THE ROLE OF PARTICIPATORY COMMUNICATION IN DE-ESCALATING HUMAN-WILDLIFE CONFLICT IN KIMINTET WARD, TRANSMARA SUB COUNTY, KENYA

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ARTS IN COMMUNICATION STUDIES AT THE UNIVERSITY OF NAIROBI

DECLARATION

STUDENT

This study is my original work and has not been presented anywhere to the best of my knowledge. No part of this research may be produced without the prior permission of the author.

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This research study has been submitted with my approval as the university superviser.

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DEDICATION

This work is dedicated to my parents Walter and Jane Ochieng, siblings and wife Margaret Munyazi.

ACKNOWLEDGEMENT

I thank God for His Grace, strength and peace of mind to undertake this study. I acknowledge everyone who in one way or another assisted me in this study.

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ABSTRACT

This study sought to investigate the role of participatory communication in de-escalating human-wildlife conflict in Kimintet Ward, Transmara sub-county, Kenya. Using Habermas' theory of Communicative Action and Ethics as the theoretical framework, this study employed a descriptive research design. Mixed method approach was used in collecting primary data from a sample size of 100 respondents and 3 key informants. The 22,843 residents of Kimintet ward were the target population. Data from the study was analysed using both quantitative and qualitative analysis techniques with the assistance of the Statistical Package for the Social Sciences and Microsoft Application. The study established that majority of the respondents were passively engaged in the development and implementation of human-wildlife conflict interventions in the study area. Communication channels, government policies on compensation and benefit sharing, attitudes and perception of local community towards wildlife, human-wildlife conflict incidents and literacy level were found to influence local community participation in human-wildlife conflict discourses at different levels. Local community in the study area preferred to be engaged in community barazas using the local language (Maasai) followed by Swahili. The study also established that cultural norms, political interference, long distances, poor infrastructure and limited access to media as the major hindrances to participatory communication. This study concluded that participatory communication plays a critical role in the de-escalation of human-wildlife conflict and that in the study area it is not used as a core function in the design and implementation of wildlife management interventions. This study therefore, recommends the need to define the minimum level of engagement in public participation in all the natural resource management initiatives. It further recommends a full enforcement of laws that stipulate community involvement in natural resource management and establishment of relevant frameworks to ensure that the local communities have access to relevant information to facilitate participation.

CHAPTER ONE

INTRODUCTION

1.1. Overview

This section entails the background, statement of the problem, objectives, research questions, justification, significance and scope and limitation of the study.

1.2 Background to the Study

Human-wildlife conflict (HWC) is a severe and growing setback to the conservation efforts around the world. The problem is quick turning into a significant danger to the existence of many important wildlife species (Muthui, 2012; Distefano, 2005).

Madden (2004) emphasises that human-wildlife conflicts heightens when individuals feel that their rights are not accorded as much prominence as wildlife wellbeing. This would then lead to the local community leaving within wildlife dispersal areas developing negative attitudes towards wildlife and resorting to retaliatory killings.

Muthui (2012) argues that laws and policies on wildlife and natural resource management also influence human-wildlife conflicts. KNBS (2010) estimated the country's population at 38.6million in 2009. The ownership of Kenya's territorial land is roughly distributed between private lands (2%); trust land (78%) and government land (20%). The rapid expansion of human population in Kenya has led to significant fragmentation of traditional wildlife habitats and their ability to range between them.

In a study Western (1992) stated that the local communities are critical in tourism since about 70% of wildlife population is on unprotected community land. Sitati (2016) on other hand observes that, for many years, communities living with wildlife have never benefited much from this resource apart from a few elites.

The communities have otherwise incurred the costs of living with wildlife including crop raiding, livestock predation and human deaths. This has resulted into communities developing negative attitudes towards wildlife and engages in retaliatory killings, habitat destruction, poaching among other strategies to keep wildlife away, (ibid., p. 1).

Kenya Wildlife Service (KWS) is in-charge of wildlife conservation and management of protected areas has taken proactive approach to regularly evaluate status and threats of these areas (Abudulghafur, 2013). The author also found out that increased human-wildlife conflict incidents across critical wildlife habitat in Kenya has forced Kenya Wildlife Service (KWS) to review their conservation strategies to include extension services, conservation education and community participation as a means to mitigate the vice.

During World Elephant Day celebrations in Meru County, Permanent Secretary Tourism and Wildlife, Dr. Margaret Mwakima announced that the documented claims by victims of HWC across the country has reached Kenya Shillings 15 billion for the past five years, (Daily Nation, August 12, 2018).

Notably, research has revealed that wildlife populations in areas that do not receive benefits have declined by over 55% while areas where benefits are accrued have an increase in wildlife numbers over the past 30 years (Norton-Griffiths, 1995). Transmara Sub County in Narok County is currently ranked as one of the human-wildlife conflict prone areas in the country. The study area Kimintet Ward, Transmara sub-county is ranked second after Olorein in reported cases of human-wildlife conflict (World Wide Fund [WWF], 2017).

1.3 Problem Statement

The increasing land fragmentation across the Mara ecosystem is posing the greatest threat to wildlife conservation efforts posing a collapse of the entire ecosystem (Løvschal et al., 2017). Habitat loss and poaching of wildlife has lead to a 70% decline of species population in the Greater Mara for the past 30 years.

Kenyan population is projected to rise by twofold by 2050. This means that competition for resources inform of land, pasture and water will go up leading to increased human-wildlife interactions (Mwangi et al., 2016). Sitati (2016) argued human-wildlife conflict has resulted into communities developing negative attitude towards wildlife and engage in retaliatory killings, habitat destruction, poaching among other strategies to keep wildlife away.

Despite the increased interventions by the different conservation stakeholders in the Mara ecosystem, human-wildlife conflict has been on the raise (Mwangi et al., 2016).

Importantly, there has been burgeoning literature on human-wildlife conflict most of which have focused on managing the wildlife with little attention on local community involvement in de-escalating human-wildlife conflict through participatory communication, even though public participation is enshrined in the Kenya constitutional. This study aimed to investigate the role of participatory communication in de-escalating human-wildlife conflict in Kimintet Ward, Transmara sub-county, Narok County.

1.4 General Objective

The study sought to determine the role of participatory communication in de-escalating Human-Wildlife Conflict (HWC) in Kimintet Ward, Transmara sub-county, Narok County.

1.5 Specific objectives:

- 1. To investigate the extent to which participatory communication is adopted in humanwildlife conflict interventions in Kimintet Ward, Transmara sub-county.
- 2. To investigate the extent to which channel of communication, government policies (compensation and benefit sharing), attitudes and perception, human-wildlife conflict incidences and levels of education influences the local community's participation in human-wildlife conflict discourses in Kimintet Ward, Transmara sub-county.
- To find out the factors that hinder participatory communication in Kimintet Ward, Transmara sub-county.
- 4. To determine the most preferred channel of communication among local communities in Kimintet Ward, Transmara sub-county.

1.6 Research questions:

- 1. How is participatory communication adopted in human-wildlife conflict interventions in Kimintet Ward, Transmara sub-county?
- 2. What extent does channel of communication, government policies (compensation and benefit sharing), attitudes and perception, human-wildlife conflict incidences and levels of education influence the local communities' participation in Kimintet Ward, Transmara sub-county?
- 3. What factors hinder participatory communication in Kimintet Ward, Transmara subcounty?
- 4. What is the most preferred channel of communication among local communities in Kimintet Ward, Transmara sub-county?

1.7 Justification of the study

The findings for this study adds to the body of knowledge in managing the country's pristine natural resources including wildlife and specifically in the implementation of interventions to de-escalate human-wildlife conflict. Available literature affirms that the current human-wildlife conflict problems are typified by insufficient or incorrect information that often lead to failure in human-wildlife conflict interventions and high level of stakeholders distrust (Madden, 2004).

Based on the available literature, it is with no doubt that there is urgent need to reduce human-wildlife conflict. It is also evident that existing strategies and policies are inadequate. With allied negative impact on livelihoods, the country's economic muscles, life threatening injuries and loss of lives, it is timely to come up with new thinking.

1.8 Significance

This study will+KH be of benefit to ecologists and development for communication professionals in the endeavour of promoting good environmental stewardship. The study provides policy makers with empirical recommendations for enhancing effective participatory communication in de-escalating human-wildlife conflict.

1.9 Scope and Limitation

The study area was limited to Kimintet Ward, Transmara West sub-county, Narok County. The area is positioned in the northwestern part of the Maasai Mara National Reserve making it a hotspot for human-wildlife conflict. Other intervening variables such as human population, culture, politics, rangeland management and Information and Communication Technology (ICT) that could either way play a role in de-escalating human-wildlife conflict were not investigated. This study only investigated the role of participatory communication in de-escalating human-wildlife conflict and not the other intervening variables.

Resource constraints both financial and time were the key limitations while conducting this study. Language and cultural differences were also major barriers during collection of data. In order to mitigate the influence of the aforementioned limitations on the quality of the outcomes of the study, the researcher used a translator and conducted pre-visits across villages in the study area

1.10 Operational Definitions

Participatory Communication/Public participation/ Development Communication (**PDC**): In this study participatory communication essentially means the same thing as public participation and Participatory Development Communication (PDC), it is a means away from the linear model of communication to a dialogical communication aimed at empowering the audience as an active participant in decision-making.

