

Gender, Culture and Environmental Conservation in Western Kenya: Contextualizing Community Participation and the Choice of Techniques

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INTRODUCTION

Despite the cross-cultural variations and the gradual but significant changes in gender roles and cultural systems that are found in Kenya today, there is no question that in many rural communities some tasks are still nearly always performed by men whereas others are predominantly the responsibility of women. This pattern is evident in the area of environmental conservation where the labour investment is still largely differentiated along gender lines. Although a great deal of attention has been paid to environmental protection in Kenya in recent years, the way a population exploits its habitat has a lot to do with the local circumstances and institutional norms, the cultural context, gender-power relationships within households and the material conditions of life. All these factors interact in complex ways to produce an overall pattern of gender division of labour, resource allocation and decision making in environmental management. Women in these cultures do not have a great deal of control in making major decisions about suitable environmental management practices or the allocation of public, productive and culturally valuable resources.

This paper discusses the results of a cross-cultural baseline study on gender participation in environmental conservation in Kericho and Nyando districts. It also compares the widespread environmental conservation patterns and practices found in the two districts and some of the cultural beliefs and ideas associated with these variations. Cultures vary in the importance they attach to land, forests, mountains, rivers, female labour and other resources. This study shows how these variations are reflected in the different kinds of environmental conservation practices in the catchment area, particularly those conservation techniques which are considered more appropriate, suitable and sustainable under the prevailing local circumstances.

1. METHODOLOGY

1.1 INTRODUCTION

This study was carried out in Nyando and Kericho districts, which are both located within the Nyando River catchment area in Western Kenya, over a period of two months between June and August, 1999. For purposes of co-ordination and implementation of community-based environmental conservation programmes, several catchment committees have been established within the catchment area.

The overall aim of this study was to collect information on gender and socio-cultural issues relating to environmental conservation activities and community participation from a cross section of male and female farmers. The gender component of the study was concerned with a wide range of issues, which include the extent of women's representation and participation in environmental and soil conservation programmes within each of the two districts, gender training in conservation techniques, the role of women groups in environmental conservation, gender division of labour and decision making in the choice of conservation techniques.

The socio-cultural component of the study focussed mainly on community perceptions and views on environmental conservation, the existing stock of indigenous conservation knowledge and skills, community participation and an assessment of some social and cultural factors influencing conservation practices and the level of participation. The emphasis of the study was on cross-cultural comparisons between the two districts and how these variations bear upon current and emerging environmental management practices.

1.2 DATA COLLECTION

The primary sources of data were interviews and discussions with a cross section of male and female farmers and other community members. The aim of the fieldwork was not to obtain a district-wide representative sample, but to collect in-depth information on specific gender and socio-cultural issues influencing the choice of environmental conservation techniques and patterns of community participation. An interview guide on gender and socio-cultural issues was developed and piloted in one division from each of the two districts and adjustments made before the instrument was used.

A total of 176 farmers were interviewed, 93 of whom were from Kericho district and another 83 from Nyando. Out of the total sample, 125 (71%) were males and 51 (29%) females.

In order to gain more insights into the complex interrelationships between gender, culture and environmental management, the research concentrated on

eliciting wider community views through in-depth interviews and discussions with the community living within the study area. Community members were asked about their general views on environmental conservation programmes and provided valuable information on local cultural and social factors influencing the level of community participation and the choice of sustainable environmental conservation techniques.

Information on some specific issues was obtained from key informant interviews with local community leaders such as religious leaders, women group leaders, youth group leaders agricultural extension officers and representatives of some Non-Governmental Organisations (NGOs) working in the area of environment. The quantitative data obtained from the in-depth interviews and the community views elicited from informal discussions have been integrated and woven into the discussions throughout this paper.

