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DECLARATION

**COMMUNITY PARTICIPATION IN HEALTH  
DEVELOPMENT IN NYANDARUA DISTRICT, KENYA.**

**Jackson Githinji Muriithi**

**I56/9132/2000**

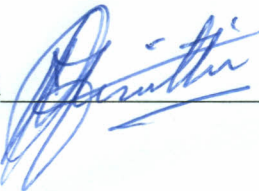
A Thesis Submitted In Partial Fulfillment Of The Requirement For  
The Award Of Master Of Public Health And Epidemiology Degree  
Of Kenya'ta University

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February, 2003

**DECLARATION**

This thesis is my original work and has not been presented for a degree in any other university or any other award.

Signed  \_\_\_\_\_

Dated 19<sup>th</sup> February, 2003

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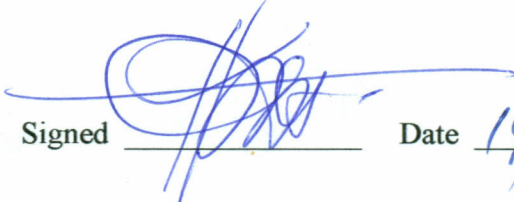
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DEDICATION

To my wife Catherine, our sons Edward, Davidson and William and my lovely parents Edward and Annah who have consistently given me immense support and encouragement during this study.

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To all of you, may God bless and keep you.

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## ABSTRACT

Although community participation in health development exists in Kenya, Community perceptions and attitude towards its role in health development is unexplored. Similarly the effect of community participation on health development on health care provision is undermined and the waiver system meant to promote community participation in health development in the health care provision remains unevaluated. Hence, this study attempted to establish the existence of needs assessment, organization, leadership and resource mobilization as factors that influence community participation in health development in rural community setup in Nyandarua district. Both structured interviews and focus group discussion were used to collect data from Community Respondents, Rural Health Facility Staff and the Rural Health Facility Management Committees.

In terms of knowledge, significant differences ( $\chi^2 = 46.94972$ ;  $p = 0.00007$ ) on the role of community respondents in health development were found between rural health facility staff and community respondents. There were also significant differences in knowledge between age groups ( $\chi^2 = 28.49994$ ;  $p = 0.00150$ ) but marital status and gender were insignificant. Significant differences were also noted in knowledge between those who attended *barazas* ( $\chi^2 = 16.31502$ ;  $p = 0.00029$ ) and those who did not and also between those who accessed waivers and those who did not ( $\chi^2 = 28.21035$ ;  $P = 0.00001$ ). Only 5.7% of the community respondents had good perception on their role in health care provision. There were significant differences ( $\chi^2 = 14.10904$ ;  $p = 0.00086$ ) in perception between gender as well as *baraza* attendees and non-attendants ( $\chi^2 = 109.69402$ ;  $p = 0.0000$ ). Almost all the Rural Health Facility Staff 94.7% had good knowledge of health care provision compared to only 5.3% who had fair knowledge. Majority of Rural Health Facility Staff interviewed 76.3%

had fair perception of health care provision. Significant differences in leadership were noted between gender ( $\chi^2 = 9.87759$ ;  $p = 0.00716$ ), waivers ( $\chi^2 = 33.45095$ ;  $p = 0.0000$ ) and education levels ( $\chi^2 = 12.9204$ ;  $p = 0.04432$ ) of the community respondents. Further, significant differences ( $\chi^2 = 14.38694$ ;  $p = 0.00075$ ) were found in organization between gender, *baraza* attendance ( $\chi^2 = 35.56165$ ;  $p = 0.0000$ ) and waivers ( $\chi^2 = 59.84615$ ;  $p = 0.0000$ ). There was a significant difference in resource mobilization between marital status ( $\chi^2 = 6.62548$ ;  $p = 0.03642$ ) and those who accessed health service without payment ( $\chi^2 = 32.59359$ ;  $p = 0.0000$ ).

The overall level of community participation was fair (score 7.8) and the order of the indicator factors was leadership (score 2.2), organization (score 2.0) resource mobilization (score 1.9) and needs assessment (score 1.8). Since the community had gradually been involved in the work of the rural health facilities, the government should give the Rural Health Facility Management Committees legal status from which specific obligations and regulations should be laid down. In this way the community will be given the responsibility to increase their contribution to the financing of promotional, preventive and curative health care activities. Community participation takes place through the RHFMC, which are loosely established, in the public health organizational structures.

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## ABBREVIATIONS

C.I	Confidence interval
CBD	Community based distributors
CDA	Community development assistant
CN	Community Nurse
CO	Clinical Officer
CPHD	Community participation in health development
CR	Community respondents
df	Degree of freedom
DHMB	District health management board
DHMT	District health management team
EN	Enrolled Nurse
FGD	Focus group discussion
FIF	Facility improvement fund
GoK	Government of Kenya
H/C	Health center
KEMRI	Kenya medical research institute
KRCN	Kenya registered community nurse
LAB. TECH	Laboratory technician
MCH	Maternal and child health
MOH	Ministry of health
NGO	Non-governmental organization
OIC	Officer in-charge of a rural health facility
PHC	Primary health care
PHT	Public health technician
RHF	Rural health facility
RHFMC	Rural health facility management committee
RHFS	Rural health facility staff
S.S	Subordinate staff
STD	Sexually transmitted disease
TBA	Traditional birth attendant
VHC	Village health committee

## CHAPTER ONE: INTRODUCTION AND LITERATURE REVIEW

### 1.0: Introduction

Community participation is a social process in which specific groups with shared needs living in a defined geographical area actively pursue identification of their needs and take decisions and establish mechanisms to meet them (Bichmann *et al.*, 1989). This means individuals and groups, exercise their right to play an active role in the development of appropriate health services. Community participation in health development (CPHD) is a process by which partnership is established between the government and local communities in the planning, implementation and utilization of health activities (Rifkin, 1990). Community participation in health development (CPHD) ensures conditions for sustained improved health and supports empowerment of communities for health development. Consequently, CPHD increases coverage, efficiency, effectiveness, and equity of health services provision and promotes self-reliance in the community (Oakely, 1989).

Community participation occurs at five levels namely; (i) Communities participating in enjoying project benefits without making any contribution. (ii) Community contribution of land, labor and money to health programs. (iii) Communities participate in the implementation of health programs and have managerial responsibilities decided upon by health planners to whom they refer for advise, supervision and approval. (iv) The community monitors and evaluates programs where it modifies objectives. (v) Communities participate in planning programs that community prioritizes with expert knowledge and resources provided by health staff, agencies and/or governments (Rifkin, 1990).

There are five factors that influence community participation and have been identified as needs assessment, leadership, organization, resource mobilization, and management (Bichmann *et al.*, 1989). These indicators can be used to facilitate assessment of participation in a given program, at different times by different planners and by different participants. This helps managers to understand the process of community participation in health programs. It seeks to describe change by assessing how broad or narrow participation is at a given time and comparing it with that at another time or with that perceived by another group. It is a participatory way of assessing community participation and may be used for involving the district health team as well as community groups in evaluating their own programs (Bichmann *et al.*, 1989).

In terms of CPHD implementation, three key elements exist: the external agency, (government health service or any outside group); the community health workers (development groups or defined target communities) and the education process that seeks to create a basis for people's sustained involvement (WHO, 1997). Partnerships between community and institutions at all levels allow for sharing of experiences, expertise and resources necessary for the attainment of 'Health for All'. Community's direct and indirect participation in the promotion and maintenance of their health and that of their families lies at the core of community centered approaches to development. Such approaches require the implementation of sustainable development programs based on self-reliance and are managed and owned by the community. Increased commitment by all is urgently needed to ensure full implementation (WHO, 1997).

In communities where CPHD has not been the practice, there may be resistance from health care providers and for it to be effective, the perception and attitudes of health care providers' towards it must be taken into account. This applies also to the community itself (Nakamura & Siregar, 1996).

Socio-economic and demographic characteristics are known to influence knowledge and perception of communities when they are expected to participate in health development programme (UNICEF, 1993, NCPD, 1994).

## **1.2: Literature review**

### **1.2.0: Community participation in health development**

The roots of Community Participation in Health Development (CPHD) can be traced from public health movements that characterized Europe and North America in the 19<sup>th</sup> century (Rifkin, 1990). Firstly, there was increasing discontent with 'western' medicine which stressed curative hospital based health care. This was followed by a health crisis that caused a shift towards preventive and decentralized community care based on epidemiological priorities. International health policy before 1978 stressed on the provision of health education but this quickly degenerated into mere provision of knowledge with limited improvements in health (Rifkin, 1990). It became apparent that it was necessary to involve communities in the planning of health services (World Bank, 1994). Secondly, there was the recognition that health formed an integral part of economic development. The issues of basic needs, social justice and people's participation began to involve health. The development of

these two trends resulted in the concept of Primary Health Care (PHC) which is essential health care, made universally accessible to individuals and families, in the community by means acceptable to them, through their full participation and at a cost that the community and the country can afford (WHO, 1978).

In the 1950's, the United Nations promoted community development in Africa as a mass education strategy for the rural poor (Oakely, 1989). There were false assumptions that plagued the community development movement and that needed to be corrected if PHC was to be successfully developed. These assumptions included were (i) communities are homogenous. (ii) knowledge would automatically create desired changes in behavior (iii) community leaders act in the best interests of their people (iv) government and community workers share the same goals for community development (v) and community development activities did not create conflicts for planners (WHO, 1979). Decentralized decision making and local participatory planning for health in which partnerships in the provision of services are encouraged helps to ensure that community needs are considered. This strengthens community ownership of health services and increases their utilization (WHO, 1997).

In developed countries, the trend in health development has been to increase national expenditure in community-oriented primary care. In the USA, this forms the basis for its public policy for providing primary care services to the under-served populations (Richard, 1993). Similarly, in the UK, the emphasis is to shift resources from secondary to primary care in order for the flow of expenditure to reflect activity (Owen, 1995). The developed world has had to respond to the changing economic times, first by cost-containment strategies and by health care reforms towards the organization of health services and greater

consumer involvement (Richard, 1993). In sub-Saharan Africa, CPHD has been directed towards community financing with an emphasis on cost recovery using instruments such as fees for services and drug sales (Abel-Smith & Ajay, 1995).

In 1987 UNICEF sponsored a meeting of African Health Ministers in Bamako, Mali where the Bamako Initiative was born. Bamako Initiative is a method of cost recovery based on the sale of essential drugs, equity and easy access of health services resulting in better utilization and improved quality of care. Bamako Initiative provided an entry point for PHC and this was used to improve the health of mothers and children who were identified as the vulnerable members of the family. Communities received duties in health care (UNICEF, 1994, 1995). Through Bamako Initiative, communities were made aware of prevailing health problems and the possibility of improving their health (UNICEF, 1994). The Bamako initiative has been instrumental in mobilizing communities to undertake various health care activities using the rationale that when people contribute financially, they become more involved (Diallo *et al.*, 1996).

The involvement of individual community members in small groups and in larger organizations must occur if the concept of participation is to develop along a continuum. However, whilst individuals are able to influence the direction and implementation of a program through their inputs and active participation, this alone does not constitute community empowerment. Empowerment and participatory approaches differ because the former has an explicit purpose to bring about social and political changes embodied in its sense of liberation and struggle (Glenn Laverack, 2001)

### 1.2.1: Needs assessment

Needs assessment is a community process of identifying problems, possible solutions to the problems and coming up with actions to resolve them with an ultimate goal of empowering them (Glenn Laverack, 2001). In order to achieve this, the community may have to acquire new skills and competencies. The importance of needs assessment toward community empowerment has been identified in a number of health programs (Tonon, 1980; Pelletier & Jonsson, 1994; Plough & Olafson, 1994; Purdey *et al.*, 1994; Roberts, 1997). However, whilst many programs advocate for wider participation, community involvement is limited. These programs lose the opportunity to involve the community in the decision making process of defining wider needs, which concern the stakeholders and have been shown not to achieve their purpose (Rifkin, 1990).

The aim of a hospital project in Hong Kong, which aimed at improving health and health care among the urban refugee community, was to have the community maintain its own health care. The hospital management decided that this could be best achieved by improving service delivery. The hospital management set up three community clinics and a health insurance scheme in the refugee area but without consulting or involving the community in the decision making process. The result was that the community saw it as a hospital project without a role for themselves and participated by accepting the services but not by contributing towards its upkeep or maintenance (Rifkin, 1990).

### 1.2.2: Leadership

Selection of community leaders is crucial for continued community participation (Bugnicourt, 1982). When communities elect their leaders, such leaders are respected,

obeyed, listened to and are effective in mobilizing behavior change in their communities making CPHD a success (Kaseje *et al.*, 1987). Programs in the water and sanitation sector have confirmed that community-chosen leaders usually deliver what the community plans and if not, can easily be replaced by more effective ones (Ryra, 1990). Selection of health management committee members needs close supervision to ensure that they represent the community at large. There is a danger of the health management committee work being dominated by health care provision staff (Jinadu *et al.*, 1997), strong community leaders and/or community elite (Moses *et al.*, 1992). Another danger of such committees may be in their flexibility to cope with other tasks when non-health community development problems have been solved (Rifkin, 1990).

Where communities are involved at the onset, health programs receive wide acceptance, there is easier mobilization of resources, greater sustainability and health improvements (Aubel & Kinday, 1996). Creating an organization from scratch, in the form of a community health committee such as the village health committee (VHC) or the Health Center Development Committee (HCDC) is common in programs designed to improve health services (WHO, 1996).

Fostering community control and ownership of health facilities and financial mechanisms has worked to mobilize revenue in rural areas. Care needs to be taken however, to ensure CPHD is not assumed to relieve the government of the responsibility to provide PHC at the community level. This happened in Ethiopia during the 1974 -1991 civil war, with the result that CPHD in health services collapsed after the war and the community expected the transitional government to take over (Barnabas, 1993).

Leadership quality of community programs is very important (Rifkin, 1990). Participation and leadership are closely connected (Goodman *et al.*, 1998). Leadership requires a strong participant base just as participation requires the direction and structure of strong leadership. Leaders play an important role in the development of small groups and community organizations that are part of a continuum of community empowerment. Participation without a formal leader often results in disorganization. In a program context, leaders are often introduced as external organizers because they are seen to have the necessary skills and expertise (Gruber & Trickeett, 1987). Leaders are historically and culturally determined in most communities, programs that ignore this have little chance of success of being accepted or utilized by the primary stakeholders (Rifkin, 1990).

NGOs in Philippines developed competent local leaders among poor people who offered more insight into the community problems and culture. However, it was found that lack of skills, training and previous management experience created limitations in their roles as leaders. Therefore, leadership style and skills can influence the way in which groups and communities develop, consequently influencing empowerment (Constantino-David, 1995).

The solution to the problem of selecting appropriate leadership is to use a pluralistic approach in the community. This is whereby there is interplay between the positional leaders, those who have been elected or appointed and the reputational leaders, those who informally serve the community. This interplay has a better chance of leading to community capacity, and likewise to community empowerment (Goodman *et al.*, 1998).

### 1.2.3: Community organization

Organizational structures in a community include small groups such as committees, religious and youth groups. The existence of and the level at which these structures function is crucial as it provides a means of coming together in order to socialize and to address their concerns and problems (Glenn Laverack, 2001). However, organizational structures are themselves insufficient to guarantee the organization and mobilization of a community. There must also be a sense of cohesion amongst its members, a concern for community issues, a sense of connection to the people and feelings of belonging manifested through customs, place, rituals and traditions (Goodman *et al.*, 1998).

Community members in Pakistan, India and Cambodia who had a sense of community belonging and who were able to inter-relate in their own situations and in those others had a better chance of establishing organizational structures (Wegelin-Schuringa, 1992). The interpretation of organizational structures for community empowerment has two distinct but inter-related dimensions: the organizational dimension of committees and community groups and the social dimension of belonging, connectedness and personal relationships (Glenn Laverack, 2001).

### 1.2.4: Resource mobilization

The ability of a community to mobilize resources both within and the ability to negotiate resources from beyond itself is an indication of high degree of skill and organization (Goodman *et al.*, 1998). The experience of many programs has identified the ability of

community groups to mobilize or gain access to resources as an important factor toward empowerment (McCall, 1998; Barrig, 1990; Eisen, 1994; MacCallan & Narayan, 1994; Fawcett *et al.*, 1995; Hildebrandt, 1996; & Roberts, 1997). However, there is little evidence to suggest that resource mobilization alone will make the community groups more empowered. The community must also have a purpose and the skills and capacities necessary to achieve this purpose, as well as the required resources (Rifkin, 1990).

### **1.2.5: Program management**

Most development agents pay lip service to the ideas of sustainability and the management potential of the community, and find it very difficult to implement in practice. Program management that empowers the community includes the control by the primary stakeholders over decisions on planning, finances, administration, reporting and conflict resolution (Rifkin, 1990). The community must have a sense of ownership of the program, which in turn must address their concerns (Glenn Laverack, 2001).

The first step toward program management by the community is to have clearly defined roles, responsibilities and line management of all stakeholders. For empowerment to be influenced by program management, the outside agent must increasingly share their control over decisions, and the access to resources with the community (Rifkin, 1990).

### **1.2.6: Training**

The training of health care providers, local leaders and community members in participatory models of interaction is essential if a 'management partnership' for any program is to be

established. There is ample evidence to suggest that capacity building at the local level and enhancement of active participation are prerequisites for human development and service sustainability. When a 'community diagnosis' is undertaken by community members themselves, for example, with assistance from the government staff, this process of needs assessment can lead to the identification of previously unrecognized problems and to increased local solidarity as well as to a recognition of the value of some form of organization. Training communities to carry out such a diagnosis and to take collective action contributes to the empowerment of the people in systematically assessing their problems and defining their needs. It also gives them the experience of working in partnership with the government staff, and helps them to elicit their genuine participation and commitment to sustaining the program (IPAP, 1996). Training of communities and health workers has been reported to improve community participation in health related activities (Nakamura & Siregar, 1996).

