

The background of the cover features two traditional African woven sandals, likely made of palm fronds or similar natural fibers, hanging from a dark wooden beam. The sandals are intricately woven and have long, thin straps. The lighting is soft, highlighting the texture of the weaving.

Journal of African Studies and Development

Volume 6 Number 4 May 2014

ISSN 2141 - 2189



*Academic
Journals*

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The Journal of African Studies and Development (JASD) will be published monthly (one volume per year) by Academic Journals.

Journal of African Studies and Development (JASD) is an open access journal that provides rapid publication (Monthly) of articles in all areas of the subject such as African literatures, sociolinguistic topics of cultural Interest, music, oral and written traditions etc.

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Journal of African Studies and Development

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Full Length Research Paper

Assessment of the effects of changing land use from pastoralism to crop farming on Lake Nakivale wetland system in Isingiro District, Uganda

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Received 8 August 2013; Accepted 7 May 2014

The paper assessed the effects of changing the land use from transhumant pastoralism to crop farming on Lake Nakivale Wetland system. Semi-structured questionnaire was administered directly to 315 respondents from randomly selected households in three parishes bordering Lake Nakivale Wetland. In order to trace trends in land use practices overtime and understand the associated environmental problems, analysis of satellite images was carried out, structured interviews and focussed group discussions held. Five transect walks of 6 km perpendicular to the wetland were carried out to confirm information generated from the analysis of satellite images and discussions. The results indicate that over the last two decades, land use practices around Lake Nakivale Wetland have changed at an alarming rate from semi-nomadic and transhumant pastoralists' way of rearing cattle to sedentary subsistence crop farming, leading to unprecedented human induced environmental problems such as land degradation, loss of wildlife habitat, wetland encroachment, destruction of important historical and cultural sites as well as siltation of Lake Nakivale. Integrated land use planning and management should guide the restoration program, if the wetland and the surrounding landscape are to regain their integrity.

Key words: Land use practices, landscape, land tenure, land degradation, pastoralism, wetland system.

INTRODUCTION

In recent years, there has been much concern on the increased destruction and conversion of Uganda's wetlands to other forms of land use like human settlement and agriculture (Stuip et al., 2002; IUCN, 2003; Kyambadde, 2005; Kaggwa et al., 2009; Mugisha, 2011). Lake Nakivale Wetland is one of the vital ecosystems of international importance (Ramsar Site) in the country that were experiencing human Nakivale Wetland has over the

last two decades changed from semi-nomadic and transhumant pastoralism to subsistence crop farming at unprecedented rate, with far reaching negative effects on the conservation of the wetland and wildlife therein.

Lake Mburo - Lake Nakivale Wetland system supports globally threatened species of birds such as Papyrus yellow Warbler (*Chloropeta gracillirostris*), red faced barbet (*Lybius rubrifaceries*), Papyrus Gonolek (*Laniarius*

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mufumbiri) and shoebill (*Balaeniceps rex*). It also hosts two of the endangered cichlid fish species *Astatoreochromis sps* and *Astatotilapia sps*. In addition, it is the only area in Uganda in which the Impala (*Aepyceros melampus*) is found (WMD and NU, 2008). Other animal species such as hippopotamus (*Hippopotamus amphibius*), sitatunga (*Tragelaphus speki*) and Nile crocodile (*Crocodylus nilotic*) reside in the wetland. A recent survey indicates that wetland system has a total of 123 plant species. Of all of these, 16 are trees, 21 shrubs and 86 herbaceous (Nature Uganda 2009 a).

The wetland is located in Isingiro District and falls within geographic coordinates of 30°49' - 31°04' East and 00°33' - 00°47' South. In the middle of the wetland is Lake Nakivale which is 14km long, 6km wide and has a maximum depth of 3.5 metres at high water level (NAFIRRI, 2010). The Wetland system intertwines with Lake Kachera and Lake Kijanibarola Wetlands through River Rwizi Wetland, which is the major inflow as well as outflow that feeds into Lake Victoria. The local people living adjacent to the wetland regardless of their sex, ethnicity, nationality and socio-economic status utilise the wetland resources such as fish, medicinal herbs, hand-craft and building materials to improve their livelihoods. However, of great concern are the poor farming practices which have triggered environmental problems that are threatening the conservation of the wetland.

The increased human settlement and simultaneous shift in land use practices around Lake Nakivale Wetland system can be traced as far back as late 1950s when Rwanda experienced tribal and ethnic conflicts that forced Tutsi who were pastoralists and rulers to flee with their herds of livestock into exile in Uganda (Bagenda *et al.*, 2003; Bitware, 2012). They settled around Lake Nakivale Wetland. In 1960, the land estimated to be about 138.5 km² was designated as a refugee resettlement area. In 1990 the Tutsi waged a war against the Hutu government in Rwanda and finally toppled it in 1994. Most of the Tutsi pastoralists returned to their motherland, but were replaced by the crop growing Hutus and other different groups of refugees from different countries. Unlike the pastoralists whose traditional livestock rearing practices were able to maintain stable ecological balance through mobility without causing great pressure on the ecosystem (De Carvalho, 1974; Simpkin, 2005; PFE *et al.*, 2010; Secretariat of the convention on Biodiversity, 2010; Bhasin, 2011), the activities of the new crop growing refugees degraded the wetland and adjacent landscape. They cleared natural vegetation and opened land for food production which exposed soils to erosion leading to land degradation and siltation of Lake Nakivale. The land use rapidly changed from semi-nomadic and transhumant pastoralism to sedentary subsistence crop cultivation with a myriad of environmental challenges. The conversion of land cover and the wetland increased in size and intensity at a high rate. The

situation was also compounded by the influx of over 10,000 nationals into the refugee resettlement area in search of land for food production. Many of them settled on the fringes of Lake Nakivale Wetland, exerting more pressure on the wetland resources. The problem was also exacerbated by the government policy that supported refugees to participate in food production activities as a means of reducing reliance on relief food items and promoting self reliance amongst refugee community (Bagenda *et al.*, 2003; Hunter, 2009).

Although the intention of promoting self reliance within refugee community was good, agricultural expansion became a key driving force of land cover changes and wildlife decline (Mundia and Murayama, 2009). Indeed, the use of land adjacent Lake Nakivale Wetland for crop production and human settlement unlike pastoralism culminated into interlinked, and interdependent environmental problems such as encroachment of wetland, loss of natural vegetation cover and wildlife species as well as soil erosion, leading to the siltation of water bodies to mention a few. This adversely compromised the wetland's capacity to perform natural functions (Nature Uganda, 2009 a). The replacement of pastoralists with crop farming community promoted poor land use practices like clearing of forests and bush land to open up land for crop farming, concentrating grazing of the remaining livestock in flood plains, wetlands and surrounding steep hills, setting up human settlements on the fringes of Lake Nakivale Wetland, using of fire to burn natural vegetation and crop residues as well as extending the crop farming into the wetland. The traditional practice of clearing bush land as a means of opening land for crop production exposed the bare land to soil erosion and other forms of degradation (Sharma *et al.*, 2007).

The earlier research on wetlands in Uganda focused on ecological, socio-economic and community attitude assessment (Bagenda *et al.*, 2003; Nature Uganda, 2009 a and b), sustainable utilization of wetland resources and services (Kyambadde, 2005; Nyakana, 2008; NAFFIRI, 2010) and a few studies which have tried to look at the effects of land use put much emphasis on people's livelihoods and farming practices (Mirongo, 2005; Makalle *et al.*, 2008). Therefore, it is against the foregoing that this study was carried out to assess the effect of rapid shift from the traditional transhumant pastoralists' life style and land use practices to sedentary subsistence crop farming, on the wetland system. More specifically, the study points out the key threats to the conservation of Lake Nakivale wetland which cropped up as a result of this change. These are: degradation of wetlands, loss of vital wildlife habitats and important cultural and historical wetland forests, siltation of Lake Nakivale as well as increased human pressure on wetland resources. The findings show that introduction of crop farming on Nakivale refugee settlement area and the landscape adjacent Lake Nakivale Wetland has had far reaching negative impacts on the conservation of the wetland

system. It is crucial for the policy makers and wetland managers to implement appropriate interventions to restore the integrity of the wetland through integration of land use practices into the planning and management of wetlands.

MATERIALS AND METHODS

The study area encompasses the wetland system around Lake Nakivale and Landscape within a radius of 6 km from the edge of the wetland. Triangulation approach that applies multiple methods, (qualitative and quantitative) to capture data which was used. The study primarily utilised between- method triangulation and to some extent data triangulation by designing household survey tool, the questionnaire, in a manner that targeted both the household heads and other members of a family. The use of triangulation technique was the best suited for this study because it created a deep understanding of pastoralists' and crop farming communities' land use practices on one hand and wetland management issues on the other. At the same time, it enhanced the accuracy and validity of data. Participatory Rural Appraisal (PRA) techniques such as, focused group discussions and structured interviews were used to generate a deeper understanding of environmental and socio-economic problems emanating from changes in land practices as a result of crop farming community replacing pastoralists.

A total of 315 households were randomly selected and either the household head or another family member was administered with a semi-structured questionnaire. In total 153 of respondents (48.6%) were male and 162 (51.4%) were females. Most of respondents involved in the survey had lived in the study area for more than 10 years. One hundred and sixty nine respondents (53.7%) had lived in the study area for more than 10 years, 64 (20.3%) had lived in the area for a period of 2 to 5 years, 62 (19.7%) for 6 to 10 years and only 20 (6.3%) respondents for a period less than one year.

The group discussions were kept focused by the use of a semi-structured group discussion guide. The guide was first pretested using six members of Rukinga fishing village beach management committee to assess its effectiveness in generating desired information and also determine the length of time required to obtain adequate and meaningful data. After the pre-test, a few alterations were made to fine tune the guide in order to make the questions clearer and well understood by the group. In total, four group discussions were held as follows: Rukinga Village (n=10), Kikutsi Village (n=6), Rubondo Village (n=8) and Kabazana Village (n=10). Assessment of satellite images that were taken in July 1984, July 1999 and August 2010 complemented information generated from the household surveys, focused group discussion and interviews. In order to minimise incidences of confusing agricultural crops to be natural vegetation, the satellite images used were taken in months of dry season (July and August) after harvesting seasons.

RESULTS

A shift from pastoralism to crop farming practices

The results from the household survey showed that land use practices around Lake Nakivale wetland had greatly changed from semi-nomadic and transhumant cattle keeping which used to be a dominant economic activity before 1994 (47% of land use) to crop farming (Figure 1), adversely affecting the wetland system and surrounding vegetation cover. The destruction of Lake Nakivale

wetland was now widespread and intense. As more cattle grazing rangeland was converted to crop gardens, the cattle keeping activities were restricted either to small patches of isolated pasture land or marginal land such as flood plains, wetland fringes and steep slopes of surrounding hills that form catchment areas.

