

Upscaling Ecotourism in Kisumu City and Its Environs: Local Community Perspective

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ABSTRACT

Kenya's quest to be among the top ten long-haul tourist destinations globally require strategic focus as envisaged in Kenya's Vision 2030. Ecotourism is emerging as an alternative development path that can enhance environmental conservation, promote preservation of cultural heritage as well as provide an alternative source of sustainable livelihood. Alternative livelihood in ecotourism provides a sustainable development path for Kisumu City and its environs. However, sustainability in ecotourism transformation is a concern; that is how to motivate the local community to participate in this venture? This study discerns these significant sustainability factors as perceived by the local community. The objective of the study was to discern the local community's perception on significant sustainability factors for ecotourism transformation. And the research question: What is the local community's perception on significant sustainability factors for ecotourism transformation? This research design used both qualitative and quantitative research. The qualitative research design focused on site specific analysis of ecotourism sites of Dunga (Kisumu), Miyandhe (Bondo) and Seka (Kendu Bay). The quantitative research entailed data collection administered through questionnaire in eco-tourism outlets represented by 10 Beach Management Units (BMU) selected through purposive sampling. Principal Component Analysis was used to discern the significant sustainability factors for ecotourism transformation. A total of 28 items converted into variables were subjected against 326 respondents in the PCA analysis. The results indicated a total of seven (7) significant sustainability factors: First factor was willingness to participate in ecotourism ventures; second Factor was upscale ecotourism initiatives in the neighbourhood; third factor was women and youth empowerment; fourth factor was youth and women employment in the neighbourhood; fifth Factor: Natural Artifact factor; sixth factor was nature and culture under threat; and seventh factor was sex and importance of culture. The paper concludes that local community willingness to participate must be up-held through direct engagement and prioritization of critical issues and recommend that ecotourism prototype will facilitate public engagement and the empowering process. Culture-based ecotourism venture was rated highly by the local community and the blend should achieve quality product that is acceptable to the local community and the visitor.

Key Words: Up scaling, Ecotourism, Sustainability, Perception, Local Community, Kisumu City

1.0 INTRODUCTION

Tourism industry is a major earner of foreign exchange and contributes about 10 per cent of Gross Domestic Product (GDP) and 9 per cent of formal employment to the Republic of Kenya at the national level and in 2006 brought in US\$800 million (Republic of Kenya, 2010a). Tourism is reported to be the fastest growing sector (UNCTAD, 2010) and between 2004 and 2006, visitors' number grew by 22 per cent each year; volume of international arrivals rose by 23.9% from 1.2 million visitors in 2008 to 1.5 million in 2009 (Republic of Kenya, 2010a). Tourism remains the hope of the future for many developing countries given that agriculture which has been the mainstay economic activity is facing adverse effects of climate change (Republic of Kenya, 2010b). Tourism sector is recognized to provide sector integration in development, namely; environment, agriculture, manufacturing, wildlife, entertainment, and handicraft; and has potential for moving the economy up the value chain, as well as promote environmental conservation, and generate employment and wealth (Republic of Kenya, 2010b).

In the period 2007-2008 Kenya faced a crisis following the disputed presidential elections, and the revenues of tourism declined. Despite this crisis, Kenya won the Best Leisure Destination award at the World Travel Fair in

Shanghai, China, in April 2008. The award testified that Kenya has a unique world acclaimed tourism product, a factor that enhanced the country's profile as a leading tourist destination. The Lake Victoria Region's vast potential has not been fully realized. Touristic sceneries of the Lake Victoria Beaches around Kisumu City and its environs: Dunga, Paga, Usenge, Wich Lum, Kendu Bay, Kit Mikayi among others; have not been exploited to support ecotourism transformation in the region (Hayombe, 2011).

Kenya's quest to be among the top ten long-haul tourist destinations globally require strategic focus as envisaged in Kenya's Vision 2030. Attaining this status would involve addressing constraints facing the tourist sector and upscale in 'niche' products such as culture and nature artifacts in ecotourism transformation. This strategy will encourage domestic and regional tourism in order to even out fluctuations occasioned by the decline of visitors during low seasons (Republic of Kenya, 2010b & 2007). Ecotourism is emerging as an alternative development path that can enhance environmental conservation, promote preservation of cultural heritage as well as provide an alternative source of sustainable livelihood. This noble idea has received albeit inadequate local participation in Kisumu City and Its environs, hence inability to mobilize the community to take initiatives to innovate and create sustainable livelihood in ecotourism ventures.

Environmental resources are steady declining, fish resources, in the Lake Victoria Basin with expansion of human settlements and sustainable livelihood is no longer guaranteed (LVEMP, 2005; NEMA, 2006; Kairu, 2001). Alternative livelihood in ecotourism provides a sustainable development path for the region. However, sustainability in ecotourism transformation is a concern; that is how to motivate the local community to participate in this venture? This study tries to discern these significant sustainability factors as perceived by the local community. The local community's perceptions on significant sustainability factors for ecotourism transformation are critical at the initiation of the ecotourism project. The perception would guide future public engagement and direction of planning for ecotourism destinations. Local knowledge on conservation of environment, culture identity and the benefits are likely to enhance ecotourism knowledge and promote local participation in eco-ventures (Mayaka & Prasad, 2012; Zhang, 2012; Angela, 2009; Honey, 2008). The critical questions are: what is the perception of local community on environmental awareness for ecotourism transformation? And what is the perception of local community on the cultural awareness for ecotourism transformation? It is envisaged that local participation can be enhanced if gender concerns are considered in ecotourism transformation especially where the role of women and youth are critical in community empowerment. This paper addresses the question of: What is the local community's perception on significant sustainability factors for ecotourism transformation?

This paper reckons that community support system to promote local participation in environmental conservation and preservation of cultural heritage is prerequisite for ecotourism transformation and sustainable livelihood.

2.0 LITERATURE REVIEW

2.1 Ecotourism Background

The World Watch Institute (WWI), reports that the ecotourism sector is growing by 20% due to the growing environmental and social concerns, while growth for the global tourism sector as a whole was 7.5% and Africa is keen on this evolution from nature tourism to ecotourism and eco-ventures (Debere, 2002). Community tourism projects have been launched using state-of-the-art environmental technologies, and initiatives helping local communities to benefit from their natural artifacts, as 'green revolution' in Kenya; similar experiments are in Central America (Goma, 2007). The International Year of Ecotourism African Conference, 2002 reported that Kenya's ecotourism industry drew international attention in 1997, when the now-famous community lodge at Il' Ngwesi was a runner-up in British Airways' prestigious Tourism for Tomorrow awards; later followed by Tortilis Camp in Amboseli and Ol Donyo Wuas in the Chyulu Hills being honoured; and Il' Ngwesi is now a model for community projects in Africa (Goma, 2007).