### **1.2.7: Culture influence on community participation in health development**

In Africa, it is culturally acceptable to pay for health care but it is difficult to mobilize the community to participate in a health preventive program from which gains are indirect (Jinadu *et al.*, 1997). The reality in much of Africa is that attempts at the provision of free health have resulted in inadequate or non-existent services, especially for the poor who are most vulnerable. In the African traditional system, the community understood the need to compensate health providers and indeed other services (Ofosu-Amaah, 1989). The poor were taken care of in that system, usually more fully than under the modern arrangements. Free health care introduced in many newly independent countries conflicted with this

tradition and undermined it (Ofosu-Amaah, 1989).

### 1.2.8: Community participation in health development in Kenya

The culture of community participation in health development in Kenya dates back to 1940s when the communities were involved in building rural health facilities through colonial enforced participation. After independence, this trend changed to a voluntary movement for fund-raising called *Harambee* fostered by the free medical treatment offered by the government at independence (KANU, 1963). There continues to be a gap between the formal health system and the health initiatives that have been developed at the community level, such as the Bamako Initiative (MoH, 1994).

CPHD is being addressed by the Health Sector Reform Secretariat of the Ministry of Health (ROK, 1994). There has been a re-orientation of the Kenyan health services to incorporate organizational structures, which ensure community representation and participation. The organizational structures include District Health Management Boards (DHMB) appointed by the Minister of Health (ROK, 1992), the Rural Health Facility Management Committees (RHFMC) that are elected from among the community (MoH, 1998). The Ministry of Health (MoH) aims at increasing coverage and accessibility of health services using active community participation towards the achievement of 'Health for All' (MoH, 1994).

The DHMB manages funds in cost sharing and is not directly involved in decisions regarding funds available from the district health vote (MoH, 1995). The overall goal of the health sector policy until the year 2010 is to promote and improve the health status of all

Kenyans through the deliberate restructuring of the health sector to make health services more effective, accessible and affordable (MoH, 1994).

Since independence, Kenya has experienced a dramatic expansion in its health services and substantial improvements in the health status of its population. However, faced with a 25% decline in real per capita Ministry of Health expenditures during 1980s and continued population growth the Government of Kenya, on 1st December 1989, introduced a new user fee program (ROK, 1989). Previously nominal fees were considerably expanded with new charges at hospitals and health centers. The primary objectives of the Facility Improvement Fund (FIF - informally known as "cost sharing") were to (1) generate additional revenue to improve the quality of medical services and primary health care, and (2) to encourage use of more cost-effective primary health services.

Guiding principles for the program have included (1) 100% local retention of revenue (75% for the facility generating the revenue and 25% for district-level primary health care); (2) additivity of FIF revenue to Treasury allocations; (3) local planning for the use of revenue; (4) inpatient and outpatient fees higher at hospitals, lower at health centers, and zero at dispensaries; (5) vigorous pursuit of National Hospital Insurance Fund reimbursement for inpatients; and (6) protection of vulnerable groups through discretionary waivers, for the poor and automatic exemptions for MCH, STD, children, and other target groups (ROK, 1990).

### **1.2.9: Outpatient exemptions and waivers**

In the context of the FIF, an exemption is an automatic excuse from payment for health care based on the patient being under five years and have a specific illness such as tuberculosis, using a specific preventive service such as antenatal care. In contrast a waiver is a discretionary release from payment based on inability to pay (KHCFP, 1994).

Except at smaller facilities such as health centers, granting a waiver is a two-step process; one person recommends the waiver (e.g. the clinician seeing the patient) and a second person (e.g., the medical superintendent) makes the decision to authorize the waiver.

Various forms and checklists for assessing inability to pay have been tried, but at the end waiver decisions are largely a matter of staff judgment. A serialized waiver authorization form is used for accountability purposes (KHCFP, 1994).

Patients and the general community need to be better informed about the availability of outpatient health waivers and exemptions. The responsibility for this falls primarily on the DHMB and DHMT. In addition, it would be useful to conduct an assessment of the reasons for the low levels of waivers, as opposed to exemptions. (KHCFP, 1994).

### **1.2.10 : Evaluation of community participation in health development**

After the 1978 Primary Health Care conference in Alma-Ata, most research concerning CPHD has centered on activities rather than processes used to achieve successful outcomes. For instance, researchers have reported on community health workers trained or community

health committees formed such as the village health committees (VHC), meetings attended and community contributions in money or in kind. However, for planners in many countries information is required about processes that influence change (Bichmann *et al.*, 1989).

Several studies have attempted to formulate measurement of community participation from as early as 1988 in Australia (Labonte, 1990; Rifkin *et al.*, 1988). Measurements of community participation continuum using other areas of influence on community participation, competence, empowerment and capacity have been published since then (Eng & Parker, 1994; Shrimpton, 1995; Laverack, 1999 & Goodman *et al.*, 1998). All authors had to adapt a particular method of measurement to fit the program under evaluation. Measurement of community participation finds its best application when used to monitor the progress of a program over time (Glenn Laverack, 2001).

Other studies have examined a series of factors that are relevant to the CPHD process, namely, assessment of needs, leadership, organization, resource mobilization, management and focus on the needs of the poor (Rifkin, 1990; Nakamura & Siregar, 1996). Nevertheless, there is need for further research to identify the knowledge, attitude and practices of populations towards community participation and the need for health committees to set out clear plans that define community roles (Al-mazoa & Al-Shamari, 1991).

### **1.3: The Problem**

#### **1.3.0: Statement of the problem**

In developing countries widespread acceptance of CPHD has coincided with the realization that governments cannot afford to fund health services alone. In most countries, policy

makers have seen community participation as a way of accessing additional resources otherwise not available to the formal health sector. These resources include manpower, material, and financial contribution. The inability of cost sharing funds to cover the recurrent budget of health facilities has increased the need for CPHD.

The objective of RHFMC is to bridge the gap between the DHMB and the local community. RHFMC are expected to enhance community participation in the decision making process, particularly in the planning and development of respective facilities. The initiative to include RHFMC in the management structures of the Ministry of Health is implemented throughout Kenya. The RHFMC program is a partnership between the formal health sector and the community. A valid partnership requires joint action and decision making between partners and an equal capacity to take an active role in participatory initiatives. The community has access to community resources and experience in mobilizing themselves for development projects while the health worker has technical know-how on health, access to government resources and knowledge of management practice. Since participatory relationships are about power sharing, there should be no dominance by either of the partners. The community's management skills have not been enhanced and health workers have not been re-oriented on their new leadership role. Although, communities and health care providers have developed a partnership in health service delivery, health care providers have not changed their role and interests. Failure to undergo this re-orientation may lead to resentment and hostility towards this partnership from the community and the health care providers.

There is insufficient literature on Community Participation in Health Development in

Kenya. Considerable energy and resources have already been lost in the implementation and subsequent failure of many community-based health care initiatives.

This scenario calls for studies to determine community perception on their role in health care provision and the rural health facility staff perception and attitude towards CPHD. Further studies to establish the criteria used at the rural health facilities to give user fee waivers to the community and whether any training has been done to educate the community on their role in order to promote their participation in health development are required. In the same tone, any limiting factors will be identified and appropriate remedial measures recommended for application.

### **1.3.1: Research question**

What is the status of community participation in health development in Nyandarua district?

### **1.3.2: Justification**

There has been a general management problem in rural health facilities throughout Kenya. In the late 1980's it became apparent that CPHD was being hampered by the deteriorating conditions of public health facilities. Demand for services was increasing with little change in the total financial allocation in the health sector, resulting in chronic under-funding of the sector (ROK, 1994). This has manifested itself in chronic shortages of drugs, linen and other health utilities, broken down medical equipment and vehicles, poor staff morale and an apparent dissatisfaction amongst the consumers of the health services. In 1989, cost sharing was introduced in an attempt to bridge the gap between the exchequer funding of health

services and the level required to meet the service needs (ROK, 1989). This was in conformity with a government sessional paper number one of 1986 (ROK, 1986).

Despite this approach, a myriad of problems continue to bedevil the provision of quality health services by the government to its populace. Consequently through the Health Sector Reform initiatives, the government started to manage rural health facilities in partnership with the relevant local communities through CPHD, since 1998. However, it is not clear whether this approach is meeting the objectives for which it was intended. No studies have been carried out to determine the status of CPHD within the target communities, hence the outcome of CPHD program is unknown. Data and information from ongoing CPHD activities are necessary if the relevant authorities have to chart and plan the way forward based on informed decisions. Hence the need for this and other studies.

## **1.4: Hypotheses**

- 1 The level of Community participation in health development is independent of the community knowledge and perception of their roles in CPHD as well as the knowledge and perception of health care providers towards the same.
- 2 Training of communities in CPHD and implementation of the health service waiver system do not influence the level of CPHD.

## **1.5: Objectives of the study**

### **1.5.0: Broad objective**

To investigate community participation in health development in Nyandarua district.

### 1.5.1: Specific objectives

1. To determine community knowledge and perception on their role in health care provision.
2. To determine the health care providers knowledge and perception towards community participation in health development.
3. To establish the criteria used in granting user fee waivers to Nyandarua community.
4. To determine specific community training undertaken in Nyandarua by health care providers to promote community participation in health development.
5. To estimate the level of community participation in health development in Nyandarua District.

## CHAPTER TWO: MATERIALS AND METHODS

### 2.0: Study area

Nyandarua district lies between latitudes  $0^{\circ} 08''$  North and  $0^{\circ} 50''$  South and between longitudes  $35^{\circ} 13''$  East and  $36^{\circ} 42''$  East (Appendix 11). The neighboring districts are Laikipia to the North, Nyeri and Murang'a to the East, Kiambu to the South and Nakuru to the West. It stretches for approximately 110 Kms from North to South and 35Kms from East to West.

Nyandarua is the largest district in central province with an area of  $3,304\text{Km}^2$ , a population of 479,902 and a density of 145. The population is comprised of 235,052 males and 244,850 females. Out these 26,491 males work for pay compared to 11,201 females. It constitutes 0.6% of the republic of Kenya area and 27% of that of Central Province. Administratively, the district is divided into five divisions, 26 locations and 70 sub-locations (ROK, 1997-2001).

#### 2.0.1: Health facilities and common diseases

There are two (2) hospitals (one of which is run by the Catholic Church and the other by the Kenya Government) eight health centers, thirty-one dispensaries, and 19 private clinics in the district (ROK, 1997-2001). The top ten diseases in order of importance are respiratory diseases, malaria, skin diseases, intestinal worms, diarrhea diseases, accidents, eye and ear infections, dental disease, pneumonia and urinary tract infections (ROK, 1997-2001). Community participation in health development was initiated in Nyandarua in 1998.

## 2.1: Study design

A cross sectional descriptive study design was used. The total patient (community respondents) attendance for over a one-year period was calculated from records of each of the rural health facility registries, for all the rural health facilities included in this study. From this the mean daily patient (community respondents) attendance per facility was calculated and converted to a percentage of the sum total of daily mean attendance of all the rural health facilities. These percentages were then used to estimate the desired sample size of community participants in the catchment area of each health facility.

Patients (community respondents) seeking health care services in rural health facilities were interviewed when exiting from the rural health facilities. The sampling unit was an individual community member.

In addition to this, key informant interviews were also held in all the selected rural health facilities. These were conducted in all the rural health facilities in Ndaragwa division with chairmen of RHFMC, women leaders and the officers' in-charges (nurse or clinical officers in-charge). All rural health facility staff present at the time of this study were interviewed. Focus group discussions were held with RHFMC, RHFS and local leaders from the rural health facility catchment areas.

## 2.2: Study population

Data was collected from the various players in CPHD namely, the community respondents (patients) and the local health facility personnel. Records at the local health facility

regarding health service charge waiver systems also formed secondary sources of data.

## **2.2.0: Inclusion and exclusion criteria**

Only Rural Health Facilities of Ministry of Health with a Rural Health Facility Management Committee were included in the study. Informed consent was obtained from individuals of 20 years of age and above seeking health services from health facilities and who had lived in the catchment areas for at-least 3 years.

### **2.2.1: Ethical consideration**

Research clearance was sought from the Ministry of Education, Science and Technology. The medical officer of Health of Nyandarua was informed and his cooperation was sought. The participants were informed that they would be interviewed in order to find out there level of involvement in the management of the facility. They were informed that the information they gave would assist the Ministry of Health to strengthen nationwide, community involvement in health development processes in line with the ongoing reforms. Assurance was given that their answers were to be treated confidential and that their names would not be written on the questionnaire and would never be linked with the information they gave the interviewer. They were allowed not to answer what they did not like to and to end the interview at will and there was no loss or gain for them.

## **2.3: Sampling and sample size determination**

Nyandarua district was purposively selected. The study was carried out in Ndaragwa Division (appendix 11) of Nyandarua district, which was selected through simple random sampling procedure. All the MOH managed rural health facilities within Ndaragwa division,

were visited. The adult population within the communities served by these health facilities constituted the sampling frame for the community survey. The Fisher *et al.* (1998) formula was used to determine the minimum sample size for the community respondent's (patient's) survey.

$$N = \frac{Z^2 pqD}{d^2}$$

- Where N is the minimum required sample size,
- Z is the confidence level (1.96), which corresponds with 95% confidence level.
- p is the presumed level of participation - Not known in this case, so 0.5 applies.
- q is equal to 1-p (1-0.5=0.5)
- d is the precision required (0.05)
- D is the design effect, in this case (1)

When substituted,

$$N = \frac{1.96 \times 1.96 \times 0.5 \times 0.5 \times 1}{0.05 \times 0.05} = \frac{3.84 \times 0.5 \times 0.5}{0.0025} = 384.16.$$

The number of the minimum sample size was increased to 400 to take care of any respondents who would not complete the interview.

## **2.4: Research instruments**

Interviews were conducted with individuals in both the general community and personnel of the health facilities using pre-tested structured questionnaires (Appendix 1 & 2). For each category of interviewees, the questionnaire structure was different (see appendix). Focus group discussions (FGD) and Key informant interviews were also carried out with personnel of the health facilities, RHFMC, local opinion leaders as well as women leader within the catchment area (Appendix 3, 4, 5 & 6). This addressed aspects of this study like fee for service waiver system among others. Available health facility records were also studied to corroborate information gathered from both the community and health facility staff.

## **2.5: Data collection procedures**

Several data collection procedures were used either singly or in combination to obtain all the necessary primary and secondary data required for the study. The field preparation and collection of both primary and secondary data was organized in several phases.

The first phase involved field preparation work which involved; exploratory survey of the study area; procurement of the research permit from the Ministry of education, Science and Technology, Nairobi, acquaintance with the officers in-charges of selected rural health facilities, the medical officer of health, the district public health officer, the hospital administrator and the district public health nurse. Questionnaire pre-testing was also done during this time, which assisted in the development of rapport with the health care providers and community members in the company of the divisional public health officer. This facilitated easier entry into the study area during the actual field study.

Analysis of the data resulting from the pre-test was done and the results helped in restructuring of the questionnaire by incorporating the missing information (eg. Ownership question was missing in the original questionnaire), omitting irrelevant questions and paraphrasing questions that appeared ambiguous to the respondents. This culminated in the questionnaire used in the study (appendix 1 & 2). Modification of the methodology to fit the needs of the study was done after questionnaire pre-test.

Phase two involved the actual fieldwork. The methods used in primary data collection consisted of questionnaire and structured interviews. Focus group discussions were also used in the advanced stage of data collection to obtain views from local leaders, members of RHFMC and RHFS members.

Phase three: This phase involved collection of secondary information from both published and unpublished sources, which focused on community participation in health development.

## **2.6: Structured Questionnaire administration**

Two types of structured questionnaires (Appendix 1 & 2) were administered to the selected respondents i.e. the community and RHFS. The languages used in the administration of the questionnaire were Kiswahili and English, however, in cases of communication difficulties, the local language (Kikuyu) was used.

Section two assessed community and RHFS perception on health care facility while the third section examined user fee waiver and its administration at the rural health facility. The last

section examined community participation in the management of rural health facility. This section sought responses on need assessment, leadership, organization and resource mobilization at the rural health facility.

The use of a recording questionnaire ensured direct contact with the respondents, a factor, which facilitated elaboration of aspects that may not have been easily understood by the respondent. The procedure ensured that the questionnaire was completed before leaving the respondent. This minimized cases of incomplete questionnaires. Finally the questionnaire remained anonymous with only a serial number and name of the health facility.

## **2.7: Structured interviews**

Structured interview (appendix 3, 4, 5 & 6) was the second method used in primary data collection. This targeted people with key information and insights to the study. Information from this source was sought to aid in triangulating data obtained through other sources as discussed earlier. Among those interviewed were the OICs, the RHFMC chairmen and local women leader. These were identified as having information on community participation in health development in their respective rural health facilities.

The open-ended nature of the interview schedule allowed respondents' freedom to go beyond simple responses to the questions asked and to reveal their views in a way they wished. The questions deviated from the original planned and center points that seemed important according to this study. Results obtained from the structured interviews did not lend themselves readily to quantification but did help to generate and clarify the dimensions present in the study.

## 2.8: Group discussion

A third method used to collect data from the community, RHFS respondents and local opinion leaders was group discussions (appendix 6). Nine group discussions were held one from each rural health facility included in the study.

Focus group discussions were homogenous groups of people usually (6-12) who under the guidance of a moderator discussed relevant topics to the theme of community participation in health management as outlined by Krueger, 1988. It explored participant's beliefs, attitudes and opinions and also indicated the range. It was valuable for gaining baseline information for the management of rural health facilities by the community in partnership with the rural health facility staff. It also provided valuable insights into how and why people made the choices the way they did as outlined by WHO *et al.*, 1992. The moderator used a guide, which was fairly flexible and allowed modification or pursuit of an anticipated discussion, which was pertinent to the theme of the study. The discussion was "focused" on community participation in rural health facility management. It did not usually cover huge range of issues but allowed the researcher to explore topics in greater details as recommended by WHO *et al.*, 1992.