2. GENDER PARTICIPATION IN ENVIRONMENTAL CONSERVATION

Environmental conservation activities in Kericho and Nyando districts are primarily allocated on the basis of gender. Generally, women play a minimal role in conservation work and their participation is limited to a narrow range of repetitive and time-consuming tasks like planting *napien* grass on the farms, preparation of tree nurseries, delivering seedlings to the nurseries and supplying water at the nurseries. They usually combine these conservation activities with their regular traditional household chores. This combination of multiple roles increases women's workload, creates role conflicts and inefficiencies and leads to significant gender disparities particularly when female labour is devalued and women are denied access to basic resources (Lindsey 1997). Nearly all the environmental conservation activities performed by women are perceived as extensions of their domestic work and not as additional responsibilities. In both districts, women's participation in conservation work is very low, as shown in Table 1, below. Part of the explanation is that women's farm work and household responsibilities divert their time away from conservation activities. Men, on the other hand, are almost entirely responsible for the more tedious and labour intensive tasks like ploughing and the excavation of trenches, which are used with the conservation techniques of *fanya juu* and *fanya chini*.

Table 1. Gender Participation in Environmental Conservation Activities.

| Gender Participation | Kericho District | | Nyando District | |
|-----------------------------|-------------------------|------------|------------------------|------------|
| | N | % | N | % |
| Female | 2 | 2.3 | 5 | 6.2 |
| Male | 85 | 97.7 | 76 | 93.8 |
| Total | 87 | 100 | 81 | 100 |

Source: Primary survey data.

This pattern of gender division of labour in environmental conservation reflects a strong cultural tradition in which women still retain most of their traditional roles in the household and on the farm. It also indicates that labour is really not a major constraint in environmental conservation although most farmers are unable to hire labour for conservation work because of financial constraints. Some catchment committees in Nyando district do hire children to fetch water for the tree nurseries because they are paid less than the women. Except for a few cases of occasional use of hired labour, the bulk of the labour for environmental conservation work is drawn from the family pool and most of the tasks are performed by men.

3. GENDER REPRESENTATION AND PARTICIPATION IN THE CATCHMENT COMMITTEES

All the environmental conservation programmes in each district are run by catchment committees which oversee the planning, management and sequencing of various activities. Although all the catchment committees in the project area have male and female members, women are consistently under-represented on each and every committee. As shown in Tables 2 and 3, most catchment committees have between 2 and 5 female members compared to men who are usually seven and more.

Part of the reason for the under-representation of women on these committees is the limited public presence of most rural women in these cultures. It also has to do with the time constraint most rural women face as a result of their multiple roles. The other reason is women's general perception of environmental conservation work as a male responsibility. It was reported that many women in Kipkelion and Londiani divisions of Kericho district consider environmental conservation activities less important than other duties which compete for their time. As a result, few of them have shown much interest in environmental conservation work. The apparent negative attitude of women towards conservation work was given as one of the explanations for electing them to serve on the catchment committees. Their

representation on the committees was therefore intended to raise environmental awareness among women and also to give them an opportunity to acquire new skills through training as well as to help mobilize the community around several environmental issues.

Table 2. Number of Female Members on the Catchment Committees in both Kericho and Nyando Districts.

| Number of Female Members | N | % |
|---------------------------------|------------|------------|
| 1 | 17 | 13.5 |
| 2 | 40 | 31.5 |
| 3 | 37 | 29.4 |
| 5 | 30 | 23.8 |
| 6 | 1 | 0.8 |
| 16 | 1 | 0.8 |
| TOTAL | 126 | 100 |

Source: Primary survey data

Table 3. Number of Male Members on the Catchment Committees in Kericho and Nyando Districts.

| Number of Male Members | N | % |
|-------------------------------|------------|------------|
| 4 | 1 | 8 |
| 5 | 1 | 8 |
| 7 | 49 | 38.9 |
| 8 | 8 | 6.3 |
| 9 | 19 | 16.1 |
| 10 | 23 | 18.3 |
| 11 | 14 | 11.1 |
| 14 | 1 | 8 |
| 16 | 9 | 7.1 |
| 18 | 1 | 8 |
| TOTAL | 126 | 100 |

Source: Primary survey data

Table 4. Gender Roles in the Catchment Committees in Kericho and Nyando Districts.

| Specific Gender Roles | M A L E | |
|------------------------------|----------------|------------|
| | N | % |
| No Specific Role | 81 | 56.3 |
| Sensitization | 27 | 18.8 |
| Mobilization | 14 | 9.7 |
| Follow-up | 6 | 4.2 |
| Planning | 16 | 11.1 |
| TOTAL | 144 | 100 |
| F E M A L E | | |
| Specific Gender Roles | N | % |
| No Specific Role | 81 | 61.8 |
| Sensitization | 28 | 21.4 |
| Mobilization | 14 | 10.7 |
| Follow-up | 4 | 3.1 |
| Planning | 4 | 3.1 |
| TOTAL | 131 | 100 |

Source: Primary survey data.