2.2 Ecotourism and Sustainable Livelihood

World Tourism Organisation (WTO) defined international tourist as anyone visiting a country, other than that which is his usual residence, for more than 24 hours; this include students, international excursionist, an individual travelling for pleasure on study tours (Smith, 1995). Ecotourism', is not only about saving fragile areas, but about helping the communities that live in them - the original and long-term custodians of the world's

wilderness to benefit from their preservation (Loehr, 2002). Responsible tourism practices within the tourism industry entails encouraging the adoption of best practices in the use of tourism resources, working with local communities and managing wastes and emissions. According to The International Ecotourism Society (TIES), ecotourism is, responsible travel to natural areas that conserves the environment and improves the well-being of local people' and relies on minimizing tourism's impact on its surroundings; environment, community-oriented and promoting the culture (Goma, 2007; Loehr, 2002; Johnstone, 1999). This was summarized as ecotourism is responsible travelling to natural places that conserve the environment, preserve the local culture and promotes the welfare of the local community.

Eco-tourism is specific, delivered by small-scale enterprises involving responsible behavior, contributes to the conservation of biodiversity, lowest possible consumption of non-renewable resources and is a learning experience (Goma, 2007; Debere, 2002). The link of ecotourism and sustainable livelihood is the responsibility of ecotourism operators that stretches far beyond their physical impact on the land: the 'real ecotourism' must involve seven vital and interrelated characteristics: travel to nature destinations; minimizing negative environmental impact; building environmental awareness; direct financial benefits for conservation; financial benefits and empowerment for local people; the respect of local culture; and the support of human rights and democracy. Ecotourism scorecard has been developed to support developing countries with well-established tourism industries; Tanzania and Zanzibar got mixed reviews; Kenya scored lowest though seen as global model for the ecotourism industry (Honey, 2008; Goma, 2007; Loehr, 2002).

Types of ecotourism practiced by communities in Kenya have been categorized and denotes all types of tourism, whether based on natural or human resource combined to contribute to sustainable livelihood (Goma, 2007) as: a) Nature Tourism: tourism supported by natural attractions: destinations; wildlife flora and fauna, beautiful landscape, geographical features; b) Rural Tourism: destinations areas perceived to be less influenced by urbanization and its impact, unsophisticated community lifestyle, low industrialization, and tourists participate in rural lifestyle (Western Kenya Circuit); c) agricultural Tourism: offering agriculture based attractions, namely; plantations, farm estates (Mau Complex, Kericho, Rift Valley); d) Cultural Tourism: visits to local communities; namely, ancestral traditions, cultural ways attracted by peoples' lifestyle, their cultural practices; passage and ceremonies: participation in dance, music, festivals, buying souvenirs and artifacts and photography; namely, Masai and Samburu. This classification, is a clear indication that ecotourism as a conservation strategy, a venture and an opportunity to leverage nature and cultural heritage has not taken root in most parts of the Lake Victoria basin. This gap calls for engaging the local institutions and communities to actively support systems that can transform ecotourism in the region.

2.3 Ecotourism Benefits to the Community

Ecotourism activities should aim to: Promote communication and resource network for visitors residents, for operation, resource managers, planners, educators, government agencies and other professional; Promote a visitor industry that is environmentally and culturally sensitive; Promote community-based sustainable economic development and benefits to local residents; Enhance visitors experience through effective interpretation; Promote resource conservation; Encourage repeat visitations, and longer stays; Provide confirming education and professional development opportunities (Weilin & Svetlana, 2012; Angela, 2009; Honey, 2008; Goma, 2007).

A Community-based trans-boundary ecotourism in the Heart of Borneo in the Kelabit Highlands of Malaysia and the Kerayan Highlands of Indonesia revealed that gathering, collating, and analyzing the findings of this research with local community members revealed that the main issues that need to be addressed include: (1) protection of forests and cultural sites as foci for ecotourism; (2) improved communication between villages, guides, and lodges; (3) increased promotion of trans-boundary trekking options; (4) village-level preparation for more tourists and more equitable distribution of income generated from ecotourism; (5) careful improvements in tourism infrastructure; (6) the negotiation of legal complications arising from international border crossings by tourists and guides; and (7) the maintenance of local control over ecotourism management and of the trajectory of future tourism development in the Heart of Borneo (Hitchner, Apu, Tarawe, Aran, & Ellyas, 2009).

Gichohi (2007) reports on the key questions on the Mara Debate: is how to improve the Mara Ecosystem for the Long-term well-being and interest of the present and future generations? Ensure there is sustainable income and livelihood for local communities. The Mara Debate summarized the following: a) the need for an autonomous body to advocate and help the community to get a leasehold on the land; b) the stakeholders to focus on the livelihood of the local people and to maximize the linkages between the community and operators; c) Emphasis

on how local people can benefit from the tourism activities d) Stakeholders to come up with joint venture partnership guidelines. Stakeholders that subscribe to majority of community institutions need strengthening through capacity building. The Mara debate raises issues to be addressed in ecotourism transformation for sustainable livelihood; as ensuring local participation and benefit sharing.

Several conservation organizations are helping communities around Kenya to find more reasons to preserve their natural environments. Facilitated by organisations like African Conservation Centre and the African Wildlife Foundation, greater donor support is programmed for natural resource management and conservation projects far off the traditional tourist track (Goma, 2007). Jokinda Women Group, composed of 25 women and 8 men, is embracing ecotourism: main activities include managing a tree nursery and making of handicrafts such as baskets for sale; eco-venture to raise incomes in from cottages and tents for accommodation and organise boat racing competition on Lake Victoria (Goma, 2007).

The community outreach program is a key area to integrate community-based tourism into mainstream tourism; to build capacity for local people to effectively engage with tourism issues; to explore ideas for tourism involvement with a goal for equitable distribution of the benefits accruing from these enterprises (Goma, 2007). Many community-based tourism enterprises exist in Kenya, and are at various stages of development. However, in the Lake Victoria basin mobilization of communities to engage in conservation and tourism enterprise is still inadequate compared to other parts of the East Africa Region. This paper explores the significant sustainability factors for ecotourism transformation in Kisumu City and Its environs from a local community perspective.