In terms of economic activities, about 62.5% of the respondents (n = 197) were actively engaged in crop cultivation alone while 19.7% of the respondents (n = 62) were practicing mixed farming that is, rearing of livestock and crop cultivation (Table 1). Only 1.3% of the respondents (n = 4) were practicing cattle keeping. Use of land to put up commercial shops was being practiced by 7.0% of the respondents (n = 22). About 4.8% of the respondents (n = 15) were not actively involved in any significant economic activity apart from being casual workers. Fisheries activities occupied 2.9% of the respondents (n = 9). The form of cattle keeping before 1994 was communal, semi-nomadic and transhumant in nature. This was confirmed by 60% of the respondents (n = 189) who indicated that although the cattle keepers had their homesteads around Lake Nakivale, depending on seasons, they used to move with their livestock from place to place even beyond Uganda's international borders to the United Republic of Tanzania in search of pasture (Table 2).

The comparison of land cover map of 1994 and 2011 revealed a great conversion of the former pastoralists' grazing rangeland into crop farmland. The grazing areas were reduced from approximately 12,120ha to merely 4,340ha (36%). On contrary, in the same period, the land under crop cultivation had increased from 120ha to more than 5,560ha (46.3 times) and wetland encroachment from zero to about 189ha (Figure 1).

Clearing of wetland forests and bush land

The crop growing community had increasingly and extensively cut down wetland forests, bush land and shrubs in order to open fresh land for subsistence crop cultivation. About 18.4% of respondents (n = 58) noted that deforestation was now one of the major threats to the conservation of Lake Nakivale wetland (Table 3). The forests and bush land on the fringes on Lake Nakivale wetland were indiscriminately converted to crop gardens. A total of 138 respondents (43.8%) ranked the level of deforestation high while 42 respondents (13.3%) put it medium level (Table 6). The trees and other woody materials that were cut down were either burnt into charcoal for commercial purposes or directly utilised as fuel wood. The rest of the plant residues and debris which would later improve soil fertility (humus) were being burnt to create a clear and open land for crop cultivation. Furthermore, two important historical and cultural forests of Ishanze and Kabeigarire where the former Kings and Queens of Ankole kingdom were respectively buried were completely destroyed.

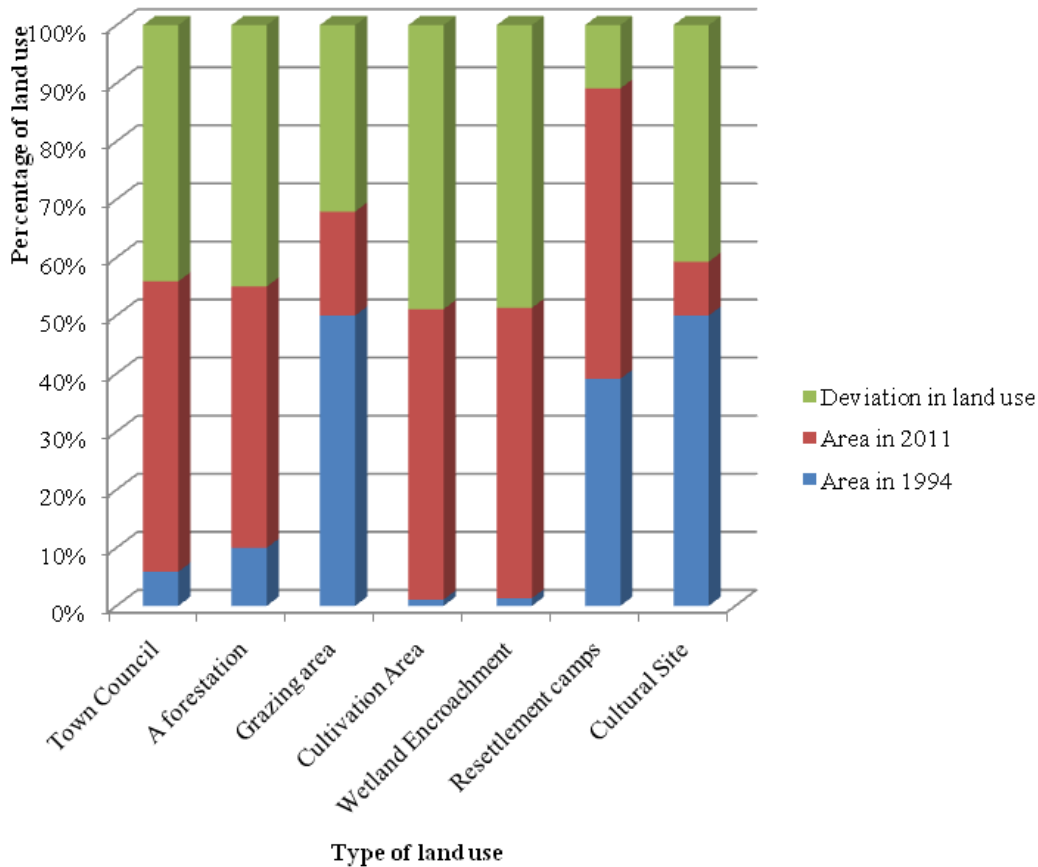


Figure 1. Changes in land use practices around Lake Nakivale Wetland between January 1994 and December 2011

Table 1. Current land use in Lake Nakivale and adjacent landscape based on major economic activities.

Form of land use	Frequency	%	Cumulative %
Settlement only	15	4.8	4.8
Crop cultivation only	197	62.5	67.3
Business/ commercial shops	22	7.0	74.3
Cattle keeping only	4	1.3	75.6
Crop and livestock farming	62	19.6	95.2
Settlement and fishing	9	2.9	98.1
Others	6	1.9	100
Total	315	100	

Table 2. Form of cattle grazing during 1959 to 1994 period.

Form of cattle keeping	Frequency	%	Cumulative %
Transhumant pastoralism	122	38.7	38.7
Nomadic	67	21.4	60.1
Fenced farms/paddocks	2	0.6	60.7
Others e.g zero grazing	2	0.6	61.3
Not sure	122	38.7	100.0
Total	315	100.0	

Table 3. Major threats to conservation of Lake Nakivale Wetland.

Threat	Frequency	%	Cumulative %
Wetland reclamation	217	68.9	68.9
Deforestation	58	18.4	87.3
Siltation of Lake Nakivale	19	6.0	93.3
Overexploitation of wetland resources	16	5.1	98.4
Wetland burning	5	1.6	100.0
Total	315	100.0	

Increased incidences of human- wildlife conflicts

In all sampled villages, residents indicated that due to the destruction of bush land and expansion of crop fields, incidences of human- wildlife conflicts had increased. In 12 out of 15 villages (80%) hippopotamus was the main problem animal that was responsible for eating and destroying the crops. Leopard was mentioned in 5 villages (33.3%) as a key problem animal. It was accused of killing livestock, while Nile crocodile was considered as the most notorious and dangerous animal in 3 villages (20%). As to why the wild animals were increasingly becoming a problem to residents, three factors were mentioned namely, increased human settlement and crop cultivation in areas that were once wild animals' habitat and the proximity of Lake Mburu national park to their villages.

Use of agro-chemicals

Farmers were applying agro-chemicals on crops grown in and on the edge of Lake Nakivale in order to control crop pests and diseases. The application of agro-chemicals on crops like tomatoes was found to be common in 5 out of 15 sampled villages (33.3% of the villages). Unlike the application of pesticides to kill livestock ticks which was widespread but taking places outside the wetland, the use of chemicals on crops was being carried out in or on fringes of the wetland.

Human settlement on the fringes of wetland

The human settlement on the fringes of Lake Nakivale wetland increased in intensity and magnitude. The population of refugees from the Democratic Republic of Congo increased from 1,294 individuals in September, 2004 to 27,053 people in June, 2011 (1983% increase). The number of other refugees raised in the same period as follows; Burundians from 326 to 5,281, Eritreans from 0 to 1,286 and Ethiopians from 73 to 330. Similarly, population of Ugandans who illegally settled on the refugee resettlement land increased from 4,892 in 1994 to over 10,000 people in 2012 (Figure 2). About 82.4% of the homesteads which were situated within 400 metre

strip along the shores of Lake Nakivale (n =574) had no proper human waste disposal facilities. The existing pit latrines were shallow, weak and potentially risky to human life as there was high potential of human wastes joining water system (pollution), causing waterborne diseases. The population exerted pressure on wetland resources. About 43.2% of the respondents (n = 136) ranked the level of human exploitation of wetland resources as a high threat while 21% (n = 66) put it at a medium level (Table 5).

Overgrazing

About 26% of the respondents (n = 82) were still keeping livestock. On average each respondent had 15 heads of cows and about 21 goats. This was much less than what they used to possess in 1990s which were in hundreds. The life style of cattle keepers was no longer transhumant but sedentary in nature. However, they were confined in flood plains, wetlands and steep slopes of surrounding hills. These areas were overgrazed and signs of land and wetland degradation were evident (Plate 1). Deep gullies were observed in banana plantations in the lower slopes of Rwendama and Kigyende hills (Plate 2). Soils and earth materials from these gullies were finding their way into Lake Nakivale through erosion and runoffs. The gullies were beginning small and shallow on the upper part of banana plantation, thereafter, go deepening and widening further and further as water runoffs move down hill taking soils and crop residues. The assessment of gullies showed that all of them were following the natural water drainage system that leads to Lake Nakivale Wetland. The eroded soils were ending up in the wetland system. It was observed that crops within a distance of 10 metres from the gully appeared weaker and poorer than those that were far away from gullies.

Wetland encroachment

About 14% of the respondents (n = 44) had their gardens either in or on the edge of Lake Nakivale Wetland. Majority of them (88.6%) were nationals and the rest (11.4%) were refugees. All the respondents (n=315) said

Table 4. Level of wetland reclamation as a threat to conservation of L. Nakivale Wetland system.