Despite gender disparity in the committee membership, there is no difference in the specific tasks performed by men and women who participate in the catchment committees. As shown in Table 4 below, both men and women tend to be equally involved in sensitization, community mobilization and following up on a number of conservation issues. About 60% of the committee work is done by both men and women. Men were, however, reported to be more involved than women in the allocation of resources and the planning of various conservation activities. Women had little public presence and almost no role in decision making.

4. WOMEN'S TRAINING IN SOIL AND WATER CONSERVATION TECHNIQUES

The training of women in soil and water conservation techniques is generally limited throughout the study area. Only about 26% of the women in Kericho district and another 39% in Nyando district have been trained in soil and water conservation techniques. In most parts of the study area, both men and women have

participated in the training programme, sometimes on an equal basis. One example is the training programme organized for farmers in Sigowet Division with the support of the Adventist Development and Relief Agency (ADRA) - a local NGO.

ADRA's approach is to empower both men and women by training husbands and wives together. This condition for training is enforced across the board for purposes of sustainability and gender equality. Farmers acquire a wide range of farm management skills and conservation techniques through such training programmes. Most of the farmers who participate in these training programmes are members of the catchment committees. However, farmers who have been trained are required to teach other farmers the new skills through barazas and demonstrations. This process has a significant multiplier effect and also helps with the sustainability of new farming and conservation techniques within the community. (Adepoju and Oppong 1994).

The women groups in the study area are not involved in soil and water conservation activities. Instead, all the women groups are engaged in a variety of income-generating activities which are not directly related to environmental conservation work. One women's group in Kipkelion Division, for example, was planning to set up a petrol station. The non-involvement of women's groups in environmental conservation efforts tends to reinforce the view that women in Kericho district have little interest and are therefore much less involved in environmental conservation and also that much environmental awareness and incentives are still needed at the community level in order to make local conservation initiatives more people-driven. Given the substantial number of women's groups in the two districts, their limited participation in environmental conservation efforts threatens the sustainability of any conservation effort. This concern emanates from the fact that women's groups usually serve as effective entry points for new environmental conservation technology in rural communities.

5. FEMALE-HEADED HOUSEHOLDS AND CONSERVATION DECISION-MAKING

The data in Table 5 show that the proportion of female-headed households is higher in Nyando District (20.7%) than in Kericho District (8.6%).

Table 5. Heads of Household.

| Heads of Household | Kericho District | | Nyando District | |
|--------------------|------------------|------------|-----------------|------------|
| | N | % | N | % |
| Male | 85 | 91.4 | 65 | 79.3 |
| Female | 8 | 8.6 | 17 | 20.7 |
| Total | 93 | 100 | 82 | 100 |

Source: Primary survey data.

The primary reason for the variation is the high number of widows in Nyando district. Ninety-five percent of the female heads of households in Nyando District are widows. Although Nyando district is also an area of higher male out-migration, the high rate of HIV/AIDS-related deaths in the district seems to have a much stronger influence than migration on the emergence of female-headed households. Most of the widows in Nyando district seem to have gained greater autonomy and control in the management of productive resources and household affairs than the women in Kericho district. The data in Table 6 show that men in Kericho district make most of the decisions on the farms (86.5%) compared to Nyando district (57.8%), where many women are heading their own households and have greater control over the decision-making process at the household level.

Table 6. Decision-making on the Farm by Gender.

| Gender | Kericho District | | Nyando District | |
|---------------|------------------|------------|-----------------|------------|
| | N | % | N | % |
| Male | 45 | 86.5 | 48 | 57.8 |
| Female | 5 | 9.6 | 18 | 21.7 |
| Joint Control | 2 | 3.8 | 17 | 20.5 |
| Total | 52 | 100 | 83 | 100 |

Source: Primary survey data.