Participants were sampled purposively to reflect population variations that were of particular relevance to study objectives. The groups spoke freely about the subject without fear of being judged by others thought to be superior, more expert or more conservative. Focus group sessions were held at the rural health facility where participants felt relaxed and free to express their views. Participants aroused the memoirs and inspired the feelings of one another leading to a deeper and fuller discussion of the problem as recommended by

Krueger 1988.

Representative members of RHFMC, RHFS, chiefs, assistant chiefs and local leaders from Ndaragwa division attended the discussions. The discussions centered on RHFMC selection, management of rural health facility in partnership between the RHFS and RHFMC (representing the community), community initiative fund and their management, and available community initiative user fee guidelines. The groups were able to fully discuss problems that affected management of their rural health facility. Results obtained through group discussions mainly helped to explain, reinforce and enrich survey results.

## **2.9: Data management and analysis**

In order to ensure confidentiality, names and addresses of respondents were not used in the data analysis. Names were not stored with data records and where incriminating information was provided, proper routine of feedback mechanisms were used to protect both the incriminated and the respondent.

Focus Group Discussions and Key Informant interviews were tape-recorded, where this was possible and transcribed manually thereafter. Information from the structured interviews was entered into statistical package of social sciences (SPSS/PC+ Inc., 444N. Michigan Ave. Chicago, IL60611.(312) 329-3600) computer package which was used in analysis.

Descriptive statistics were sought to show the nature of the data and Chi-square statistic was used to establish association where applicable between community perception and community participation in health development and between socio-economic and demographic characteristics and community participation process indicators namely, need assessment, leadership, organization and resource mobilization. Chi-square was also used to

test the associations of the process indicators between rural health facilities. Chi square was used to delineate the relationships among health care providers and community respondent's perception, knowledge on health *baraza* attendance and significant factors in granting waivers and participation in health development.

An index (Appendix 8) was developed to measure community and RHFS respondents' knowledge of health care provision at the RHF.

To assess the level of community participation in Ndaragwa Division, Nyandarua District, needs assessment, leadership, organization and resource mobilization, which are factors that influence CPHD, were estimated in accordance with Bichmann *et al.*, 1989.

A set of questions was developed for each of these factors that influence the breadth of community participation namely; needs assessment, leadership, organization and resource mobilization. Although Bichmann *et al.*, 1989 used a predetermined scoring index, this study developed a scoring index where a score of one was given for each correct response.

For each outcome variable, the scores for the various questions were summed up and categorized as follows; < 50% of expected maximum score as poor (score of 1), 50% - 74% as fair (score of 2) and  $\geq$  75% as good (score of 3) community participation in health development. A scoring range was then developed where an overall score of 1 - 4 showed poor, 5 - 8 fair and 9 - 12 good community participation in health development. This sought to bring a clearer picture of the level of each of the factors that influence community participation in health development.

## CHAPTER THREE: RESULTS

### 3.1: Respondent Socio-Economic and Demographic Characteristics

The respondents recruited into this study included four hundred and one (401) community respondents (CR) and 38 health staff in nine (9) rural health facilities (RHF) of Ndaragwa division. The CR recruited were those seeking health services at the RHF while the 38 were rural health facility staff members (RHFS). In addition, rural health facility management committee (RHFMC) members consisting of chairmen, officers in charges and local women leaders were also interviewed. Further, one focus group discussion was conducted in each RHF to corroborate the information gathered from the structured interviews.

#### 3.1.1: Distribution of community respondents

The distribution of community respondents was; Baari 48 (12%), Kahembe 53 (13.2%), Kirima 53 (9.2%), Pesi 24 (6%), Shamata 50 (12.5%), Subuku 71 (17.7%) dispensaries and Leshau Pondo 30 (7.5%) and Ndaragwa 57 (14.2%) health centers. The lowest number of community respondents per facility was 24 while the highest was 71. In four RHF, less than 40 CR were interviewed while in five, 49 or more CR were interviewed (Table 1).

Ndaragwa division has two (2) health centers and seven (7) dispensaries. Subuku 71 (17.7%), Ndaragwa 57 (13.2%) had more interviewees than the rest though these were regarded as representative of the sample. Majority of CR 314 (78.3%) were from dispensaries while 87 (21.7%) were from health centers (Table 1)

**Table 1: Distribution of community respondents at the rural health facilities.**

Rural health facility	Mean daily patient attendance		Desired sample per rural health facility No.	Actual No. of community respondents	
	No.	%		No.	%
Baari dispensary	36	12.12	49	48	12
Kahembe dispensary	40	13.47	54	53	13.2
Kirima dispensary	26	8.75	35	37	9.2
Leshau P. health center	23	7.744	31	30	7.5
Ndaragwa health center	42	14.14	57	57	14.2
Pesi dispensary	18	6.06	24	24	6.0
Shamata dispensary	37	12.46	50	50	12.5
Subuku dispensary	52	17.51	70	71	17.7
Uruku dispensary	23	7.740	31	31	7.7
<b>TOTAL</b>	<b>297</b>	<b>100</b>	<b>401</b>	<b>401</b>	<b>100</b>

### **3.1.2: Community respondents gender distribution**

The gender distribution of CR varied with men comprising less than half the number of females (Table 2). Of the CR interviewed 123 (30.7%) were male and 278 (69.3%), female (Table 2). In all the facilities visited female respondents were more than male. Kirima dispensary and Leshau Pondo health center had roughly an equal distribution between male and female while Pesi and Baari dispensary had the highest difference in gender. More than half the number of RHFS respondents 22 (57.9%) were female (Table 2).

### **3.1.3: Age distribution among community respondents and rural health facility staff respondents.**

The mean age of CR was  $37.2 \pm 13.01$  years (range, 21 to 84 years) with age group 25 - 34 years registering the highest proportion 154 (38.4%) of respondents. Those aged 35 - 44 were second most 90 (22.4%) while those above 65 years were 16 (4%) (Table 2). More than half of the CR were less than 44 years. Shamata and Subuku dispensaries had older CR in age group 35 - 44 than in the 25 - 34. In Ndaragwa health center, Pesi and Shamata dispensaries there, were more older CR above 60 years than in age group 55 - 64.

The mean age of RHFS was  $38.06 \pm 7.17$  years (range 19 - 52 years) with a mode and median of 40 years. The group with the highest number 21 (55.3%) of interviewees was between 35 - 44 years. RHFS respondents were distributed into age categories 15 - 24 years 1 (2.6%), 25 - 34 years 10 (26.3%) and more than half 21 (55.3%) of them in the age group 35 - 44 years. At least 6 (15.8%) were 45 years or above (Table 2).

### 3.1.4: Community respondents' level of education.

Approximately 58% of the respondents had primary education with about 31% having completed secondary level of education. A small number ( $\approx$  4%) had attained college education while (6%) had no formal education (Table 2). Education level followed the same trend in each health facility as that of the overall.

### 3.1.5: Marital status among community and rural health facility staff respondents

The married community respondents comprised of 346 (86.4%) while married RHFS were 35 (92.1%) (Table 2). A small proportion of the CR 1.2% were widowed, divorced 1%, separated 0.2%. Of the CR 45 (11.2%) were single compared to 3 (7.9%) of the RHFS. The distribution trend was similar in all the health facilities where majority were married with almost none widowed, divorced or separated.

### 3.1.6: Occupation of community respondents

Majority of CR 277 (69.4%) were farmers while others were traders 54 (13.5%), employed 49 (12.4%), (4%) unemployed and 3 (0.7%) were students (Table 2). The distribution by health facility followed a similar trend.

### **3.2: Distribution of rural health facility staff respondents of Ndaragwa division**

Of the staff interviewed, 12 (31.6%) worked in health centers while 26 (68.4%) in dispensaries. Majority 8 (21.1%) of rural health facility staff were from Ndaragwa health center while Uruku dispensary had the least 3 (7.9%) staff (Table 2). The number of interviewees in all rural health facilities comprised all the staff present at the time of the interview which formed (60.3%) of all the staff deployed in these rural health facilities. All the RHF except Ndaragwa health center had three to five RHFS respondents.

#### **3.2.1: Rural health facility staff respondents by cadre**

Nurses formed the majority of RHFS with an overall total of 18 (47.6%) (Table 2). Clinical officers and watchmen were the least accounting for 1 (2.6%) each. Other RHFS included public health technicians 7 (18.4%), laboratory technicians 4 (10.5%), subordinate staff 2 (5.2%) and revenue clerks 5 (13.1%) (Table 2).

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**Table 2: Community and Rural Health Facility Staff Respondents Socio-Economic and Demographic Characteristics**

<b>Community respondents demographic characteristic</b>	<b>%</b>	<b>Rural health facility staff demographic characteristic</b>	<b>%</b>
<b>Sex</b>		<b>Sex</b>	
Male	69.3	Male	42.1
Female	30.7	Female	57.9
<b>Age Groups</b>		<b>Age Groups</b>	
15 -24	15.0	15 -24	2.6
25 - 34	38.4	25 - 34	26.3
35 - 44	22.4	35 - 44	55.3
45 - 54	12.2	45 - 54	15.8
55 - 64	8.0	55 - 64	0
> 65	4.0	> 65	0
<b>Marital status</b>		<b>Marital status</b>	
Married	86.4	Married	92.1
Single	11.2	Single	7.9
Windowed	1.2	Windowed	0
Divorced	1.0	Divorced	0
Separated	0.2	Separated	0
<b>Education Level</b>		<b>Cadre</b>	
Primary	58.2	Enrolled Nurse	23.9
Secondary	31.2	Community nurse	21.1
College/University	4.3	Kenya Registered community Nurse	2.6
No formal education	6.3	Clinical Officer	2.6
<b>Occupation</b>		Public Health Technician	18.4
Farmers	69.4	Laboratory Technician	10.5
Traders	13.5	Subordinate staff	6.2
Employed	12.4	Revenue Clerk	13.1
Unemployed	4.0	Watchman	2.6
Students	0.7		

### 3.3: Community knowledge of health care facility

Most of the CR 249 (62.1%) had fair knowledge of health care facilities while 84 (20.9%) had poor knowledge. However, 68 (17%) had good knowledge of their health care facility (Figure 1).

#### 3.3.1: Knowledge of community respondents on role in health care provision.

A proportion of 264 (65.8%) of the community respondents indicated that the government owned the RHF in full while 80 (20%) indicated that they were owned by the community, and 57 (14.2%) did not have any idea as to who owned the RHF. Majority of the CR 360 (89.8%) knew about the existence of RHFMC while 41 (10.2%) did not. From the list of duties presented to the interviewee 325 (81.0%) identified at least one duty of the RHFMC while 76 (19%) did not know any (Table 3).

**Table 3: Community respondents' knowledge on rural health facility ownership, existence, and duty of rural health facility management committee**

Knowledge of community respondents on	Response	Community Responses	
		Number	%
(i) RHF ownership	Community	264	65.8
	Government	80	20
	Did not know	57	14.2
(ii) RHFMC existence	Aware	360	89.8
	Unaware	41	10.2
(iii) Duty of RHFMC	Know any	325	81.0
	Don't know any	76	19.0

Knowledge varied between rural health facilities with a significant statistical difference ( $\chi^2 = 46.94972$ ;  $P = 0.0007$ ) in knowledge from one rural health facilities to another.

### 3.3.2: Rural health facility staff knowledge of health care facility.

Almost all the RHFS 36 (94.7%) had good knowledge of health care facility and only 2 (5.3%) had fair knowledge (Figure 2). Responses regarding RHFMC are presented in table 4 below. Majority of the RHFS 37 (97.4%) knew of the existence of RHFMC while 1 (2.6%) did not. From the list of responsibilities of RHFMC (Appendix 4) presented to the interviewee 37 (97.4%) identified at least one responsibility while 1 (2.6%) could not.

**Table 4: Knowledge of rural health facility staff on existence and duty of rural health facility management committees**

Knowledge	Response	RHFS Responses	
		Number	%
(i) RHFMC existence	Aware	37	97.4
	Unaware	1	2.6
(ii) Duty of RHFMC	Know any	37	97.4
	Don't know any	1	2.6

### 3.3.3: Community perception on their role in health care provision

More than half of the CR 203 (50.6%) had poor perception of their role in health care provision while 175 (43.6%) had fair and 23 (5.7%) good perception (Figure 1). Up to 238 (59.3%) of CR indicated that health care provision in the health facility was the responsibility of RHFS alone while 44 (11.0%) felt this was the responsibility of the RHFMC alone. Many more 62 (15.4%) however believe that the RHFMC and RHFS in partnership must work together in health care provision. Of those interviewed, 57 (14.3%)

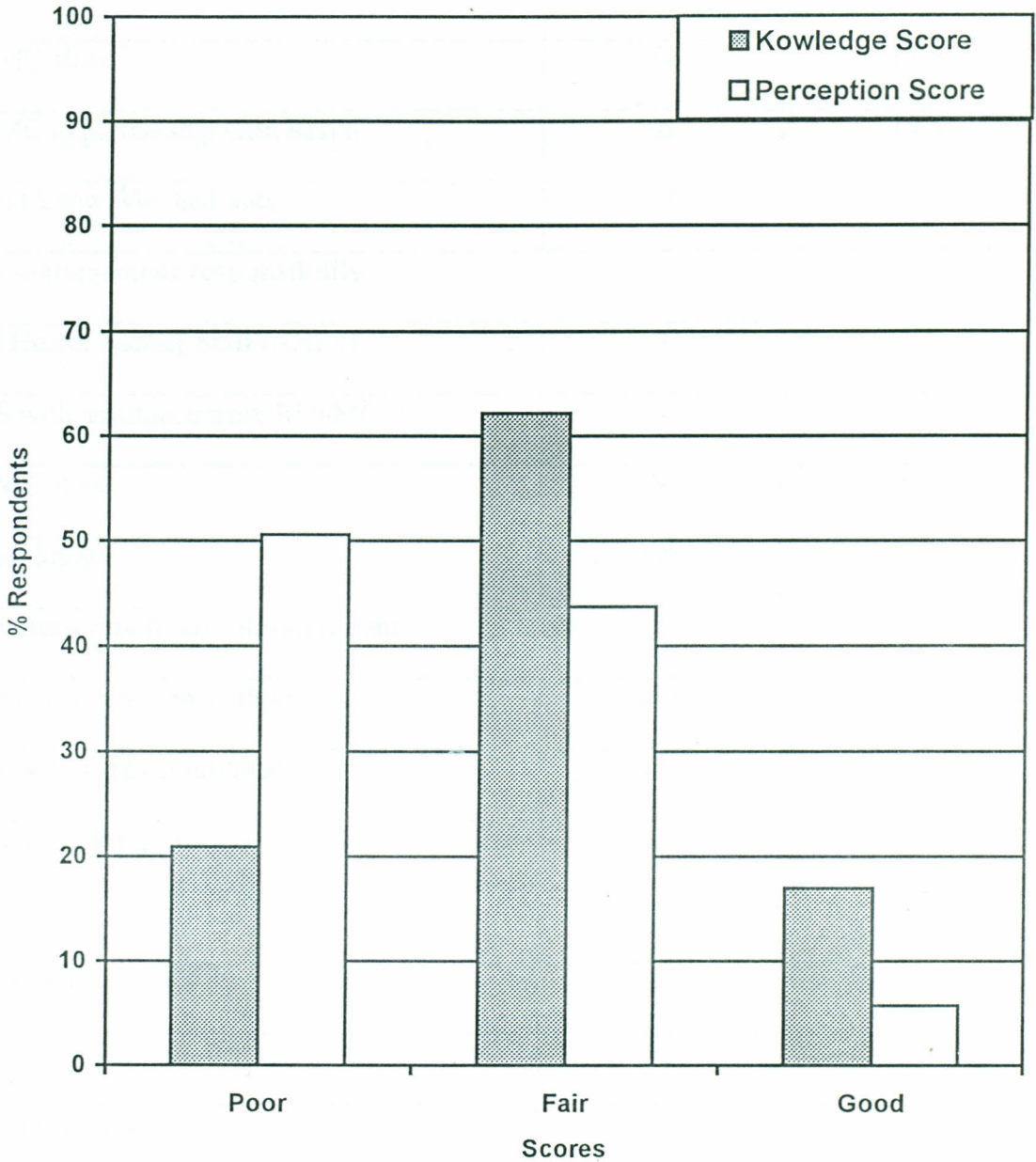
did not have any idea as to whose responsibility this was (Table 5).

The daily management of the RHF was perceived by 231 (57.7%) of CR as the responsibility of the RHFS alone while 26 (6.5%) felt that the RHFS with assistance from RHFMC are responsible for the management. 16(4.0%) however believe that the RHFMC alone must remain the managers and 128 (31.8%) did not know about such responsibility (Table 5).

On their need to contribute material (or otherwise) support towards health development, a total of 341 (85.0%) of community respondents supported the need for community contributions towards health while 60 (15%) did not.

The responsibility of decision making on levying of fees on health services consumers and ultimate utilization of such income at the RHF are summarized below (Table 5). 110 (27.4%) respondents felt that the RHFMC alone should make this decision, while 70 (17.5%) indicated that the government alone should do so. 42 (10.5%) felt that the RHFS alone must do so while 28 (7.0%) believed that this should be the responsibility of the local community members alone. 4 (1%), however, believed the decisions must be made by both RHFMC and RHFS together and 147 (36.6%) did not know whose decision this must be (Table 5).

