary services (78.1% to 84.6%), and land registry (58.6% to 65.1%) in the same period of time. This means that the level of empowerment had implications in essential indicators of natural capital which in a sense helped to improve the households' level of resilience.

Improved access to financial capital, as mentioned earlier, was at the core of the project activities. The results of the study showed that 94.8 % (Males-94.1%, Females-95.5%) felt their access levels to credit facilities improved. This was

reinforced by the project records that showed 7,299 persons had accessed the GS&L services with a cumulative loan totalling to KShs. 189,574,504.00 in 107,167 transactions. A further gender analysis showed that 81.7% of the direct beneficiaries were a woman which is higher than the proposed proportion of 70% women. Moreover, women had a higher mean amount of borrowed money than men at KShs. 26,074.94 relative to men's KShs. 25,514.92. This is particularly a major achievement given that nearly 70% of the households in the project are male headed. This implies that a good number of women were empowered economically in line with the targets of the *Lok Pachi* project.

The results indicated that the borrowed money from the GS&L groups was largely used expand or start businesses, defray funeral expenses, meet expenses related to domestic uses, pay for medical services and pay educational fees in that order. Further analysis showed that there were changes in the uses of the loans between the first and the third most recent loans from the time of the study. The results showed that there were marked constant increases in the proportion of participants using their borrowed money to initiate or expand their business and to pay for medical expenses. Uses for agriculture and domestic use dropped for loan two before rising in loan three while the use education and funeral expenses increased in loan two before dropping at loan three.

The results showed that GS&L was the most used (69.4%) method of savings followed by banks (10.7%) and merry-go-round (7.5%). The cumulative savings in the GS&L groups amounted to KShs 23,290,148.00 with women having the largest proportion of KShs. 19,193,601.00 as compared to men's KShs. 4,096,547.00. The mean savings by gender also showed that women saved more than men at KShs. 3,217.16 as compared to men's KShs. 3,073.18. Again, the program was very effective in women empowerment.

The savings obtained from GS&L liquidation were largely used in household investments and in meeting household expenses. The major uses were paying school fees, buying livestock, domestic use, start or expand business, buy food, and pay medical bills in that order. This showed that the motive for savings was mainly to accumulate the required finances for long term investments like education, livestock, and business enterprises. This is particularly important in improving the household level of resilience against shocks as a result of improved livelihoods. Females were more likely than males to spend their liquidation savings on school fees and purchase of livestock while males were more likely to spend their similar savings on domestic use and in business than their female counterparts.

The study results showed significant gains in physical capital. Improvements were reported in household's access to safe drinking water (92.7%), quality of housing (79.8%), improvement in communication equipment (73.5%), access to quality seed (67.0%) and access to fertiliser (58.6%). Despite the great improvements in access to safe drinking water there were challenges with a significant proportion (30%) still accessing their drinking water from lakes, rivers, and unprotected wells. Even though it is understandable that they use treatments methods to improve the quality shortage of the requisite chemicals can place the households at greater risk. There were distinct gender variations in access to communications equipments, quality seeds

and fertilizers with all favouring males. This means that more efforts still need to be put towards gender equity with regard to access to physical capital.

Improvements in the quality of housing was exhibited by the reduction of the proportions of households with mud walls from 75.5% to 66.7%, grass thatched houses from 38.8% to 22.9%, mud floor from 72.4% to 66.9%. At the same time, there were increases in the proportion of households with cemented walls from 10.7% to 16.7%, iron sheets roofs from 56.2% to 71.6% and cemented floors from 25.8% to 30.7%. There were, therefore major impacts in physical capital of the participants.

Social capital is one of the major entry points of the *Lok Pachi* project since the participants were organised into working groups. The results showed that the sampled participants felt there were improvements in their levels of participation in community activities (80.6%), reduction in discrimination against women (84.5%), working with family and friends (94.8%), involvement in reciprocal exchange services (86.2%), and leadership in groups (89.9%). These improvements translated into improved access to fishing groups, membership in GS&L groups, membership in HIV& AIDS support groups, membership in beach management committees, participation in community services, involvement in village courts and *barazas*, access to banks, membership in school/market/church committees/boards, and membership to farmers or workers union. This was significant achievement given that the project took initiatives to train the direct participants on group dynamics among other components of GS&L training topics. Working together, as is mirrored in the names provided to some groups, is more important to the vulnerable groups. There were no marked gender variations in the reported improvements except in reduction in discrimination against women where a higher proportion of males than females indicated improvements.