Community participation: In this study this term is used to mean the effective engagement of the local community in Kimintet Ward in the complete project cycle of interventions to help de-escalate human-wildlife conflict.

Wildlife dispersal area: Those areas outside protected areas. In this study Kimintet Ward fall within wildlife dispersal area, primarily within wildlife migratory corridors.

Local communities: Residents in the study area Kimintet Ward, Transmara sub-county. The local community in this study is mainly the Maasai.

Human-wildlife conflicts (HWC): Human-wildlife interaction that would lead to loss of property, life or injuries to both human and wildlife.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Overview

This chapter provides an overview on human-wildlife conflict, causes of human-wildlife conflict, participatory communication in environment and wildlife conservation, factors influencing participation in human-wildlife conflict discourse, the role of participatory communication in de-escalating human-wildlife conflict, platforms used in communicating human-wildlife conflict discourses, factors that hinder participatory communication and levels of participatory communication. It also covers summary and gap in research, theoretical and conceptual framework.

2.2 Overview on Human-Wildlife Conflict

Human and wildlife have long co-existed from across the world. However, today unprecedented increase in human and livestock population change in land use and socialeconomic values has led to competition for resources and thus conflict (McCabe et al., 2002).

Weru (2016) argues that Kenya is renown for its pristine ecosystem and thriving biodiversity that are ecological inter-connected and globally recognised as priority landscapes. The never-ending land fragmentation in areas considered wildlife protected-areas and wildlife corridors is threatening.

Mbau (2013) on the other hand wrote that, conflicts have become a serious issue of concern and are a threat to local community livelihoods, safety and wildlife conservation efforts especially in rangelands bordering protected areas. Literatures from different parts of the world suggest upsurge in human population close to reserves and parks as a key attribute to human-wildlife conflict. Studies have also shown that human-wildlife conflict is prominence in areas where agriculture and livestock keeping are important sources of livelihoods (Løvschal et al., 2017; Distefano, 2005).

According to (Muthui, 2012) human-wildlife conflict is a major concern contributing to the loss in biological diversity resulting in a drastic decline in number of many endangered wildlife species across the world. Monitoring of Illegal Killing of Elephants (2017) revealed that 11 out of 34 elephant mortality recorded in 2017 was attributed to human-wildlife conflict. The report further stated that elephant threat in the ecosystem is

more about habitat fragmentation and competition with human than security risk. Today, we are losing more of the iconic species to human-wildlife conflict than poaching. For example according to (MIKE, 2017) 4 elephants were poached while 11 others were killed in human-wildlife conflict].

Lion's population in Africa has reduced by 43%, translating to about 20,000 individuals in the past 20 years (WWF, 2017). At the Lake Nakuru National Park lions' population now stands at 16 individuals according to the October 2017 Spatially Explicit Capture-Recapture (SECR) census.

Aerial census of elephants in Shimba Hills by Kenya Wildlife Service (KWS) revealed that the number of elephants had consistently been declining with the highest decline recorded in 2017 standing at only 35 elephants. This represented over 80% decline in population compared to 2007 (305 elephants) and 2012 (274 elephants) (WWF, 2017). This decline was attributed to increasing change in land use and fragmentation of land around Shimba Hills.

Humans contributed to one third of elephant mortalities (141 of 437 deaths) in Amboseli between 1974 and 1990, (Kangwana, 1993). Damage of properties, livestock predation, crop raid and death or injury of people, are some of the common forms of human-wildlife conflict. FAO (2009) reports that human development and conservation do not seem to get along, resulting into human and biodiversity conflict, while humans try to improve their livelihood, biodiversity on the other hand tries to survive.

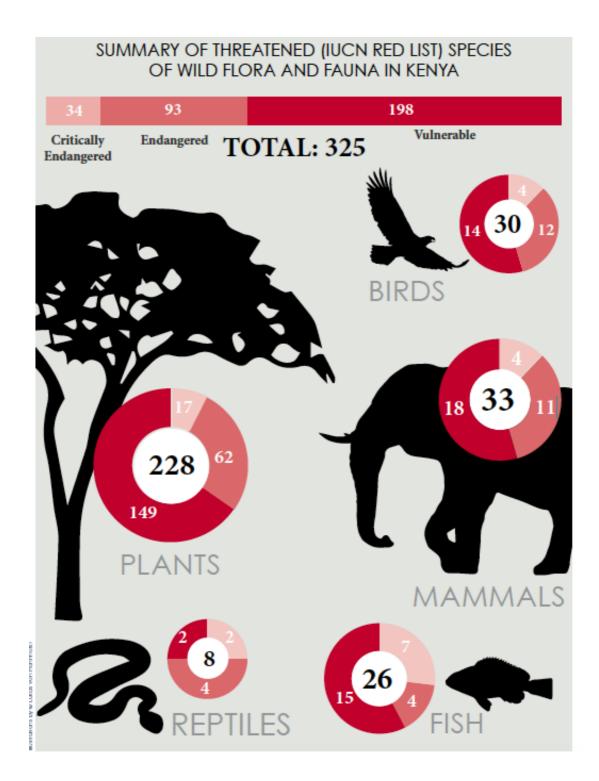


Figure 2.1: IUCN Red List species in Kenya Source: Kenya Wildlife Service database, 2015

2.2.1 Causes of Human-Wildlife Conflict

Changes in land use practices in what used to be predominately wildlife habitat has greatly contributed to increased human-wildlife interactions in most cases leading to conflicts (Serneels and Lambin 2001; Thuiller*et al.*, 2006).

Land fragmentation and farming in wildlife abundant areas such as Samburu and Kwale has intensified conflict (KWS, 1996). Pastoralists like the Maasai are slowly switching to agriculture, increasing their interaction with wildlife, which leads to conflict (Okello, 2006).

Human-wildlife conflict threatens one of Kenya's greatest foreign exchange earners, wildlife tourism (Muthui, 2012). Human-wildlife conflict is also threatening food production in the country, as farm and livestock raids continue unabated especially by baboons, elephants, buffalos, and predators. "Currently Kenya is facing one of its greatest challenges: hunger and malnutrition of a greater part of its population" (Mbau, 2013).

Studies report that in Africa, by the year 2000, human population tripled since 1960. This has seen the spread of agriculture leading into encroachment of more marginal lands, which have been acting as wildlife habitats (Campbell et al., 2003; Okello, 2005a; Muruthi, 2005; Okello and Kioko, 2010 as cited in Mbau, 2013). The settlement of people into new habitats leads to increased demand for resources that are also a necessity for wildlife, [for instance], water and pasture for their livestock. Setting permanent residence near water resources prevents wildlife from accessing water, thus setting scenarios for conflicts (Fergusson, 2002).

Different measures, most informed by scientific research have been used to reduce human-wildlife conflict. This measure in most cases is counterproductive, as it creates physical barriers for migratory wildlife species. "In a bid to reclaim their migratory routes, migratory species such as elephants, wildebeest's, and zebras would break such fences leading to conflicts" (Mbau, 2013).

In the Maasai Mara ecosystem, subdivision of what used to be communal ranches and government land, has also contributed to the conflicts. In Samburu, Transmara, Kwale, Mt. Kenya and Taita-Taveta, land fragmentation through small-scale farming has precipitated intensification of human-wildlife conflicts (Kenya Wildlife Service, 1996, 2012).

The Kenya Wildlife Service has documented the Hell's Gate National Park, Maasai Mara National Reserve, Ol Doinyo Sabuk National Park, Mt. Kenya National Park, Tsavo National Parks and Tana-River Primate National Reserve; areas that are part of Kenya's rangelands, as human-wildlife conflict hotspots (Mbau, 2013).

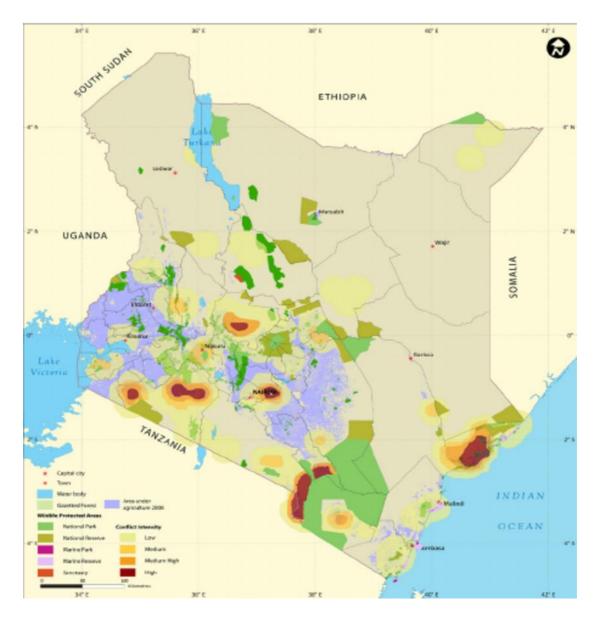


Figure 2.2: The map showing the hotspots in Kenya.

Source: Kenya Wildlife Service

2.3 Participatory Communication in Environment and Wildlife Conservation

Participatory communication, as part of development communication, is based on the right of individuals to speak out collectively without anyone prescribing for them what they should (Freire, 1983).

According to (Kheerajita & Flor, 2013) sharing of information and making it common within natural resource management including wildlife conservation falls under the larger field of development communication and in particularly public participation. Kheerajita and his associate argue that local community's involvement through participatory communication has been advocated in response to environmental deterioration, including

the loss of biodiversity. Participatory approaches are seen as a key way to link conservation and sustainable development (Kheerajita & Flor, 2013).