Level of wetland reclamation	Frequency	%	Cumulative
High	259	82.2	82.2
Medium	22	7.0	89.2
Low	1	0.3	89.5
Don't know	33	10.5	100
Total	315	100	

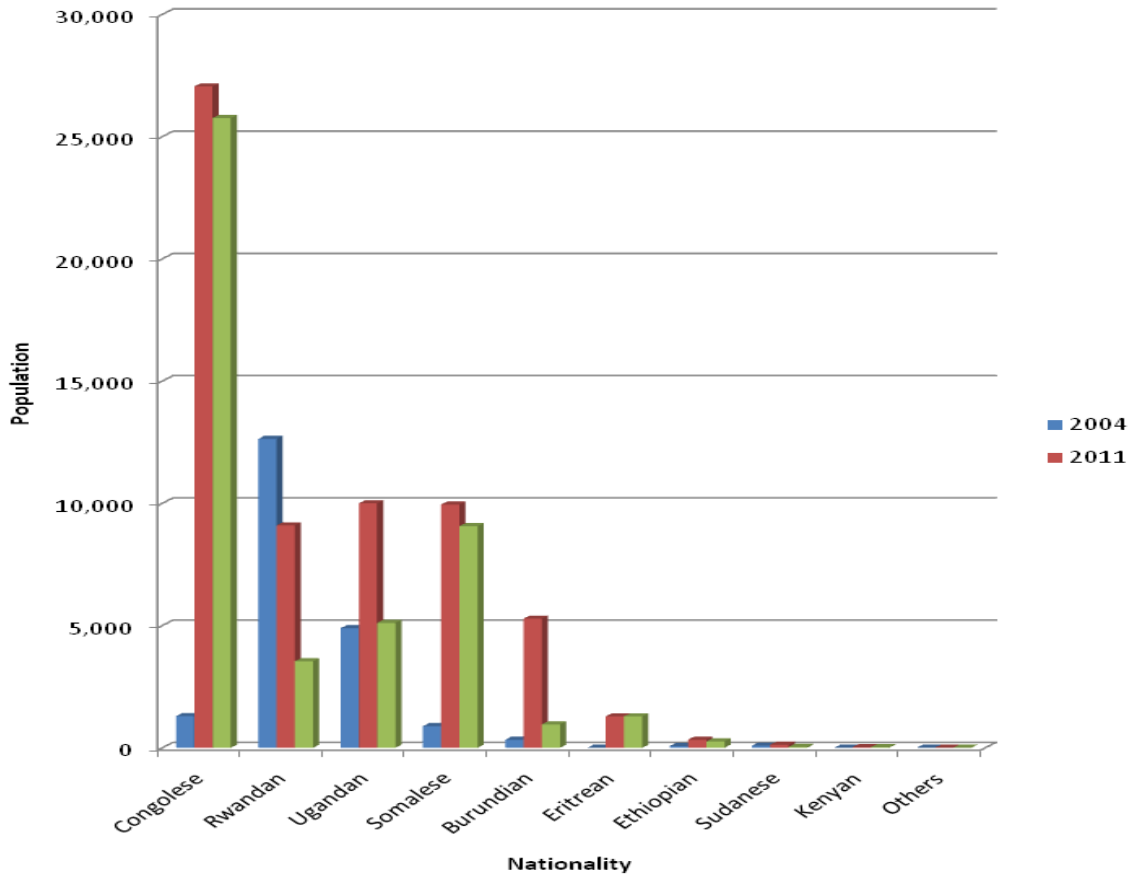


Figure 2. Change in human population in Nakivale Refugee Settlement from 30th September 2004 to 30th June 2011 (Source: Regional Office of Prime Minister, Mbarara).

that the problem of wetland reclamation and conversion to crop fields did not exit at the time when the landscape was dominantly utilized by transhumant pastoralists for cattle keeping. They indicated that encroachment of the wetland intensified in late 1990s and early 2000s as a result of the scramble for land for food production. About 68.9% of the respondents (n = 217) indicated that wetland reclamation was now a serious threat to the conservation of Lake Nakivale Wetland (Table 3). However, 82.2% of the respondents (n = 259) ranked the level of wetland reclamation as high while 7% of the

respondents put it at medium level (Table 4). It was established that by the end of 2011 approximately 189ha of the wetland had been encroached. When the Landsat 7 Thematic Mapper (TM) satellite images taken in July 1984, July 1999 and August 2010 and land cover map were analysed, it became clear that over a period of time, the wetland experienced human induced degradation. It was most damaging threat that with time, was like wipe out the whole wetland system (Figure 3). Areas which were heavily degraded include fringes of Lake Nakivale Wetland, some sections of River Rwizi banks, as it

Table 5. Level of overexploitation of wetland resources.

Level of wetland resource exploitation	Frequency	%	Cumulative %
High	136	43.2	43.2
Medium	66	21.0	64.2
Low	17	5.4	69.6
Don't know	96	30.4	100.0
Total	315	100.0	

Table 6. Level of deforestation.

Level of deforestation	Frequency	%	Cumulative %
High	138	43.8	43.8
Medium	42	13.3	57.1
Low	36	11.4	68.5
Don't know	99	31.5	100
Total	315	100	

**Plate 1.** Some section of hilly areas around lake Nakivale Wetland which have been heavily degraded by overgrazing.



Plate 2: Deep gullies in a banana plantation on the slopes of Rwendama hill: eroded soils are deposited in Lake Nakivale wetland.

approaches Lake Mburo- Nakivale wetland system and islands on Lake Nakivale.

Increased commercial centres and other infrastructure development

The commercial centres around Lake Nakivale Wetland have over the last two decades had increased in number, size and quality. They increased from three in 1994 to over 15 in 2012, with Isingiro Town which according to respondents is believed to have had a few shops, growing into a major town council. A rural road network was constructed to improve accessibility to remote areas, ease transportation of agricultural produce such as beans, maize and banana to urban markets and expedite the general service delivery to the increased population. However, it was established that poor drainage system in some sections of feeder roads had contributed to the siltation of Lake Nakivale as earth materials eroded from these roads (Plate 3) were ending up in the water system.

DISCUSSION

The results of the study indicate that subsistence crop farming which replaced semi-nomadic and transhumant pastoralists' land use practices had emerged as a dominant economic activity and the greatest source of livelihoods for the neighbouring communities around Lake Nakivale Wetland. However, the traditional crop farming practices have had more disturbing and destructive effects on the wetland system than pastoralists' practices. This could be attributed to two major factors. One, pastoralists used to make strategic seasonal movements to allow sustainable utilization of pasture and other wetland resources thus conserving the rangeland (Simpkin, 2005). Second, crop farmers have destroyed natural vegetation cover at an alarming rate, encouraged wetland encroachment and exposed soils to erosion (Nunes et al., 2011; Sharm and Tiwari, 2010). The practice of burning crop residues and vegetation matter while preparing land for crop cultivation was a bad practice that did not only compromise the gradual



Plate 3. Heavily degraded section of one of the feeder roads, earth materials eroded are deposited in the wetland.

recycling of soil nutrients but sometimes acted as a source of seasonal fires that burn Lake Nakivale Wetland system.

Although the national environment management regulations prohibit cultivation of crops within a 200 metre strip along the shores of Lake Nakivale wetland (protected zone) and empower the local government authorities to protect wetlands (GOU 1997; GOU, 2000), farmers who had planted banana, watermelon and cabbage within the wetland and protected zone. The causes of shift in land use practices around Lake Nakivale Wetland seem to be both by coincidence and as a government policy issue. By coincidence because when the Tutsi refugees (traditionally pastoralists) left the study area and returned to their motherland, Rwanda in 1994, they were replaced by the Hutu ethnic group who are crop cultivators. This created a drastic change in land use and land cover. It was also the government of Uganda and UNHCR's policy to make refugees self reliant and less dependent on relief items (Hunter, 2009). However, allocating land parcels to refugees to grow crops stimulated the influx of nationals in search of either free or cheap land for crop cultivation. Many nationals settled on the fringes of Lake Nakivale wetland as this was the only land that was perceived to be available for them as the rest of it was reserved for

refugees.

The loss of natural vegetation cover in the study area can be attributed to the poor farming methods and land use practices involved in the crop production such as clearance of tree cover coupled with the use of fire to prepare land for crop production. This has led to the decimation of wetland forests, bush land and woodland which are critical habitat for wildlife. This explains why the remaining wild animals were increasingly becoming a source of conflict between wildlife managers and residents. The rapid loss of tree cover and the degradation of Lake Nakivale Wetland and adjacent landscape can also be associated with the exponential human population growth. For instance, the refugee population grew from 15,304 people as 30th September, 2004 to 53,153 individuals as of 30th June, 2011 which is 247.3% increase. In other words, within a period of just seven years, the population of refugees multiplied by 3.5 times. The population of nationals also doubled. The only decline in population was noted on Rwandese refugees (Figure 2). This was basically due to the fact that Rwanda government took an important step towards repatriation of her citizens who were refugees in neighbouring countries. The government in collaboration with UNHCR encouraged refugees of Rwanda origin to go back home as the

country was now peaceful and stable. Many refugees responded positively and were repatriated during the time of this study.

The depletion of two important sacred forests of Ishangye and Kabeigarire that possess historical and cultural values could be attributed to the failure by the government of republic of Uganda to restore and support the institution of Ankole Kingdom. This has not only denied people who take pride in their history and culture a chance to protect their heritage but destroyed a vital tourism attraction. Developing the two sites into a tourist facility such as constructing a five star hotel or recreation facility that offers among other services such as a boat ride on Lake Nakivale, forest walk, cultural and historical interpretation and picnic beach facilities could easily promote tourism industry in Isingiro district. This would in turn, create jobs for the youth and attract private sector to invest in rural areas. At the long run, the local people would accrue economic benefits from cultural tourism which would act as incentives for them to conserve Lake Nakivale Wetland system.

Although the application of agrochemicals to crops is one of the modern ways of protecting crops against pests and diseases thus, improving yields, their use on crops grown in wetlands was likely to have a long term negative effect on the quality of water system and wildlife habitats. If the use of pesticides was not well regulated/controlled early enough, it would be potentially dangerous to human beings and aquatic species, as there were high chances of these chemicals to find their way to the water system. The threat of water pollution was also eminent because of human settlement on the edge of the wetland without proper housing and human waste disposal system. The conversion of livestock grazing areas into crop fields made it difficult for the remaining pastoralists to continue practicing transhumant lifestyle. The cattle keepers were forced to abandon their pastoralists' lifestyle and practices to adopt sedentary livestock management. They were squeezed out of cattle rangeland and confined in an "empty" land (Bagenda, et al., 2003), most of it being either flooded plains, wetlands and steep slopes of surrounding hills.

Consequently, overgrazing has become more rampant and widespread, accentuating the land degradation. The bare hills can no longer hold heavy water runoffs because they are devoid of grass and tree cover that would naturally control the speed of water runoffs. Soil and other earth materials are eroded uncontrollably leading to the development of deep gullies in banana plantations in the lower slopes. The deposition of earth materials into the wetland is considered to be one of the causes of current siltation and seasonal receding of Lake Nakivale (NAFIRRI, 2010). This situation was accentuated by overgrazing that takes place on the upper parts of the hill slopes, leaving the land bare.