Tiffany (2011) analyses sustainable ecotourism in Amozonia by evaluating six sites and using the six the criteria of: financial support, employment for residents, local attitudes towards conservation, local attitudes towards tourism, ecological status of area and protection of area and conclude that this area had a great potential. However, such kind of study has not been carried out in the study area whose potential is yet to be realized. Thematic areas for sustainability observed in this study, from a local community perspective, were knowledge of ecotourism, nature artifacts, cultural artifacts, youth participation, women participation and level of ecotourism initiatives.

2.4 OBJECTIVES

1. To discern the local community's perception on significant sustainability factors for ecotourism transformation
Research Questions: What is the local community's perception on significant sustainability factors for ecotourism transformation?

3.0 METHODOLOGY

This research design used both qualitative and quantitative research. The qualitative research design focused on site specific analysis of ecotourism sites, where the local community and governmental representation comprised both vertical and horizontal integration in participation. This design focussed on the Project Sites of Dunga (Kisumu), Miyandhe (Bondo) and Seka (Kendu Bay). This allowed generation of data for participatory environmental design of eco-tourism sites as growth points to propel ecotourism transformation and upscale rural empowerment with the urban-rural development continuum process for the City Council of Kisumu and its environs.

The quantitative research entailed data collection administered through questionnaire in eco-tourism outlets represented by 10 Beach Management Units (BMU) selected through purposive sampling. BMU were selected as ecotourism sites since they have a governing structure under the Fisheries Act 2006 that integrates both Lake front development and exploitation of lake resources in the region. BMU representations include fishermen, businessmen, boat crew, business women (fishmongers) and community representatives. Assembly of BMU members were conducted where questionnaire were administered to a total of 326 respondents. The BMU assembly is gender responsive comprising male and female with a youth representation. The BMU usually comprise of 50 to 200 members in the Assembly depending on the fishing activity at the beach (District Fisheries Officer). The stratified random sampling was used to select the respondent where 30% of both male and female present at the assembly meeting was selected. The BMU selected were clustered around 3 research project sites; namely; Cluster One: Dunga, Ngege, Ogal, Paga and Usoma Beaches in Kisumu City; Cluster Two: Kendu Bay,

Kotieno, Rambira and Seka Beaches around Kendu Town; Cluster Three: Port South Beach (Miyandhe) and Uyawi Beaches around Bondo Town (Table 3.1).

The Questionnaire administered had three main components, namely; ecotourism concept, natural artifacts, cultural artifacts, women and youth participation and up-scaling ecotourism initiatives as significant variables for ecotourism transformation. The questionnaire was developed based on existing literature on significant sustainability factors that would lead to the local community's participation in the ecotourism transformation process (Zhang and Lei, 2012; Honey, 2008; Goma, 2007). A Five Likert Scale was used to rate perception of respondents where: Strongly Agree (5), Agree (4), Dont not know (3), Disagree (2) and Strongly Disagree (1).

Table 3.1 Sample Design for Selected Beach Management Units by Respondents and Gender

Beach Management Units (BMU) & Assembly members present	Number of Respondents		Gender Representation		Location (Cluster)
			Male	Female	
	No	%			
Dunga (96)	32	9.58	14	8	Kisumu City
Usoma (90)	30	9.17	21	9	Kisumu City
Ngege (102)	34	10.40	30	4	Kisumu City
Ogal (135)	45	13.80	29	16	Kisumu City
Paga (162)	54	16.51	40	14	Kisumu City
Kendu Bay (69)	23	7.03	11	12	Kendu Bay Town
Kotieno (99)	33	10.10	19	12	Kendu Bay Town
Rambira (102)	34	10.40	20	14	Kendu Bay Town
Seka (54)	18	5.50	13	5	Kendu Bay Town
Port South Bay (75)	25	7.65	18	7	Bondo Town
Uyawi (Pilot Survey)					Bondo Town (Pilot)
TOTAL	326				

3.1 Principal Component Analysis (PCA)

Principal Component Analysis was used to discern the significant sustainability factors for ecotourism transformation. A total of 28 items converted into variables were subjected against 326 respondents in the PCA analysis in order derive significant factors for ecotourism transformation from a local community perceptive. Eigen values of 5 and more is considered significant a factor that explains the common variance (Kothari, 2011). This study used all the factors which had Eigen Value (>1.0) as significant sustainability factors according to Kaiser's criterion (Kothari, 2011).

3.2 Reliability Test

Uyawi Beach in Bondo Cluster was used as a pilot beach to test reliability items in the questionnaire using Gronbach's Reliability Statistics. The components of nature artifacts, cultural artifacts and women participation, youth participation, and up-scaling ecotourism initiatives were included in the questionnaire.

3.3 Content Validity Test

The Content validity test was done by a team of researchers led by the Principal Researcher and the items were sanctioned as meaningful to the study in exploring the significant sustainability factors that can influence ecotourism transformation in Kisumu City and its environs.

4.0 RESULTS

Cronbach's Reliability Statistics was represented by nature artifacts (.731), culture artifacts (.863), and women-youth participation (.725) and was > 0.70. The items in the questionnaire were reliable and can be used to generalize information on ecotourism transformation and local participation in the study area.

4.1 Principal Component Analysis (PCA)

Principal Component Analysis identified Seven (7) significant sustainability factors for ecotourism transformation as perceived by the local community (Table 4.1). The factors were willingness to participate in ecotourism ventures as factor one with Eigen value (5.907), 24%; upscale ecotourism initiatives as factor two (2.033), 8.13%; women-youth empowerment as factor three (1.47), 5.9%; women and youth employment as factor four (1.29), 5.2%, nature artifact as factor five (1.2), 4.8%, threats to nature and culture as factor six (1.1), 4.3% and sex and culture as seventh factor (1.06), 4.2% the variance loadings respectively. The most significant factor is the willingness to participate in ecotourism ventures (Eigen value > 5) (Kothari, 2011).