Limited female access to the decision-making process in Kericho district has a lot to do with how much women in that culture defer socially and culturally to their husbands and other male relatives. This has particularly important implications for local conservation initiative and the level of female participation in environmental conservation. The study has also shown (Table 7) that men control much of the income derived from the sale of farm produce. Only 9.6% of the surveyed women in Kericho district had some control over their farm income although they produce,

process, store and sometimes market the bulk of the farm produce (Bailey and Peoples 1999). The household gender income gap can be explained in part by the differential access to resources, gender related attitudes, and cultural beliefs and practices which are part of the overall cultural system in the study area. The women in Nyando district have much more control (33.3%) over their farm incomes primarily because their male partners who have inherited them after the death of their husbands have virtually no control over the family resources. Throughout the study area, most of the decisions regarding the type of conservation techniques to be used are made by agricultural officers (Table 8). Farmers rarely make such decisions on their own primarily because of the existing knowledge gap between the agricultural extension officers and the farmers. Joint decision-making between the farmers and the extension personnel was found to be very limited.

Table 7. Control of Farm Income by Gender

| Gender | Kericho District | | Nyando District | |
|---------------|------------------|------------|-----------------|------------|
| | N | % | N | % |
| Male | 45 | 86.5 | 35 | 43.2 |
| Female | 5 | 9.6 | 19 | 23.5 |
| Joint Control | 2 | 3.8 | 27 | 33.3 |
| Total | 52 | 100 | 81 | 100 |

Source: Primary survey data

Differences in the level of education and conservation knowledge and technical skills between the farmers and the extension officers accounts, in large part, for the limited participation by the farmers in the conservation decision-making process. Over 55% of the surveyed farmers have primary education and another 15% are illiterate. The other reason is that most women are not actively involved in catchment conservation committees and activities and therefore lack the practical experience and technical skills needed to make more informed choices and decisions about different conservation techniques. The extension officers in the study area are generally much better educated and trained than the average male farmer in the community who, in turn, is more educated than the average female farmer. Many women therefore do not have the same input levels because of the differences in the accumulation of human capital. In both Nyando and Kericho districts, women's education lags significantly behind that of men. All these factors interact in complex ways to produce an overall pattern of conservation decision-making and community participation which reproduces gender inequality both at the household and community levels. (The World Bank 1995).

Table 8. Decision-making on Type of Conservation Techniques

| Who Decides | Kericho District | | Nyando District | |
|----------------------|------------------|------------|-----------------|------------|
| | N | % | N | % |
| Farmer | 8 | 9.4 | 7 | 8.6 |
| Agricultural Officer | 66 | 77.6 | 35 | 43.2 |
| Both | 11 | 13 | 39 | 48.2 |
| Total | 85 | 100 | 71 | 100 |

Source: Primary survey data

6. ETHNIC DIVERSITY AND LOCAL CONSERVATION INITIATIVES

The entire River Nyando Catchment area is made up of different ethnic groups with diverse socio-cultural backgrounds. In Kericho district, the ethnic communities are the Kipsigis, the Kikuyu and the Abagusii. The Abagusii mainly inhabit the settlement schemes in and around Kipkelion division. The main ethnic communities in Nyando district are the Luo, the Nandis and a few Kipsigis living around the Koru area in Muhoroni division.

This ethnic diversity has important implications for environmental conservation efforts in the catchment area. One example is the Ndarugu farm in Londiani division which, for a long time, was inhabited by the Kikuyu, who planted a lot of trees and built several terraces to control soil erosion. When the Kikuyu left the area during the period of the ethnic clashes in the Western, Rift Valley and Nyanza Provinces in the early 1990s, the Kipsigis cut down most of the trees which the Kikuyu had planted and removed the terraces, thereby exposing the land to serious degradation. Secondly, both the Luo and the Kipsigis have a strong pastoral background which they have maintained up to the present day. Both ethnic groups still view cattle as a status symbol and an important source of wealth and security, regardless of the quality of the animals. Cattle, sheep and goats are still widely used by the two communities as ritual animals for different ceremonies. Consequently, overstocking and overgrazing are increasingly becoming major problems in Nyando division. The problem of overgrazing is getting particularly worse in the plains of Lower Nyakach where farmers continue to practice communal grazing on individual land holdings whose owners have title deeds. The combined effects of overgrazing, flooding, soil erosion, soil compaction and lack of ground cover have produced huge gulleys in the Lower Nyakach area, particularly on the borderline between the hills and the plains. These gulleys, together with those found in Tabaita

catchment area are already posing a major threat to people's lives and their livelihoods. Human and animal lives have been lost in these gulleys.