The encroachment and reclamation of wetland was widespread in the southern part of the wetland where

land is predominantly owned by the government of Uganda in collaboration with UNHCR as refugee settlement. The situation was quite different in the northern part of the wetland, where land was either owned by private farmers or Lake Mburo national park. This perhaps raises the critical issue of land tenure system and how it influences the land use practices and conservation of wetland resources. It appears, where farmers had the right to access, control and use the land, they were more responsible for the protection of wetland resources than where they were not sure of their future stay on land. This is possible because it has been noted that right to land is crucial in determining what role land plays in the livelihood of a household (Soini, 2006). The growth in urbanisation has had two major effects on Lake Nakivale wetland. First, residents of urban centres were depending on wetland for fuel wood, handcraft materials and fisheries resources. Second, the poor waste disposal system in urban centres which are built in boggy areas was a potential source of water pollution.

CONCLUSION

From the study, it can be concluded that, change in land use from traditional transhumant pastoralism to subsistence crop farming has accentuated human induced degradation of Lake Nakivale Wetland, a Ramsor site. Traditional crop farming, as a form of land use practice has negatively affected wetland system because it encourages direct clearance of natural vegetation cover and reclamation of the wetland. The loss of tree cover exposes soils to erosion leading to the siltation of Lake Nakivale and loss of soil fertility. It is also imperative that restoration of degraded areas and overall management of Lake Nakivale wetland should integrate issues of land use. Land use planning and formulation of general management plan of the wetland should also put into consideration trends in land use practices, if the integrity of the wetland system is to be enhanced.

Conflict of Interests

The author(s) have not declared any conflict of interests.

ACKNOWLEDGEMENT

I would like to express my sincere thanks and appreciation first and foremost, to my two eminent supervisors: Prof. Eric L. Edroma (Ph.D.) and Prof. Faustino L. Oracha Meza (Ph.D.) for their professional and valuable advice, encouragement and dedication to this project.

I also wish to thank Ms Macklean Kirungi and Mr Michael Murinda for being hardworking and supportive research assistants who endured difficult field conditions

to collect raw data.

REFERENCES

- Bagenda E, Naggaga A, Smith E (2003). Land problem in Nakivale Settlement and the implication for refugee protection in Uganda. Working Refugee Law Project, Kampala, Uganda p.8.
- Bhasin V (2011). Pastoralists of Himalayas. *J. Hum. Ecol.* 33(3):147-177.
- Bitware B (2012). Rwanda ethnic conflicts: A historical look at root causes: European Peace University, Australia.
- De Carvalho EC (1974). "Traditional" and "modern" patterns of cattle raising in South-Western Angola: A critical evaluation of change from pastoralism to ranching. *J. Dev. Areas* 8:199-226.
- GOU (1997). The Uganda Local Governments Act. Uganda Printing and Publishing Corporation, Entebbe, Uganda.
- GOU (2000). The National Environment (Wetlands, River Banks and Lake Shores Management) Regulations: Statutory Instruments No. 3. Uganda Printing and Publishing Corporation, Entebbe, Uganda.
- Hunter M (2009). The failure of self-reliance in refugee settlements. *University of Leeds Pol. J.* 2:1-46. <http://www.polis.leeds.ac.uk/assets/files/students/student-journal/ma-winter-09/meredith-hunter-winter-09.pdf>
- IUCN (2003). Nakivubo Swamp, Uganda: Managing natural wetlands for their ecosystem services. Integrating wetlands economic values into River Basin Management project. The World Conservation Union, East African Region Office, Nairobi, Kenya. <http://cmsdata.iucn.org/downloads/casestudy07nakivubo.pdf>
- Kaggwa R, Hogan R, Hall B (2009). Enhancing wetlands' contribution to growth, employment and prosperity. UNDP/NEMA/UNEP Poverty Environment Initiative Project, Kampala, Uganda. http://www.unpei.org/sites/default/files/e_library_documents/uganda-enhancing-wetlands-contribution-prosperity-final.pdf
- Kyambadde J (2005). Optimising processes for biological nitrogen removal in Nakivubo Wetland, Uganda. Department of Biotechnology, Royal Institute of Technology, Stockholm.
- Makalle AMP, Obando J, Bamutaze Y (2008). Effects of land use practices on livelihoods in the trans-boundary sub-catchments of the Lake Victoria Basin. *Afr. J. Environ. Sci. Tech.* 2(10):309-317.
- Mironga JM (2005). Effects of farming practices on wetlands of Kish District, Kenya. Faculty of Environment and Resource Development, Egerton University, Njoro, Kenya.
- Mugisha AH (2011). Wetlands for forests: Twenty years of wetlands conservation in Uganda. Have Uganda's wetlands become wastelands again? A public talk on the World Wetland Day held at Uganda Museum. National Environmental Management Authority, Kampala.
- Mundia CN, Murayama Y (2009). Analysis of land use/cover change and animal population dynamics in a wildlife sanctuary in East Africa. *Rem. Sens.* 1:952-970.
- NAFIRRI (2010). The fisheries resources of Lake Nakivale: Report of rapid assessment of the Lake Nakivale fishery prepared for the Office of the Prime Minister on Lake Nakivale Refugee Settlement. National Fisheries Resources Research Institute, Jinja, Uganda. http://www.firi.go.ug/tech_reports/Report%20of%20a%20Rapid%20Assessment%20of%20the%20Lake%20Nakivale%20Fishery%202010.pdf
- Nature Uganda (2009a). Ecological baseline survey of Lake Bisina, Lake Opeta, Lake Mburo and Lake Nakivale wetland systems. The East Africa Natural History Society, Kampala. <http://natureuganda.org/downloads/Ecological%20Surveys%20%20010.pdf>
- Nature Uganda (2009b). A socio-economic baseline survey of communities adjacent to Lake Bisini/Opeta and Lake Mburo/Nakivale Wetland Systems. The East Africa Natural History Society, Kampala. <http://www.natureuganda.org/downloads/Socio-Economic%20Baseline%20Survey%20of%20COBWEB%20Project%20Implementation%20Areas.pdf>
- Nunes AN, De Almeida AC, Coelho COA (2011). Impact of land use and cover on runoff and soil erosion in a marginal area of Portugal. *Appl. Geog.* 31: 687-699.
- Nyakana JB (2008). Sustainable wetland resource utilisation of Sango Bay through Ecotourism Development. *Afri. J. Environ. Sci. Tech.* 2(10):326-335.
- PFE, IIRR, DF (2010). Pastoralism and land: Land tenure, administration and use in pastoral areas of Ethiopia. International Institute of Rural Reconstruction, African Regional Centre, Nairobi, Kenya. http://www.pfe-ethiopia.org/pub_files/pastoralism%20&%20Land%20full%20Book.pdf
- Secretariat of the Convention on Biodiversity (2010). Pastoralism, nature conservation and development: A good practice guide. Montreal.
- Sharma A, Tiwari KN (2010). Effect of land use cover change on soil erosion potential in agricultural watershed. *Environ. Monit. Assess.* 173:789-801.
- Sharma E, Bhuchar S, Ma Xing, Kothari BP (2007). Land use change and its impact on hydro-ecology linkage in Himalayan Watershed. *Trop. Ecol.* 48(2):151-161.
- Simpkin SP (2005). Regional livestock study in the Greater Horn of Africa. International Committee of Red Cross (ICRC). Nairobi Regional Delegation, Kenya.
- Sioni E (2006). Bird diversity and land use on the slopes of Mt Kirimajaro and the adjacent plains in Tanzania. World Agro-forestry Centre (ICRAF), Nairobi, Kenya.
- Stuip MAM, Baker CJ, Oosterberg W (2002). The socio-economics of wetlands. Wetlands International and RIZA. The Netherlands.
- WMD & NU (2008). Implementing the Ramsar Convention in Uganda: A guide to the management of Ramsar sites in Uganda. Wetland Management Division/ Nature Uganda, Kampala.

Full Length Research Paper

Perceptions of development by residents of a rural community in Kenya: A capability issue

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Received 25 March 2013; Accepted 7 May, 2014

Despite the acknowledgment that participatory approaches in development have potential in understanding and designing development programmes and policies, perceptions of development continue to be dominated by outsiders including professionals and other development agents, most of whom do not experience the conditions. Using qualitative data collected from residents of Makueni County of Eastern Kenya, this paper attempts to involve Makueni community members in the conceptualization of development in their context and outlining possible strategies to address the identified development issues. The study finds a community keen on participating in development and who are able to rank their development needs and priorities, emphasizing the importance of water in driving development, as well as the perceived hierarchical nature of development. The study recommends the use of both macro and micro approaches to development where development recipients are involved in development plans and decisions.

Key words: Development; perceptions; participatory development; Kenya; sub-Saharan Africa.

INTRODUCTION

Although the key factors singled out in neo-classical approaches as being key in development are the standard of living and income, in recent development studies, it has become increasingly important to recognise also the importance of non-monetary factors, particularly in understanding the dynamics of socio-economic development (Sen 2010; Ledwith 1997; Sen 1999; Szirmai 2005; Laderchi, Saith, and Stewart 2003). These measures include viewing income as a means to development and reduction of poverty rather than the end

by itself. In addition, the multidimensional nature of poverty has necessitated a proposition of various measurement approaches, including using both qualitative and quantitative measures that go beyond the conventional measures of using income and expenditure (KIPPRA 2004; Alkire et al., 2013; UNDP 2010a; McKinley 1997; Laderchi, Saith, and Stewart 2003; Laderchi 1997). Based on these approaches, one key aspect in the efforts to advance development is the involvement of other development actors in development

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efforts, most notably the beneficiaries of development efforts, an approach that is however still rarely applied. Participation in development, which entails enlarging the capacity of the socially and economically marginalized individuals and involving them in decision making over their own lives is rarely sought, especially in development efforts implemented in developing countries (Guijt and Shah 1998; Chambers 2005; Sen 1999). Yet, it has been advanced as an approach that holds great potential in ensuring faster and more sustainable outcomes as it helps understand communities' felt needs thereby helping prioritise them in development initiatives (Chambers 1983, 2005). There is therefore a need to revisit such approaches, since many communities in developing countries, especially those in the rural areas, continue to experience poverty, stagnated development and poor wellbeing outcomes (Fotso 2006; Sahn and Sahn 2004; Smith, Ruel, and Ndiaye 2004).

This approach is important in the sub-Saharan region where many of the countries face poor wellbeing and development progress. The rural areas of the region fare even worse. For instance, although sub-Saharan Africa nearly doubled the number of people using an improved drinking water source, from 252 million in 1990 to 492 million in 2008, this progress was greater in urban areas, compared to the rural areas of the region. (United Nations 2011). Consequently, an urban dweller in sub-Saharan Africa is 1.8 times more likely to have access to an improved water source than a counterpart in the rural area (United Nations 2011). The improvements, favouring the urban areas, have also been reported in other areas of wellbeing. Reports of child malnutrition indicate that the rural population is worst affected, with children in rural areas of developing regions being twice as likely to be underweight as their urban counterparts (United Nations 2011). In comparison to the urban and the non-poor, less progress in sanitation has been registered among the poor and those in the rural areas (World Bank 2010). Food shortages are also a major problem during years of drought, and nutritional intake in rural areas of sub-Saharan Africa is consistently poor (Maxwell 2001).