Figure 1: Community respondents knowledge and perception of health care provision



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**Table 5: Community perception of health care responsibilities and contribution towards its provision at the rural health facility.**

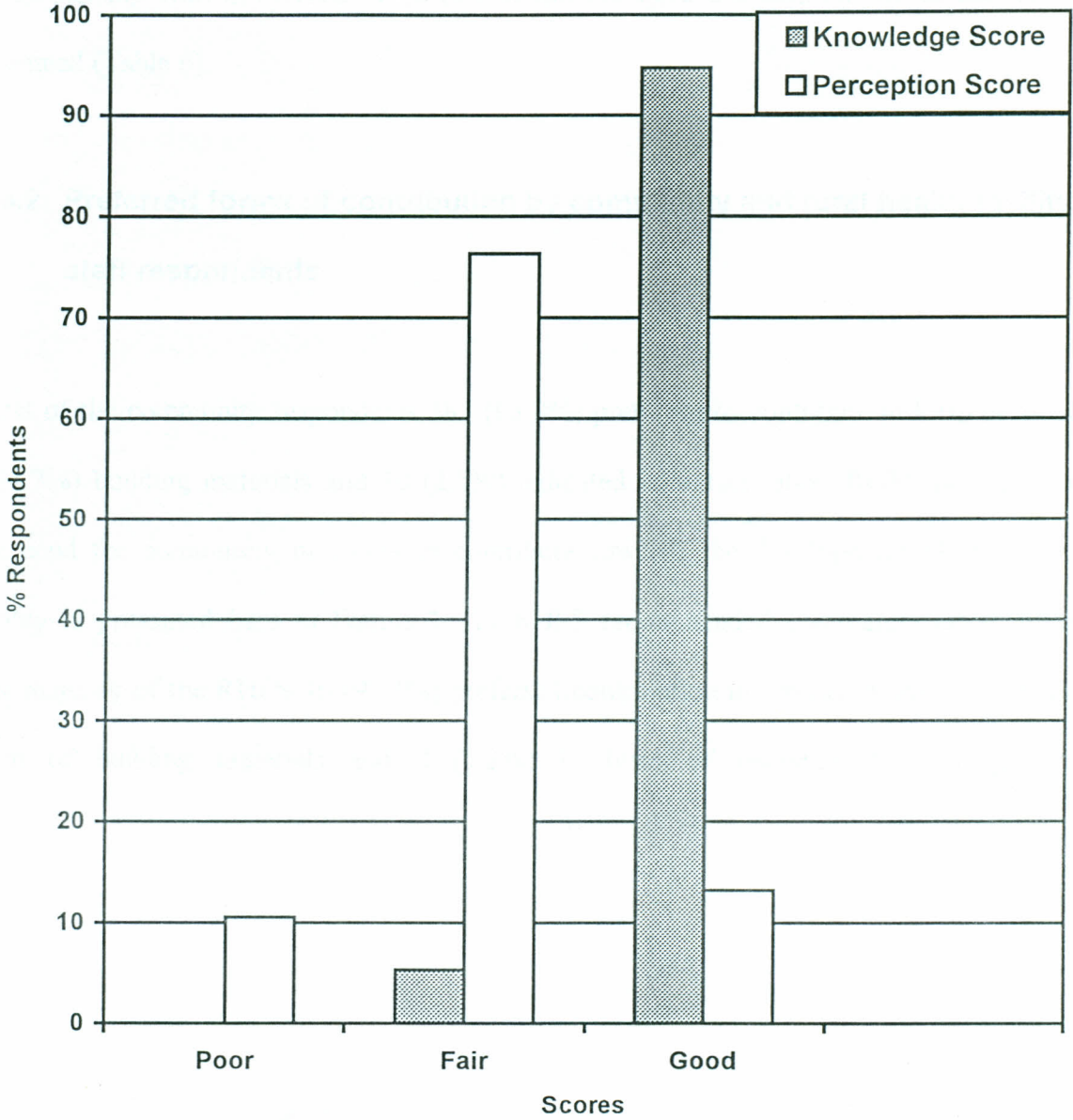
Responsibility for health care provision	Responses	
	Number	%
RHFS alone	238	59.3
RHFMC alone	44	11.0
RHFMC in partnership with RHFS	62	15.4
Did not know who had duty	57	14.3
<b>Daily management responsibility</b>		
Rural Health Facility Staff (RHFS)	231	57.7
RHFS with assistance from RHFMC	26	6.5
RHFMC alone	16	4.0
Did not know	128	31.8
<b>Contribution to health development</b>		
Positive towards contribution	341	85.0
Negative towards contribution	60	15.0
<b>Decision making process</b>		
RHFMC	110	27.4
Government	70	17.5
RHFS	42	10.5
Community members	28	7
RHFMC in partnership with RHFS	4	1
Did not know	147	36.6

### **3.4: Rural health facility staff perception on health care provision at the rural health facility**

Majority of RHFS 29 (76.3%) interviewed had fair perception of health care provision while 4 (10.5%) had poor and 5 (13.2%) good perception (Figure 2). A proportion of 17 (44.7%) of RHFS indicated that it was their duty alone to provide health care services to the community while 3 (8.0%) of them indicated that this was the duty of the RHFMC alone. 17 (44.7%) indicated that it was the duty of RHFMC and RHFS in partnership while 1 (2.6%) had no idea whose responsibility this was.

Majority of the RHFS 30 (78.9%) perceived the responsibility of daily management as solely that of RHFS while 8 (21.1%) noted this as a responsibility of RHFS and RHFMC in partnership (Table 6).

Figure 2: Rural health facility staff Knowledge and perception on health care provision



### **3.4.1: Rural health facility staff perception on decision-making in fee levying**

The RHFS were interviewed on who decided the amount of fees for services. Twenty-seven (71.0%) indicated that it was the RHFMC, 5 (13.2%) the RHFS and 4 (10.5%) the RHFMC in partnership with the RHFS. Two (5.3%) did not have any idea on whose decision this remained (Table 6).

### **3.4.2: Preferred forms of contribution by community and rural health facility staff respondents**

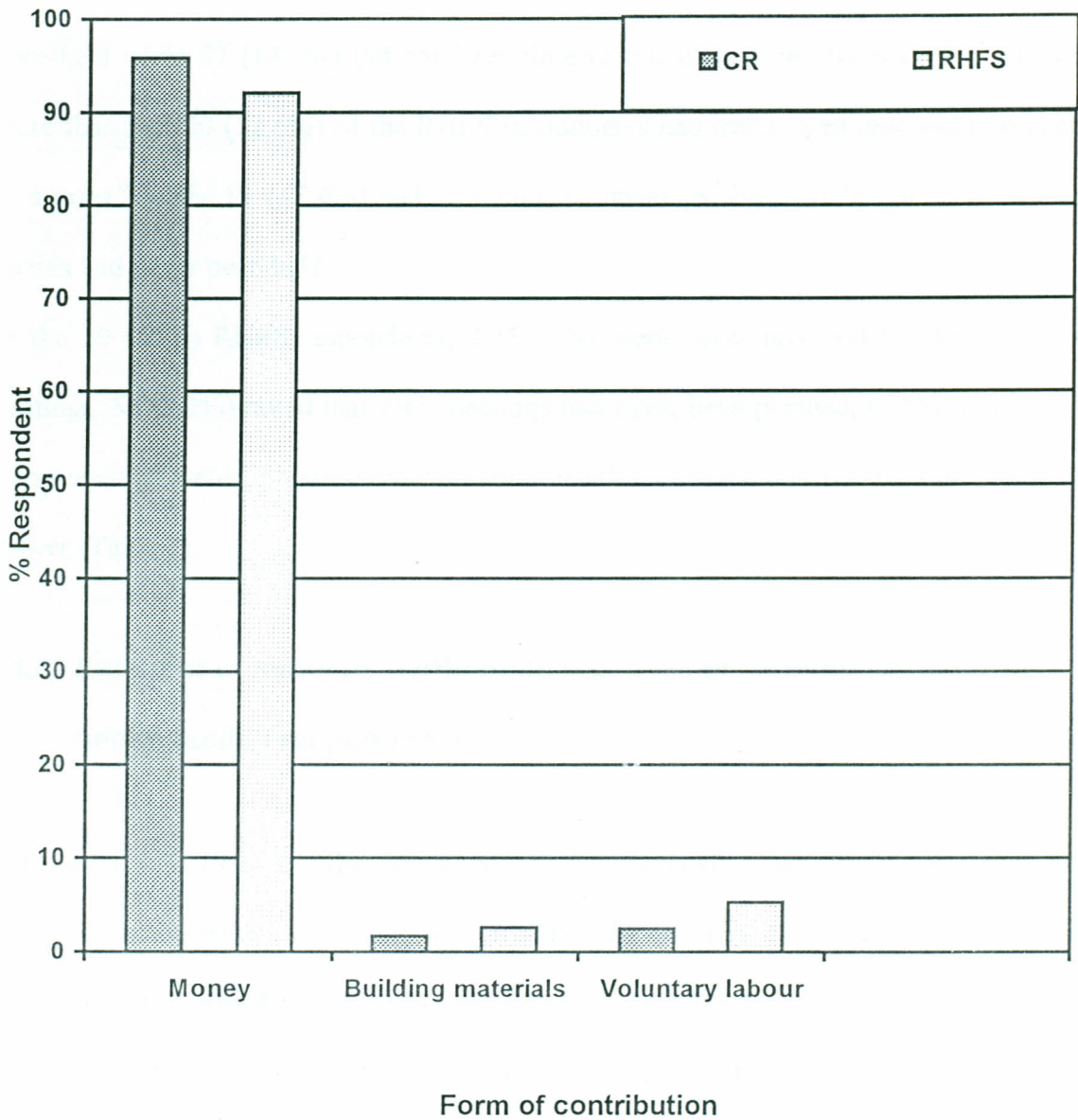
Most of the community respondents 385 (95.8%) preferred to contribute in form of money, 7 (1.7%) building materials and 10 (2.5%) indicated voluntary labor. RHFS perception on the need for community members to contribute towards the development of their health facility is presented here in Figure 3. All RHFS recommended community contributions. The majority of the RHFS 36 (92.1%) preferred contribution in form of money, 1 (2.6%) in form of building materials and 2 (5.3%) in form of voluntary labor (Figure 3).

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**Table 6: Rural health facility staff perception on roles in health care provision at the rural health facility.**

Responsibility of health care provision	RHFS Responses	
	Number	%
RHFS alone	17	44.7
RHFMC alone	3	8
RHFMC in partnership with RHFS	17	44.7
Did not know who had duty	1	2.6
<b>Responsibility of daily management</b>		
Rural Health Facility Staff (RHFS)	30	78.9
RHFS with assistance from RHFMC	8	21.1
<b>Contribution to health development</b>		
Positive towards contribution	38	100
<b>Decision making on user fee</b>		
RHFMC	27	71.0
RHFS	5	13.2
RHFS and RHFMC in partnership	4	10.5
Did not Know	2	5.3

Figure 3: Forms of contribution preferred by community and rural health facility staff respondents



### 3.4.3: Community responses on attendance of community meetings (*baraza*)

More than half of CR 227 (56.6%) had never attended a “*baraza*” (community health meeting) called upon to discuss health related matters against only 174 (43.4%) who did. However, community meetings whose agenda was exclusively health had never been held here. Of the 227 (56.6%) community respondents, 170 (42.4%) did not know when meetings were held while 57 (14.2%) did not have time to attend such meetings even if they knew. More than half 20 (52.6%) of the RHFS respondents had never been involved in organizing a “*baraza*” while 18 (47.4%) had. Community meetings that had health as the exclusive agenda had never been held.

Of the 20 (52.6) RHFS respondents, 4 (10.5%) were never involved by the OIC in such meetings, 5 (13.2%) noted that such meetings had never been planned, (7.8%) indicated that such meetings were organized by the public health technician and (21.1%) did not give an answer (Table 7).

### 3.4.4: Extent of community participation as seen by community and rural health facility respondents.

The extent of CPHD by the community and rural health facilities in as far as health promotion activities are concerned are presented here (Table 8). 97 (22.7%) CR indicated that community members too were involved in health promotion activities within the community while 296 (73.8%) indicated that they were not. The existence of community health workers was not known to 14 (3.5%) of CR. Some of the ways that were noted by the community as involvement in health related activities include traditional birth attendants (TBA), community drug distributors (CBD), growth monitoring activities, health education on nutrition, good hygiene and sanitation practices.

**Table 7: Participation in health *baraza* by rural health facility staff**

Involved in planning of Baraza	Response	
	No.	%
Yes	18	47.4
No	20	52.6
<b>Reasons for non involvement</b>		
OIC did not involve them	4	10.5
No such kind of a meeting planned	5	13.2
No answer	8	21.1
Meeting for Public Health Technician	3	7.8

**Table 8: Community involvement in health work**

		Response	
		Number	%
Any involvement	Yes	91	22.7
	No	296	73.8
	Don't know	14	3.5

Out of 9 officers in-charge (OIC) of rural health facilities included in the study, 8 supported the idea of RHFMC participation in management of the RHF. One OIC however thought that the RHFMC were a bother and retarded development of services in the RHF. Majority of RHFS 24 (63.2%) indicated that the community was involved at the community level to promote health as traditional birth attendants, in health education on good practices on hygiene and sanitation. A proportion of 12 (31.6%) of the RHFS indicated that community members did not participate in health promotion at the community level while 2 (5.2%) had no answer.

### **3.5: User fee waiver criteria in Nyandarua district**

The criteria used in granting waivers on health services user fees to Ndaragwa division community formed an important element of this study. Three hundred and seventeen (79.1%) of CR were charged fees per health care service rendered per visit, while 84 (20.9%) were charged once for all forms of health care services provided in a single visit to health facility (Table 9). Thirty six (94.7%) of staff interviewed indicated that user fees are charged per health care service rendered, 2 (5.3%) said charges were levied once and covered all health care services in a visit (Table 9).

There existed no standard user fee waiver guidelines in all the rural health facilities visited. All considerations on waivers were at the discretion of the OIC or nurse on duty except in one rural health facility where the area chief was involved to confirm poverty before recommending for waivers. Final decisions on waiver of user fee were made by the OIC. In two health facilities, no waivers were given at all. The fees charged at the rural health facilities per service per visit ranged from one to one hundred and fifty Kenya shillings.

#### **3.5.1: Treatment affordability**

Two hundred and ninety two (72.8%) of the community interviewees indicated that they always afforded the cost of treatment while 109 (27.2%) could not always afford to do so. When the RHFS were asked whether community members always afforded treatment, 9 (23.7%) were on the affirmative while 29 (76.3%) were not (Table 9).

### **3.5.2: Accessibility of health service without payment**

Two hundred and thirty three (58.1%) community respondents' felt that they could access health services without payment while 126 (31.4%) said they could not. Forty two (10.5%) did not know whether they could access any health service if unable to pay (Table 9).

Thirty four (89.4%) of RHFS felt that community members could still access health services even if unable to pay for them and 4 (10.6%) indicated it was not possible to access health services without payment (Table 9).

### **3.5.3: Alternatives available to the community if unable to pay**

One hundred and ninety four (48.4%) community respondents said that credit facilities existed for those unable to pay while, 32 (8%) believed that health facility user fee waiver was available for those unable to pay. One hundred and seventy five (43.6%) did not know of alternatives (Table 9). Out of 38 RHFS, 28 (73.7%) said health facility user fees waiver was available for those unable to pay, 7 (18.4%) indicated the availability of credit facility and 2 (5.3%) had no information (Table 9).

**Table 9: Responses of community and rural health facility staff respondents on user fee charges**

User fee charge	CR Responses		RHFS Responses	
	Number	%	Number	%
(i) Charge				
• Charged a standard fee once for all health care services rendered	317	79.1	2	5.3
• Charged different charges for all health care services rendered	84	20.9	36	94.7
(ii) Affordability of service				
• Community members always afford to pay for health care service	292	72.8	9	23.7
• Did not always afford to pay for health care service	109	23.7	29	76.3
(iii) Waiver				
• RHFS could waive the charge if community member unable to pay	-		34	89.4
• RHFS could not render health service without pay	-		4	10.6
• Community members could access health service without pay	253	58.1	-	-
• Community members could not access health service without pay	126	31.4	-	-
• CR not aware of waiver system	42	10.5	-	-
(iv) Waiver alternatives				
• Credit	194	48.4	7	18.4
• Waiver	32	8.0	28	76.3
• Did not know	175	43.6	2	5.3

### 3.6: Community training to promote community participation in health development

The community and RHFS respondents indicated that the Ministry of Health, through the maintenance project for Rural Health facilities facilitated by preventive maintenance support unit, had organized a one-day awareness creation meeting in 1998. Although the objective of these seminars was to emphasize ownership concept and the need for the communities to work in partnership with the government in the management of their rural health facility, the general community was left out.

The respondents indicated that RHFMC (chairman, secretary, treasurer and two other members from the same committee), the officer in charge of the rural health facility, the public health technician in charge of maintenance and Community Development Assistant (CDA), chiefs, assistant chiefs, councilors, divisional public health officer, local opinion leaders, religious leaders and *maendeleo ya wanawake* (organization for women development) representatives were trained in those forums. They indicated that the district officers (provincial administration) were invited to officially open the training sessions while the chairman of DHMB was invited to attend, actively participate and officially close the session.

A further one-day seminar on the same concept of establishing a sustainable RHF management system based on a partnership between RHFMC and RHFS with necessary assistance from DHMT/DHMB was organized.

To enhance partnership in management of the rural health facilities the RHFMCs recommended further training on team building, management of community pharmacies,

financial management, roles and responsibilities of each partner, better ways of cooperating with the community to entrench the ownership concept and how to source for funds.

### **3.7: Level of community participation in health development in Ndaragwa division**

To assess the level of community participation in Ndaragwa division, Nyandarua district, needs identification, leadership, organization and resource mobilization (factors that influence CPHD) were estimated in accordance with Bichmann *et al.* (1989).

#### **3.7.1: Scoring for community participation indicator factors**

The rating was done using a cross tabulation of indicator factors that influence community participation by RHF. The score with the highest respondent percentage was picked and scored as 1, 2 or 3 (poor, fair or good). This was done for both CR and RHFS (Table 10). When the four factors that influence community participation were considered CR rated L.Pondo (score 4) and Ndaragwa (score 4) as poor while all the others were rated as fair. The RHFS rated community participation in all the RHF's as good except Ndaragwa (score 7), which was rated fair.

Highest score for each variable was notable in Baari that was the best (score 3) in needs assessment and leadership while Kirima and Shamata were the best (score 3) in organization. All the health facilities scored fairly in resource mobilization (score 2) except the two health centers (L. Pondo and Ndaragwa) that scored poorly (score 1.5 and 1 respectively).