Other differences between the various ethnic communities in the study area which influence their conservation activities is the size of land holdings. Farmers with large pieces of land were found to be less concerned about soil erosion and less involved in conservation efforts than those with smaller land holdings. When farmers have large pieces of land, they can choose to practise shifting cultivation and allow some parcels to go fallow for a period of time. This, however, is not an option for farmers experiencing land shortage and who must conserve the little they have. The study also found that when the terrain has many slopes, soil conservation is given higher priority because the risk of severe erosion is more real than in the plains.

7. CULTURAL INFLUENCES ON CONSERVATION PRACTICES

The choice of conservation practices is influenced by a multitude of cultural factors. Here we discuss only a few forces that were found to be common and relevant in the study area. As was pointed out earlier, the value placed on cattle by the Luo and the Kipsigis has encouraged overstocking and subsequent overgrazing in some parts of Nyando and Kericho districts. Furthermore, the culturally defined gender division of labour which prescribes appropriate roles for men and women also has a direct bearing on environmental conservation. In some communities in the study area, it is considered culturally inappropriate and socially unacceptable for women to engage in tree planting and fencing (Peoples and Bailey 2000). These tasks are culturally defined as men's work. In some parts of Lower and Upper Nyakach divisions, women have to seek permission from men before they can cut down certain types of trees for firewood because the trees belong to the men. This cultural restriction may discourage wanton destruction of the ground cover and therefore contribute to environmental protection and conservation.

There is a common belief in Lower and Upper Nyakach divisions that some trees bring misfortune to the family when they are planted around farms and within homesteads. Examples of such trees were given as *terminalia species spp* and *croton megalocarpus*. These trees are usually uprooted because of the traditional belief that they contribute to people's deaths and other misfortunes in the family.

In Londiani division, the Kipsigis hill (locally known as Tulwab Kipsigis) is a sacred place mainly used for male circumcision and other cultural rituals on a regular basis. Because of its sacredness, the indigenous forest on top of the hill has not been encroached upon either in terms of human settlement, animal grazing, or deforestation. The cultural significance of the Kipsigis has therefore contributed to the conservation of the forest.

Other forms of cultural beliefs have also influenced the adoption of new soil conservation and farm management techniques. One example is the prevalence of striga weed on most farms in Nyando district. The weed is usually common where the soil fertility is very low and little or no fertilizer has been used. Most farmers in Nyando district are reluctant to use inorganic fertilizers because they believe that such fertilizers could lead to the loss of soil fertility and eventually create dependency on fertilizer use. This belief is part of the reason chemical fertilizers are rarely used in Nyando district. However, many farmers in the district do not use organic fertilizers either, and this has contributed to low agricultural productivity in the area. Instead of using the fertilizers, the farmers prefer to track crops like cassava, groundnuts and cow peas to restore the productivity of the soil. The belief about organic fertilizers and the tracking technique both seem to explain, at least in part, the choice of crops such as sorghum and groundnuts which are common in the lower parts of Nyando district. The limited use of inorganic fertilizers, together with other factors like texture and taste, also partly explains why farmers in Lower Nyakach division seem to prefer the local variety of yellow maize (known in the Luo vernacular as *Nyamula*) to other improved maize varieties.

8. INTEGRATION OF INDIGENOUS KNOWLEDGE INTO MODERN CONSERVATION TECHNIQUES

Over 80% of the surveyed farmers still use their indigenous knowledge and skills in the management of soil and water resources. The study shows that most farmers still prefer the traditional conservation technique of using unploughed strips lined with cactus on both sides. This technique has been used for many years and fine-tuned to control soil erosion.

Other indigenous knowledge and skills which continue to be applied in the management of soil and water resources include the conservation of shade and medicinal trees, shifting cultivation and shifting of cattle bomas to spread the manure. Much of the indigenous knowledge has been incorporated into the modern conservation techniques. For example, shifting cultivation has been integrated into the fallow method in such a way that the fallow land is used for grazing purposes. Similarly, the traditional methods of river bank conservation are still practised in conjunction with the modern conservation techniques.