In Kenya, there are high poverty levels and unequal development between regions and between rural and urban areas (IFAD 2010; Muhula 2009; Alwy and Schech 2007; World Bank 2009). In Kenya, despite the distinct gap between the 'rich' and the 'poor' regions, as well as between rural and urban areas (IFAD 2010; Muhula 2009; Alwy and Schech 2007; World Bank 2009), very few of the development initiatives implemented incorporate participatory approaches where the views of community members are sought in order to prioritise their needs. At the same time, in cases when this approach has been used, this has either been incomplete or has been applied at a macro level, disregarding the resource and

cultural variations between the regions of the country. Consequently, development inequalities can be observed not just between regions, but also within regions and between the rural and urban areas of the country. Makueni district, for instance, is reported to be one of the poorest in Eastern province and in the country (73.5% of households are poor) (NCAPD 2005). The district is also reported as making the highest contribution to the national poverty level (5.1%) compared to other districts in Eastern province where it lies, at: Nithi (4.5%), Kitui Central (4.4%), Mbooni (4.2%), Kangundo (4.2%), Kibwezi (4%), Igembe (3.9%), Mwingi North (3.9%), Mwala (3.7%), and Machakos Town (3.6%). These dynamics support the need to consider context when planning and implementing development projects.

This paper seeks to answer these three questions; How do residents of Makueni County understand "development"? What are the various aspects of development that are perceived to be important to Makueni residents? What aspects of development/wellbeing are viewed at individual/ household, community and national levels? To do this, the paper employs the United Nations' definition of 'development' as a process of enlarging people's choices with the most critical choices entailing a long and healthy life, acquiring knowledge and enjoying a decent standard of living, outlining political freedom, guarantee of human rights and self-respect as other important choices in development (UNDP 2010b). The approach of 'development' used in this paper incorporates its multi-faceted nature that encompasses economic, social, political, cultural and environmental factors as defined and used in other studies in the country (Republic of Kenya 1979; Bahemuka et al. 1998). The study uses 'participation' or 'participatory development' defined as a methodology where the capacity of the socially and economically marginalised is enlarged and their involvement in decision making over their own lives is sought (Guijt and Shah 1998; Chambers 2005; Sen 1999). The study is based upon the concept of community proposed by MacQueen et al (2001) as a result of the study among respondents in the US where it was referred to as

"...a group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings" (MacQueen et al. 2001).

MATERIALS AND METHODS

Study area and population

The study was conducted in Kitonyoni and Mwanja sub locations of Kathonzi district in Makueni County, Eastern Kenya. Following

the enactment of a new constitution in 2010, the Kenyan government implemented a devolved system of governance which came into effect in March, 2013. Makueni which was a district at the time of study is now a County. The study sites therefore now fall in Kathonzi district which is within Makueni County. There are instances in this paper where this area is referred to as a district especially in regards to statistical presentations. Kitonyoni sub location is an area covering 27.1 sq km with a total population of 2,500, which is comprised of 1,284 males and 1,306 females, while Mwanja is 62.9 sq km with a total population of 3,239, which is comprised of 1,569 males and 1,670 females.

Makueni area is inhabited by the Akamba-speaking Bantus who form about 97% of the population of the County with the remaining 3% comprising people from other communities, who live mainly in the town areas of the County (Republic of Kenya 2009). The two study sub-locations like most of Makueni are semi-arid in nature receiving just with minimal rainfall between November and December during which the people grow maize, beans, green grams, chickpeas, cowpeas and pigeon peas for subsistence. Other than this subsistence agriculture, the other main economic activities in the sub-locations include beekeeping, small scale trade and subsistence goat farming (Oxfam 2006). The minimal rainfall received in the area causes acute food insecurity especially during the long dry spells, thereby leading to high dependency of a large proportion of the population on government or donor food aid (GOK 2006).

Although traditionally relying on farming as a means of livelihood, the Akamba people are now shifting from farming and are incorporating other means of livelihood, in particular migrant labour to the towns and cities as a result of increased poverty in the County (Nzioka 2000). Like many other indigenous African communities, the Akamba people consider a family unit as a very important entity in their lives, because it is the basic unit of production, consumption, investment and insurance (Tiffen et al., 1994). 99% of household in Kitonyoni use water from streams, springs, wells or boreholes while in Mwanja, 99% use water from streams (Republic of Kenya 2011b). Regarding energy, only 13.1% of households in the district use electricity with 81.2% using paraffin for lighting (Republic of Kenya 2011a). Health outcomes are also poor, whereby Eastern province where Makueni County is located had the highest percentage of stunted children, at 41.9% (KNBS and ICF Macro 2010).

Data collection and analysis

This paper uses qualitative data collected in 2012 using focus group discussions (FGDs) and key informant interviews (KIIs) to understand the community's perceptions of development. Ethical approval of the study was obtained from the University's School of Social Sciences Ethics Committee and from the Kenya National Council for Science and Technology (NCST). Informed consent was obtained from participants before the discussions were held. A total of 36 groups of men and women and two community leaders were interviewed on their perceptions of development.

The FGDs comprised community members aged between 18 and 60 years who were sampled using the stratified sampling technique, from the 11 and 16 villages forming Kitonyoni and Mwanja respectively. The respondents were categorised by age and gender in order to limit inhibitions during the discussions and to understand their perceptions based on these categorizations, as gender has been found to be important in perceptions (Maccoby 2002). Each group comprised between 8 and 12 participants to make it easy for

the moderator to manage the group and to ensure effective interaction among the participants of the discussions. For the purpose of conducting the interviews, the interviewees were approached and a consent form was administered. After that, the appointment for the discussions was made. Replacements were done in instances where those selected were either unavailable or unwilling to participate. In total, 36 FGDs and 2 KIIs were held (See Table 1 for respondents' details).

Four experienced qualitative research assistants (2 male and 2 female) were trained on the research tools and conducted the group discussions in Kamba language, the language spoken in the study area. The KIIs were conducted in English since the two interviewed community leaders in charge of Kitonyoni and Mwanja sub-locations could freely express themselves. The areas of investigation in these discussions included the respondents characterized by overall understanding of development as well as the understanding of development at personal, community and national levels. These issues were discussed one at a time. The training given to the research assistants covered rapport-creation and encouraging discussion of the issues raised amongst the respondents, allowing divergent views as well as consensus-building amongst the discussants. In all the questions/issues under discussion, the moderator probed for all possible responses from the respondents.

The data were audio recorded and later, those obtained from the FGDs transcribed and translated into English. A second examination of the translations after transcriptions was done in order to check for any inconsistencies and ensure reliability of the data.

Data processing and analysis

The data was coded in NVivo 9 software and analysed using the grounded theory approach whereby emerging themes from the data were summarised. In some cases verbatim quotes are used to illustrate responses on the relevant issues/themes. Selection of these quotes is done ensuring there is a balance along gender, age and sub-location. The first question posed to respondents was "What is development?" translated and administered in the local Kamba language as "Meendeonikyau?". The translation of the word "Development" into the Kamba equivalent "Meendeo" is derived from the Kiswahili translation "Maendeleo" which means progress, advancement or improvement (University of Dar-Es-Salaam 1981).

Kamba and Kiswahili languages belong to the Bantu group of languages hence the construction of the Kamba language is similar to that of Kiswahili, as is the example of the grammatical inflexion taking place at the beginning of the words and within the words (Ma-Maendeleo in Kiswahili and Me-Meendeo in Kamba) hence an intimate relationship in the conjugation of their nouns and verbs (Nurse 2006; Bryan 1961; Hinde 1904). In addition to this translation, the understanding and comprehension of the word 'development' by the respondents in this study could have been influenced by the community's experience and familiarity of the use of the word and the associated activities, given that language is dynamic and meanings attached to words and phrases may vary depending on context, historical experiences and previous uses attached to the words (Catford 1967).

The word 'Maendeleo' in the Kenyan context, with its variants depending on the location and community/language has been widely applied in the country to refer to the progress, advancement or improvement in the livelihoods and wellbeing for local communities, as demonstrated by the work of one national organization known as 'Maendeleo YaWanawake (MYW)' which also

Table 1. Characteristics of respondents

Method and respondent	Age-category	No. of individuals/groups
Household interviews	-	1065
FGD Women	18 to 24 years	6
FGD Women	25 to 40 years	6
FGD Women	41+ years	6
FGD Men	18 to 24 years	6
FGD Men	25 to 40 years	6
FGD Men	41+ years	6
KII community leader	-	2

derives its name from the word 'development' (MYO 2014). MYW's development agenda reflects the understanding and definitions adopted in this study, to improve the quality of life of rural communities in Kenya with some of these efforts including gender equality in development and improvement in governance (MYO 2014). The organization was registered in Kenya in 1952.

The approach adopted in this investigation is based on the recommendations proposed by Hennink et al. (2011). According to these recommendations, the respondents were allowed to mention, discuss and deliberate on the emerging issues and in some instance reach a consensus amongst themselves on the factors considered to mean/indicate personal, community and national development (Hennink et al., 2011). The moderator guided the discussions and if necessary probed to get more clarity on issues mentioned or to encourage discussants to exhaustively mention all the issues as they perceived them, sometimes following the mentioned issues to get more information.

RESULTS

Meaning of development

As demonstrated in these two quotes, the overarching definition of development in this study emerged to be its characteristic of upward mobility and a constant improvement in all spheres of life:

"...if I used to borrow a donkey from my neighbour, I stop and buy mine ... If I was using kerosene for lighting then I buy solar"Female 25-40 FGD, Mwanja.

"...even moving from a grass thatched house to one that has corrugated iron sheets" Male 18-24 FGD, Kitonyoni.

This study found that improving one's status through nurture and education, having a family and meeting basic needs were considered to be the most important indicators of personal development. At the community level, improvement in infrastructure and access to services, while addressing obstacles to development and involving community members in development projects were cited as the important pathways to community development. National development, on the other hand was reportedly

achievable through representative leadership and competent judicial systems.

In addition, availability of electricity was reported mainly by the youth to have potential in facilitating improved communication through internet connectivity thereby facilitating development at all the three levels. Development was also viewed as a hierarchical process where preference was given first of all to achieving personal/household development followed by community and finally national development since development at the lower level(s) was viewed as contributing to development at the subsequent levels. Further, although development was considered to be a responsibility of the government, with help from the donor community, those responding were also supportive of their community being involved in development initiatives. This involvement ranged from just being constantly kept informed of plans and progress of development initiatives to actual involvement in development activities through offering of labour or locally available resources such as community land, for implementation of development projects.