Table 4.1 Sustainability factors for Ecotourism Transformation
First Factor: Willingness to participate in ecotourism ventures

CODE	Variables	Communalities	Loadings
CA11	Enjoy cultural artifacts in your neighbourhood	.745	.580
CA15	Local community benefit from cultural-ecotourism ventures	.681	.543
Y 18	Youth can be employed in ecotourism ventures	.646	.605
CA12	Witness other people enjoy cultural artifacts	.644	.452
Y20	Youth willing to participate in ecotourism ventures	.555	.494
NA7	Local community benefit from nature-ecotourism ventures	.504	.394
CA14	Ecotourism help in protecting & conserving culture artifacts	.493	.466
W24	Women willing to participate ecotourism ventures	.460	.474
W22	Women can be employed in ecotourism ventures	.413	.514

Second Factor: Upscale ecotourism initiatives in the neighbourhood

CODE	Variables	Communalities	Loadings
W27	The need to upscale ecotourism initiatives in neighbourhood	.789	.697
W26	Initiatives awareness in environmental, culture, conservation	.652	.582
W28	Capacity building-training: ecotourism entrepreneurship	.627	.538
W25	The need to promote ecotourism	.519	.484

Third Factor: Women and Youth Empowerment

CODE	Variables	Communalities	Loadings
W23	Majority of Women are empowered	.764	.690
Y19	Majority of youth are empowered	.736	.623

Fourth Factor: Youth and Women Employment in the neighbourhood

CODE	Variables	Communalities	Loadings
Y17	Majority of youth employed in neighbourhood	.718	.617
W21	Majority of women employed in neighbourhood	.672	.672
NA3	Sometime enjoy natural environment	.591	.602

Fifth Factor: Natural Artifact factor

CODE	Variables	Communalities	Loadings
NA6	Ecotourism significance in protecting/nature	.688	.602
NA2	Nature as important resource that support ecotourism	.693	.525

Sixth Factor: Nature and Culture under threat

CODE	Variables	Communalities	Loadings
NA5	Nature under threat from human activities	.647	.572
NA4	Witness people enjoy nature	.601	.552
CA13	Culture under threat and being forgotten	.587	.609

Seventh Factor: Sex and importance of culture

CODE	Variables	Communalities	Loadings
SEX	Sex	.674	.590
CA10	Culture important resource for ecotourism	.558	.571

5.0 DISCUSSION

This section provides an in depth discussion of significant sustainability factors for ecotourism transformation from a local community perspective and explains three structural models that can be replicated in various beach management units and ecotourism sites for participatory environmental design process.

5.1 Factor One: Willingness to Participate in Ecotourism Ventures

The local community willingness to participate in ecotourism ventures is the most significant sustainability factor in ecotourism transformation. Promoting ecotourism ventures in the neighbourhood would create positive motivation for community participation. The Local community agreed (34%) and strongly agreed (55.8%) that they enjoy cultural artifacts and was rated high (.745) is an indication of likeability and the willingness to conserve and protect cultural ecotourism resource (Zhang & Lei, 2012). Benefits to local community accruing from cultural-ecotourism ventures were rated high (.681) with 38% and 52.5% of respondents agree and strongly agree respectively. The community willingness to participate is underpinned by the likelihood of getting immediate tangible benefits (Republic of Kenya, 2010b; Honey, 2008; Okello, Wishitemi & Mwizi, 2001).

Youths employment in ecotourism ventures was highly rated (.646) with 31.6% and 59.6% of respondents agree and strongly agree respectively. Youth employment is a concern in the neighbourhood as majority are employed in the declining fishing industry, hence any alternative livelihood is an opportunity. This opportunity is a positive motivation and enhances the youths' willingness to participate in ecotourism ventures. Witnessing other people enjoy cultural artifacts was rated high (.644) with 34% and 55.8% of respondents agree and strongly agree respectively. Cultural artifacts are still revered among the Luo community with rich heritage of *Ohangla*, *Nyatiti* and *Rumba* Music are discernible among Kenyan Communities and are vital ecotourism resources (Okumba, 2004; Herbich, 2002; Odede, 2000; Ogot, 1967).

The Youth willingness to participate in ecotourism venture was moderately rated (.555) with 32.2% and 60.1% agree and strongly agree respectively. This intention of the youth to participate can be translated to reality if positive motivators to the ecotourism ventures are initiated (Zhang & Lei, 2012; Page & Dowling, 2002). Local community can benefit from nature-ecotourism ventures was moderately rated (.504) with 27.9% and 63.5% of respondents agree and strongly agree respectively. Nature artifacts compared to cultural artifacts was moderately rated to have benefits perhaps due to limited natural habitat areas with big games and the rich cultural heritage that community identify with than natural artifacts. Nature artifacts have their own dangers: floods, threats from wild animals and inability to tame them (Huho & Angawa, 2008). Cultural artifacts are human creation over time and can be controlled and manipulated. Ecotourism ventures can help in protecting and conserving cultural artifacts was moderately rated (.504) with 29.8% and 56% of respondents agree and strongly agree respectively. Local community perception on cultural artifacts as important resources (goods) that support ecotourism was highly ranked with 52.5% and 38.0% strongly agreed and agreed respectively. It was reported that ecotourism may help in ecotourism ventures within the neighbourhood with 56.4% and 29.4% strongly agreed and agreed respectively.

Willingness to participate in ecotourism ventures has positive motivation in protecting and conserving the cultural artifacts for posterity and as products for business (Zhang & Lei, 2012; Honey, 2008). Women willingness to participate in ecotourism venture was moderately rated (.493) with 33.4% and 57.7% of respondents agree and strongly agree respectively. Women willingness to participate was ranked lower than the youths in ecotourism ventures an indication that sex stereotyping is still a reality. Gender responsive planning is an emerging concern in the sustainability debate (Fainstein & Campbell, 2012; UN-HABITAT, 2009). This was supported by women employment in ecotourism that was moderately rated (.413) with 33.1% agree and 55.8 strongly agree. Women employment is perceived to belong to subsistence and not cash economy.

Culture artifacts were identified during a focus group discussion as appropriate products that can be branded for ecotourism ventures; various authors have documented the same (Okumba, 2004; Herbich, 2002; Odede, 2000; Ogot, 1967). These products include music such as folk songs and traditional instruments like *ohangla*, *nyatiti*, *kinanda* and *orutu*. Dances such as Luo Rumba, and traditional folk dances like *goyo otenga*, *miend owalo*, *miend dada*, *ohangla* dance were recognised to have unique cultural identity. Drama was also identified as cultural product: as plays, poetry, tongue twisters, humour and culture talk. Traditional housing and architecture provides historical cultural imprint, hence traditional design concepts, building materials and construction were equally identified: *as duol*, *od mikaye*, *od wuoyi*, *simba*. Rich cultures include food and drinks identified by the local

community as cultural crops (*osuga, apoth, onyulo, aruda, obwolo, dek, akeyo, awayo, susa, mito, anyuong, atipa,*); traditional beer (*oseke, otia, busa, mbare, pelele*); traditional cooking (*obambla, aliya, kuon arudo, atururu, origa, ogira*); traditional dress (*afuongo, owalo, kandho, opien*); traditional trade (black smith, carpentry: *then, kom nyaluo, yie, ngango*, pottery: *agulu, mbiru, dak, ohigla*); Pre-historic sites (*Rusinga Island, Got Ramogi, Wadh Lango, Kisumu historical ruins, Fort Ternan, Thimlich Ohinga and Gogo Falls, Simbi Nyaima, Lwanda Magere, Nyamgondho, Abundu, Kit Mikayi*).