9. WHAT THE FARMERS CONSIDER TO BE THE MOST SUITABLE CONSERVATION TECHNIQUES

Although there are some minor differences in the types of conservation techniques used in the uplands and the low land areas, the most common, suitable and perhaps sustainable techniques in the whole of the study area are shown in Table 9 as grass strips (31%), terracing (21%), unploughed strips (10%) stone lines (7%), and sisal strips (15%). Other more conventional conservation techniques like *fanya juu* and *fanya chini* have been used for a long time to control soil erosion and they are mainly preferred in more sloping areas in Kericho district.

Table 9. Most Suitable Conservation Techniques in Kericho and Nyando Districts.

| Most Suitable Conservation Techniques | N | % |
|--|------------|------------|
| Grass strips | 65 | 31.0 |
| Terracing | 45 | 21.4 |
| Unploughed strips | 21 | 10.0 |
| Stone lines | 21 | 10.0 |
| Sisal strips | 15 | 7.1 |
| Cut off drains | 11 | 5.2 |
| Fanya Juu | 7 | 3.3 |
| Tree planting | 7 | 3.3 |
| Fanya chini | 6 | 2.9 |
| Contour farming | 4 | 1.9 |
| Drainage channels | 3 | 1.4 |
| Trash lines | 1 | 0.5 |
| Crop rotation | 1 | 0.5 |
| Agroforestry | 1 | 0.5 |
| River bank conservation | 1 | 0.5 |
| Check dams | 1 | 0.5 |
| Total | 210 | 100 |

Source: Primary survey data

The suitability of conservation techniques is primarily influenced by the ecological, socio-cultural and economic conditions of the farmer and the area. For instance, biological measures of conservation were found to be more appropriate in the Kano plains. Similarly, ground cover was more widely used in the lower reaches of the Nyando plains but this had to take account of the size of land holdings, the farming methods used and the prevailing household gender division of labour and financial situation. Ultimately, the suitability and sustainability of the conservation

techniques require that the capacity of the farming community is sufficiently enhanced through skills training for men and women, equitable access to productive resources and income - generating opportunities, increased environmental awareness, community participation and the involvement of all the stakeholders and development partners.

10. COMMUNITY PARTICIPATION AND SUSTAINABLE ENVIRONMENTAL CONSERVATION

The level of community participation in soil and water conservation activities is generally low throughout the study area although this varies from one part of the catchment area to another. The study shows that, farmers with small pieces of land on very sloping terrains tend to participate more actively in conservation activities than those with larger pieces in less sloping areas. Land is more scarce in Kericho than Nyando district because of higher population densities. It is also more intensively cultivated with animal droppings used as organic manure. Because of land scarcity, there is a real danger of starvation if the little land that is available is eroded. These differences in the size of land holdings have important conservation implications. In Kericho district soil conservation is taken much more seriously than in Nyando. Community participation is also influenced by the involvement of NGOs and community-based organisations involved in environmental conservation programmes.

In Muhoroni division, for example, the community was less enthusiastic about the use of modern conservation techniques and most farmers were waiting for the catchment committee members to try out the new techniques first. In this area, environmental conservation activities have not been given high priority according to the 1997/98 PRA. Sugarcane production and marketing are, instead, the community's top priority. Members of the Mbogo catchment committee had set up a co-operative society to market their sugarcane while many other farmers in the area are involved in a wide range of off-farm income-generating-activities and therefore have very little time for conservation work. Poverty has a lot to do with this trend. The struggle for economic survival does make conservation work a low priority issue, particularly when many farmers cannot afford basic tools like wheelbarrows and jembes. Low levels of community participation are also linked to lack of incentives to the community and limited environmental awareness in the study area.

Dependency on external support has also contributed to low levels of community participation in environmental conservation. Many farmers still expect to receive some subsidies and incentives for their involvement in environmental conservation work. In some parts of Nyando district, for example, some donor-funded projects used to employ casual labour to dig the terraces on the farms. Some farmers still

expect this type of support to come from outside and have shown very little interest in building the terraces themselves. In Muhoroni division the community has been relying on the government to build the dykes along the river. Heavy machinery is required to construct dykes to control the floods which have claimed lives and destroyed property.