Personal/household development

Asked about what personal/household development meant to them, respondents in this study gave an overriding description of development meaning improvement in one's status in such areas as acquisition of education as a pathway to a better job, better incomes and therefore improvement in one's status as well as acquisition of assets that make life more comfortable and which also raise one's status. Having a family, specifically a spouse and children was also considered important as it raises one's social status.

Empowerment

Self-improvement through the acquisition of adequate

education as well as life-skills was reported to be an avenue through which personal or household development could be achieved. A majority of discussants in this study (regardless of age and gender) viewed education as an avenue to improve one's communication and avail more economic opportunities, as a form of empowerment whereby one's autonomy in decision-making, self-reliance, direct democracy and social learning is enhanced. In this study, education was considered crucial such that the inability to access education beyond primary and secondary levels was viewed as a characteristic of less-development, due to its limiting nature in accessing social and economic opportunities. The perceived importance of education in development in this study is emphasised in these quotes:

"Like getting enough education because the education that we have is not enough that can give us development that can match the times we are living in" Female 41+ FGD, Mwanja.

"Enough education is like going up to the university level and having the ability to communicate in any way because like now we have internet, the Facebook and you know, you can't do such without having enough education" Male 25-40 FGD, Mwanja.

The other form of empowerment reported to be important in fostering personal development relates to parental nurturing (physically, morally, religiously and culturally) enabling one to become self-reliant thus:

"In my opinion, development is from the time I was born by my parents [sic], bringing me up and showing me what is right and what is wrong ...what can harm me and what cannot, and they brought me up by teaching me how I can live in this Gods' word...took me to school..." Female 18-24 FGD, Kitonyoni

Asset-acquisition

In the quest to raise standards of living, this study found that people (across age and gender) considered acquisition of such assets like electricity, own source of water, radio, mobile phone, a car and businesses as indicators of progress. Acquiring assets to enable access to water was considered paramount, thus:

"I feel like I have some 'development' in my home because I have a small borehole that I have dug, and I use the water for my goats and irrigate a tree, so I feel I am doing well" Female 25-40 FGD, Mwanja.

Ownership of assets was important as it enabled households to meet other needs such as lighting,

communication and water.

Family

The most common social measures of personal development highlighted, especially by the older male respondents were marriage and children both as indicators and pathways to development. Yet, not only getting a spouse and children, but also providing for them was considered a sign of development. In addition, it was considered to be an important avenue of societal-continuity and empowerment, education and other forms of nurture. In this regard, having a family was given high importance as it also gains respect and a higher status among peers and in the community. In this study, having a family also had economic benefits since wives were considered to be important initiators of development through their interaction with other women. Consequently, many aspects of home improvement were handled by women while the 'bigger' development efforts like schooling and investment were reported to be preferably handled by men. To younger respondents, marriage and family were however not frequently mentioned as important aspects of one's personal progress, rather this was mostly emphasized by male older respondents:

"As you have heard, all of us have wives so a man who doesn't have a wife basically has nothing, what can he possibly discuss among men? He doesn't have a child, no goat, no dog. So that man who does not have a wife has basically nothing because she [wife] is the pillar to that man, anything even if it is a child is always under the care of the woman because even in my home I don't know the things that we have, but my wife does. So women are the foundation and pillars of us men in this area" Male 41+ FGD, Kitonyoni.

This perception may arise from the influence of global urban culture which values individualism and personal achievement and one that the younger generation are increasingly imbued with, including the youth in Kenya.

Community development

Community development was perceived as a state of availability and access of community resources and services, specifically, improved infrastructure and associated services such as having easily accessible and adequately equipped health facilities, good quality schools, accessible markets and good quality roads all of which were reported to have potential in helping improve the community's well-being outcomes.

Accessible roads' dual role emerged in this study

whereby it was reported to enable the opening up of the community to trade while at the same time enabling access of services and ensuring ease of transportation of farm produce to the markets, thus:

"...and if someone who is unwell, they can be taken to the hospital through good roads so that they won't suffer a lot by taking them to the hospital through the bushes" Female 18-24 FGD, Mwanja.

"Then, the mangoes just get lost (they go to waste), because where will the vehicles pass? ... that is a loss which would have brought profit to Kenya. They just end up rotting and yet they were to go to (be exported) abroad" Female 25-40 FGD, Kitonyoni.

Adequate and consistent supply of water at household and community levels was perceived to be important both as an indicator of individual/household development and a pathway to household and community development. Its importance as a recipe for development centred around its enablement of households to irrigate farms, thereby cultivating enough food and eliminating malnutrition and resultant illnesses and in the improvement of hygiene both at households and community levels, specifically at the health-facility level (Figure 1). Further, it was recounted that adequate water supply to enable household to build bigger houses (which in itself was considered a form of development) and engage in businesses that require use of water. Most importantly, it was reported that this could significantly reduce the cost of water, which was Ksh. 8 to 10 for 20-litre jerry can (Ksh. 80 is approximately equivalent to USD 1) at the time of study and also the time spent accessing it.

Absence of electricity in the community was highlighted as an impediment to the development of the community, as it is an obstacle to the acquisition and use of life-skills by the youth who miss formal higher education, forcing them to migrate to cities in search of opportunities, therefore denying the community their expertise. In the present study, electricity is perceived to have potential to spur growth through entrepreneurship while at the same time helping with provision and access of important services including health services such as maternal health, cold chains for vaccines and antidotes for snake and dog bites:

"Yes! If electricity comes within our area, the women will not have to go and be cut (undergo caesarean section) at Wote (the nearest town, which is approximately 50km away) since our dispensary here will have the theatre section" Female, 25-40 FGD, Mwanja.

"But if we had electricity just here around, such a person can work from within. They can weld doors and windows for people to buy and at the end of the day, that person

will just go and sleep at his home (own his own home), no one will ask him for rent" Female, 25-40 FGD, Kitonyoni.

It also overwhelmingly emerged that community development could only be improved once personal/household development had been achieved. For instance, even with availability of schools and health facilities as indicators of development, the community would still require trained expertise in order to provide the necessary services. Achievement of adequate education, cited as one of the indicators of personal development, would in turn ensure the community benefits from such training and expertise. In addition, most of the indicators of personal/household development were basics that were necessary for improvement in capabilities, thereby contributing to improvement in the community status. A male respondent said this to support this view:

"Development for me as a man from this community... I should be in a position to work and contribute something to this sub location. For example, I am a businessman and I spend my profit just within the community... I also educate children and if they would perform well, they would come back and help the people of this community as a whole" Male 41+ FGD, Kitonyoni.

The main custodian of development at the three levels however remains the government, supported by non-governmental organizations, with community members making contributions. Community participation in community development initiatives implemented was considered important, at all stages of development, including at initiation and monitoring of the projects.

National development

Some of the important factors for national development emerging in this study include good leadership which has potential to ensure sustained peace and progress for all Kenyans and credible facilities and institutions alongside poverty eradication efforts as well as gender, age and regional balance in leadership and equitable development. Similar to community leadership, it was reported that national development could better be achieved once individual/household and community development efforts are met. It was perceived that having improved leadership and other systems at the national levels was important but this would be pointless unless people's livelihoods at the household and community levels are met since an empowered populace would best participate in governance and leadership, a situation that would be difficult to achieve in the absence of improved capabilities for the populace and improved infrastructure and community services. Figure 1 shows a summary of Makueni

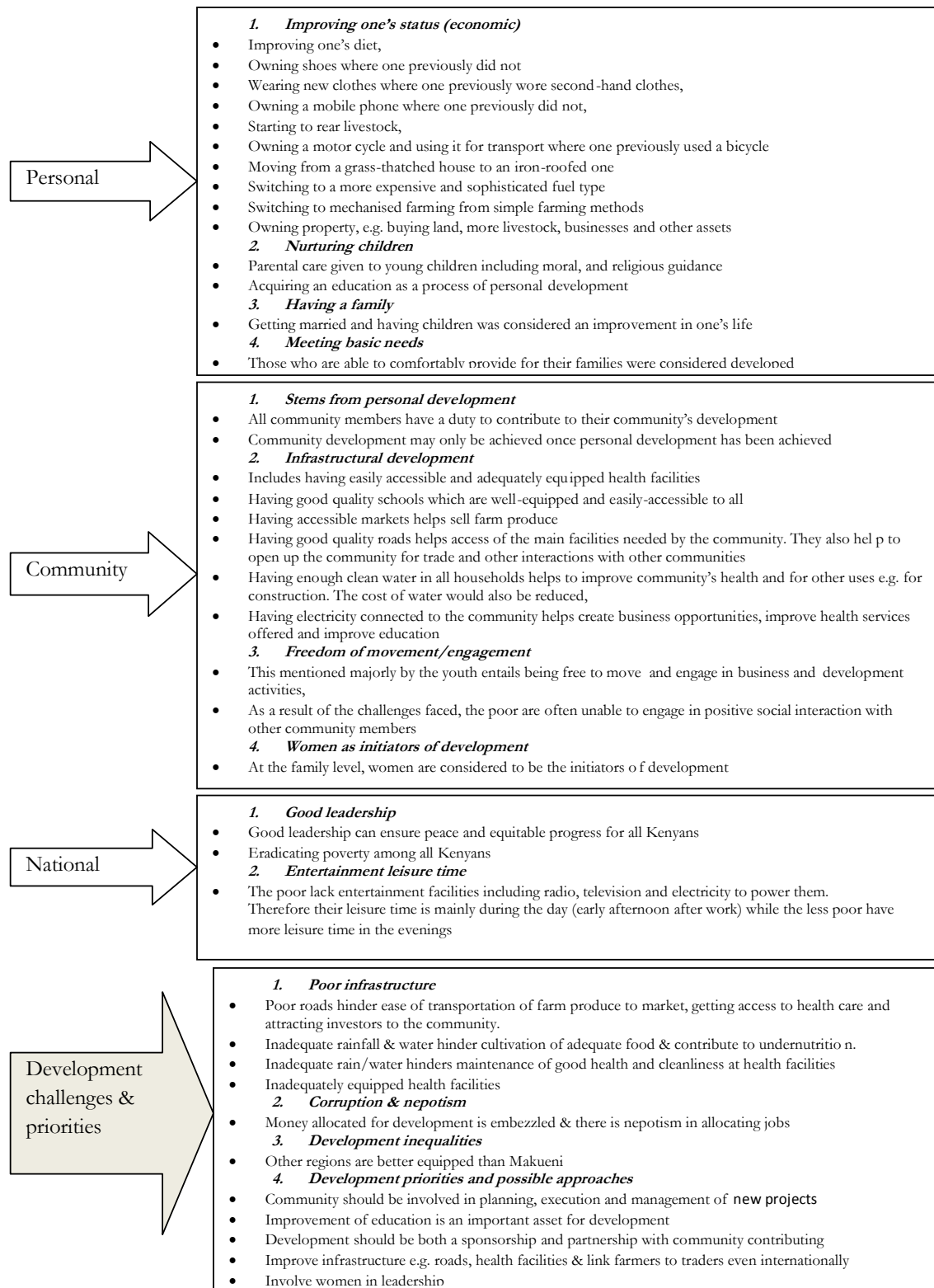


Figure 1. A summary of Makeni community perceptions of development.

community perceptions of development.