The Constitution of Kenya 2010 provides Kenyans with direction on environmental issues that directly affect wildlife management. Odote, et al. (2015) stated that, the preamble of the constitution highlights the environment as part of the country's heritage further, the achievement of sustainable development; a concept that drives all conservation efforts is included in article ten.

2.4 Factors Influencing Participation in Human-Wildlife Conflict Discourses

Human-wildlife conflict is partly to blame for poor living conditions of the people living close to the wildlife due to poor resource management (Muthui, 2012). Muthui argues that management methods hardly consider local community perspectives, since in most cases; they do not cooperate with the wildlife and conservation authorities. If local communities living around protected areas made money from wild animals, these animals would become assets and there would be reasons for conservation (2012).

Studies have also shown that attitudes and perceptions influence public participation in human-wildlife discourse. Mbau (2013) writes that local communities often view wildlife as a threat to their wellbeing. This is more so for local communities that inhabit areas surrounding protected areas where wildlife is frequently responsible for adverse consequences, such as, crop and livestock damage, death or injury. This researcher observes that, "in other instances, wildlife is viewed as a source of hardship through increased competition for food and water resources."

In other instances, wildlife is viewed as a source of hardship through increased competition for food and water resources. Such association of wildlife with damage influences local community tolerance to wildlife and their response to conservation initiatives/efforts (McGregor, 2004; Hamissou and di Silvestre, 2008 as cited in Mbau, 2013). Losses of properties, death/injuries and lack of compensation for these losses from the government are some of the issues that influence community involvement in wildlife conservation.

Mbau (2013) observes that lack of a clear understanding of the linkages between the ecological and policy factors that drive conflicts and the integration of these factors with Indigenous Ecological Knowledge (IEK), Indigenous Knowledge (IK) and perceptions

held within local community domains in influencing their dynamics [also influence communication engagement in human-wildlife conflict]. This is manifested when communities reject conservation efforts because they feel sidelined in the policy-making processes.

The conflicts have had negative effects on people leading to increased community outcry in the past decades especially due to crop destruction, disruption of livelihood systems and killing of people, thus necessitating the need for action by governments (FAO, 2009).

2.5 Role of Participatory Communication in De-Escalating Human-Wildlife Conflict

Kheerajita and Flor (2013) states that best methods of conserving and managing wildlife outside protected areas are those that promote the equality and equity in access to natural resources goods and services. Participatory approaches are seen as a key way to link conservation and sustainable development. These researchers argue that local community's involvement through participatory communication has been advocated in response to environmental deterioration, including the loss of biodiversity.

In a study on *The Effectiveness of Participatory Communication In Solving Land Conflicts In Kenya* (Mulae, 2013) revealed that there was a gap in the achievement of the desired social setting due to the numerous land related conflicts. Mulae pointed to the need for participation in driving the social change agenda through dialogue and participatory communication.

Madden posit that the needs of the local people should be addressed by relevant wildlife authority in matters of human-wildlife conflict as a measure to reduce escalation of the conflict. Muthui (2012) on the other hand observes that participatory planning can help resolve human-wildlife conflict.

This concept builds into the notion that through effectively communicating duties of different stakeholders the objectives aimed at de-escalating human-wildlife conflict and improving human welfare can be attained.

Local people's opinions are known to influence conservation efforts, and thus understanding local communities concerns in relation to natural resource management which provides a basis for effective management of conflict (Kretser et al., 2009). Ebua, Agwafo and Fonkwo (2011) posit that putting into consideration local community perspectives on human-wildlife conflict, in addition to understanding the ecological factors leading to conflicts is key in coming up with workable solutions/strategies to solve the conflicts.

2.6 Platforms used in Communicating Human-Wildlife Conflict

Feliciano (1974) in his article titled *Communication Strategies for Rural Development* attest that interpersonal/personal communications are more effective than mass media when it comes to promoting rural development. This is because in interpersonal communication, a communicator is able to tailor particular messages according to specific needs of the audience. Research also shows that communication process in social change is not a linear process but a back and forth affair where communicators have to adjust strategies appropriately and interpersonal communication offer such autonomy (Feliciano, 1974).

Okwu (1972) on the other hand underscores that importance of appreciating already established communication system in his article *Tradition Urban Media Model stocktaking for Africa development. Role of Tradition Communication.* He argues that development communicator should appreciate that every society have their structured way of communication and in tradition African society it was informal than formal mechanism.

Research has identified field workers on extension officers as central characters in forging change in agricultural sector. For effective diffusion of technology among a rural community (Feliciano, (1974) also underscores the importance of using rural communication network. He lists village elders, the farmers and his wife, neighbour, relative and friends, religious leaders, community leader formal and informal groups and various types of traditional folk media major forces in forging change.

With the exception of radio, the mass media and mass media aids-newspaper, radio, television, film, magazine, leaflets pamphlets, posters comic-have not filtered down to the grassroots to any appreciable degree. This is due to the inaccessibility of many villages resulting from inadequate transportation facilitates and also poor distribution procedures and practices, (Feliciano, 1974).

In is study (Abudulghafur, 2013) found that increased human-wildlife conflict incidents across critical wildlife habitat in Kenya has forced Kenya Wildlife Services to review their conservation strategies to include extension services, conservation education and community participation.

2.7 Factors that Hinder Participatory Communication

Freire (1970) *Pedagogy of the Oppressed* analyses dialogue as human phenomenon and highlights the importance of 'word' inhuman conversations. Better said that human generate meanings depending on varied reasons such as cultural background, experiences, context. Dialogue cannot occur in cases where one party feel oppressed; this is often manifested in the level of relationship between the powerful counters and in developing economies.

Freire (1969) argues that illiteracy levels in developing countries are high thus explaining its low development. FAO (2014) knowledge gap particularly in developing countries is a big hindrance to development.

Mass media risk being ineffective if they are used without inadequate knowledge of the local culture where they are going to be received (Schramm 1964). Beltra (1967) argued that communication for development have symbiotic relation. So strong is the bond that one easily tells developed a country us by its communication systems. Beltran argues that communication for development has been factored as a main operation support and instrument. This author also suggest the need to incorporate communication into master national plans, we should not only finance communication for development practice but should be sufficiently financed (1967).

2.7.1 Levels of Participatory Communication

The thought of participatory communication is traced in the 1950s to Paolo Friere, during his seminal work in North Eastern Brazil as an adult literacy campaigner. Tufte and Mefalopulos (2000) three typologies of participation: Passive Participation, Participation by Consultation and Empowerment Participation.

Typologies	CHARACTERISTICS OF EACH TYPE
Passive Participation	Local groups are not fully worried in what is
	taking place. The facilitators simply come to the
	community without previous statistics or
	notification. In this form of participation,
	humans' remarks is minimum or non-existent and
	their participation is assessed thru head counting.
Participation by Consultation	This is an extractive method, whereby network
	participants offer answers to questions posed
	through facilitators. Input isn't always limited to
	meetings but can be provided at special points in
	time. Ultimately, the consultative method keeps
	all the choice-making electricity inside the
	fingers of the facilitators who are below no
	obligation to incorporate the human being's
	enter. On this form of participation, the extent of
	participation does not result in dramatic changes
	in what must be carried out, which is already
	determined by using the participatory
	communication facilitators.
Empowerment Participation	This is when the stakeholders are allowed to
	completely take part, initiate thoughts and
	participate within the analysis. This results in
	joint selection making about what must be
	finished and how it will be accomplished. Whilst
	facilitators are equal partners inside the
	development effort, the community participants
	have large say within the decisions regarding
	their lives.

Table 2.1: Typologies of participation

Source: Tufte and Mefalopulos (2000)

Of the three levels, the ideology of Participatory Communication for development is strongly represented in the third option, Empowerment Participation.

2.8 Summary and Research Gap

In Narok County, human population around the [Maasai Mara National Reserve] reserve is on an upward trend with an average growth of 7% annually, almost three times the national rate (Coughenour et al., 2000). The exploding settlement and sub-division of land across much of the Mara landscape has resulted in increased fencing of private lands, reduced wildlife migratory corridors, and increased human-wildlife conflict.

Human-wildlife conflict is also affecting food production in the country. An unabated wildlife raid into farms is counterproductive in the efforts towards encouraging food production in the country. This intern renders many youths who would otherwise have ventured into agri-business jobless and many other starving.

Despite efforts to solve the problem, human-wildlife conflicts have increased over the years. The main methods that have been used for managing human-wildlife conflicts in Kenya include physical barriers (Electric fencing, game moats, vegetation barriers, ditches, stone walls and high tensile fences), translocation, establishment of sanctuaries, problem animal control, conducting animal drives especially for elephants and community sensitisation in addition to traditional deterrents and mitigation approaches (Omondi et al., 2004). The approaches have in most cases tended towards managing the wildlife.

Whereas there are many literatures on human-wildlife conflict, research on the role of participatory communication in de-escalating human-wildlife conflict is lacking. It is from this premise that this study builds new knowledge on the roles of participatory communication in de-escalating human-wildlife conflict.

2.9 Analytical Framework

2.9.1 Theoretical Framework

Habermas' principle of communicative movement and ethics is normally used as the concept for public participation (Macias, 2010). Rationality and use of language are the key concepts of this scholars' theory.