The study showed gains in gender empowerment in relations to property ownership, access and control. The results indicated that despite the existence of some spots of male dominance, there were visible gains in women's ability to acquire and access essential resources. The results indicated that a higher proportion of women had relative ease than men in acquiring poultry and gas cooker. It also shows that men had comparatively relative ease than women in acquiring land, radio, sofa sets, house and homes.

The results further show that there were changes with regard to access to the selected property items. For instances women had a higher proportion of those with relative ease in accessing poultry, sofa sets and house. Thus, even though women had difficulties acquiring some of the property items, their access levels improved significantly. Interestingly, there were equal proportions in access to radio and men only retained dominance in access to homes and land.

The results showed significant improvements in decision making among women on selected elements. Specifically, there were improvements in women's ability in making decisions with regard to wearing of condoms, asking the spouse to go for joint HIV test, use of contraceptives, asking for sexual intercourse, and determining when to have sex. This was an important gain given that the spread of HIV&AIDS has in some quarters been widely associated with the women's inability to make

crucial decisions with regard to sexuality. Nonetheless, a higher proportion of males than females reported ease in decision making in all the selected issues on sexuality with asking for sexual intercourse and when to have sex having much wider variations.

The project also had visible impact in knowledge levels on HIV&AIDS. The improvements were reported in critical areas of HIV&AIDS prevention, methods of transmission, care and management, access to support services, and testing and counselling. It is important to note that the quality of knowledge on HIV&AIDS showed significant gains with the main sources of information being media, health workers, friends and relatives, organisations and community based PET groups.

The *Lok Pachi* project made major gains in the fight against HIV&AIDS related stigma. The proportion of respondents reporting they had ease in discussing information on HIV&AIDS with their respective partners and family members were 84.1% and 83.3% respectively. A comparative analysis with the mid-term evaluation reports showed that there were general improvements for the majority willing to discuss their status with others. Specifically, the proportion of those who showed no one else knew their HIV status dropped from 67.2% during the mid-term to 39.6% at the time of the current study. The proportion of those reporting to know their HIV status increases from 32.8% during the mid-term survey to 68.9% at the end term with no gender variations. Despite these impressive gains, the proportion reporting having gone for HIV test with their spouse was only 9.6% which is by all standards low. This therefore implies that much still needs to be done in this area. Moreover, there was a distinct gender differences between the males and females with males more likely to take up HIV tests with their spouses than did females.

5.2 Conclusion

The study therefore concludes that the *Lok Pachi* project was very successful in attaining its major objectives. Particularly, the project reached a total of 36,495 against the proposed 25,000 through 7,299 direct beneficiaries instead of the projected 5,000. The GS&L activities are an effective tool of economic empowerment and its combination with the HIV&AIDS activities is achievable as is demonstrated by the gains made in the major indicators of household livelihood security. In a sense *Lok Pachi* project model proved to be an effective intervention in tackling the social-economic impact HIV&AIDS. Despite these gains there still remain major challenges with regard to HIV&AIDS stigma and quality of knowledge possessed by community members. And linkages between the GS&L groups and other organisation and debt collection confidence and strategies still remain a challenge. There is also need to sustain the gains made in gender empowerment with regard to physical, financial human, social and natural capital. However, more efforts will be required to enhance gender parity in essential indicators for each of these livelihood indicators especially for physical capital where men had a comparatively more improvements than did women.

5.3 Recommendations

The study makes two sets of recommendations. The first set of recommendations target specific areas of improvement for the improvement of the *Lok Pachi* Project model and the attendant outcomes. And the second set identifies some of the areas that may require further studies.

5.3.1 Recommendations for Practice and policy

The following are the recommendations in areas that would help improve the practice and policy with regard to the *Lok Pachi* project.