5.2 Factor Two: Upscale Ecotourism Initiatives in the Neighbourhood

The need to upscale ecotourism initiatives in the neighborhood was rated high (.789) as the second sustainability factor for ecotourism transformation with 28.2% and 61.3% of respondents agree and strongly agree respectively. Ecotourism initiatives through awareness creation on significance of environment and culture conservation was rated high (.652) with 35.6% and 49.4% of respondents agree and strongly agree respectively. Ecotourism initiatives that are community based are limited as drivers to ecotourism transformation in the neighbourhood. Most of these areas are not designated as tourist destinations and effort by respective agencies such as Ministry of Tourism, Kenya Tourism Board and Kenya Wild Life Services are limited. Most strategies and initiatives are considered ad hoc and fragmented with low performance (Mayaka & Prashad, 2012). Strategic planning is a requisite to initiate community action towards ecotourism; while destination branding through image creation to pull and retain visitation is critical (Kozak & Martin, 2012; Laverack & Thangphet, 2007). Capacity building on training and ecotourism entrepreneurship initiatives were rated high (.627) with 27.6% and 63.8% of respondents agree and strongly agree respectively. Community empowerment through capacity building in enhancing knowledge of environment and culture identity among all gender; the youth, women, men, and old folk is significant for initiation, upsacing participation and realising accrued benefit (Zhang & Lei, 2012; Honey, 2008; Mascardo, 2008). The need to promote ecotourism was rated moderately (.519), compared to specific initiatives which were rated high, with 34.7% and 45.1% agree and strongly agree respectively. The local community are aware of specific initiatives that are significant in ecotourism transformation, namely; training on culture and environment knowledge, promoting enterpreneurial skills and initiating benefit sharing (Republic of Kenya, 2010b; Honey, 2008). However, the critical question is why have they not been motivated to participate in ecotourism ventures despite their willingness and having good intention? The institutions with the mandate to promote ecotourism may not have realised the potential of ecotourism in these neighbourhood or they have attempted with little success. Lack of any success story and best practice to emulate negates knowledge generation, attitude change and positive motivation. Creating ecotourism ventures, small and medium-sized operations through participatory design of ecotourism prototypes, as explained in factor one may lead to success stories as positive motivating factors for ecotourism transformation (Mastura & Siti, 2012).

5.3 Third Factor: Women and Youth Empowerment

Women (.764) and youth (.736) empowerment were rated as the third significant sustainability factor for ecotourism transformation. Institutional arrangements for sustainability require strengthening local participation in decision making, where ownership and power structure guarantees benefits to the destinations (Mayaka & Prashad, 2012). Women in the neighbourhood had been empowered to participate in ecotourism was rated high (.764) with 26.4% and 40.8% of respondents agree and strongly agree respectively. Women empowerment is significant for ecotourism transformation where the accruing benefits should, provide alternative livelihood and increase multiplier economic effect to leverage women from poverty situation. Empowerment for women, majority of the rural population, positively improves the welfare of the entire community; guarantees sustainability of the intended project (Neto, 2003). Youth in the neighbourhood have been empowered (.736) was rated high with 26.4% and 39.3% of respondents agree and strongly agree respectively. Youth empowerment is significant a sustainability factor as guarantees future engagement of wider population that can alleviate poverty and spur socio-economic growth (Honey, 2008; Goma, 2007).

5.4 Fourth Factor: Youth and Women Employment in the Neighbourhood

Youth (.718) and Women (.672) employment were rated as the fourth significant sustainability factor for ecotourism transformation. Majority of youth are employed in the neighbourhood was rated high (.718) with 26.7% and 46.3% of respondents agree and strongly agree respectively. Most youth in the neighbourhood are employed in the declining fishing industry as boat crew, fishermen, and fish mongers; implications are that the source of livelihood is not guaranteed. Sustainability of economic livelihood in fishing industry require employment of the youth to optimize benefit sharing, reasonable labour hours against optimum production and returns from the trade (EPZA, 2005).

5.5 Fifth Factor: Nature Artifacts

Nature artifacts was rated as the fifth significant sustainability factor for ecotourism transformation. Nature artifacts are important resources that support ecotourism (.693) with 26.1% and 67.5% of respondents agree and strongly agree respectively. Ecotourism may help in protecting and conserving the natural artifact was rated high (.688) with 27.9% and 63.5% respondents agree and strongly agree respectively. Kisumu City and its environs is located within a natural environment that include the Lake Victoria Water front with sand beaches, wetlands with unique flora and fauna; which can be transformed as unique ecotourism destinations (Hayombe, 2011; Maitland, 2010; Falted, Rhedin & Wanga, 2012). Kenya's tourism sector is recognized to have comparative advantage of natural resource endowment that underpins ecotourism (Mayaka & Prasad, 2012). Most respondents (96%) agreed that ecotourism is defined as responsible travel to natural places that conserve environment, preserve the local culture and promotes the welfare of the local community. The local community agreed that their natural environment can be transformed as ecotourism destinations and that they can benefit from ecotourism ventures (91.4). Likeability concept is considered a significant factor in nature conservation, protection and the driver to participate in ecotourism ventures (Zhang & Lei, 2012; Cary, 2002). Most respondents agreed that they enjoy the surrounding nature artifacts (93.8). This is a significant factor since their participation in conservation and utilization of nature artifacts for ecotourism transformation can be guaranteed.

This study identified several nature artifacts that can be branded during the focus group discussion with the local community (Figure 6.1). The Lake was identified as a unique destination for sight seeing, swimming, water sport and fishing expeditions. The wetlands were identified as destinations for nature trails, game hunting, and collection of herbal medicine and observations of rare plant communities. Bird watching, hunting and trapping was discerned as important activities which could pull ecotourism visitors. Forest products were recognized as destination for nature trails, hunting and trapping of games, observation of rare plant communities and collection of herbal medicine. Fishing as an activity was identified as a product with many fish species that can attract tourist for sport fishing. Games viewing and hunting were recognized as attractors with animals like crocodiles, hippopotamus and rare sitatunga antelope as common nature artifacts (Falted, Rhedin & Wanga, 2012).