Habermas (1964) defines general public sphere as a space where individuals can freely engage in discourses and access information. In his theory, Habermas coins the phrase *communicative action* that he describes as the sequence of interaction, negotiation, and

consensus, when accompanied by the serious disposition of the participants to reach an agreement.

Habermas argues that for a meaningful discussion to take place there is need for a rational process. This scholar poses ideal situation for participation. He argues that all potential participants of a discourse must have the same chance to employ communicative speech acts; and that all discourse participants must have the same chance to interpret, claim or assert, recommend, explain, and put forth justifications; and problematise, justify, or refute any validity claim.

Habermas' notion of the ideal speech situation presumes equality among the discourse participants because all have the same chance to participate, and they are all capable of doing so, writes (Macias, 2010). Scholars have however critiqued Habermas' theory for its principle of consensus. Habermas' principle of consensus observes that norms are justified if all the participants could reach a mutual understanding, in an ideal speech situation (Macias, 2010). Thomassen (2008) observes that Habermas' idea of consensus as impractical, as it would mean an end of communication. This is because it does not provide room for negotiation or disagreements.

2.10 Conceptual framework **Independent Variable Dependent Variable Channel of communication:** Radio and television program • Documentaries, development . campaigns, theatre, Interpersonal/personal communications, Conservation Education Program, Public meetings Human-wildlife conflict Predation • Crop/property damage • **Retaliatory killings** • Literacy levels Human deaths/injuries Local community attitudes and perceptions toward wildlife Government policies on compensation and benefit sharing Human-wildlife conflict incidences Deaths and injuries **Conservation measures** • Fencing, awareness, • Early HWC Reporting systems, • Compensation and benefit sharing mechanism

Source author, 2018



2.10.1 Role of Participatory Communication in Alleviating Human-Wildlife Conflict

Diagram 2.10 shows the relationship variables. The variables in this study are directly related in that any alterations in the independent variable would positively or negatively influence the dependent variable, which is human-wildlife conflict. The dependent variable, human-wildlife conflict was measured using the following parameters: predation, crop/property damage, retaliatory killings incidents, injuries, deaths and injuries.

CHAPTER THREE

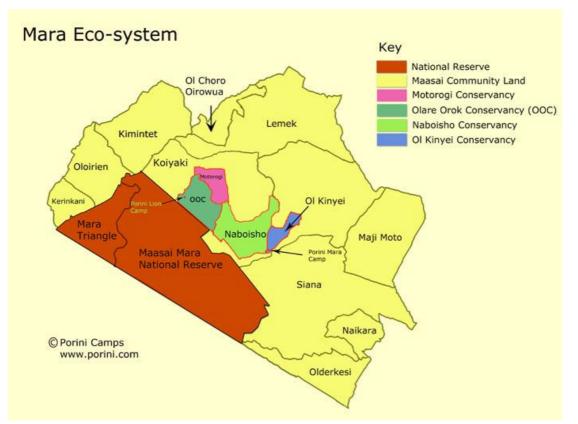
METHODOLOGY

3.1 Overview

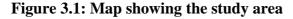
This chapter discusses the research methodology used in this study. It includes the research design, research approach, study site and population, population sample, sampling techniques, data collection and presentation methods and research tools used.

3.2 Research Design

This study employed descriptive research design. This design was adopted for this study because it does not involve manipulation of variables under investigation but seeks to establish the status of the phenomena (Borge & Gall, 1983).



3.3 Study site



This study was conducted in Kimintet Ward, Transmara West sub-county in Narok County. Kimintet Ward comprises of 8 sub-locations. The study area was selected for its proximity to the researchers' workstation and most importantly human-wildlife conflict prone area. In 2017, 32-crop raid and 16 predation cases were reported from this area (WWF-Kenya, 2018). Also, the study area borders the Mara Triangle, the Northwestern part of the Maasai Mara National Reserve making it prime for human-wildlife conflict. The region is recognised as a human-elephant conflict hotspot within Kenya due to the high number of incidents recorded each year (Litoroh *et al.* 2012).

The Kiminet Ward is located in Transmara West sub-county, south-west Kenya. It falls within critical wildlife dispersal area. The region is an important dispersal area for elephants and has traditionally been home to a resident population of 200 to 300 individuals (Sitati, Walpole & Smith 2003).

3.4 Research Approach

The study employed a mixed approach of both qualitative and quantitative methods to examine the role of participatory communication in de-escalating human-wildlife conflict in Kimintet Ward. Creswell (2003) postulates that the use of more than one method to investigate the same research problem strengthens research findings through the combination of information sources and analytical approaches. Mixed method approach helps to overcome any bias, which is inherent within a single method approach, adds value to the theoretical debate and also complements the limitation of one method with the others strength (2003).

Qualitative data was collected from the respondents using open-ended questions, which allowed the responded to express themselves. Respondents purposively sampled for the study also gave qualitative data. Numerical data from residents in the study area was collected using quantitative method.

3.5 Study Population

The targeted populations in this study were adults (male and female) above age of 18 years living in Kimintet Ward, Transmara West sub-county in Narok County. Historically, the people living in this region were pastoralists but this has changed in recent decades, especially because the high rainfall and rich fertile soils in the Transmara make it highly suitable for farming (Sitati, Walpole & Smith, 2003).

3.6 Sample Size and Sampling Techniques

3.6.1 Sample Size

The sample size for this study was 103 respondents, made up of 100 adults' residents of Kimintet Ward and 3 participants purposively sampled from a poll of wildlife management and community engagement experts working in the Mara-Serengeti landscape.

Yamane (1967) formula was used to determine the sample size in the study:

$$n=\frac{N}{1+N(e)^2}$$

Where-:

n - The desired sample size (when the population is greater than 10,000).

N=Total population. Total population at Kimintet Ward is 22,843, according to Kenya Population and Housing Census (2009).

 \mathbf{e} = accuracy level required Standard error is 10%

$$\frac{22,843}{1+22,843}(0.1)^2$$

......

22,843		
1	+	22,843 (0.01)

22,843 1 + 228.43

22,843 229.43

n=99.564

n=100

3.6.2 Sampling Technique and Procedure

Multiple sample techniques (non-probability and probability) were used in this study. Kimintet Ward is predominantly inhabited the Maasai communities. The local community in the study area lives within one compound host several families. Simple random technique was used to collect data, where an individual house within the homestead was considered as one sample. To select the 100 respondents the researcher visited 10 villages, the smallest village had 198 households/*manyattas* while the largest had 254 households/*manyattas*. Sampling units in each village was sorted using random numbers generated from *Research Randomiser* software. An interview questionnaire was then administered to an adult in each of the household selected. The figure below shows results from *Research Randomiser* used at a village in Saparingo where households with the following numbers 7, 59, 68, 88, 115, 129, 171, 184, 191 and 195 were interviewed.

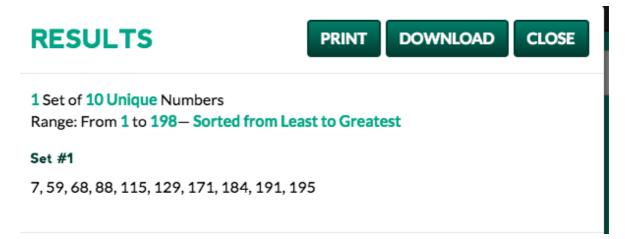


Figure 3.2: Result for a village in Saparingo, Kimintet Ward, Source author, 2018:

Three key informants for the study were purposively sampled. The key informants were selected based on their specialised knowledge in the subject matter and willingness to participate in the study.

3.7 Data Collection Methods

Both quantitative and qualitative methods were used in the collection of data. The study used questionnaires for the local community and interview schedule for the key informants to obtain primary data. This data was captured through a semi-structured questionnaire that contained closed ended and open-ended questions, which were used to collect primary data from the respondents in the study area. The research sought for a translator when engaging with illiterate respondents. Questions in the questionnaire were read out loud discussed on a one on one basis with the respondents. Self-administered questionnaire were sent out to the three key informants were Dr. Yussuf Wato, Wildlife Programme Manager, WWF-Kenya, Philemon Chebet, Senior Warden, Transmara Region Kenya Wildlife Service (KWS) and Peter Lokitela, SS, HSC, Community Anti-Poaching Officer based in the Mara Basin using *Survey Monkey* an online platform.

3.8 Data Analysis and Presentation

The researcher used both quantitative and qualitative analysis techniques with the assistance of the Statistical Package for the Social Sciences (SPSS) and Microsoft Application. This study employed a mixed method approach, which allowed for triangulation of numerical data with in-depth explanations obtained qualitatively from the respondents.

3.8.1 Quantitative data

Descriptive methods were used to analyse the quantitative data. The data collected was numerical or coded statistically to enable for quantitative analysis. The themes coincided with the study objectives. Percentages, charts, figures and frequency tables were used in the analysis and presentation of data.

3.8.2 Qualitative data

Descriptive information informs of narration and explanations were also obtained in the study. Analysis of this data involved coding and organisation of collected data into themes that addressed the research questions. Some of this data was coded so that it could be analysed statistically and presented using descriptive methods.

3.8.3 Data Presentation

Percentages, charts, figures and frequency tables were used in the analysis and presentation of data. Descriptive information informs of narration and explanations were also obtained in the study were presented using appropriate verbatim quotes to illustrate those findings.

3.9 Reliability and Validity

The researcher employed a defined methodology that was approved by the superviser and a defense panel to ensure the reliability and validity of the study. Pretesting of the data collection instruments among a few selected local communities in the study area during a reconnaissance exercises and adjusting the instrument accordingly also helped ensure that the methodology is fit for the study.