1. The household livelihood security approach is an effective and efficient framework for project planning in a resource constrained communities. CIK may consider using this approach in their future projects
2. The *Lok Pachi* model needs to be replicated elsewhere especially in addressing the socio-economic impacts of HIV&AIDS.
3. There is need to strengthen the linkages between the GS&L groups and other partner organisation as a strategy for sustainability. This is likely to enhance the members' confidence and thus enhance the retention of the project results and outcomes.
4. Effective mechanism needs to be identified and enforced to promote joint HIV testing of spouses and sexual partners. This may help reduce the levels of new infections and reduce the rate of re-infections.
5. There is need to enhance the HIV&AIDS advocacy within the community so as to strengthen the level of openness and thus reduce stigma. This will help improve the level of disclosure of status by PLWHIV .
6. Collaboration with health workers and media practitioners on issues relating to HIV&AIDS needs to be strengthened. This is largely because many participants indicated they received HIV&AIDS information through the media and health workers.
7. The GS&L groups may require more guidance on loan repayment and debt collection strategies. These approaches must be reoriented to the groups' settings.
8. As an exit strategy to *Lok Pachi* project CIK may need to provide guidelines to the GS&L on ways of follow-up training.

5.3.2 Recommendations for Further Research

The following areas may need further research in order to provide more light into the Household livelihood security approach and the GS&L.

1. There is need to explore further the differential behaviour of women members of the GS&L in the various locations. Specifically, focus may be paid to why men in some locations saved and borrowed more than women and vice versa.

2. There may be need to conduct a study of the household livelihood security approach integrated with the GS&L with a focus on agricultural training. This particularly so because majority of the respondents indicated their main occupation was farming.
3. Further studies may need to be carried out to find out why the participants used borrowed money for different purposes compared to the money they received from savings.
4. There is need to conduct a study to understand the factors restricting uptake of joint HIV testing between spouses and sexual partners.

References

- Ashley, C. And D. Carney (1999) *Livelihoods Approach Compared* London: DFID
- Badri, M.; G. J. Naartens; S. Mandalia; L. Bekker; J. Penrod; R. Platt; R. Wood; and Beck E. (2006) "Cost Effectiveness of High Active ART in South Africa" *PLoS Medicine* Vol. 3
- Barnett, T., J. Tumushabe, G. B. Bantebya, R. Ssebuliba, J. Ngasongwa, D. Kapinga, M. Ndelike, M. Drinkwater, G. Mitti, and M. Haslwimmer., (1995) The social and economic impact of HIV/AIDS on farming systems and livelihoods in rural Africa: Some experience and lessons from Uganda, Tanzania and Zambia. *Journal of International Development* 7 (1): 163-176.
- CARE (2006) *Household Livelihood Security through an HIV and AIDS Lens: Uncovering and Influencing the Two Way Link. Experience from Angola and Malawi*
- Chamber, R. (1988) *Sustainable Rural Livelihoods: A Key Strategy for People, Environment and Development* London: Earthscan
- Chambers, R. And G. Conway (1992) *Sustainable Rural Livelihood: Practical Concepts for the twenty first Century*. IDS Discussion Paper 296; IDS, Brighton: UK, February 1992
- Drimie, S. And J. Gandura (2005) *The Impact of HIV/AIDS on Rural Livelihoods in Southern Africa: An Inventory and Literature Review* Harare: FAO
- Drinkwater, M. and T. McEwan (1992) *Household Food Security and Environmental Sustainability in Food Security Research: Developing Sustainable Livelihoods Approach* A Paper presented at Biannual Review Meeting, Manyu: Zambia 13th to 16th April 1992
- Drinkwater, M. and T. Rusinow (1999) *Application of CARE Livelihood Approach* Presentations for NRAC, 99 CARE Memo
- Frankenberg, T. (1996) "Measuring Household Livelihood Security: An Approach for Reducing Absolute Poverty" in *Food Forum* 24. Washington DC.: Food Aid Management
- Frankenberger, T.; M. Drinkwater and D. Maxwell (2000) *CARE Operationalizing Household Livelihood Security: A Holistic Approach for Addressing Poverty and Vulnerability*: Atlanta: CARE
- Glanim, I. (2000) *Household Livelihood Security: Meeting Basic Needs and Fulfilling Rights*. Atlanta: CARE Discussion Paper