Community respondents rated all the indicator factors below fair with resource mobilization being rated poor (score 1) while the RHFS respondents rated all the factors above fair with resource mobilization being rated the best (score 2.7). Ndaragwa health center was scored

the least (score 4), which is poor by CR and, also by the RHFS (score 7), which was fair. On overall the CR rated community participation as fair (score 5.7) while the RHFS rated it as good (score 9.7). Baari was rated the best by CR (score 8) and also by RHFS (score 11). According to the CR, there was no RHF with good community participation while the RHFS rated all as good except Ndaragwa, which was rated fair.

### **3.7.2: Level of community participation in rural health facilities**

A scoring range was developed further using outcomes of scores in table 10 above where an overall score of 1 - 4 showed poor, 5 - 8 fair and 9 - 12 good community participation. Majority of the RHF when community and RHFS responses are combined and an average calculated (Kahembe (score 6.5), Leshau Pondo (score 6.5), Subuku (score 8), Uruku (score 7.5) and Ndaragwa (score 5.9)) had fair community participation (Figure 4). Four rural health facilities (Baari (score 9.5), Kirima (score 9), Pesi (score 8.5) and Shamata (score 8.5)) had good community participation (Figure 4). The overall average score using responses from CR and RHFS was (7.8), which falls within the range of fair community participation. In this respect, CPHD in Ndaragwa division was fair.

### **3.7.3: A comparative account of factors that influence community participation among rural health facilities**

Baari dispensary was the best (score 3) in needs assessment while Uruku was the worst (score 1). Kirima and Shamata were the best (score 3) in organization while Baari, Kahembe, L. Pondo, Ndaragwa, and Subuku score the least (score 1.5). Baari had the best (score 3) leadership while Kahembe and Ndaragwa had the worst (score 1.5). Ndaragwa was the worst in resource mobilization while all the others were fair (Figure 5)

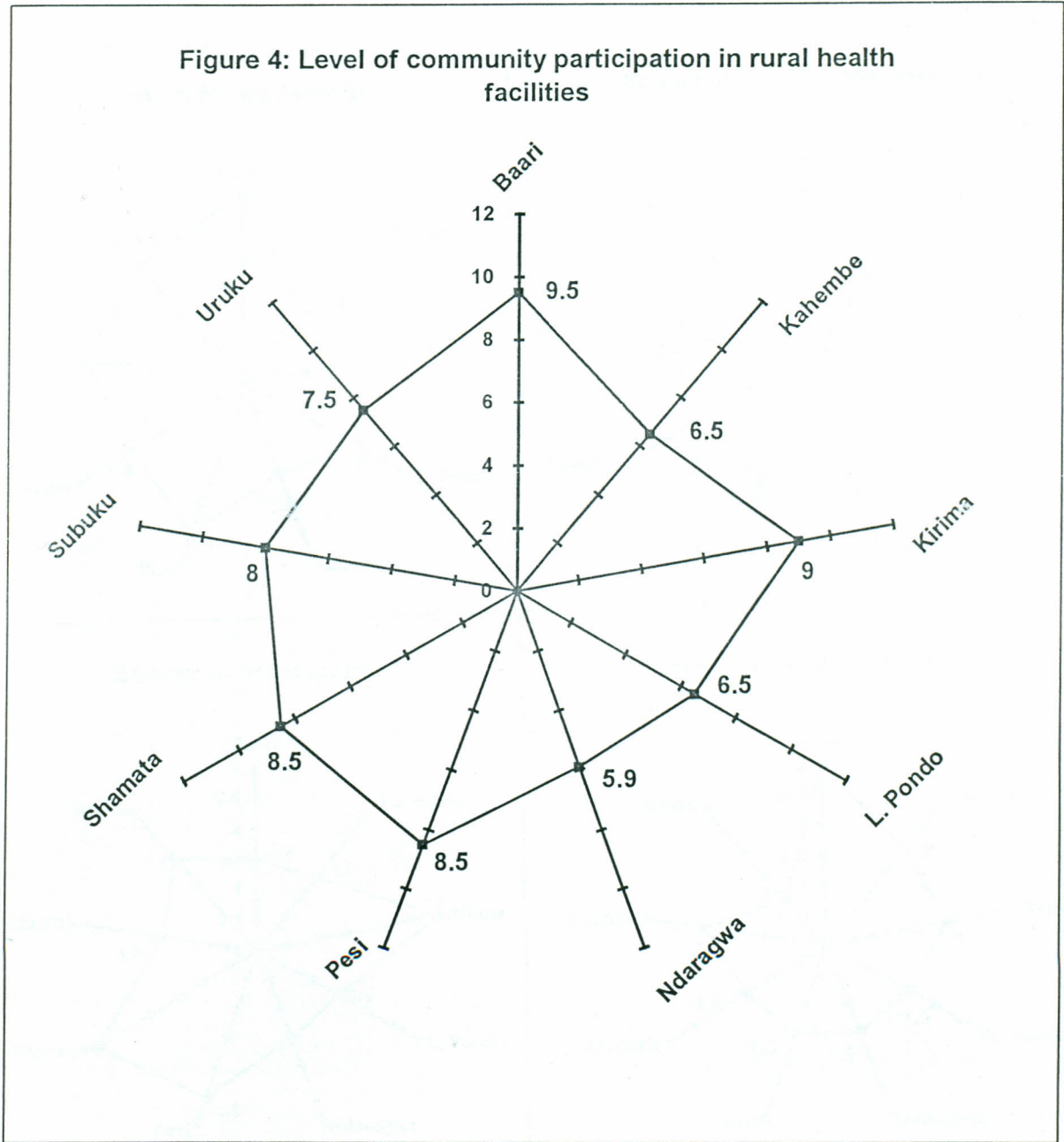
**Table 10: Scoring for community participation indicator factors using community and rural health facility staff responses**

Rural health facility	Indicator factors that influence community participation									
	Needs assessment		Leadership		Organization		Resource mobilization		Total score	
	Scores									
	CR	RHFS	CR	RHFS	CR	RHFS	CR	RHFS	CR	RHFS
Baari Disp.	3	3	3	3	1	2	1	3	8	11
Kahembe	1	3	1	2	1	1	1	3	4	9
Kirima	1	3	2	2	3	3	1	3	7	11
L. Pondo H/C	1	2	1	3	1	2	1	2	4	9
Ndaragwa H/C	1	2	1	2	1	2	1	1	4	7
Pesi	1	2	2	3	3	2	1	3	7	10
Shamata	1	2	2	2	3	3	1	3	7	10
Subuku	1	3	2	3	1	2	1	3	5	11
Uruku	1	1	2	3	1	3	1	3	5	10
Total score	12	20	16	23	15	20	9	24	51	88
Mean of each method	1.3	2.2	1.8	2.6	1.7	2.2	1	2.7	5.7	9.8
Overall Mean	1.8		2.2		2.0		1.9		7.8	

The maximum expected score in this ranking scale was 12.

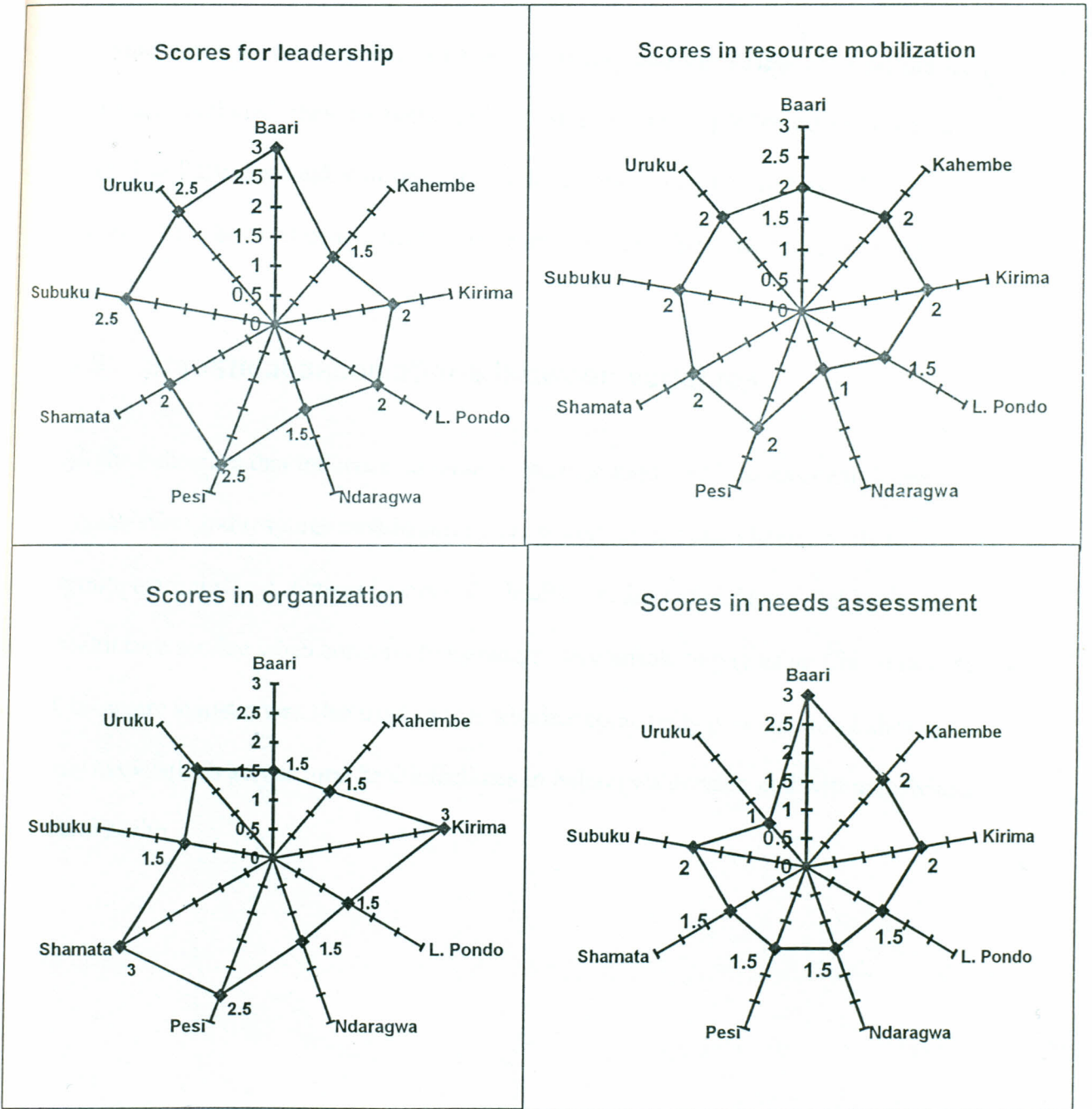
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Figure 4: Level of community participation in rural health facilities



The highest score was 9.5 and the least was 5.9 from an expected maximum of 12.

Figure 5: A comparative account of factors that influence community participation among rural health facilities



### **3.7.4: Level of community participation in health development per indicator factor in all rural health facilities.**

Overall, when all the responses of the community and the RHFS respondents from all the RHF are combined, they are better in leadership (score 2.2) followed by organization (score 2.0). The RHF are weaker in resource mobilization (score 1.9) followed by need assessment (score 1.8). The maximum expected score per indicator factor was three (Figure 6).

### **3.8: Statistical associations between variables**

All the indicators that influence community participation; needs assessment, leadership, organization and resource mobilization were tested for any associations with gender, age group, marital status, *baraza* (community health meeting) attendance, and accessibility of health care service when community members were unable to pay using Chi-square statistic. Chi-square statistic was also used to test whether community participation indicators had any associations across rural health facilities in Ndaragwa division and within individual rural health.

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Figure 6: Level of community participation in indicator factors that influence it.

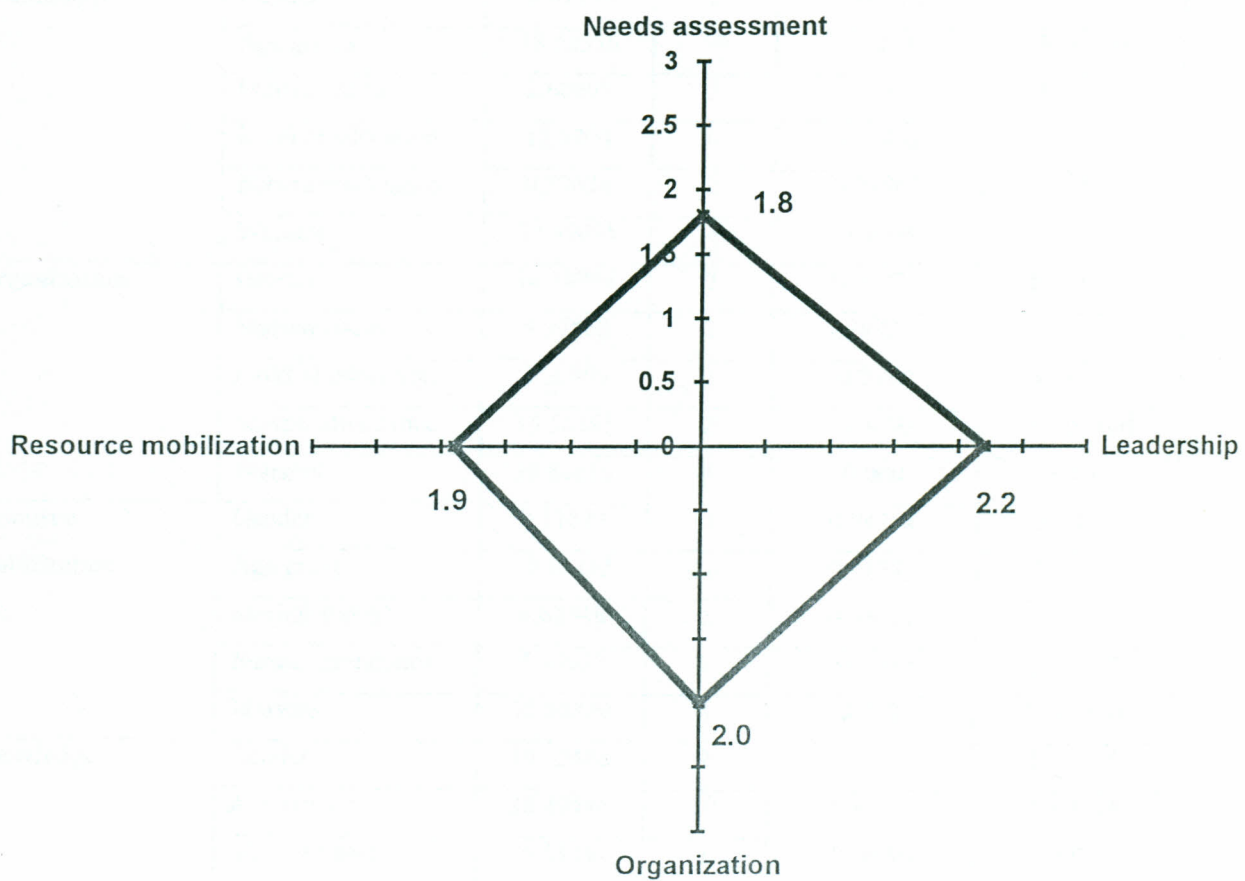


Table 11: Statistical associations between variables

Dependent variables	Independent variable	$\chi^2$	df	p - value	Significance at 95% C.I
Needs assessment	Gender	3.76696	2	0.5206	P > 0.05
	Age group	5.68960	10	0.84063	P > 0.05
	Marital status	0.57624	2	0.74967	P > 0.05
	<i>Baraza</i> attendance	0.57624	2	0.74967	P > 0.05
	Waivers	8.75875	4	0.6742	P > 0.05
Leadership	Gender	9.87759	2	0.00716	P < 0.05
	Age group	18.02536	10	0.5454	P > 0.05
	Marital status	3.60003	2	0.16530	P > 0.05
	Level of education	12.9204	6	0.04432	P < 0.05
	<i>Baraza</i> attendance	0.57624	2	0.74967	P > 0.05
	Waivers	33.45095	4	0.0000	P < 0.0001
Organization	Gender	14.38994	2	0.00075	P < 0.001
	Marital status	5.37588	2	0.06802	P > 0.05
	Level of education	3.30899	2	0.7918	P > 0.05
	<i>Baraza</i> attendance	35.56165	2	0.0000	P < 0.0001
	Waivers	59.84615	4	0.000	P < 0.001
Resource Mobilization	Gender	0.11673	2	0.94354	P > 0.05
	Age group	15.53252	10	0.11382	P > 0.05
	Marital status	6.62548	2	0.03642	P < 0.05
	<i>Baraza</i> attendance	5.30907	2	0.07033	P > 0.05
	Waivers	32.59359	4	0.000	P < 0.001
Knowledge	Gender	10.62488	2	0.0493	P < 0.05
	Age group	28.49994	10	0.00150	P < 0.01
	Marital status	6.1194	2	0.04690	P < 0.05
	<i>Baraza</i> attendance	16.31502	2	0.00029	P < 0.001
	Waivers	28.21035	4	0.00001	P < 0.0001
Perception	Gender	14.10904	2	0.00086	P < 0.001
	Marital status	1.166672	2	0.43459	P > 0.05
	<i>Baraza</i> attendance	109.69402	2	0.0000	P < 0.0001
	Waivers	48.04414	4	0.000	P < 0.0001
Needs Assessment	Across RHF	146.94053	16	0.000	P < 0.0001
Leadership	Across RHF	89.70784	16	0.000	P < 0.0001

## CHAPTER FOUR: DISCUSSION

### 4.0: General discussion

The study largely examined community participation in health development. Consistent with Bichmann *et al.*, 1989, this study has not included management as a factor of assessing the breadth of participation. Management questions have however been answered severally and separately in focus group discussion and in both the community respondents and rural health facility questionnaires.