3.10 Ethical Considerations

Clearance to carry out this research was granted by The University of Nairobi (UON). The researcher defended the research proposal at a panel organised by the School of Journalism and Mass Communications at the University of Nairobi (7th July 2018) and after a successful defense, a Certificate of Fieldwork was issued (Appendix iii), Certificate of Correction (CoC) was issued after corrections recommended by the examining board of University of Nairobi were carried out (Appendix IV). The researcher also ensured that the study was not plagiarised and thus awarded the Certificate of Originality (Appendix V)

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Overview

This chapter presents analysis of data and interpretation of findings generated from the study of the *Role of Participatory Communication in De-escalating Human-Wildlife Conflict in Kimintet Ward, Transmara sub-county, in Kenya.* Data analysis and its interpretation were organised around the study objectives as outlined in chapter one. The data analysis was presented in the form of texts, charts, frequencies and percentages.

4.2 Instrument Return Rate

The researcher distributed 100 questionnaires to respondents in Kimintet Ward out of which 100 were returned translating to a response rate of 100%. Self-administered questionnaires sent to three key informants via *Survey Monkey* were also returned.

4.3 Demographic Information of Respondents

The study sought to find out the demographic characteristics of respondents in this case: age, gender and level of educational. The purpose of this information was to establish the general characteristics of local community living in Kimintet Ward, Transmara Sub-County, Kenya. Findings are as elaborated below:

4.3.1 Distribution of Respondents by Gender

Gender distribution of the respondents was 72% male and 28% female. In a predominantly patriarchal society the researcher made deliberate effort to ensure equal gender representation in the study. It was important to establish the gender distribution of the respondent because the Constitution of Kenya guarantees the right to equality for both men and women. To collect responses from the women, the researcher engaged village elders as contact persons and in some instances found women who willingly participated. The key informants for the study were male.

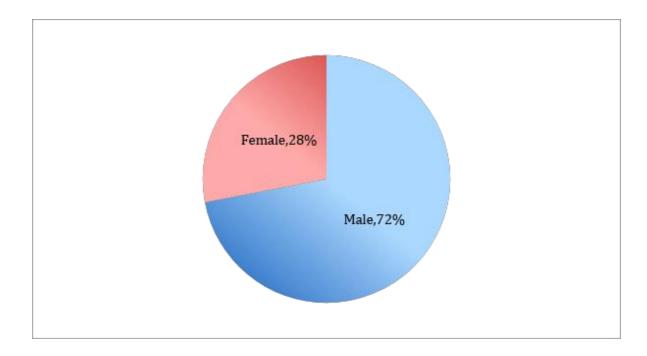


Figure 4.1: Distribution of the respondents by gender

4.3.2 Distribution by Level of Education

The study found out that 40% of the respondents' had attained primary education, 24% tertiary (university/college) and 18% had reached secondary level of education. The study further established that 18% of the respondents had not attended formal schooling as summarised in figure 4.2. It was important to establish this because education enables all persons to participate effectively (Muigua, 2014).

The Narok County Integrated Development Plan (2018-2022) states that there are 664 public primary schools including 19 special schools with an enrolment of 239,948 pupils across the County. In Narok County 11% the primary school children transition to secondary schools; thus explains the discrepancies in the level of education of the respondents.

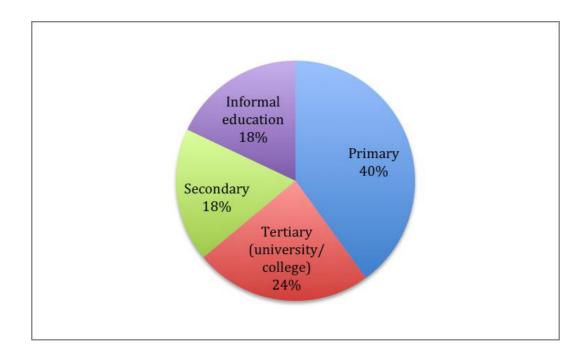


Figure 4.2: Distribution of participants by levels of education

4.3.3 Distribution of Respondents by Age

Distribution of respondents by age was 33% between 18-27 and 28-37 years respectively. The least represented age group was 48 years and above with a 12% distribution rate as illustrated in the figure 4.3. It was critical to determine the age distribution of the respondents because within the Maasai culture age-grading system plays a critical role in determining what an individual can and cannot do. It is also important to determine the age groups of the respondents because of its potential contribution and impact on socio-economic development of the county including de-escalating human-wildlife conflict and protecting critical natural resources.

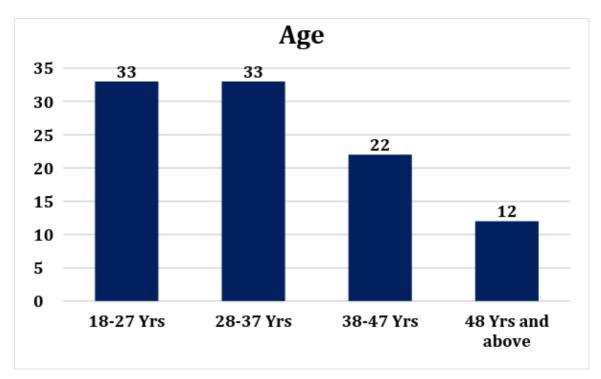


Figure 4.3: Distribution of respondents by age

4.4 Effective Participatory Communication in Human-Wildlife Conflict Interventions

The study sought to establish whether participatory communication is used as a tool to deescalate human-wildlife conflict in Kimintet Ward. From the study, 72% of the respondents taught that participatory communication is being used as a tool that helps deescalate human-wildlife conflict while 28% thought to the contrary.

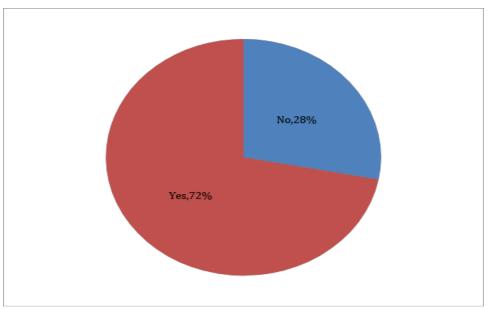


Figure 4.4: Percentage of respondents who believed that participatory communication is being used as a tool in de-escalating human-wildlife conflict

4.4.1 Extent of Adoption of Participatory Communication in Human-Wildlife Conflict Interventions

The study aimed to establish the extent to which participatory communication was adopted in human-wildlife conflict interventions in the study area. In the scale of 1 to 5 where 1=No Extent, 2=Little Extent, 3=Moderate extent, 4=Great extent and 5=Very Great Extent. Findings are summarised in table 4.1

Statements	No Extent	Little Extent	Moderate extent	Great extent	Very Great Extent
Local communities in Kimintet Ward are involved in the development of conservation plans for community managed wildlife areas	29%	26%	13%	19%	13%
Local communities in Kimintet Ward are involved in harnessing cultural conservation methods and practices.	15%	39%	29%	16%	1%
Data on the management of wildlife is open source and can easily be accessed by the local community in Kimintet Ward.	48%	35%	9%	3%	5%
Local communities in Kimintet Ward are involved in the development, implementation and evaluation of strategies/policies to de-escalate human and wildlife conflicts.	16%	36%	35%	12%	1%
Local communities are involved in the declaration of wildlife ecosystems and habitats in need of protection.	11%	24%	35%	19%	11%

Table 4.1: Summarised findings of participatory communication in human-wildlife conflict interventions

4.4.2 Local communities involved in the development of conservation plans for community-managed wildlife areas

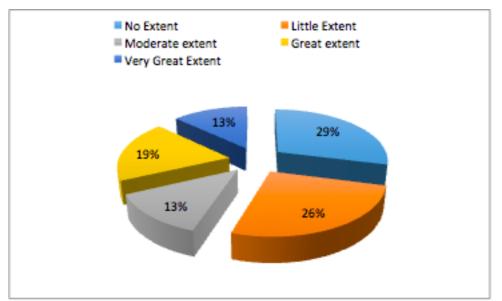


Figure 4.5: Percentage of local communities' involvement in the development of conservation plans for community managed wildlife areas in Kimintet Ward

From the study 29% of the respondents felt that at no extent are the local communities in Kimintet Ward involved in the development of conservation plans for community managed wildlife areas. A total of 26% respondents said to a little extent, 13% others said to a very great extent and moderate extent were they involved. The study, also found out that 19% of the respondents to a great extent were being involved in the development of conservation plans for community managed wildlife areas. Noticeably, more than half of the respondents felt that the local communities' involvement in the development of conservation plans for community managed wildlife areas were lacking.

This study affirms Muthui (2012) argument that management methods often do not take into account the local people living with the animals, since in most cases; they do not cooperate with the wildlife and conservation authorities.

Dr. Yussuf Wato posited that the local community is involved to some extent but reiterated that more needed to be done to increase public participation. He described community participation in Human-Wildlife Conflict interventions as passive. Mr. Philemon Chebet, Transmara Region Kenya Wildlife Service (KWS) Senior Warden on the other hand said that there was moderate extent of engagement, describing the local community involvement as passive.

4.4.3: Local communities in Kimintet Ward are involved in harnessing cultural conservation methods and practices.