5.6 Sixth Factor: Nature and Culture under threat from Human Activities

Nature and culture under threat was rated as the sixth significant sustainability factor for ecotourism promotion. Some of the natural artifacts are under threat from human activities in the neighbourhood were rated high (.647) with 29.4% and 51.8% of respondents agree and strongly agree respectively. Ecotourism sustainability entirely depends on nature artifacts, most respondents (96%) agreed that ecotourism is defined as responsible travel to natural places that conserve environment, preserve the local culture and promotes the welfare of the local community (Republic of Kenya, 2010b; Honey, 2008). Having witnessed other people come to enjoy the natural environment in the neighbourhood was rated high (.601) with 26.7% and 62% of respondents agree and strongly agree respectively. This indicates how much the nature artifacts need to be protected and conserved. Some of these cultural artifacts are under threat and are being forgotten was rated high (.587) with 35.3% and 48.2% of respondents agree and strongly agree respectively. Ecotourism transformation success has to include cultural artifacts as significant factors that require protection and conservation.

5.7 Seven Factor: Sex-culture

Sex and culture was rated as the seventh significant sustainability factor for ecotourism transformation. Sex was rated high (.674) with 65.3% and 34.7% respondent representing as a gender balance. Cultural artifacts are important resources (goods) that support ecotourism was moderately rated (.558) with 38% and 52.5% of respondents agree and strongly agree respectively. This factor was rated last as significant and may not have critical influence, however, the threats to nature and culture as resources is a constraint to ecotourism transformation. All genders: the old, young, male or female are important stakeholders as members of the local community that can be transformed as actors in the ecotourism transformation. However, any discrimination of one gender may negate participation in ecotourism ventures. Aramanzan (2003) reports the belief that men and women even if in the same community or household live different lives, have to be approached by different strategies.

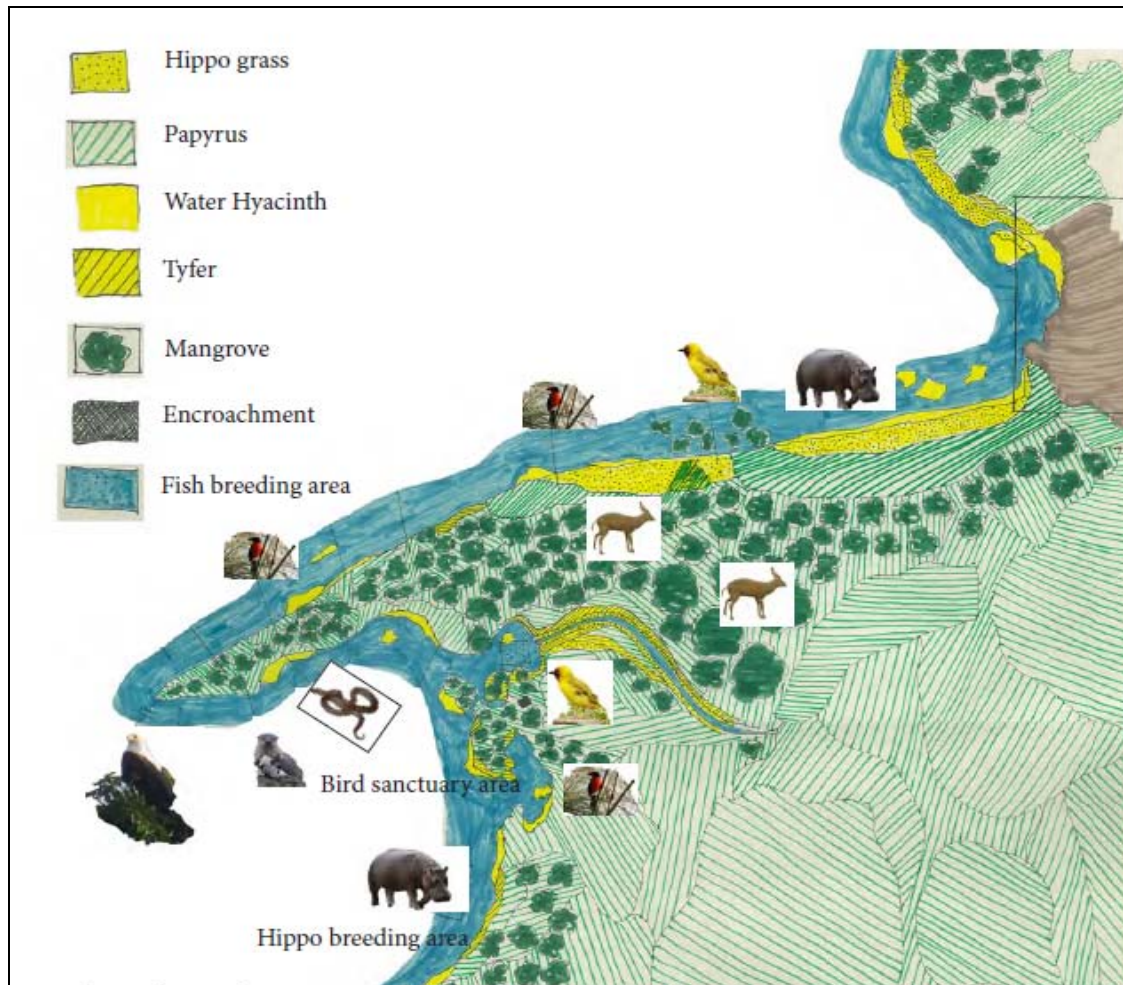


Figure 6.1: Dunga Wetlands Ecotourism Resources
 Source: Falted, Rhedin & Wanga (2012).

6.0 CONCLUSION AND RECOMMENDATIONS

This study identified seven significant sustainability factors for ecotourism transformation as perceived by the local community. There was one significant sustainability factor according Principal Component Analysis: the willingness to participate in ecotourism venture. This explains the local community intention and readiness to engage in ecotourism transformation. This participation is linked on perceived immediate direct benefits from these eco-ventures such as project initiatives, employment, immediate business opportunities, empowerment, capacity building. The paper concludes that local community willingness to participate must be up-held through direct engagement and prioritization of critical issues that are embedded in ecotourism transformation. Recommendation is that ecotourism prototype will act as a precursor for further public engagement, through demonstration and up-scaling of the empowering process. The paper recognized that culture-based ecotourism venture was rated highly by the local community. This would require that ecotourism ventures blend culture and nature artifacts to achieve quality mix that are acceptable to the local community. A major observation was that both youth and women empowerment is a significant sustainability factor, with no prejudice to employment in this alternative venture to fishing which has been a source of livelihood. The paper further posits that ecotourism venture is a viable programme in the study area. The various cluster studied: Kisumu, Kendu Bay and Bondo areas have potentials to offer similar and unique cultural and natural products; thus important synergy within the Western tourist circuit. This tourist circuit can be transformed through lake transport, road, and air transport as a

nexus of beach to island hopping adventure. The Government initiative to fast tract opening of these potential ecotourism sites would offer economic multiplier effects to