Although this study is similar to others done in Nepal (Bichmann, 1987), Australia (Labonte, 1990), (Rifkin *et al.*, 1988) and in Indonesia (Nakamura and Siregar, 1996), it is different in that it included community members and rural health facility staff. This inclusion of rural health facility staff was necessary as they are important and are known to influence community participation as outlined by Freyens *et al.*, (1993) in Rwanda. Consequently, they influence both health policy and the community that they serve because of their position in the health system (Freyens *et al.*, 1993).

Based on the literature review in the past twenty years, this is the first study of its kind in Kenya. As such the study has made a contribution in knowledge of community participation in a rural set up in Kenya. This finding will find relevance in re-evaluation of health policy and the improvement of the concept of community participation particularly in the on going health sector reforms (ROK 1994).

The study has revealed factors, for instance, the lack of a legal framework for the rural

health facility management committees, inadequate knowledge, poor perception and the unwillingness of RHFS to share power with the community, all of which have a direct impact on the community participation process.

#### **4.1: Community knowledge and perception of health care provision**

According to the focus group discussion the roots of the RHFMC can be traced to building and farm buying committees whose functions were to build the RHF on *harambee* (pooling resources together) and to buy land and settle community respectively. After the completion of these functions, these building and farm buying committees were generally dissolved and more often replaced by RHFMC. This is consistent with the finding of Omambia (1984), who found that community mobilization was easier if based on a tangible objective for instance farm buying or health facilities construction, but ceases when such an objective has been met.

In the view of the community, the development of the RHFMC was seen to be beneficial in community participation process that required proper knowledge and perception of health provision. The initial participants of building and farm buying committees were deemed by the community to have this knowledge and would therefore enable community participation process.

The findings of this study however do not support this community view because it revealed that the RHFMC members require training in management of health care provision. This is important in view of the finding of this study that the community knowledge of health care provision was generally poor (Figure 1).

Although the community respondents had good knowledge on the RHFMC existence and its roles and responsibilities (Table 3) it is not clear at what point they learned of its existence; but probably during its inception or its functional phase. The community user fee initiative that started in 1998 in most rural health facilities could have facilitated in this awareness. But the self- help spirit existent in the community could have played a role.

#### **4.2: Rural health facility staff knowledge and perception of Community Participation in Health Development**

Both knowledge and perception of rural health facility staff was good (Figure 2) as expected but their knowledge and practice on community participation was low and the perception was that community would interfere with the running of the RHF. Similarly results have been obtained in Rwanda where it was also concluded that RHFS have difficult in understanding and practicing the concept of community participation (Freyens *et al.*, 1993).

Less than half of the rural health facility staff favored to work in partnership with the rural health facility management committee (Table 6) in expectation that the financial status of their facilities would improve. This scenario suggests that the change in policy had not been communicated to the health care providers either in seminars or during their training. This finding agrees with another study done in Pakistan (Eshan & Colin 1998). The RHFS supported the idea of RHFMC on the basis of resource generation but resented the idea of community participation in making management decisions.

In two facilities (Subuku & Shamata), serious conflicts on who was supposed to hire and fire casuals, the keeping of the minutes record and decision making on utilization of the

funds collected from the community had emerged. There was a clear indication of the health care providers did not have adequate awareness on the change in policy, as these cases required that the two partners share power for effective management. This finding concurs with that of Freyens *et al.*, (1993). This study also reveals that there was no rural health facility in the study area that was supplied with rural health facility manual as promised by MOH (ROK, 1998). This deficiency allows for disorganization similar to one noted in Subuku and Shamata rural health facilities.

Lack of a manual by Ministry of Health to clarify the actual roles and responsibilities in the community management of the rural health facilities is a likely factor contributing to the community inability to fulfill their mandate in rural health facility management committees. Although there was no resistance in the introduction of rural health facility management committees in the study area, the rural health facility management committee's acceptance in other areas of this country requires exploration.

The RHFS were unanimous on the need of the community to contribute towards health development at the rural health facility (Table 6) probably because the rural health facility management committees were perceived as a vehicle to more money to finance health facilities. This is confirmed by the fact that rural health facility staff preferred money as the mode of contribution as opposed to building material and voluntary labor (Figure 3). Hence, caution needs to be exercised to ensure that CPHD does not relieve the government the responsibility for providing PHC at the community level as revealed by other studies (Barnabas, 1993).

Further to this, conflicts were noted where the officer in-charge in the rural health facility did not accept rural health facility management committee's role in management of rural health facilities contrary to policy preference. Also, the officers in-charges would prefer to offer services to the community without having to mount community health *barazas*. Lack of *baraza* indicate that community needs are not taken into account in delivering health care services, a contradiction of the principal of CPHD (Rifkin 1990).

### 4.3: Criteria for User Fee Waiver

There were no user fee guidelines in all the rural health facilities found in the study area and rural health facility management committees and rural health facility staff charged for services even at dispensary level contrary to the existing cost sharing policy (ROK, 1990). Services offered at dispensaries are required to be free of any charges in order to promote primary health care throughout the country (ROK, 1989). However, community members interviewed showed inadequate awareness on the existence of user fee waiver option and some paid for services they required while those who could not were given a credit (Table 9).

The discretion to grant waivers was done by the OIC except in one facility (Baari) where the chief was consulted to confirm the poverty level of those applying for a waiver. Brian Abel-Smith (1991) points out that allowing rural health facility staff discretion to give waiver may result in very rough justice. The finding of this study is in agreement in the observation that a child was denied a waiver at Pesi dispensary and later died at home. The issue of resource generation at rural health facility interfered with the waiver system as found during focus group discussions in all rural health facilities. The leaders feared that if community members

were educated on waiver system, then all would claim to be poor while not and hence poor resource generation.

#### **4.4: Training to promote community participation in health development**

Training and seminars for executive members of the rural health facility management committees was done to enhance their skills in management but the non-executive members did not receive any training, hence cannot participate fully in management decisions. This differential training has caused friction in many of the rural health facility management committees studied in this study and interfered with rural health facility management committee's member's ability to work as a team. To date, key decision, such as types of new services required and control over medicines and equipment remain under the management of the Ministry of health staff and to a lesser extent the District Health Management Team (DHMT). Control has been found to create dependence on the formal health system rather than an integral component of community development process (David & Zakus, 1998).

The health professionals did not undergo training or attend seminars to prepare them to establish participatory relationships with the community. Thus, opportunity to redefine their professional roles in health care in line with the CPHD has been missed.

It was observed that the DHMT trained only the executive members of the RHFMC excluding other members of the full committee. This unwittingly resulted in a knowledge gap between the executive and the rest of the committee members. The full committee did not question the decisions of the executive, as they were perceived to be better informed. In cases where non-executive members were interviewed they were poorly informed about their own committees' activities. There is a real danger of establishing the executive

committee as a link with the formal health service. Simply put, the difference between the knowledge given to the executive committee members and that given to the rest of the community was too wide. The DHMT that was running the training program failed to take into account the need to keep the community informed in order to ensure their cooperation. In some committees (Ndaragwa and Subuku), non-executive members stopped attending meetings because they felt their contributions were no longer needed. Thus the executive arm of the health committee assumed the role of health workers. In this case then as in Mexican experience, they became the latest appendage of the Ministry of health rather than a vehicle for community participation (David & Zakus, 1998). This arrangement may be good to the District Health Management Team (DHMT).

#### **4.5: Community participation in health development**

This study examined the four factors that influence community participation as outlined by Bichmann *et al.*, (1989). If one equates the scoring in this study with that of Nakamura and Siregar (1996) who used an Indonesian population, then the finding on needs assessment (1.8) and resource mobilization (1.9) are in agreement (Table 10). This suggests that the tool developed by Bichmann *et al.*, (1989) can be used to study community participation across populations on needs assessment and resource mobilization but may give different results on the other indicator factors, that is, organization and leadership.

Based on observations of this study, leadership and organization indicator factors are in disagreement with Nakamura and Siregar (1996) perhaps due to the differential characteristics that might be found in both populations where the organization of health system in Indonesia is different from that in Kenya. In the Indonesian study community

awareness was heightened in monthly seminars organized by volunteers, during which they discussed their activities, attended lectures and participated in question and answer sessions before assessment of community participation was done as opposed to the Kenyan experience where no awareness creation was done.

## CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

### 5.1: Conclusions

1. Knowledge of health care provision is good among the RHFS but poor among community respondents.
2. Similarly perception score is only fair among RHFS and poor among community respondents.
3. Cost sharing policy guideline on waiver system was not practiced as outlined by government policy.
4. Training is lacking among RHFS, non-executive members of RHFMC and the community members on the roles and responsibilities in the new arrangement in consistency with the government requirement.
5. A legal framework for the rural health facility management committees is lacking and hence the RHFMC are ignored by RHFS.
6. Community participation in health development was fair.

### 5.2: Recommendations

1. The concept of community participation in health development has yet to gain widespread understanding and support by the community. There is need to create this awareness through *barazas* and seminars conducted by Ministry of health staff in conjunction with social scientists.
2. The RHFS, non-executive members of RHFMC and the community should be trained on their roles and responsibilities in the new arrangement to enable them

make informed decisions.

3. Government needs to give rural health facility management committees legal status from which specific obligations and regulations should be laid down.
4. The government needs to have a motivational policy for the RHFMC members by giving them sitting allowances and exemption from user fee charge.
5. A comparative study on the management of health centers under official cost sharing and dispensaries under community user fee initiative is recommended.
6. Similar studies are recommended in other districts in Kenya to determine practice.

## 7. References

1. **Abel-Smith, B. & D. Ajay.** 1995. Community Financing in developing countries: The potential for the health sector. *Health policy and planning* 3: 95 – 108.
2. **Al-Mazroa, & S. Al-Shammari.** 1991. Communities participation and attitudes of decision-makers towards community involvement in health development in Saudi Arabia. *Bulletin of world health organization* 69: 43 - 50
3. **Aubel, J. & S. N. Kinday.** 1996. Lessons on sustainability for community health projects. *World Health Forum* 17: 52 - 57
4. **Barnabas, G.** 1993. Health care in Tigray, Northern Ethiopia. Unpublished report.
5. **Barrig, M.** 1990. Women and development in Peru: old models, new actors, *Community development journal* 25: 377 - 385.
6. **Bichmann, W.,** 1987. Community involvement in Nepals health system: a case study of district health services management and the community health leader scheme in Kaski district. Liverpool school of Tropical Medicine, (Dissertation for comm. Health).
7. **Bichmann, W., S. B. Rifkin, & M. Shrestha.** 1989. Towards the measurement of community participation, *World Health Forum* 10: 467-472.
8. **Brian, Abel-Smith.** 1991. Financing health for all. *World health forum* 12: 191- 200.
9. **Bugnicourt, J.** 1982. Popular participation in development in Africa. *Assignment children:* 59 - 60.
10. **Constantino-David, K.** 1995. Community organizing in the Philippines: The experience of development NGOs, in G. Craig and M. Mayo, eds, *A Reader in participation and development*, Zed Books, London, UK: 154 -167.
11. **David, J. & L. Zakus.** 1998. Resource dependency and community participation in primary health care. *Soc, Sci Med.* 46: 475 – 494.

12. **Diallo, I., S. Mckeown & I. Wone.** 1996. Bamako boost for primary care, *World Health Forum* 17: (4) 382-385.
13. **Eisen, A.** 1994. A survey of neighborhood-based, comprehensive community empowerment initiatives, *Health Education Quarterly* 21: (2) 235-252.
14. **Eng, E. & E. Parker.** 1994. Measuring community competence in Mississippi delta: The interface between program evaluation and empowerment, *Health Education Quarterly* 21: (2) 199-220.
15. **Eshan, Ullah Tarin & Colin Thunhurst.** 1998. Community participation - with provider cooperation. *World health forum.* 19: 72 - 75.
16. **Fawcett, S.B., A. Paine - Andrews, V. T. Francisco, J. A Schultz, K. P Richter, R. K. Lewis, E. L. Williams, K. J. Harris, J. Y. Berkley, J. L. Fisher & C. M. Lopez.** 1995. Using empowerment theory in collaborative partnerships for community health and development, *American journal of community psychology* 23: 677-697.
17. **Fisher, A. A., J. E. Laing, J. E. Stoeckel, & J. W. Townsend.** 1998. *Handbook of Family Planning Operations Research Design.* 2<sup>nd</sup> Ed. Population Council 77.
18. **Freyens, P., N. Mbakiyemo & M. Martin.** 1993. How do health workers see community participation? *World health forum* 14: 253 - 257.
19. **Glenn, Laverack.** 2001. An identification and interpretation of the organizational aspects of community empowerment. Oxford University Press. *Community development journal* 36: 134 -145.
20. **Goodman, R.M., M. A. Speers, K. Mcleroy, S. Fawcett, M. Kegler, E. Parker, S. Rathgeb Smith, T. D. Sterling & N. Wallertein.** 1998. Identifying and defining the dimensions of community capacity to provide the basis for measurement, *Health Education and Behavior* 25: 258-278.

21. **Gruber, J. & E. J. Trickett.** 1987. Can we empower others? The paradox of empowerment in the governing of an alternative public school, *American journal of community psychology* 15: 353 - 372.
22. **Hildebrandt, E.** 1996. Building community participation in health care: A model and example from South Africa, *Image: Journal of nursing scholarship* 28: (2) 15-159.
23. **International program advisory panel (IPAP).** 1996. Discussion paper on community participation.
24. **Jinadu, M. K., Davies-Adetugbo, Ogunbodede & A. K. Adetugbo.** (1997). Partnership for Primary Health Care; *World Health Forum* 18: (2) 211-214
25. **Kaseje, D. C. O., E. K. N. Sempebwa & H. C. Spencer.** 1987. Community leadership and participation in the Saradidi, Kenya, Rural Health Development Program, *Annals of Tropical Medicine and parasitology* 81 (1) 45-55.
26. **Kenya African National Union (KANU).** 1963. Kenya African National Union (KANU) Manifesto; Kenya Moja, Taifa Moja, Twasonga Mbele tu.
27. **Kenya Health Care Financing Project.** (1994). Impact of cost sharing in Kenya: 1989 - 1993
28. **Krueger, A.** 1988. Focus groups, A practical guide for applied research. Sage publications London.
29. **Labonte, R.** 1990 & **Rifkin,** 1988. Empowerment: Notes on professional and community dimensions, *Canadian Review of Social policy* 26: 64 -75.
30. **Laverack, G.** (1999). Addressing the contradiction between discourse and practice in health promotion, Deakin University, Phd, Melbourne, Australia.
31. **MacCallan L. & V. Narayan.** 1994. Keeping the heart beat in Gramphia: a case study in community participation and ownership, *Health promotion international* 9 (1) 13 -19.

32. **McCall, M.** 1998. The implications of Eastern African rural social structure for local level development: the case for participatory development based on indigenous knowledge systems, *Regional Development Dialogue* 9: (2) 41-69.
33. **Moses, S., F. Manji, J. E. Bradley, J. O. Niko, N. Kerke, M. A. Malisa and F. A. Plummer.** 1992. Impact of user fees on attendance at a referral center for sexually transmitted diseases in Kenya. *The Lancet* 340: 463 – 466.
34. **Nakamura, Y. & M. Siregar** 1996. Qualitative assessment of community Participation in health promotion activities. *World health forum* 17: 415 - 417.
35. **National council for population and development (NCPD), Central bureau of statistics, Office of the President and Ministry of planning and development.** 1994. Kenya Health Demographic Survey (1998) Calverton M.D. Macro.
36. **Oakely, P.** 1989. Community Involvement in Health Development: an examination of the critical issues, Geneva, WHO.
37. **Ofori-Amaah, S.** 1989. The Bamako initiative. Letter to the Editor, *the Lancet*, p 162.
38. **Omambia, D. O.** 1984. Report of socio-cultural survey on sanitary practices.
39. **Owen, Dyer.** 1995. UK Government proposes changes to primary care. *BMJ* 312
40. **Pelletier, D. & V. Jonsson.** 1994. The use of information in Iringa nutrition program, *Food Policy* 19: 301- 313.
41. **Plough, A. & F. Olafson.** 1994. Implementing the Boston Healthy Start initiative: a case study of community empowerment and public health, *Health education Quarterly* 21: 221 - 234.
42. **Purdey, A. F., G. B. Adhikari, S. A. Robinson & P. W. Cox.** 1994. Participatory health development in rural Nepal: clarifying the process of community empowerment, *Health Education Quarterly*, 21: 329 - 343.