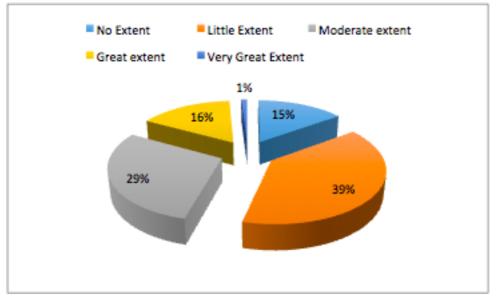
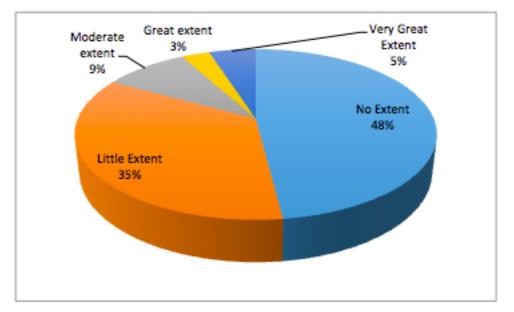


Figure 4.6: Local communities' involvement in harnessing cultural conservation methods and practices in Kimintet Ward

From the study, 39% of the respondents said that to a little extent are the local communities in Kimintet Ward involved in harnessing cultural conservation methods and practices. The study also showed that 29% of the respondents to a moderate extent while only a respondent thought that to a very great extent were they involved in harnessing cultural conservation methods and practices. More than half of the total respondents felt that local communities are not involved in harnessing cultural conservation methods and practices in Kimintet Ward.



4.4.4 Access to Information about Management of Wildlife in Kimintet Ward

Figure 4.7: Percentage of access to information about management of wildlife in Kimintet Ward

The study established that, 48% of the respondents did not have access to information on the management of wildlife in Kimintet Ward. One of the respondents said, "*It is not easy to access information on interventions, early warning systems, compensation and data on human-wildlife conflict incidences from the government.*" From the study, 35% of the respondents said that to a little extent while only 5% said to very great extent do they have access to information about the management of wildlife. The study established that more than three quarters of the respondents did not have an access to information on the management of wildlife that includes human-wildlife conflict interventions.

4.4.5 Local communities' involvement in the development, implementation and evaluation of strategies/policies to de-escalate human and wildlife conflicts in Kimintet Ward

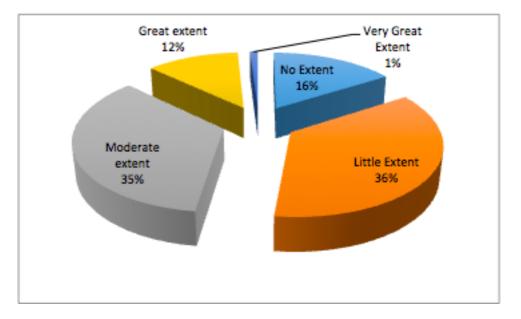


Figure 4.8: Percentage of local communities' involvement in the development, implementation and evaluation of strategies/policies to de-escalate human and wildlife conflicts in Kimintet Ward

The study determined that 36% of the respondents were to a little extent involved in the development, implementation and evaluation of strategies/policies to de-escalate human and wildlife conflicts. The study also determined that 35% of the respondents said that to a moderate extent and 1% to a very great extent were they involved. This gave a strong indication that local community in Kimintet Ward is hardly involved in the development, implementation and evaluation of strategies/policies to de-escalate human and wildlife conflicts. Philemon Chebet, Senior Warden, Transmara Region Kenya Wildlife Service (KWS) and Dr. Yussuf Wato, Wildlife Programme Manager, WWF-Kenya who both described community engagement as passive participation affirming the findings.

4.4.6 Local community involvement in the declaration of wildlife ecosystems and habitats in need of protection in Kimintet Ward

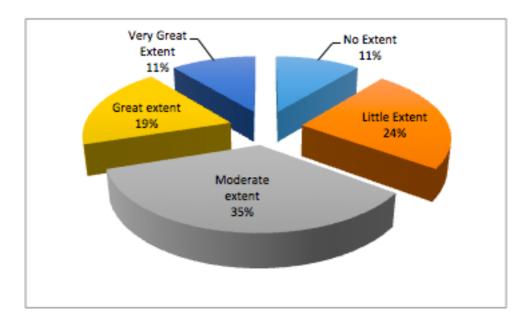


Figure 4.9: Percentage of local community involvement in the declaration of wildlife ecosystems and habitats in need of protection in Kimintet Ward

The study established that 35% of the respondents to a moderate extent were involved in the declaration of wildlife ecosystems and habitats in need of protection. The study also found out that, 24% others argued that to a little extent, 19% to a great extent, 11% to a very great extent and 11% to no extent were they involved in the declaration of wildlife ecosystems and habitats in need of protection. Kimintet Ward is positioned within wildlife corridors and the local community felt left out in the mapping process of critical wildlife dispersal areas, which fall within community land.

4.4.7 Level of Community Participation in Human-Wildlife Conflict Interventions

This study also sought to determine the level of local community participation in humanwildlife conflict intervention using *(Tufte and Mefalopulos, 2000)* typologies of participation. Detailed descriptions of each of the typologies were included in the questionnaire and were read out and translated where necessary to the respondents for clarity. From the study 45% of the respondents selected passive participation, followed by participation by consultation at 40% and 15% empowerment participation.

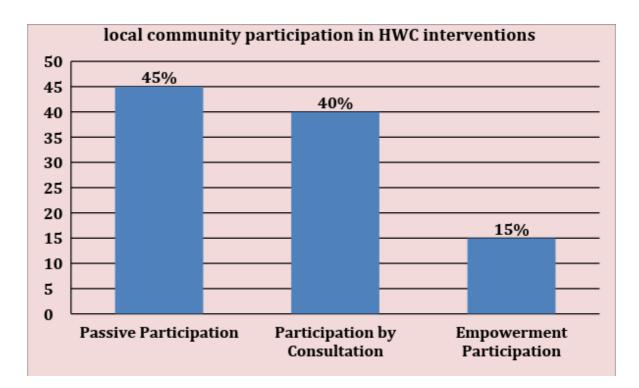


Figure 4.10: Levels of community participation in Human-Wildlife Conflict interventions in Kimintet Ward

Mr. Philemon Chebet, Transmara Region Kenya Wildlife Service (KWS) Senior Warden and Dr. Yussuf Wato, Wildlife Programme Manager, WWF-Kenya argued that community engagement in Kimintet Ward on human-wildlife conflict intervention is passive. Peter Lokitela, SS, HSC Community Anti-Poaching Officer in Mara Basin on the other hand thought the engagement is empowerment participation.

Muigua (2014) adds that the quality and extent of participation matters so that it is not enough for people to participate but there is need for them to be able to appreciate the real implications of any decision being made. Otherwise, it is reduced to a matter of formality without any real benefit or achieving the desired end.

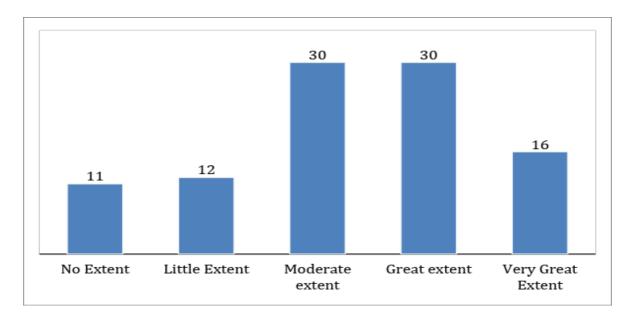
4.4.8 Factors That Influence Participation in Human-Wildlife Conflict Discourse

This study further sought to rate the extent to which factors in the table 5 below influenced participation in human-wildlife conflict discourses in Kimintet Ward, Narok County. The rating was on a scale of 1 to 5 where 1=No Extent, 2=Little Extent, 3=Moderate extent, 4=Great extent and 5=Very Great Extent.

Factors that influence participation in human- wildlife conflict discourse	No Extent	Little Extent	Moderate extent	Great extent	Very Great Extent
Communication channel used.	11%	12%	30%	30%	16%
Government policies/wildlife policies and legal frameworks i.e. compensation, benefit distribution.	10%	22%	23%	28%	17%
Attitudes and perception of local community towards wildlife.	7%	11%	28%	30%	24%
Human-wildlife conflict incidences.	1%	12%	18%	38%	31%
Literacy levels	6%	10%	8%	26%	50%

 Table 4.2: Factors that influence participation in Human-Wildlife Conflict Discourse

Result from the study affirmed that communication channel, government policies (compensation and benefit sharing), attitudes and perception of local community towards wildlife, human-wildlife conflict incidence and literacy level influenced participation in human-wildlife conflict discourses at different extents.



4.4.9 Influence of Communication Channel on Human-Wildlife Conflict Discourses

Figure 4.11: Extent of influence of communication channel on human-wildlife conflict discourses in Kimintet Ward

The study established that most of the respondents' decisions of whether or not to engage in human-wildlife conflict discourses were informed by the channel of communication selected by the sender. Kimintet ward is a fairly remote area with a high illiteracy level as such selecting the appropriate communication channel is crucial to realising effective participation. From the study, 30% of the respondents argued that to a great extent and 30% to a moderate extent does communication channel influence their participation in human-wildlife conflict discourses. The result further showed that 12% and 11% of the respondents said that to a little and no extent respectively does communication channel influence their participation in human-wildlife conflict discourses as shown in figure 4.11.