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REFERENCES

- Angela W. K (2009). Lamu: is sustainable cultural tourism possible. *Kenya Past and Present*, 38, 43-49.
- Aramanzan, M. (2003). Commercialisation and gender roles among Lake Victoria shore fishing communities of Uganda. *Research Report, Under the 14th OSSREA Research Competition on Gender Issues*. Retrieved on July 4, 2012 from www.ossrea.net.
- Debere, S. (2002, Summer). *Ecotourism in Africa. Travel Africa Magazine*. Retrieved on September 24, 2012 from www.eco-resorts.com.
- Export Processing Zone Authority (EPZA, 2005). *Fishing Industry in Kenya*. Nairobi: EPZA.
- Faltd, T., Rhedin, J., & Wang, J. (2012). *Dunga Beach and Wetlands, Reality Studio 2012 Kisumu*. Unpublished report on Design for Sustainable Development. Gothenburg: Chalmers University of Technology.
- Fainstein, S. S., and Campbell, S. (2012). Social justice: race, gender, class. In S.S. Fainstein & S. Campbell (3rd ed.), *Readings in Planning Theory* (pp 317-319). West Sussex: Wiley-Blackwell.
- Gichohi, H. (2007). *Debate Key Questions in the Mara in the Debate*. Retrieved on June 6, 2012 from www.esok.org.
- Goma, J.K., (2007). *National Inventory of Ecotourism Projects in Kenya, Ford Foundation Office for Eastern Africa (2003-2005)*. Nairobi: Ecotourism Society of Kenya.
- Hayombe, P.O. (2011). *Environmental implications within a city-lake interface: Planning and management of Kisumu Municipality*. Germany: Lap Lambert Academic Publishing.
- Herbich, I. (2002). The Luo. In C. Ember, M., Ember & I. Skoggard (Eds.). *Encyclopedia of World Cultures Supplement* (pp. 189–194). New York: Macmillan.
- Hitchner, S. L., Apu, L. F., Tarawe, L., Aran, S. G. S. N. & Ellyas, Y. (2009). Community-based transboundary ecotourism in the Heart of Borneo: a case study of the Kelabit Highlands of Malaysia and the Kerayan Highlands of Indonesia. *Journal of Ecotourism*, 8,2, 193-213.
- Honey, M. (2008). *Ecotourism and sustainable development: Who own paradise? 2nded.* Washington, DC: Island Press.
- Huho, J.M., & Ang'awa, F.P. (2008). Effects of floods on crop farming: A case study of Budalang'i Division, Kenya. *International Journal of Disaster Management and Risk Reduction*,1, 2, 94-102.
- Johnstone, R. (1999). The Greening and Greenwashing of Kenya's Tourism *Ecoforum, Shorttrains*. Retrieved on September 24, 2012 from www.eco-resorts/archives/media.

- Kairu, J. K. (2001). Wetland use and impact on Lake Victoria, Kenya Region. *Lakes & Reservoirs and Management*, 6, 117-125.
- Kozak, M., Martin, D. (2012). Tourism life cycle and sustainability analysis: Profit-focused strategies for mature destinations. *Elsevier, Tourism Management* 33, 188-194.
- Laverack, G. & Thangphet, S. (2007). Building Community Capacity for Locally Managed Ecotourism in Northern Thailand. *Community Development Journal*, 44, 2, 172-185.
- Lake Victoria Environmental Management Project (LVEMP) (2005). *Lake victoria environment report on water quality and ecosystem status: Winam Gulf and river basins in Kenya*. Kisumu: LVEMP.
- Loehr A. (2002, March). *Leading Africa's Green Revolution, Ecotourism in Kenya*. Press Release, ITB Trade Fair. September 24, 2012 from www.eco-resorts/archives/media.
- Maitland, R. (2010). Everyday life as a creative experience in cities. *International Journal of Culture, Tourism and Hospitality Research*, 4, 3, 176-185.
- Mayaka, M. A.; & Prasad, H. (2012). Tourism in Kenya: An analysis of strategic issues and challenges. *Elsevier, Tourism Management Perspectives*, 1, 48-56
- Moscardo G (Ed) 2008. *Building Community Capacity for Tourism Development*. Australia: James Cook University.
- Mustura, J., Siti, A, M. (2012). Ecotourism-related products and activities, and economic sustainability of small and medium island chalets. *Elsevier Tourism Management* 33, 63-691.
- National Environment Management Authority (NEMA 2006). *State of environment report : Waste and pollution*. Nairobi: NEMA.
- Neto, F. (2003 June 5). A new approach to sustainable tourism development: moving beyond environmental protection. *DESA Discussion Paper*, 29.
- Ogot, B. A. (1967). *History of the southern Luo: Migration and settlement, 1500-1900*, Series: *peoples of East Africa (Vol.1)*. Nairobi: East African Publishing House.
- Odede, A. Z.F. (2000). An Investigation into stone structures and earthworks in Bondo Division, Lake Victoria Basin, Kenya. Unpublished M.A. Thesis, University of Nairobi.
- Okello, .M., Wishitemi, B.E. L., & Mwizi, A. M. (2001). Relative Importance of conservation areas in Kenya based on diverse tourist attractions. *Journal of Tourism Studies*, 12, 39-49.
- Okumba, M. (2004). *Oral Literature of the Luo*. Nairobi: East Africa Education Publishers.
- Page, S. J., & Dowling, R. K. (2002). *Ecotourism: Themes in tourism*. New York: Prentice Hall.
- Republic of Kenya (2007). *Kenya Vision 2030*. Nairobi: Government Printer.
- Republic of Kenya (2010a). *Economic Survey, highlights*, Nairobi: Kenya National Bureau of Statistics. Retrieved on November 23, 2012, from www.go.ke.
- Republic of Kenya (2010b). *Sessional paper no.1 of 2010 on enhancing sustainable tourism in Kenya*. Ministry of Tourism, Nairobi: Government Printer.
- Rigdon, E. E. (1998). Structural equation modeling. In G.A. Marcoulides (Ed.), *Modern methods for business research* (pp. 251-294). Mahwah, NJ: Erlbaum.