Social attitudes towards agricultural work, particularly among the youth and some educated people in the community tend to reduce the level of community participation. Some parents still believe that when their children have completed secondary education then they should not be involved in soil conservation work even when the children are unemployed and staying at home with nothing to do. The involvement of the youth in soil and water conservation activities was higher in Kericho district (60%) than in Nyando district (50%). Part of the reason is lack of environmental awareness among the youth. Another plausible explanation has to do with the attitudes of the youth towards manual farm work. Many young school leavers look down upon farm work as something that "makes the hands dirty" and should therefore be left to the uneducated people. Throughout the study area, the youth were involved in a limited range of conservation activities as shown in Tables 10 and 11 below. Other reasons for the limited participation of the youth in conservation activities are ignorance (60.8%), laxity (25.4%), and poverty (11.2%).

Table 10. Involvement of Youth in Environmental Conservation Activities in Kericho and Nyando districts.

| TYPES OF ACTIVITIES | N | % |
|----------------------------|-----------|------------|
| Tree planting | 10 | 55.6 |
| Building check dams | 6 | 33.3 |
| Building stone lines | 2 | 11.1 |
| TOTAL | 18 | 100 |

Source: Primary survey data

Community participation in environmental conservation is relatively high in the areas where local NGOs have a strong presence. As indicated earlier, the activities of ADRA in the Kiptome catchment area has increased local participation and enhanced sustainability primarily because of their training programme and how the skills acquired by the trained farmers are shared by other farmers through seminars, barazas and field demonstrations.

Although there are very few Community Based Organisations (9.9%) dealing with environmental issues in Kericho district compared to a higher Community Based Organizations (CBOs) participation of 44% in Nyando district, those Organizations, together with the NGOs, tend to be involved in community

mobilization and sensitization, as well as planning and co-ordination of environmental projects and programmes.

Table 11. Reasons for Non-Involvement of Youth in Environmental Conservation.

| REASONS | N | % |
|------------------------------------|------------|------------|
| Ignorance | 76 | 60.8 |
| Poverty | 14 | 11.2 |
| Laxity | 33 | 25.4 |
| Lack of administrative enforcement | 2 | 1.5 |
| TOTAL | 125 | 100 |

Source: Primary survey data

Women ' s groups are among the most common CBOs and the reported negative attitude of the women in Kericho towards conservation activities partly explains the low participation rate.

11. CONCLUSION

The skewed pattern of gender participation in environmental conservation reflects the overall status of rural women in Western Kenya. Although there are some minor variations in women's roles and rights between Nyando and Kericho districts, the overall structure of gender division of labour in environmental conservation work is basically similar cross-culturally. In both cultures, the bulk of the female labour is allocated more to domestic work and subsistence agriculture than to environmental and soil conservation activities at both household and community levels. Further, the rural women in Kericho district are consistently under-represented in all the catchment committees, have unequal access to land and family income and little control over the decision-making process, among other valuable resources. Their counterparts in Nyando district have relatively greater control over farm incomes and conservation decision-making, primarily as a result of the fact that many of them head their own households.

Cultural beliefs and value systems among the Luo and the Kipsigis ethnic communities have been shown to have both positive and negative environmental consequences. For example, the cultural value placed on cattle by the Luo and the Kipsigis has frequently led to overgrazing and land degradation in the study area. By contrast, the perception of the Kipsigis hill as a sacred place has contributed to

the preservation of its forest cover. Similar beliefs about the use of organic fertilizers have minimized the loss of soil fertility.

While an understanding of the social and cultural contexts of environmental management is crucial to the success of any conservation initiative, the material conditions of life and household gender-power relations have also been shown to be relevant and vital. The level of community participation in environmental conservation is therefore linked to a variety of local social and economic factors all of which are critical. Families with small pieces of land in sloping terrains tend to be more actively involved in soil conservation activities than those with more land in the plains.

Although the complexity of the interrelationships between gender, culture and environmental conservation in rural Western Kenya remains complex, it is evident that community participation in environmental conservation and the practices preferred by the farmers have to be analysed and understood within the border context of gender-power imbalance, unequal resource allocation, poverty and deeply rooted cultural beliefs, values and practices. Efforts to increase the level of community participation should seek to enhance the capacity of rural families and communities, promote equitable access to productive and culturally valuable resources, raise environmental awareness and encourage greater participation among all the development partners dealing with environmental issues in the catchment area.

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