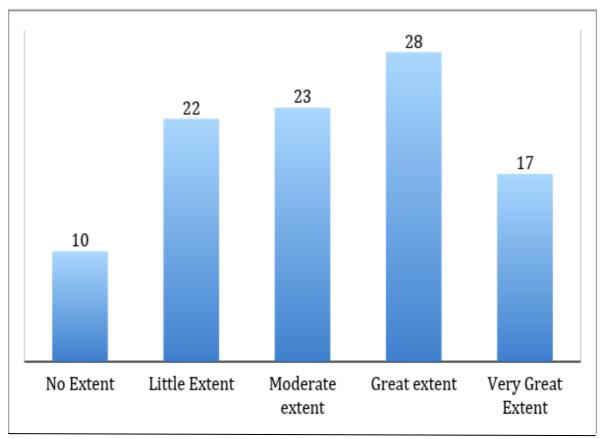


Figure 4.12: Influence of government policies on participation in human-wildlife conflict discourses in Kimintet Ward

The study established that government policies on compensation and benefit sharing influenced 28% of the respondent's decision to a great extent to participate in Human-Wildlife Conflict discourses.

4.4.11 Influence of Attitudes and Perception of Local Community towards Wildlife on Human-Wildlife Conflict Discourses

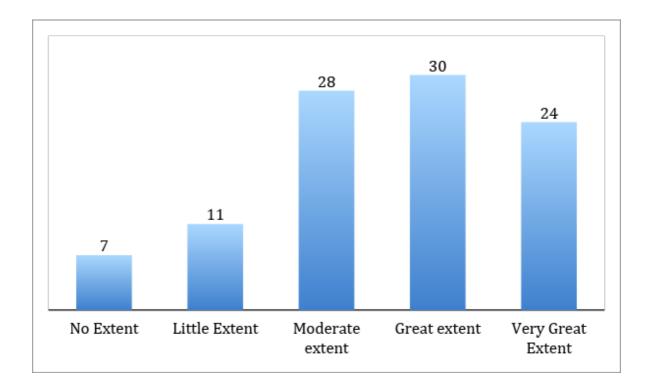
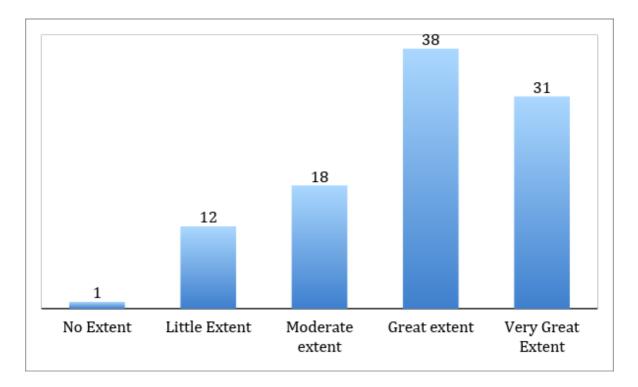


Figure 4.13: Influence of attitudes and perception of local community towards wildlife on participation in human-wildlife conflict discourses in Kimintet Ward

The study determined that attitudes and perception of the local community towards wildlife influenced 30% of the respondents to a great extent to participate in human-wildlife conflict discourses. The study also showed that 24% and 28% to a very great extent and moderate extent respectively did attitudes and perception of the local community towards wildlife influenced their participation in human-wildlife conflict discourses.

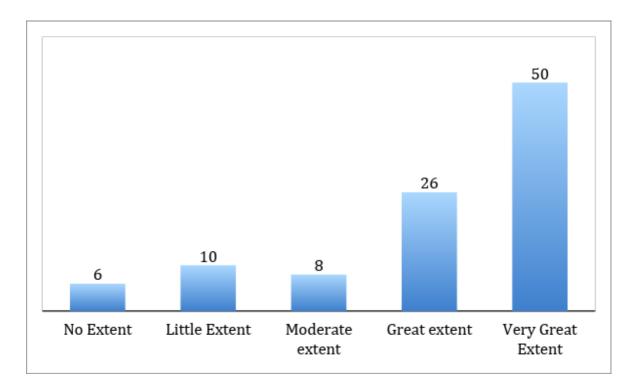
According to Walpole and Leader-Williams (2001) the attitudes of the local community towards elephants were generally negative because of a lack of related benefits. The resident elephant population is found in areas where people do not derive any benefits from tourism. The future of elephants in Transmara is bleak unless local tolerance to elephants can be improved. This can only be achieved through improved human-elephant conflict mitigation and increased elephant-related benefits (Walpole & Leader-Williams, 2001).



4.4.12 Influence of Human-Wildlife Conflict incidents on participation

Figure 4.14: Results showing how human-wildlife conflict incidents influenced community participation in human-wildlife conflict discourses in Kimintet Ward

From the study, 38% of the respondents pointed out that to a great extent did humanwildlife conflict incidents influence their participation while another 31% said to a very great extent. It was also established that 1% of the respondents said that to a little extent did incidents of human-wildlife conflict not influence their decision to participate in human-wildlife conflict discourses. On of the respondents said, "Wildlife prey on our livestock every day, 7 of my sheep were recently killed by hyenas why should I care about wildlife at the expense of my sheep."



4.4.13 Influence of Literacy Levels on Human-Wildlife Conflict Discourse

Figure 4:15 Influence of literacy levels in human-wildlife conflict discourses in Kimintet Ward

From the study, 50% of the respondents said that to a very great extent did literacy levels influence their participation in human-wildlife conflict discourses. On the other hand, human-wildlife conflict incidents contribute to high illiteracy level in communities within wildlife dispersal areas. Walpole, Karanja, Sitati and Leader-Williams (2003) on a study on *Human Elephant Conflict and Children Education* in primary schools in Transmara found out that most students in elephant ranges wait until elephants have receded back into the forest before going to school. Many students arrive late and/or are always absent, and this obviously affects their education.

Analysis undertaken of the performances of both schools and individual pupils showed that surprisingly, the mean score was lowest in schools with the lowest teacher-pupil ratio. However, many of these schools occurred within the elephant range and experienced very low enrolment. The key factors that affected school performances were division, elephant presence, tribe and number of candidates, Walpole, Karanja, Sitati and Leader-Williams (2003)

4.4.14 Factors that Hinder Participatory Communication in Human-Wildlife Conflict Discourses

This study further sought to determine factors that hinder participatory communication discourses in Kimintet Ward. The question that was to be answered by respondents was: What factors, if any, hinder your participation in human-wildlife conflict discourse? This was an open-ended question. Below are factors that were mentioned by majority of the respondents:

4.4.14.1 Cultural Norms and Values

Majority of the respondents pointed out that some of Maasai cultures are punitive and in as such hinders effective participation of individuals especially women and youth. Gender stereotype was cited as a problem that mutes many to actively participate in human-wildlife conflict discourses. The respondents explained that women and youth are often not allowed to oppose decisions made the elders.

4.4.14.2 Political Interference

It is often considered that political leaders make decisions on behalf of the people they represent, therefore making it difficult for all-inclusive communication. Philemon Chebet, Senior Warden, Transmara Region Kenya Wildlife Service (KWS) cited political incitement, clanism among the predominant Maasai community (Siria and Purko clan) and tribal clashes as factors that hinder participatory communication in Kimintet Ward.

4.4.14.3 Unsettled compensation/Lack of compensation

Unsettled compensation or lack of it all together was pointed out as a major deterrent for local community participation in human-wildlife conflict discourses. Majority of the respondents had developed negative attitudes towards conservation because they felt that the government pays a considerable attention to the wildlife than people. This study affirmed (Muthui, 2012) observation that most victims, especially farmers, fail in compensation schemes due to bureaucratic inadequacies, cheating, corruption and cost and time involved to generate a compensation claim.

Dr. Yussuf Wato said:

Wildlife like other land uses must generate some revenues that will support communities livelihoods for communities to support and participate in HWC discourse,". He further stated that "delayed compensation of HWC victims, negative perceptions on wildlife law enforcers and the perception that the community does not benefit much from wildlife conservation also propagate Human-Wildlife Conflict.

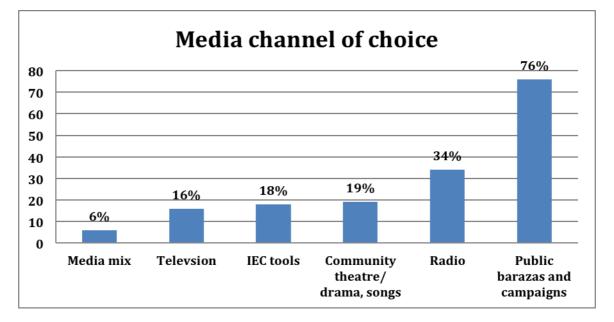
Mr. Philemon Chebet, Senior Warden, Transmara Region Kenya Wildlife Service (KWS) further affirmed that lack of compensation and direct benefits to the local communities as a major factor hindering their participation.

4.4.14.4 Bad infrastructure and network connectivity

Bad infrastructure makes it difficult for the local community to access their preferred medium of communication, which is community meeting. Bad signals also limit access to broadcast media and as such hampers the dissemination of information using mass media.

Dr. Wato, observed that:

Some media are out of reach for the local communities, few people own television, wildlife areas are vast and it is practically impossible to conduct training, exchange programs and workshops for everyone, Illiteracy levels in most wildlife rich areas is high hence most platforms like social media - twitter, Facebook, or newspapers cannot be used in this areas effectively.