- Smith, S. L. J. (1995). *Tourist Analysis Handbook* (2nd ed.), London: Longman.
- Stone, R. W. & Henry, J. W. (2003). The roles of computer self-efficacy and outcome expectancy in influencing the computer end-user's organizational commitment. *Journal of End User Computing*, 15, 1, 38-53.
- Tiffany, M.D. (2011). Sustainable ecotourism in Amozonia: Evaluation of six sites in Southern Peru. *International Journal of Tourism Research*. Retrieved on November 2, 2012 from www.wiley.com
- UNCTAD (2010). *The Contribution of Tourism to Trade and Development. Note by the UNCTAD Secretariat. TD/B/C.I/8.*
- UN-HABITAT (2009). *Global Report on Human Settlement 2009: Planning for Sustainable Cities*. London: Earthscan.
- Weilin, L., Svetlana, S. (2012). Ecotourism experiences reported online: Classification of satisfaction attributes. *Elsevier, Tourism Management*, 33, 702-712.
- Williams, K. J. H., & Cary, J. (2002). Landscape preferences, ecological quality, and biodiversity protection. *Environment and Behavior*, 34, 2, 257-274.
- WWF (2001 July). *Guidelines for Community-based ecotourism development*.
- Zhang, H. & Lei, S.L., (2012). A Structural model of residents' intention to participate in ecotourism: The case of a wetland community. *Elsevier, Tourism Management*, 33, 96-925.

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APPENDICES

APPENDIX A

KISUMU LOCAL INTERACTION PLATFORM (KLIP): QUESTIONNAIRE FOR ECOTOURISM BASELINE SURVEY (ANALYSIS OF LOCAL CONTEXT)

A: BIODATA

Name..... Name of Beach.....BMU Official/Member.....

Sex: 1. Male [] 2. Female [] **Age:** 1. 18-30 [] 2. 31-45 [] 3. 46-60 [] 4. 60+ []

Education: 1. No Primary [] 2. Primary [] 3. Post Primary /Secondary [] 4. Post Secondary []

A: ECOTOURISM

1. Ecotourism is defined as responsible travelling to natural places that conserve the environment, preserve the local culture and promotes the welfare of the local community.

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

B: NATURE ARTIFACTS

2. Natural artifacts are important resources (goods) that support ecotourism.

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

3. Sometimes you enjoy the natural environment in your neighbourhood.

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

4. You witness other people come enjoy the natural environment in your neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

5. Some of these natural artifacts are under threat from human activities.

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

6. Ecotourism may help in protecting, and conserving the natural artifacts in this neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

7. The local community can benefit from natural artifacts in ecotourism ventures within the neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

8. Indicate some of the natural artifacts (resources) that attract people to this neighbourhood on the table

Nature Artifacts	Attraction classification	Tick	Name of Place	Type of Activity
Lake	Seeing			
	Swimming			
	Water Sports			
Wetlands	Nature trails			
	Hunting			
	Plant Communities			
	Herbal Medicine			
Birds	Bird watching			
	Hunting/trapping			
Forests	Nature trails			
	Hunting/trapping			
	Plant Communities			
	Herbal Medicine			
Fishing	Fishing			
	Sport Fishing			
Animals/ Games	Hippo			
	Crocodiles			
	Snakes			
	Sitatunga Antelopes (<i>Due</i>)			

9. Please indicate the threats to natural artifacts by human activities

Nature Artifacts	Type of Threats	Tick	Name of Place	Type of Activity
Lake	Receding (decrease water level)			
	Waste disposal			
	List Others:			
Wetlands	Encroachment: human settlements			
	Pollution: Solid and liquid wastes			
	Vegetation clearing			
	List Others:			
Birds	Bird Hunting/trapping			
	Habitat clearing (breeding)			
	List Others:			
Forests	Encroachment: human settlements			
	Vegetation clearing			
	List Others:			
Fishing	Indiscriminate fishing			
	Over fishing (increased demand)			
	List Others:			
Animals/ Games	Game hunting			
	Encroachment: game habitat			
	List Others:			

C: CULTURAL ARTIFICATS

10. Cultural artifacts are important resources (goods) that support ecotourism.
 A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []
11. Sometimes you enjoy the cultural artifacts in your neighbourhood.
 A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []
12. You witness other people come enjoy the cultural artifacts in your neighbourhood
 A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []
13. Some of these cultural artifacts are under threat and are being forgotten.
 A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []
14. Ecotourism may help in protecting, and conserving the cultural artifacts in this neighbourhood
 A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []
15. The local community can benefit from the cultural artifacts in ecotourism ventures within the neighbourhood
 A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []
16. Indicate some of the natural artifacts (resources) that attract people to this neighbourhood on the table

Culture Artifacts	Attraction Classification	Tick	Name of Place	Type of Activity
Music	Folk songs			
	Traditional instruments: <i>ohangla, nyatiti, kinanda, orutu</i>			
	List others			
Dances	Luo <i>Rumba</i>			
	Traditional folklore dances			
	List others:			
Drama	Plays, Poetry			
	Tongue twisters			
	Humour			
	List others:			
Housing & Architecture	Traditional houses			
	Building material and constructions			
	Traditional design concepts			
	List of Others:			
Food & Drinks	Cultural crops: <i>osuga, akeyo, onyulo, apoth,</i>			
	Traditional beer: <i>busa, kwete, oseke</i>			
	Traditional Cooking: <i>obambla, aliya, origa,</i>			
	Food preservation			
Dressing	Traditional dress: <i>pien, ang'wola, owalo</i>			
	Dress making			
	List others:			
Traditional Trade	Black smith			
	Carpentry,			
	Art & crafts			
	Pottery			
	List others:			

*NB: words in italics are in local language

D: YOUTH PARTICIPATION

17. Majority of youths are employed within the neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

18. Youths can be employed in ecotourism ventures in this neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

19. Youths in this neighbourhood have been empowered to participate in ecotourism ventures

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

20. Youths in this neighbourhood are willing to participate in ecotourism ventures

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

E: WOMEN PARTICIPATION

21. Majority of women are employed within the neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

22. Women can be employed in ecotourism ventures in this neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

23. Women in this neighbourhood have been empowered to participate in ecotourism ventures

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

24. Women in this neighbourhood are willing to participate in ecotourism ventures

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

F: INITIATIVES

25. There are initiatives to promote ecotourism in this neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

26. Some of the initiatives include environmental and cultural awareness, nature protection and conservation in the neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

27. There is a need for upscaling (more) initiatives for promoting ecotourism in the neighbourhood

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []

28. Capacity building that includes training (environmental, cultural understanding and entrepreneurship) for ecotourism is necessary for the local community

A: Strongly Disagree [] B: Disagree [] C: Do not Know [] D: Agree [] E) Strongly Agree []