43. **Republic of Kenya.** 1986. Sessional Paper No. 1 on economic management for renewed growth, p12 sec.2.19. Government printers, Nairobi.
44. **Republic of Kenya.** 1989. Kenya National development plan, 1989-1993, Chapter 10, Section 10.3, The health system and section 10.4, Health objectives and strategies, Nairobi 236 - 239
45. **Republic of Kenya.** 1990. Health care services fund. The exchequer and Audit Act (Cap. 412), Legal notice (268) Nairobi.
46. **Republic of Kenya.** 1992. Legal Notice No. 162: The Public Health Act (Cap. 242), The public health (District Management Boards) rules.
47. **Ministry of Health.** 1994. Kenya's Health Policy Framework.
48. **Ministry of Health.** 1995. Guidelines for District Health Management Boards, 15<sup>th</sup> September, MoH, Nairobi, Kenya.
49. **Republic of Kenya.** 1997-2001. Nyandarua district development plan, Office of the Vice President, Ministry of Planning and National Development, Government Printer, Nairobi, Kenya.
50. **Ministry of Health.** 1998. Rural Health Facility Management Committee Ministerial Circular no. 79/98, ref. no. Misc/1/A/2/(79).
51. **Richard, A. Wright.** 1993. Community-oriented primary care; The cornerstone of Health Care Reform, MD. JAMA, 269: 2544 – 2547.
52. **Rifkin, S. B.** 1990. Community Participation in Maternal and child Health/Family Planning Programs. An analysis based on case study materials. Geneva, WHO.
53. **Rifkin, S., I. Muller & W. Bichmann.** 1988. Primary health care: On measuring participation. soc. Sci. med. 26: 931 - 940.
54. **Roberts, G.** 1997. The Kadavu health promotion model, Health Promotion International,

- 12: 283-290.
55. **Ryra, S.**, 1990. Tools for community participation. World Bank.
  56. **Shrimpton, R.** 1995. Community participation in food and nutrition programs: an analysis of recent government experiences, in P. Pinstrip-Adersen, D. Pelletier and H. Alderman, eds (1995), *Child Growth and Nutrition in Developing Countries: Priorities for Action*, Cornell University Press, Ithaca 243-261.
  57. **Tonon, M. A.** 1980. Concepts in community empowerment: a case study of sanitary change in Guatemalan village, *International Journal of Health Education*, 23: 1-16.
  58. **United Nations International Children's Education Fund (UNICEF).** 1994. Project Proposal for the PHC/Bamako initiative in Kenya, Kenya Country Office.
  59. **United Nations International Children's Education Fund (UNICEF).** 1993. Facts for life: A communication Challenge Pla & Uk.
  60. **United Nations International Children's Education Fund (UNICEF).** 1994 – 1995. Bamako Initiatives Mid-term Review– Kenya Country Office.
  61. **Wegelin-Schuringa, M.** 1992. Participation Approaches to Urban Water Supply and Sanitation, IRC, The Hague, The Netherlands.
  62. **World Bank Publication.** 1994. Better Health in Africa; Experience and lessons learned. Development in Practice, Washington D.C.
  63. **World health organization (WHO), United Nations Development programme (UNDP) & World Bank.** 1992. Special programme for research and training in tropical diseases (TDR). Methods for social research in tropical diseases No. 1. The Focus Group Manual.
  64. **World Health Organization (WHO).** 1978. Primary Health Care: Report of the International Conference on PHC, Alma-Ata, USSR 6 -12 Geneva.

65. **World Health Organization (WHO).** 1979. Formulating Strategies for health for all by the year 2000, Geneva.
66. **World Health Organization (WHO).** 1996. AFYA KWA WOTE: The newsletter of WHO, Kenya 7.
67. **World Health Organization (WHO).** 1997. 'Health for All' in the 21<sup>st</sup> century 44

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## Appendix 1: Community Respondents Structured Questionnaire

### Introduction

My name is ..... I work for ministry of health but I am currently a student in Kenyatta University. We are interviewing people who use this health facility in order to find out the level of their involvement in its management for it to provide quality health services to those who use it. The information you give will assist the ministry of health to strengthen nationwide, community involvement in health development processes in line with the ongoing reforms.

### Confidentiality and consent

I am going to ask you questions about the management of this rural health facility. Your answers are completely confidential. Your name will not be written on this form and will never be used in any information you tell me. You do not have to answer any question you do not want to and you may end the interview any time you want to. However, your honest answers to these questions will help the ministry to know what people think about this facility, how the RHFMC was selected and how management of this facility is done. We would greatly appreciate in your help in answering these questions. Your selection top this study is purely on random basis.

Would you be willing to participate?

\_\_\_\_\_ Date \_\_\_\_\_

Signature of the interviewer certifying that informed consent has been given

## Community Respondents Structured Questionnaire

Serial No: \_\_\_\_\_

Date of interview: \_\_\_\_\_

Name of interviewer: \_\_\_\_\_

Facility code: (1) Health Center

(2) Dispensary

Name of Health Facility: \_\_\_\_\_

### Instructions

Fill in one questionnaire for each client interviewed.

### Section I: Community respondent's demographic characteristics

1. Sex code (1) Male

(2) Female

2. Age in number of completed years.

3. What is your level of education?

Primary school

Secondary school

College/University

None

4. Marital status?

(1) Married (2) Single (3) Widowed (4) Divorced (5) Separated

5. What is your current occupation?

- (1) Unemployed
- (2) Farming
- (3) Wage/salary employment (full time)
- (4) Self employment (business/trader)
- (5) Casual worker
- (6) Student
- (7) Other, specify.

**Section II: Community respondents' perception on health care facility**

6. Who owns this rural health facility?

- (1) Government      (2) Community      (3) I don't Know

7. Are you aware of the existence of the Health Facility Management Committee?

- (1) No      (2) Yes

8. If yes, what are its duties (tick what is mentioned)

To oversee the general operations and management of this health facility.

To advice the community on matters related to the promotion of health services.

To represent and articulate community interests on matters pertaining to health in Sub-locational, locational and sub-District development committees' forums.

To facilitate a feedback process to the community pertaining to the operations and management of the rural health facility.

To implement community decisions pertaining to their own health.

To mobilize community resources towards the development of Health Services within their area.

To educate the community in healthy living habits

To mobilize money and labor for health activities within the village

To liaison with the health facility in its activities

To identify, train or support CHWs (tick what is mentioned)

To identify and waive fees for service those who cannot afford to pay for health services (tick what is mentioned)

All of the above

Do not know

Others (specify) \_\_\_\_\_

9. Who is responsible for provision of health services in this health facility?

(1) RHFS alone (The government alone)

(2) RHFMC in Partnership with RHFS

(3) The community alone (RHFMC)

(4) Do not know

(5) Others, specify \_\_\_\_\_

10. Is there a need for the community members who use this health facility to make any monetary or material contributions to ensure that it runs well?

(1) Yes

(2) No

11. If yes, how?

(1) Voluntary labor

(2) Money

(3) Materials for building

(4) Other \_\_\_\_\_

If no, why?

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12. Are you personally making any contribution towards this health facility?

1. Yes

2. No

13. Who decides how much you should pay for services at this health facility?

The Government

The Healthy Facility Committee

Health facility staff

Community members

Do not know

Others, Specify

14. Have you ever attended a "baraza" at which health matters were discussed?

No

Yes

15. If no, why?

(1) I do not know when meetings are held.

(2) I do not have time to attend.

16. If yes, How long ago? (in months) \_\_\_\_\_

(1) 0-3      (2) 4-6      (3) 6-12      (4) 12-24      (5) Over 24

17. Are there any community members involved in health work within the community?

(1) Yes

(2) No

18. If yes, how?

(1) As a Traditional Birth Attendant's

(2) In Community Based Drugs distribution

(3) In growth monitoring activities such as weighing of babies

(4) In educating the community on nutrition e.g. the need for kitchen gardens.

(5) In educating the community on good hygiene and sanitation practices

(6) Others, specify? \_\_\_\_\_

### Section III: User fee waivers

19. (a) What is the charging mode in this rural health facility?

Charged once for all health services given

Charged user fee per health care service rendered

20. Are you always able to afford the treatment?

(1) Yes      (2) No

21. Is it possible to get treatment at this health facility if one does not have the money to pay for it?

(1) Yes      (2) No

22. If yes, how?

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Fees waiver

Credit

Exchange with goods

Exchange of voluntary labor

Others (specify)

**Section IV: Community participation in the management of rural health facilities**

**Needs assessment**

23. (a) What are the major diseases in this area? Tick in the column marked (a)

For which of these diseases can you get treatment in this health facility? Tick in the column marked (b)

	DISEASES	Tick what is mentioned (a)	Tick if treatment is available (b)
1	Respiratory diseases		
2	Malaria		
3	Skin diseases		
4	Intestinal worms		
5	Diarrhea Diseases		
6	Accidents		
7	Eye and Ear infections		
8	Dental diseases		
9	Pneumonia		
10	Urinary tract infections		
11	Other (specify)		

24. Which health promotion activities are carried out by this health facility:

(a) In the health facility?

- (1) Growth monitoring
- (2) Oral re-hydration
- (3) Promotion of Breast-feeding
- (4) Immunization
- (5) Family planning
- (6) Others

(Specify) \_\_\_\_\_

(b) In the community?

- (1) Water quality control through protection of, springs, wells, dams, bore-holes and advice on the need to boil drinking water. (Tick what is mentioned)
- (2) Vector control through environmental modification and good housing.
- (3) Food quality control
- (4) Waste management
- (5) Growth monitoring activities e.g. weighing of babies done away from the health facility
- (6) Oral re-hydration solutions available together with the know-how to use it in the community.
- (7) Promotion of Breast feeding
- (8) Family planning i.e. distribution of contraceptives by CHWs
- (9) Promotion of kitchen gardens
- (10) Others (Specify) \_\_\_\_\_

**Leadership**

25. Who makes the necessary decisions concerning the running of this health facility?
- (1) Health staff alone
  - (2) The Health Facility Management Committee alone
  - (3) The Health Facility Management Committee and health staff together
  - (4) Others
  - (5) Do not know
26. Who is responsible for the day to day running of this health facility?
- (1) Health staff alone
  - (2) Health staff with occasional assistance from the RHFMC
  - (2) The RHFMC
  - (3) Others, Specify
  - (4) Do not know

**Community organization**

27. (a) How were the RHMFC members selected?
- (1) Appointment
  - (2) Election
- (b) How would you rate their performance?
- (1) Very Good (2) Good (3) Fair (4) Poor (5) Very poor

**Resource mobilization**

28. (a) What happens to the fees levied for treatment in this health facility?
- (1) Used to pay staff salaries and to buy equipment
  - (2) Used to procure drugs and other medical supplies
  - (3) Used to improve/maintain the building/equipment in this health facility.
  - (4) Used to pay salaries to support staff they have employed
  - (5) Others (specify) \_\_\_\_\_
  - (6) Do not know
- (b) How else does the RHFMC raise funds to support health activities for the community?
- (1) By holding Harambees
  - (2) By soliciting for donations either of cash, drugs or other materials
  - (3) Others (Specify) \_\_\_\_\_

## Appendix 2: Rural Health Facility Staff Respondents Structured Questionnaire

### Introduction

My name is ..... I work for ministry of health but I am currently a student in Kenyatta University. We are interviewing people who use this health facility in order to find out the level of their involvement in its management for it to provide quality health services to those who use it. The information you give will assist the ministry of health to strengthen nationwide, community involvement in health development processes in line with the ongoing reforms.

### Confidentiality and consent

I am going to ask you questions about the management of this rural health facility. Your answers are completely confidential. Your name will not be written on this form and will never be used in any information you tell me. You do not have to answer any question you do not want to and you may end the interview any time you want to. However, your honest answers to these questions will help the ministry to know what people think about this facility, how the RHFMC was selected and how management of this facility is done. We would greatly appreciate in your help in answering these questions. Would you be willing to participate?

\_\_\_\_\_ Date \_\_\_\_\_

Signature of the interviewer certifying that informed consent has been given



Public health technician

Nutritionist

Others, Specify

4. Marital status?

(1) Married (2) Single (3) Widowed (4) Divorced (5) Separated

**Section II: Rural health facility staff respondents perception on health care facility**

5. Are you aware of the existence of the Health Facility Management Committee?

(1) No (2) Yes

6. If yes, what are its duties (tick what is mentioned)

1. To oversee the general operations and management of this health facility.
2. To advice the community on matters related to the promotion of health services.
3. To represent and articulate community interests on matters pertaining to health in Sub-locational, locational and sub-District development committees' forums.
4. To facilitate a feedback process to the community pertaining to the operations and management of the rural health facility.
5. To implement community decisions pertaining to their own health.
6. To mobilize community resources towards the development of Health Services within their area.
7. To educate the community in healthy living habits
8. To mobilize money and labor for health activities within the village
9. To liaison with the health facility in its activities

10. To identify, train or support CHWs (tick what is mentioned)
11. To identify and waive fees for service those who cannot afford to pay for health services  
(tick what is mentioned)
12. All of the above
13. Do not know
14. Others (specify) \_\_\_\_\_

7. Who is responsible for provision of health services in this health facility?

RHFS alone (The government alone)

RHFMC in Partnership with RHFS

The community alone (RHFMC)

Do not know

Others, specify \_\_\_\_\_

8. Is there a need for the community members who use this health facility to make any monetary or material contributions to ensure that it runs well?

(1) Yes                      (2) No

9. If yes, how?

(1) Voluntary labor

(2) Money

(3) Materials for building

(4) Other \_\_\_\_\_

If no, why?

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- 
10. Who decides how much should be paid for services at this health facility?
1. The Government
  2. The Healthy Facility Committee
  3. Health facility staff
  4. Community members
  5. Do not know
  6. Others, Specify
11. Have you ever been involved in the organization of a "baraza" at which health matters were discussed?
- (1) No                      (2) Yes
12. If no, why?
- (1) The officer in charge does not involve us.
  - (2) I do not have time to attend.
  - (3) There has never been such a meeting in this facility.
  - (4) No answer
  - (5) Others, specify
13. If yes, How long ago? (in months) \_\_\_\_\_
- (1) 0-3              (2) 4-6              (3) 6-12              (4) 12-24              (5) Over 24
14. Are there any community members involved in health work within the community?
- Yes                      (2) No
15. If yes, how?

As a Traditional Birth Attendant's

In Community Based Drugs distribution

In growth monitoring activities such as weighing of babies

In educating the community on nutrition e.g. the need for kitchen gardens.

In educating the community on good hygiene and sanitation practices

Others, specify? \_\_\_\_\_

### Section III: User fee waivers

16. (a) What is the charging mode in this rural health facility?
- (1) Charged once for all health services given
- (2) Charged user fee per health care service rendered
17. Do all community members always afford the treatment?
- (1) Yes (2) No
18. Is it possible to get treatment at this health facility if one does not have the money to pay for it?
- (1) Yes (2) No
19. If yes, how?
- (1) Fees waiver
- (2) Credit
- (3) Exchange with goods
- (4) Exchange of voluntary labor
- (5) Others (specify)

#### Section IV: Community participation in the management of rural health facilities

##### Needs assessment

20. (a) What are the major diseases in this area? Tick in the column marked (a)
- (b) For which of these diseases can you get treatment in this health facility? Tick in the column marked (b)

	DISEASES	Tick what is mentioned (a)	Tick if treatment is available (b)
1	Respiratory diseases		
2	Malaria		
3	Skin diseases		
4	Intestinal worms		
5	Diarrhea Diseases		
6	Accidents		
7	Eye and Ear infections		
8	Dental diseases		
9	Pneumonia		
10	Urinary tract infections		
11	Other (specify)		

21. Which health promotion activities are carried out by this health facility:

(a) In the health facility?

- (1) Growth monitoring
- (2) Oral re-hydration
- (3) Promotion of Breast-feeding
- (4) Immunization
- (5) Family planning
- (6) Others

(Specify) \_\_\_\_\_

(b) In the community?

- (1) Water quality control through protection of, springs, wells, dams, bore-holes and advice on the need to boil drinking water. (Tick what is mentioned)
- (2) Vector control through environmental modification and good housing.
- (3) Food quality control
- (4) Waste management
- (5) Growth monitoring activities e.g. weighing of babies done away from the health facility
- (6) Oral re-hydration solutions available together with the know-how to use it in the community.
- (7) Promotion of Breast feeding
- (8) Family planning i.e. distribution of contraceptives by CHWs
- (9) Promotion of kitchen gardens
- (10) Others (Specify) \_\_\_\_\_

### Leadership

22. Who makes the necessary decisions concerning the running of this health facility?

- (1) Health staff alone
- (2) The Health Facility Management Committee alone
- (6) The Health Facility Management Committee and health staff together
- (7) Others
- (8) Do not know

23. Who is responsible for the day to day running of this health facility?

- (1) Health staff alone
- (2) Health staff with occasional assistance from the RHFMC
- (5) The RHFMC
- (6) Others, Specify
- (7) Do not know

### Community organization

24. (a) How were the RHMFC members selected?

- (1) Appointment
- (2) Election

(b) How would you rate their performance?

- (1) Very Good (2) Good (3) Fair (4) Poor (5) Very poor

### Resource mobilization

25 (a) What happens to the fees levied for treatment in this health facility?

- (1) Used to pay staff salaries and to buy equipment
- (2) Used to procure drugs and other medical supplies

- (3) Used to improve/maintain the building/equipment in this health facility.
- (4) Used to pay salaries to support staff they have employed
- (5) Others (specify) \_\_\_\_\_
- (6) Do not know

(b) How else does the RHFMC raise funds to support health activities for the community?

- (1) By holding Harambees
- (2) By soliciting for donations either of cash, drugs or other materials
- (3) Others (Specify) \_\_\_\_\_

### Appendix 3: Interview Schedule for Key Informant Interviews for the Leader of the Rural Health Facility Management Committee.

Approximate date of the constitution of the rural health facility management committee

2. How did the organization come into being?
3. Was it a pre-existing organization?
4. How did the present leaders obtain their posts?
5. What is the frequency of committee meetings?
6. Are there minutes of previous meetings that I can see?
7. What is the relationship of health care providers and RHFMC?
8. Who decides on the community needs to be addressed?
9. Are any fees levied for health services?
  - Types and amounts
10. Who decides on the activities and allocation of these finances?
11. On who does the ultimate responsibility of management of this rural health facility lie?
12. Who is responsible for day to day running of the health facility?
  - Administratively
  - Financial
  - Technical services
13. How many members are in the RHFMC?
14. What are the members background in terms of profession?
15. Have the duties in the committee been allocated on professional background?

16. Do you have professional qualifications or past experience in the same capacity at which you are currently serving?

Have you received any training, seminars and health education from the health care provision staff?

18. If any, explain, how long and where it took place.
19. Do you think you need any additional training from the health workers to improve performance? If yes, which areas?
20. Has the RHFMC instituted any other source of funds other than user fee to lower the cost of providing quality health services?
21. Has the RHFMC undertaken any actions to increase income of this facility? (Other sources of funds)
22. Has RHFMC prioritized their needs to utilize available resources?
23. What has the community contributed?
24. Does this facility have a bank account? If not where do you keep the money you collect?
25. Who are the signatories to the bank account?
- What is the current bank balance?
- How many members are you?
- How many of the RHFMC members are women?

Has the RHFMC employed any member of staff? (1) Yes (2) No. If yes, Who?

Are there any incentives given to RHF staff by the RHFMC in this facility.

How often do you get drugs from the government?

Do you as a committee buy any drugs?