- Krantz, L. (2001) *The Sustainable Livelihood Approach to Poverty Reduction: An Introduction* Stockholm: SIDA Division for Policy and Social Economic Analysis
- Lamprey, P., Wigley, M., Carr, D., & Collymore, Y., (2003) *'Once an Urban Phenomenon, HIV/AIDS Threatens Lives and Livelihoods of Rural Communities'*, Population Reference Bureau
- Loewenson, R. and Whiteside, A., (2001) "HIV/AIDS: implications for poverty reduction" paper prepared for the UNDP for the UN General Assembly Special Session on HIV/AIDS, 25-27 June.
- Malawi Ministry of Health (2005) "Working Together for Health" A Speech by Minister of Health given on WHO Day of Health 2006 in Lilongwe, on April 7, 2006. Lilongwe: Government Printers
- Nischal, K.C.; U. Khopkar; D.G. Saple (2005) "Improving Adherence to Antiretroviral Therapy" in *Indian Journal of Dermatol Venereol, and Leprol* (serial on line 2005) cited 2008, June 28/71:316-20. Available: <http://www.ijdl.com/text.asp?2005/71/5316/16780>
- Walker, L., (2002) *A study of child-headed households on commercial farms in Zimbabwe*. Harare: HPL Printers
- Waterhouse, R. and Vifjhuizen, C., (2001) "Strategic women and gainful men: gender, land and natural resources in different rural contexts in Mozambique", *Nucleo de Estudos de Terra, UEM*; Faculty of Agronomy and Forestry engineering, UEM and ActionAid – Mozambique, Maputo.
- WHO (2006) *The World Health Report 2006: Working Together for Health*, Geneva: WHO, www.WHO.int.3by5
- WHO/UNAIDS (2005) *AIDS Epidemic Update 2005* Geneva: WHO

APPENDIX I: Sample Frame

Target Location	Clusters	30% clusters	Sampled Cluster	No. of Sampled Groups	30% Groups and Membership	Total No. of HH	No. of HH visited
West Uyoma	14	4	Nyakongo 7; Kahoya 3; Nyabera 2; madiany2	12	Obondi 10; Mosmos 10; Ukweli 13; Kamolo 7	40	33
Central Uyoma	17	5	Ojawa 3; Nyakwara 1; Masala 7; Lango 2; Gwena 1	14	Ngwono 9; Be-i-jing 12; Onyalo biro; Teko odago le 7	34	28
East Uyoma	18	6	Nyamasore 2; Migowa 2; Ranalo 4; Osewre 4; Mituri 2 Rageng'ni 4	18	Kajembe 17; Together B 9; Mawuotho 15; Migowa 8; Hera 10; Rid wiyi 5	60	50
South sakwa	17	5	Anyoungi 1; Ludhi 4; Abimbo 7; Oiko 3; Matagwe 1	16	Konyrouk 9; Owila 17; Yesu nyalo 10; Migwena mbele 14; Mwangaza 13	63	52
Central sakwa	24	7	Nyangoma 14; Mindhadho 4; Magak 2; Wagusu 2; Sirongo 3; Luore 1; Nango 4	32	Bed mamuol 13; Nyandiri B14; Nyamase 17; Rieko loyo teko 13; Bonde 14; Kodero moyie 12; Tim kinda 16; Jiwri sirongo 17; Komolo veg. 17; Kowaga 20	153	127
West/S.West sakwa	12	4	Maranda 5; Masita 4; Sinyanya 5; Kapiyo 3.	17	Osiepe 12; Riwrwok e teko 7; Yaw Pachi-M 13; Sinyanya B 6; Nyi alego 8	49	41
Township	8	2	Kamsinjire 4; Maseno 6.	10	Maseno A 11; Kinda 15; Chamluchi 6	32	27
Siaya	5	2	Pap gori 2; Maoho 4.	6	Pap gori D 16; Sinani 11	27	22
TOTAL	115	35		125	39	458	380