Willingness to participate in development

The community's perceived willingness to participate in community development was demonstrated through their actual participation in development initiatives at the time of study. Community engagement in development work was already being incorporated in development projects in the study community. A quote from a community leader emphasizes this ongoing process:

"Whenever there is a project to be implemented, my office facilitates the coming together of community members to fundraise for the project. At such times, we may even approach the CDF, LATF etc and we may also request well-wishers. At the same time, if the government has funds, we can access them. We may also bring women groups together where they plant trees in nurseries to sell so that this money can facilitate the projects" KII Community leader

Development as a hierarchical affair

This study reveals the community's perception of development to be hierarchical where it trickles up from the personal/household level, to community and to national levels. Perceptions of those responding in this study argued that although national and community development were considered important, prerequisite was given to personal/household development, otherwise, community and national development may take longer to be achieved. To those responding, meeting personal and household needs such as food, education, water, clothing, housing, was considered paramount as most are basics needed for survival, while community and national development efforts were more related to improvement in infrastructure and other community-level services that are not basics needed for survival. This trickle-up effect of development from the individual, to community and to the national level was highlighted by both community respondents and government leaders responding in the study. This quote from a community leader clearly outlines this importance:

"It should be a personal issue because the development of a nation depends on the development of an individual, therefore if an individual is developed, then the nation becomes developed too. Also a personal issues so that collective efforts of each individual can bring about greater change. It will be pointless if there is development at the national level when the individual person is not

developed" KII Community leader.

DISCUSSION

The purpose of this paper was to investigate how residents of Kitonyoni and Mwanja sub-locations of Makueni County perceive development, with the view of informing development studies and development approaches. This is particularly useful in the Kenyan and sub-Saharan context where the existence of inadequate factual data about the development situation at the micro-levels from the perspectives of those residing in these areas. It is even more important focusing on a rural context in the region where a majority of the population reside, especially since the United Nations Population Division projects that a majority of Kenya's population (53%) will still reside in rural Kenya by 2025 (UN Population Division 2010). This study, presenting results from a qualitative study, provides a rich and dynamic understanding of development from the point of view of residents of these two study areas, which has potential in helping development practitioners to focus on communities' development priorities in these areas and other within the County.

Responding to the perceptions of development at the personal/household, community and national levels, development at the personal/household level mainly revolved around improvement of people's capabilities in order to improve their livelihoods and wellbeing. Having a family, specifically a spouse and children was considered important as it raises one's social status, a factor considered important in other studies (Trani, Bakhshi, and Rolland 2011; UNDP 2010b). This finding also corresponds to that in a study by Biswas-Diener and Diener (2001) in Calcutta slums of India where the importance of social relationships specifically family and friendships was articulated as it was reported to contribute to life satisfaction (Biswas-Diener and Diener 2001).

Although conducted in a different region and setting (urban slums whereas the current study was conducted in a rural setting), the findings from Biswas-Diener and Diener (2001)'s study mirror those in the current study, which found family to be an important social relationship. The other personal/household development areas that have potential to improve people's capabilities were reported to include having an adequate education, good nutrition, adequate shelter, absence of disease and freedom of movement, self-esteem and freedom from servitude (Sen 1999). Education has indeed been emphasized as being important in personal empowerment, for instance in Friedman (2001)'s study of inequality around the world (Friedman 2001), with Amartya

Sen also viewing education as an important factor that enables self-sufficiency (Sen 1999).

While personal/household development was largely perceived to be the improvement in people's capabilities, community development was viewed as a state of availability and access of community resources and services, specifically, improvement in infrastructure and associated services such as having easily accessible and adequately equipped health facilities, good quality schools, accessible markets and good quality roads all of which were reported to have potential in helping improve the community's well-being outcomes. The effect of good health infrastructure on access to health services cannot be underscored, based on findings from other studies in sub-Saharan Africa (SHDRP and UNDP 1998; Ahenkora 1999). For example, in Ghana poor health infrastructural development, such as the lack of electricity, was an obstacle to the provision of services requiring electricity while long distance to health facilities, poorly qualified health personnel and constant drug stock outs or high expense accessing drugs also emerged as major health infrastructural constraints (Ahenkora 1999).

The importance of electricity has also been emphasized in other studies investigating the importance of rural electrification in development and poverty reduction (Barnes 1988). At the national level, the most important factor perceived to drive development is good leadership. This emerged important due to its perceived potential in ensuring sustained peace and equitable development for all the regions of the country. In Malawi, people perceived corruption and nepotism to be constraints to national development, findings that are on the flip-side of those in this study, where respondents emphasized the positive aspect of good leadership in improving national development (Chipimo-Mbizule 1997).

This study also revealed the community's perception of development to be hierarchical where it ideally trickles up from the personal/household level, to community and to national levels. Those responding in the study emphasized on taking care of personal/household needs, most of which revolve around improving people's capabilities and functioning, factors that have been considered to be important in achieving equitable and sustainable development in other studies (Sen 1985; UNDP 2010b; Beard 2007; Binns and Nel 1999). A study in Indonesia found that households contributed to community development according to their own level of development or well-being (Beard 2007). Another study in South Africa found that involvement of communities in development initiatives through identification, implementation and management of development projects leads to development at the personal/household level through improvement in overall socioeconomic conditions benefiting households (Binns and Nel 1999).

It emerged in this study that unless efforts to improve education, health and livelihoods of individuals and households was achieved, most infrastructural development, like schools and hospitals, would lack the people with capacity to either use or offer services. In addition, the United Nations' definition of development reflects these development priorities. The UN emphasizes the importance of enlarging people's choices with the most important ones that entail ensuring they have long and healthy lives, acquiring knowledge and enjoying descent standards of living (UNDP 2010b). Based on this study's findings, it is thus expected that personal/household development is likely to have a trickle-up effect in development at the higher levels, for instance by improving the country's human development index, a measure of development defined and supported by the United Nations and incorporated in development studies and approaches. The human development index (HDI) combines indicators of life expectancy, educational attainment and income, regarded as factors that are achievable at the personal/household level, into a composite human development index that assesses a country's level of human development (UNDP 2014).

Following the discussion of this study's findings, some similarities and differences have been drawn in some of the main findings, indicating that perceptions of development vary by context. This study reinforces the existence of variations in perceptions of development, where the interpretations and indicators are influenced by context (Ebdon 1995; SHDRP and UNDP 1998). Ownership of poultry and livestock as an indicator of wellbeing in Makueni for instance, was also reported in a study in Mongolia, a context that varies from that of Makueni (Ebdon 1995). Makueni residents – being a farming community – consider livestock and poultry insurance assets while in Mongolia those having smaller herds were considered to be poor because they are exposed to risk of losing all their stock and were therefore vulnerable to a rapid decline into poverty. Closer to Makueni, in Tanzania, livestock was considered an investment which can be converted into cash, food and other farm implements when needed (SHDRP and UNDP; 1998). Further, the study in Tanzania found some variation in the perceptions of wellbeing, in the various villages enumerated, depending on the main economic activities engaged in.

Variations in the main means of livelihood therefore influence how development is perceived since the Mongolian community depends on livestock for subsistence while Makueni and Tanzanian communities engage in farming as a means of livelihood. Further contextual variations were observed where water was regarded as the first development priority in Makueni. While water was also regarded as an important need in a similar semi-arid

context, this was however not ranked as the most important need (Brock 1999). This indicates that even in similar circumstances, people's perceptions may vary. In addition, discussants in this study clearly outlined the potential benefit that an adequate and constant supply of water at household and community levels could have on development and poverty reduction, a clarity that has yet to be made in other perception of development studies, indicating that if development priorities were based on this, improvement in the wellbeing and development of Makueni residents could be enhanced. The study therefore also adds to the known indicators of wellbeing and areas that development efforts in Makueni County could target. While the Makueni district development plan articulates orphan-hood, disease, disability and environmental conservation as some of the challenges faced in the County and which development efforts seek to target (NCAPD 2005), the present study expands the list and shows the priority areas of need as articulated by the study's respondents.

CONCLUSIONS

Following the findings of this study, emphasis is placed on the importance of rethinking development and ensuring that both macro and micro approaches are given equal importance since context may influence importance and ranking of development needs. This importance cannot be better emphasized than through the existence of variations in macro and micro indicators of poverty in studies in the country and the region. In Uganda for instance, household quantitative data was found to be inadequate in understanding poverty (McGee 2004) while Kenya's poverty reduction strategy paper (PRSP) was found to vary with the problems and priorities articulated by residents of 80 rural communities in 10 districts of Western Kenya (Swallow 2005). The present study also emphasizes prioritization of development such that while community infrastructure and access to services and national leadership and judicial systems are important and although they need to be improved, in the face of limited resources, priority needs to be put in place to improve the living standards at personal/household levels before moving to community factors. Community potential in embracing and participating in development is also possible as found in this study. Kitonyoni and Mwanja communities were found to be keen in participating in development projects, demonstrated by their involvement in already on-going development efforts as well as in their ability to articulate and rank their needs and priorities. This lends support to the need for development practitioners to adopt more participatory development approaches which have potential in

unearthing needs that may be overlooked when development priorities are determined by outsiders or when development and poverty studies and initiatives are approached solely from a macro-level disregarding the importance of micro-level approaches.