#### **Appendix 4: Interview schedule for key informant interview with health officer in-charge of health facility**

- (1) When did you join this facility? Where were you before?
- (2) What was the process of initiation of the Rural Health Facility Management Committee?
- (3) Has the introduction of the RHFMC affected community contribution in the development of this facility? If Yes, how?
- (4) Is there any input from the community about what needs they would like met by this health facility?
- (5) Is the community provided any forum to indicate there needs and expectations from the this health facility
- (6) Have any seminars been organized to train community leaders on their roles?
- (7) Has DHMT/DHMB done any teachings to community members about there roles in CPHD?
- (8) Do you as a rule attend community meetings (barazas)
- (9) Do you as a rule attend RHFMC committee meetings?
- (10) In your opinion what roles should
  - (i) The community members in general have in the provision of health care in this health facility?
  - (ii) The RHFMC committee members have in the provision of health care in this health facility?
  - (iii) Is community involvement currently adequate? If yes, what role do they play? If no, Which area would you like them involved more in?
11. Do you think community involvement in the running of this health facility is necessary? If yes

why?

12. Are there any written guideline for user fee waivers? If yes, can I see? How many have you waived this year? Who decides who should be waived or not?
13. Should the RHFMC only manage those resources obtained through cost sharing/ community initiative or should they have authority over the supplies given by the Ministry of Health?
14. If yes to 10 above, what is the status in this facility?
15. Does the RHFMC have a community initiative bank account other than for official cost sharing?
16. How supportive has the DHMT been in your efforts to improve health services in this facility?
17. How supportive has the DHMB been in your efforts to improve health services in this facility?
18. When did a member of the DHMT visit you last?
19. When did a member of the DHMB other than the MOH visit you last?

### Appendix 5: Interview Schedule for Women Leader

1. Name of the health facility \_\_\_\_\_ code \_\_\_\_\_

Age of respondent (in years) \_\_\_\_\_ sex (1) Male (2) Female

Do you get your health services from this facility? (1) Yes (2) No

How do you rate the health services being offered by this facility?

(1) Very adequate (2) Adequate (3) Inadequate (4) Poor

(a) Are you aware of the existence of the RHFMC?

(b) If yes, do you know of any member of the RHFMC? (1) Yes (2) No

What do you think is their role?

If Yes to number 7, what is your view of the work they are doing?

Are you aware when the RHFMC was established? (1) Yes (2) No. If yes, When?

What changes have you seen since it was established?

Have you played any role in mobilizing for funds to improve health service delivery?

Has the community participated in any communal activities in support of improvement of health services in this facility?

If yes, give details of the activity and when;

## Appendix 6: Interview Schedule for Informal Group Discussions

1. Community's knowledge and attitude about their role in CPHD.
2. Attitude of health staff
3. Are all community's health needs being addressed?
4. In those health facilities that are charging fees for treatment how do you take care of the poor in your community?
5. As regards the GoK allocation of resources, who is responsible for ensuring appropriate utilization?
6. If the elected community representatives in the RHFMC are not effective, is there any mechanism in place for their replacement?
7. Are community members comfortable with the level of resource mobilization especially given the current hard economic times?

## Appendix 7: Variables and Indicators

### Independent variables for CR and RHFS

#### Respondent demographic characteristics

##### Age

This variable refers to age group of the respondents. It will show the age group distribution of clients and its relationship with other variables will also be determined. The ages in years were classified into ten-year age groups from 15 to over 65 years.

##### Literacy and occupation

A combination of these two variables assisted in appreciating the social economic status of respondents, which was important in determining their perception and capacity to contribute to community activities in improving their rural health facility. The level of education was used to determine the understanding of cost sharing policy in health services of the Kenyan government. The respondent's occupation assisted to determine how much free time they had to offer towards community participation in health service provision.

##### Knowledge

Level of knowledge possessed by the CR about their role in the formal health care system.

##### Indicator

The indicator was highest percentage of community respondents who scored poor, fair or good in 3 test questions for knowledge in the client's questionnaire. The issues under consideration included:

- Knowledge on ownership of the rural health facility.
- Knowledge about the existence of RHFMC
- Duties of RHFMC

### **Perceptions on health care provision**

The issues under consideration included;

- Responsibility for provision of health services at the rural health facility.
- Whether the CR were making any contributions towards the rural health facility.
- Responsibility of decision making on the amount to be charged as user fee in the rural health facility.
- The RHFS were asked whether there was any need for the community members to contribute towards the running of the RHF.
- Who decides how much should be paid for services at the RHF.
- Responsibility for daily management of the rural health facility

### **Waivers**

- Whether the community would access health services if they were unable to pay.

### **Baraza attendance**

- Whether the CR had attended any baraza where health matters were discussed.
- Whether the RHFS had participated in organizing any baraza where health matters were discussed.

### **Dependent variables for CR and RHFS.**

The level of community participation was assessed as follows: A ranking of the appropriate variables

was used to indicate poor, fair or good participation. The indicators used were needs assessment, leadership, organization, and resource mobilization. Two types of ranking were carried out. The first was the community survey and the second was RHFS respondents.

### **Needs assessment**

This is the extent to which community health needs were considered when planning health services at the health facility. It was an indication of how well the community identified its health needs, prioritize them, identify alternative solutions and decide on the appropriate resources required to solve its problems. It was assessed using the extent to which the community members obtained treatment for the common diseases in that area. The issues considered included;

- Whether the CR and RHFS knew the major diseases and whether treatment was available in their rural health facility or not.
- The health promotion activities carried out by the rural health facility

### **Leadership**

This indicator was used to describe the individual or organ responsible for making decisions at the level of the health facility. An example is the person who authorizes money to be spent in an emergency without the authority of the full committee.

The following issues were considered:

- Responsibility of making decisions concerning overall management of the rural health facility.
- Responsibility of daily management of the rural health facility.

## Community organization

- How was the Rural Health Facility Management Committee members selected?
- How would you rate their performance?
- Who was responsible for its formation and whether it was active or not. Here issues such as how committee members attained their posts, whether by appointment or by election were examined.
- Method of choosing community representatives
- Frequency of public health meetings (*barazas*)

## Resource mobilization;

This refers to those resources raised from, the community members in terms of fees for health service provided at their health facility or any outreach health service. In addition other inputs such as voluntary labor, donations and fundraising were considered.

This was scored using:

- Community member's answers on the use of the resources collected at their health facility
- Answers from leaders of the RHFMC regarding what activity they have undertaken to increase income to their health facility.
- Other sources of funds adapted by the rural health facility management committee were also explored.

## Appendix 8: Knowledge Index for Community and Rural Health Facility Staff

### Respondents

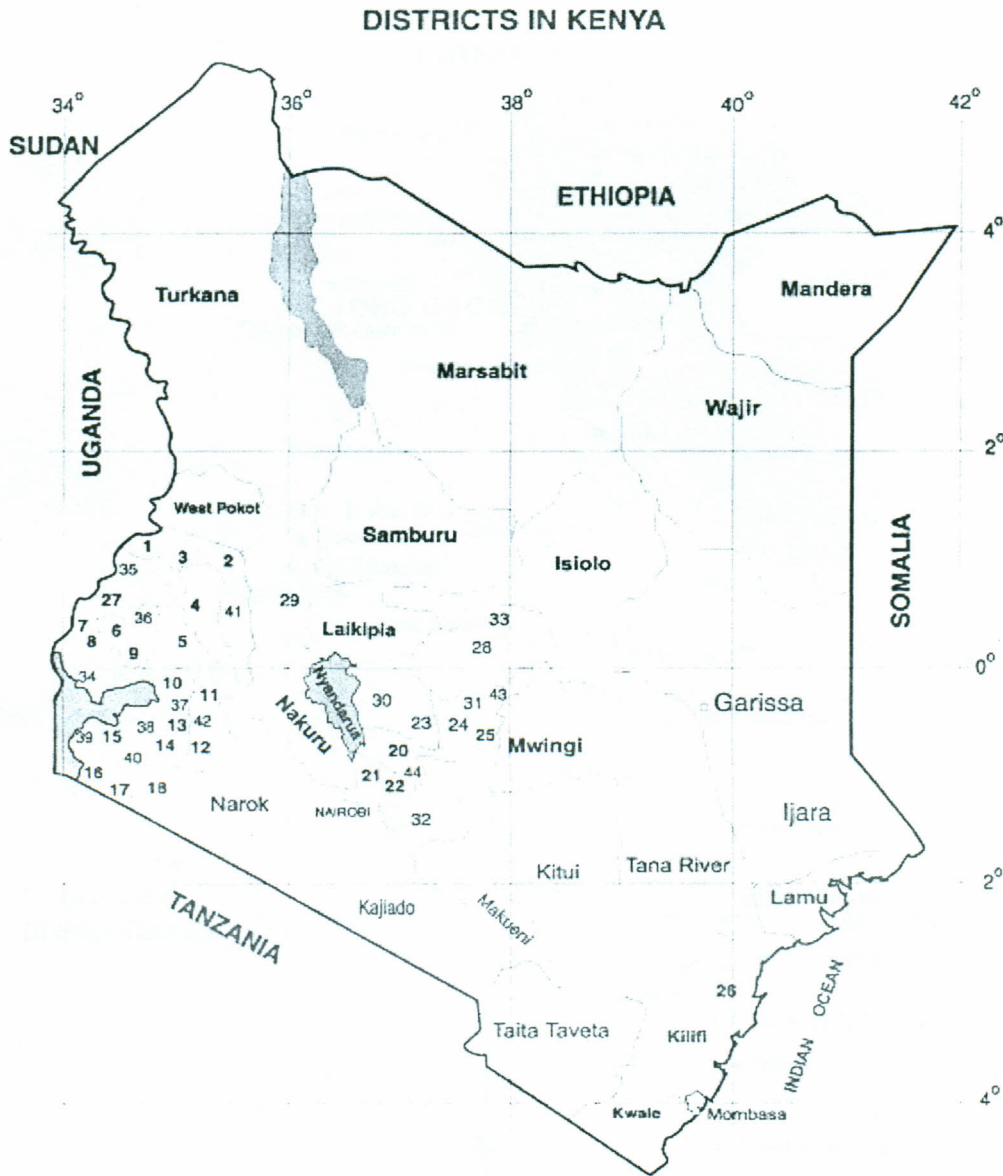
To measure level of knowledge of community respondents on their role of health care provision at the RHF, the following scale was used (for the purposes of this study).

- Factual questions listed below (1 - 3) on role of the community in health development were asked.
  - A mark of one was assigned to all questions scored correctly and zero for wrong answers.
  - The marks obtained were added to get total knowledge score for each respondent
  - Frequency distribution of all scores obtained by the respondents were looked at and cut off points for poor, fair and good levels of knowledge determined as; Poor (less than 50%), Fair (50% - 74%) and Good (75% and above).
1. A respondent knowledge of who owns the rural health facility.
  2. The respondent being aware of the existence of the RHFMC.
  3. The respondent being able to mention at least on responsibility of the RHFMC.
    - Knowledge of ownership = 1 point
    - Awareness of the existence of the RHFMC = 1 point
    - Knowledge of at least on responsibility of the RHFMC = 1 point

### Scoring

- No knowledge (Poor) = Less than 50%
- Inadequate knowledge (Fair) = 50% - 74%
- Adequate knowledge (Good) = 75% and above

Appendix 9: Location of the Nyandarua District on the Kenyan Map



- |                 |              |                 |                |              |                    |                |              |
|-----------------|--------------|-----------------|----------------|--------------|--------------------|----------------|--------------|
| 1 - Mt. Elgon   | 7 - Busea    | 13 - Nyamira    | 20 - Murang'a  | 26 - Malindi | 32 - Machakos      | 38 - Rachuonyo | 43 - Tharaka |
| 2 - Marakwet    | 8 - Siaya    | 14 - Kisii      | 21 - Kiambu    | 27 - Bungoma | 33 - Nyambene      | 39 - Suba      |              |
| 3 - Trans Nzoia | 9 - Vhiga    | 15 - Homa Bay   | 22 - Thika     | 28 - Meru    | 34 - Bondo         | 40 - Gucha     |              |
| 4 - Uasin Gishu | 10 - Kisumu  | 16 - Migori     | 23 - Kirinyaga | 29 - Baringo | 35 - Teeo          | 41 - Keayo     |              |
| 5 - Nandi       | 11 - Kericho | 17 - Kuria      | 24 - Embu      | 30 - Nyeri   | 36 - Butere Mumias | 42 - Buret     |              |
| 6 - Kakamega    | 12 - Bomet   | 18 - Trans Mara | 25 - Mbeera    | 31 - Nithu   | 37 - Nyando        | 44 - Maragua   |              |

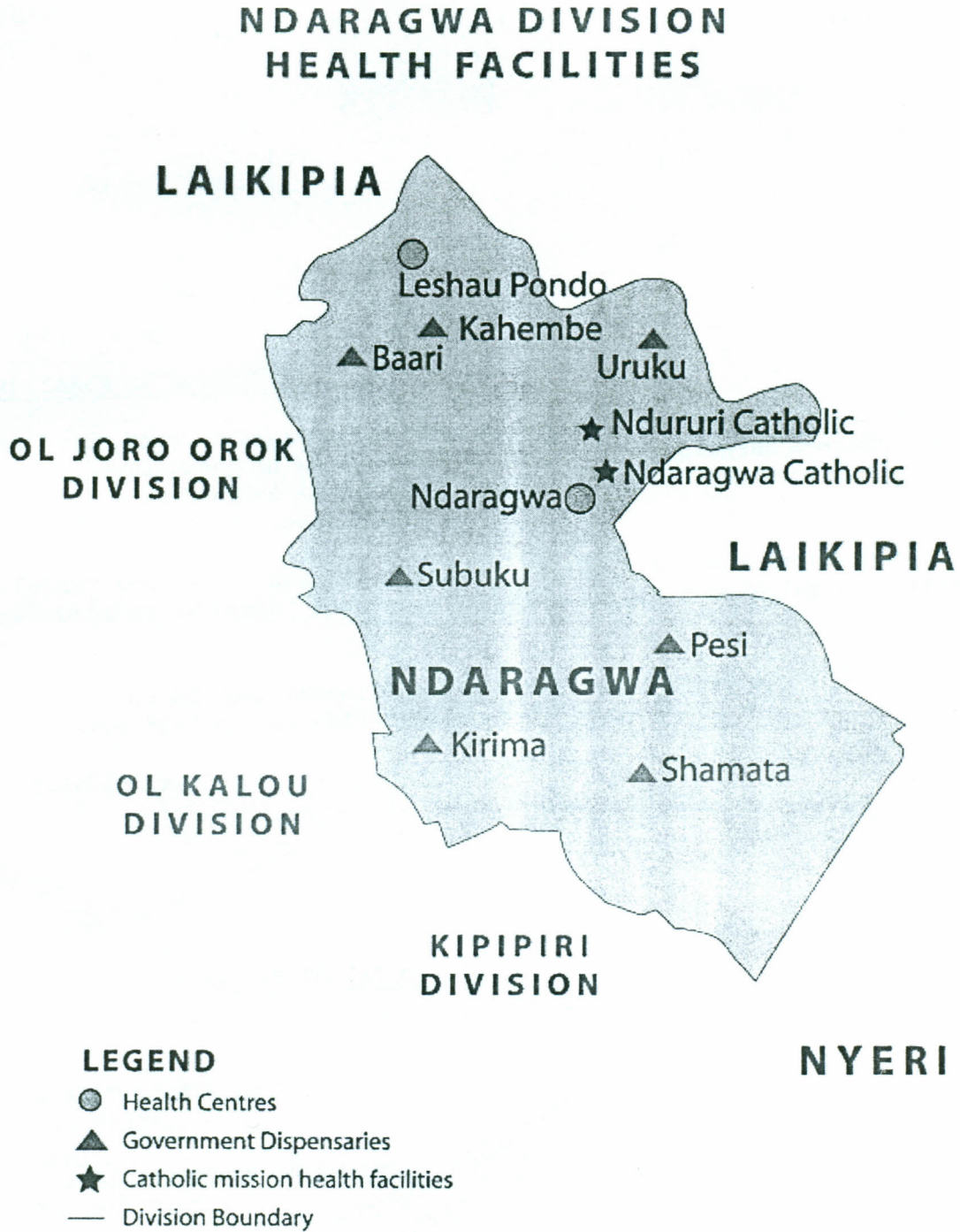
Scale 1:4 500 000  
 0 50 100 150 200 250 Kms

Appendix 10: Location of Ndaragwa Division on Nyandarua District Map

**NYANDARUA DISTRICT  
HEALTH FACILITIES**



Appendix 11: Location of Rural Health Facilities in Ndaragwa Division



Appendix 12: Research Authorization Letter

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

ms: "EDUCATION", Nairobi  
Doc: Nairobi 334411  
Replying please quote  
No. MOEST 13/001/31C 221/2  
and date



JOGOO HOUSE "B"  
HARAMBEE AVENUE  
P.O. Box 30040  
NAIROBI

.....19TH OCTOBER....., 20.01.

MURITHI  
JACKSON GITHINJI GITHIRI  
KENYATTA UNIVERSITY  
P.O BOX 43844  
NAIROBI

Dear Sir,

RE: RESEARCH AUTHORIZATION

On the basis of your application for authority to conduct research on, "A Health Development in Nyandarua District". I am pleased to inform you that you have been authorized to conduct research in Nyandarua District for a period ending 30th September, 2002.

You are advised to Pay Courtesy Calls to The District Commissioner and The Medical Officer of Health Nyandarua District before commencing your research project.

Upon completion of your research project you are advised to avail two copies of your research findings to this Office.

Yours faithfully,

  
A. G. KAARIA  
FOR: PERMANENT SECRETARY/EDUCATION

CC.

THE DISTRICT COMMISSIONER,  
NYANDARUA DISTRICT

MEDICAL  
THE PROVINCIAL OFFICER OF HEALTH,  
NYANDARUA DISTRICT.

PERMANENT SECRETARY  
MINISTRY OF EDUCATION

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