REFERENCES

- Ahenkora K (1999). The contribution of older people to development: the Ghana case. HelpAge International/HelpAge Ghana/DfID.
- Alkire S, Roche JM, Sumner A (2013). "Where Do the World's Multidimensionally Poor People Live?" Oxford Poverty & Human Development Initiative (OPHI) Working Paper no. 61. <http://www.ophi.org.uk/wp-content/uploads/ophi-wp-61.pdf?79d835>
- Alwy A, Schech S (2007). "Ethnicity, Politics, and State Resource Allocation: Explaining Educational Inequalities in Kenya." Springer International Handbooks of Education 19:129-144. http://link.springer.com/chapter/10.1007%2F978-1-4020-5199-9_7
- Bahemuka J, Nganda B, Nzioka C, Gakuru O, Njeru E (1998). "Analysis and Evaluation of Poverty in Kenya." In Poverty Revisited: Analysis and Strategies Towards Poverty Eradication in Kenya edited by Bahemuka J, Nganda B and Nzioka C. Nairobi: Ruaraka Printing Press.
- Barnes DF (1988). Electric power for rural growth: How electricity affects rural life in developing countries. Boulder: Westview Press.
- Beard VA (2007). "Household Contributions to Community Development in Indonesia." World Dev. 35(4):607-625. doi: <http://dx.doi.org/10.1016/j.worlddev.2006.06.006>
- Binns T, Etienne N (1999). "Beyond the development impasse: the role of local economic development and community self-reliance in rural South Africa." J. Mod. Afr. Stud. 37(3):389-408. <http://eprints.ru.ac.za/716/1/Impasse.pdf>
- Biswas-Diener R, Diener Ed (2001). "Making the Best of a Bad Situation: Satisfaction in the Slums of Calcutta." Soc. Indic. Res 55(3):329-352. doi: 10.1023/a:1010905029386
- Brock K (1999). It's not only wealth that matters-it's peace of mind too: A Review of Participatory Work on Poverty and Illbeing. In Consultations with the Poor: Global Synthesis Workshop. Washington DC: Poverty Group, PREM, World Bank.
- Bryan MA (1961). "The Bantu Languages of Africa by M. A. Bryan." Language <http://www.biblio.com/book/bantu-languages-africa-m-bryan/d/485654020>
- Catford JC (1967). A Linguistic Theory of Translation. Oxford: Oxford University Press.
- Chambers R (1983). Rural development: Putting the Last First. Essex: Longman.
- Chambers R (2005). Ideas for Development. London: Earthscan. http://books.google.com.ng/books/about/Ideas_for_Development.html?id=dsTBkFnYjRYC&redir_esc=y
- Chipimo-Mbizule C (1997). Lusaka Longitudinal Livelihood Cohort Study. In Baseline Study in peri-urban Lusaka: CARE Zambia.
- Ebdon R (1995). Poverty perceptions among rural herders and sum inhabitants of Chuluut sum, Arkhangai Aimag in Mongolia. Ulaanbaatar, Mongolia: Centre for Social Development and FAO.
- Fotso JC (2006). "Child Health Inequities in Developing Countries: Differences across Urban and Rural Areas." Int. J. Equity. Health 5(9):1-10.
- Frieden J (2001). "Inequality, causes and possible futures." Int. Soc. Sci. Rev. 2(1):33-40.
- GOK (2006). Agricultural Annual Report, Makueni District Government of Kenya. Ministry of Agriculture, Livestock and Fisheries, Makueni.
- Guijt I Shah MK (1998). "Waking up to power, conflict and process." In The Myth of Community: Gender Issues in Participatory Development, edited by Guijt I and Shah MK. London: Intermediate Technology Publications.

- Hennink M, Hutter I, Bailey A (2011). *Qualitative Research Methods*. London, California, New Delhi and Singapore: Sage.
- Hinde H (1904). *Vocabularies of the Kamba and Kikuyu languages of East Africa*. Cambridge: Cambridge University Press.
- IFAD (2010). *Rural poverty report 2011. New realities, new challenges: new opportunities for tomorrow's generation*. Rome: International Fund for Agricultural Development (IFAD). <http://www.ifad.org/RPR2011/>
- KIPPRA-CORNELL (2004). *Quantitative and qualitative methods for poverty analysis*. Paper read at Proceedings of the Workshop on the quantitative and qualitative methods of poverty analysis held on 11 March, at Nairobi. <http://www.saga.cornell.edu/saga/q-qconf/qqconf.html>
- KNBS, ICF Macro (2010). *Kenya Demographic and Health Survey 2008-09*. Calverton, Maryland: KNBS and ICF Macro. <http://dhsprogram.com/pubs/pdf/SR178/SR178.pdf>
- Laderchi CR (1997). "Poverty and its many dimensions: The role of income as an indicator." *Oxford Agrarian Studies* 25 (3):345-360. doi: 10.1080/13600819708424139
- Laderchi CRi, Saith R, Stewart F (2003). "Does it Matter that we do not Agree on the Definition of Poverty? A Comparison of Four Approaches." *Oxford Dev. Stud.* 31(3):243-274. doi: 10.1080/1360081032000111698
- Ledwith M (1997). *Community Development: A Critical Approach*. Birmingham: Venture Press.
- Maccoby EE (2002). "Gender and Group Process: A Developmental Perspective." *Curr. Dir. Psychol. Sci.* 11 (2).
- MacQueen KM, McLellan E, Metzger DS, Kegeles S, Strauss RP, Scotti R, Blanchard L, Trotter RT (2001). "What is community? An evidence-based definition for participatory public health." *Am. J. Pub. Health* 91(12):1929-1938.
- Maxwell S (2001). "The evolution of thinking about food security." In *Food Security in Sub-Saharan Africa*, edited by Devereux S and Maxwell S, London: ITDG Publishers. pp. 13-32.
- McGee R (2004). "Constructing Poverty Trends in Uganda: A Multidisciplinary Perspective." *Dev. Chang* doi: 10.1111/j.1467-7660.2004.00363.x. 35(3):499-523.
- McKinley T (1997). *Beyond the Line: Implementing Complementary Methods of Poverty Measurement*. UNDP Technical Support Document. p. 3.
- Muhula R (2009). "Horizontal Inequalities and Ethno-regional politics in Kenya." *Kenya Studies Review* 1 (2).
- MYO (2014). *Maendeleo Ya Wanawake* <<http://mywokenya.org/>> Accessed January 05.
- NCAPD (2005). *Makueni District Strategic Plan 2005-2010 for Implementation of the National Population Policy for Sustainable Development*. National Coordinating Agency for Population and Development. <http://www.ncapd-ke.org/images/stories/districts/Makueni>
- Nurse D (2006). "Focus in Bantu: verbal morphology and function." *ZAS Papers in Linguistics*. 43:189-207.
- Nzioka C (2000). *Makueni district profile: Human resource management, 1989-1998*. Drylands Research Working p.9.
- Oxfam (2006). *delivering the agenda*, Oxfam International briefing paper. [http://www.disasterriskreduction.net/fileadmin/user_upload/drought/docs/Kenya%20Arid%20Lands%20OXFAM%20final\[1\].pdf](http://www.disasterriskreduction.net/fileadmin/user_upload/drought/docs/Kenya%20Arid%20Lands%20OXFAM%20final[1].pdf)
- Republic of Kenya (1979). *National Development Plan 1979-1983*. Nairobi: Government Printer.
- Republic of Kenya (2009). *Makueni District Development Plan 2008-2012*. edited by Office of the Prime Minister Ministry of State for Planning National Development and Vision 2013. Nairobi: Government Printer.
- Republic of Kenya (2011). *Availability of Energy Sources, by County*. Kenya Open Data 2011a [cited August 3 2011]. Available from <http://www.opendata.go.ke/Energy/Availability-of-Energy-Sources-by-County/g9hi-bs9n>
- Republic of Kenya (2011). *County Data Sheet: Makueni 2011b* [cited August 5 2011]. Available from <http://opendata.go.ke/facet/counties/Makueni?&page=4>
- Sahn DE, Sahn DE (2004). *Urban-Rural Inequality in Living Standards in Africa*. Working Papers UNU-WIDER Research Paper World Institute for Development Economic Research (UNU-WIDER).
- Sen A (1985). *Commodities and Capabilities* Amsterdam: North-Holland.
- Sen A (1999). *Development as Freedom*. Oxford: Oxford University Press.
- Sen A (2010). *Development as Freedom*. Oxford: Oxford University Press.
- SHDRP, UNDP (1998). *Participatory Poverty Assessment, Shinyanga Region, Tanzania*. In *Shinyanga Human Development Report Project*.
- Smith LC, Ruel MT, Ndiaye A (2004). *Why is Child Malnutrition Lower in Urban than Rural Areas? Evidence from 36 Developing Countries*. In *Discussion Paper BRIEFS: Discussion Paper 176: IFPRI*.
- Swallow B (2005). "Potential for Poverty Reduction Strategies to Address Community Priorities: Case Study of Kenya." *World Development* 33(2):301-321. doi: <http://dx.doi.org/10.1016/j.worlddev.2004.07.015>
- Szirmai A (2005). *The Dynamics of Socio-Economic Development: An Introduction*. Cambridge: Cambridge University Press.
- Tiffen M, Mortimore M, Gichuki F (1994). *More people, less erosion: environmental recovery in Kenya*. Chichester, United Kingdom: John Wiley and Sons.
- Trani JF, Parul B, Cécile R (2011). "Capabilities, Perception of Well-being and Development Effort: Some Evidence from Afghanistan." *Oxford Dev. Stud.* 39(4):403-426. doi: 10.1080/13600818.2011.620089
- UN Population Division (2010). *World Urbanization Prospects: The 2009 Revision*. New York: United Nations. http://esa.un.org/unpd/wup/Documents/WUP2009_Highlights_Final.pdf
- UNDP (2010a). *Human Development Report 2010. 20th Anniversary Edition, The Real Wealth of Nations: Pathways to Human Development*. http://hdr.undp.org/sites/default/files/reports/270/hdr_2010_en_compl_ete_reprint.pdf
- UNDP (2010b). *Human Development Reports* <Accessed December 1 2010>. United Nations Development Programme <http://hdr.undp.org/en/content/human-development-report-2010>
- UNDP (2014). *Human Development Index (HDI)*. United Nations Development Programme (UNDP) 2014 [cited February 10 2014]. <http://hdr.undp.org/en/statistics/hdi>
- United Nations (2011). *The Millennium Development Goals Report 2011*. Geneva: United Nations. http://www.un.org/millenniumgoals/MDG2011_PRa_EN.pdf
- University of Dar-Es-Salaam (1981). *Kamusi ya Kiswahili Sanifu*. Nairobi: Oxford University Press.
- World Bank (2009). *Kenya Poverty and Inequality Assessment*. In *Poverty Reduction and Economic Management Unit Africa Region: The World Bank*. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/07/21/000333037_20090721003150/Rendered/PDF/441900ESW0P0901IC0Dislosed071171091.pdf
- World Bank (2010). *World Development Report 2010*. New York: The World Bank. <http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTWDRS/0,,contentMDK:23062354~pagePK:478093~piPK:477627~theSitePK:477624,00.html>

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9th International Conference on the Arts in Society, Rome, Italy

14th International Conference on Application of Concurrency to System Design, Tunis, Tunisia

The background of the entire page is a photograph of two traditional African woven baskets, likely made of palm fronds or similar natural fibers, hanging from a dark wooden beam. The baskets are intricately woven and have a conical shape. The lighting is soft, highlighting the texture of the weaving. The text is overlaid on this image.

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