4.4.15 Preferred Communication Platforms

Figure 4:16: Preferred communication platforms

Findings on table 4:16 shows that majority of the respondents involved in the study at 76% indicated public *barazas* and campaigns as their most preferred media channel, followed by radio at 34%, community theatre/drama, songs at 19%, Information, Education and Communication (IEC) tools at (18%) and television at 16%. Feliciano,

(1974), attests that interpersonal/personal communications are more effective than mass media when it comes to promoting rural development. Okwu (1972) on the other hand underscores that importance of appreciating already established communication system in his article *Tradition Urban Media Model stocktaking for Africa development. Role of Tradition Communication.* He argues that development communicator should appreciate that every society has their structured way of communication and in tradition African society it was informal rather than formal mechanisms. Research has identified field workers on extension officers as central characters in forging change in agricultural sector. For effective diffusion of technology among a rural community (Feliciano, (1974) also underscores the importance of using rural communication network. He lists village elders, the farmers and his wife, neighbour, relative and friends, religious leaders, community leader formal and informal groups and various types of traditional folk media as major forces in forging change.

4.4.16 Preferred language in communicating Human-Wildlife Conflict

The study established that there was a strong variation in preference on the language, which the relevant stakeholders should use in communicating human-wildlife conflict. The question that was posed to the respondents was: Which language would you prefer to be used in communicating human-wildlife conflict? To establish this, respondents were required to respond to the aforementioned question on the questionnaire that they were provided with. Figure below shows the findings.

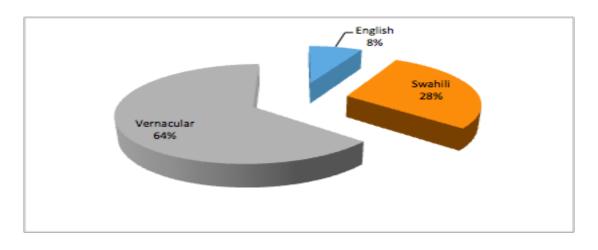


Figure 4:17: Preferred language in communicating Human-Wildlife Conflict

Findings from figure 4:17 shows that 64% of the respondents indicated that they preferred vernacular (Maasai) to be used in communicating human-wildlife conflict. Swahili

followed at 28% and English languages at 8%. This result is indicative of the level of education where majority of the respondents lack formal education since most of the respondent only attended primary school.

4.4.17 Role of Participatory Communication in Alleviating Human-Wildlife Conflict

The study also sought to establish from the participants the role of participatory communication in alleviating human-wildlife conflict. These were the responses by a majority of the respondents:

Majority of the respondents said that through participatory communication, the local community gets to own the interventions and fully support its implementation. In this regard, participatory communication helps de-escalate human-wildlife conflict through legitimising of decision-making among the key stakeholders.

The study also determined that through empowerment participation the local community would reduce retaliatory killings of wildlife and destruction of natural assets such as forests. Majority of the respondents at 83% argued that participatory communication helps builds consensus about human-wildlife conflict issues as it encourages openness, accountability and transparency.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Overview

This chapter presents a summary of the findings, conclusions and recommendations of the study whose aim was to determine the role of participatory communication in deescalating human-wildlife conflict in Kimintet Ward, Transmara sub-county, Narok County.

5.2 Summary of findings

The study sought to establish whether participatory communication plays a role in deescalating human-wildlife conflict, how participatory communication is adopted in human-wildlife conflict interventions, what extent channels of communication, government policies (compensation and benefit sharing), attitudes and perception, humanwildlife conflict incidences and levels of education influenced the local communities' participation in human-wildlife conflict discourses, what factors hinder participatory communication and the most preferred channel of communication in communicating human-wildlife conflict messages among the local communities in Kimintet Ward, Transmara sub-county. The following emerged as the key findings in the study:

The study established that participatory communication is being used as a tool to help deescalate human-wildlife conflict in Kimintet Ward, Transmara Sub-County, Kenya. However, the study further established that the most common typology of participatory communication used in human-wildlife conflict interventions in Kimintet Ward was passive participation. According to the findings, 45% of the respondents selected passive participation, followed by participation by consultation and empowerment participation respectively. Two out of the three key informants in the study also confirmed that the type of participatory community used in Kimintet Ward was passive participation. With this regard, it was concluded that participatory communication is being used as a formality but not necessarily as a core function in the programme design and implementation of wildlife management including human-wildlife conflict interventions in Kimintet Ward.

The study also determined that the local community's involvement in the development of conservation plans for community managed wildlife areas in Kimintet Ward was lacking. More than half of the respondents affirmed at no extent are the local community in

Kimintet Ward involved in the development of conservation plans for community managed wildlife areas.

The study further determined that more than half of the respondents felt that the local community's involvement in the development of conservation plans for community managed wildlife areas were lacking. From the study, 39% of the respondents argued that to a little extent are the local community in Kimintet Ward involved in harnessing cultural conservation methods and practices. Only one respondent thought that to a very great extent were they involved in harnessing cultural conservation methods and practices.

The study found out that most of the respondents, at 48% in Kimintet Ward did not have access to information on the management of wildlife. The study established that more than three quarters of the respondents do not have an access to information on the management of wildlife that includes human-wildlife conflict interventions.

More than half of the respondents gave a strong indication that local community in Kimintet Ward are hardly involved in the development, implementation and evaluation of strategies/policies to de-escalate human and wildlife conflicts. While 83% of the respondents felt that the local community is not involved in harnessing cultural conservation methods and practices in Kimintet Ward.

Local communities in Kimintet Ward are hardly involved in the declaration of wildlife ecosystems and habitats in need of protection within the study area according to the study results. This study also affirmed that communication channel used, government policies on compensation and benefit sharing, attitudes and perception of local community towards wildlife, human-wildlife conflict incidence and literacy level influences participation in human-wildlife conflict discourses at different levels. According to the study, level of education was selected by a majority of the respondents as a factor that influenced their participation to a very great extent, followed human-wildlife conflict incidences, government policies (compensation and benefit sharing), attitudes and perception and channels of communication in that order.

The study also found out that cultural norms, political interference, long distances, poor infrastructure and lack of media access as the popular hindrance to participatory communication in human-wildlife conflict. On the preferred media channel, community *barazas* was rated, as the most preferred media channel in communication of human-

wildlife conflict matters, this followed by radio, community theater, Information, Education and Communication (IEC) material, television and a media mix respectively. The language of choice for the majority of the respondents was Maasai, followed by Swahili and then English.

5.3 Conclusion

Data analysis in this study has determined that participatory communication plays a critical role in de-escalating human-wildlife conflict however not in isolation. Participatory communication in human-wildlife conflict interventions in Kimintet Ward is being used as a formality and that effective community participation is lacking.

Human-wildlife conflict is a significant problem in Kimintet Ward, Transmara sub-county with serious concerns to the well-being of both people and wildlife. To enable peaceful co-existence between people and wildlife management, strategies need incorporate the people aspect in the intervention through effective participation as a core function in programme implementation.

5.4 Recommendations

The study recommends the following action plans:

- There is a need to define the minimum level of engagement in public participation. In all the natural resource management initiatives, including towards de-escalating human-wildlife conflict, minimum acceptable standards of participation should be determined.
- 2. There is need for enforcement of laws that ensures community involvement is mandatory in natural resource management.
- 3. The local community in Kimintet Ward indicated that they do not have access to information on human-wildlife conflict and that for any effective participation in human-wildlife conflict discourses to occur, there is need to empower the local community with the relevant information. Therefore, the need to establish relevant frameworks to ensure that the local community has access to relevant information to facilitate participation.
- 4. Participatory communication should be sufficiently resourced and that it is important to engage with the local community in their most preferred channel of communication.

5.4.1 Recommendations for further study

This study aimed to establish the role of participatory communication in de-escalating human-wildlife conflict in Kimintet Ward, Transmara sub-county. However, unsustainable human activities are ranked as the major challenge facing conservation of natural resources across the world. This study recommends further studies to determine participatory communication role in de-escalating natural resources (land, forest, water, minerals) related conflicts.

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APPENDICES

Appendix 1: Research questionnaire

My name is Austine Okande, a student at the University of Nairobi, School of Journalism and Mass Communication currently pursuing a Master of Arts Degree in Communication Studies (Development Communications major). I am conducting a study on *The Role of Participatory Communication in De-escalating Human-Wildlife Conflict in Kimintet Ward, Transmara sub-county, Kenya.* The research is purely for academic reasons and your responses will be treated confidential. Kindly answer the following questions. Thank you.

SECTION A: DEMOGRAPHIC INFORMATION

1. Kindly Tick ($$) appr	opriate answer
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a) Male ()

b) Female ()

2. What is your highest level of education?

Level of Education	Tick ($$) appropriate
Primary school	
Secondary school	
Tertiary (university/college)	
Others (please specify)	

- 3. What is your age bracket?
- a) 18-27 ()
- b) 28-37 ()
- c) 38-47 ()
- d) 48 years and above ()

SECTION A: PARTICIPATORY COMMUNICATION IN HUMAN-WILDLIFE CONFLICT (HWC) INTERVENTIONS.

4. Do you think that participatory communication is being used as a tool that helps de-escalate Human-wildlife conflict in Kimintet Ward?

Yes [] No []

5. Rate the extent you agree with the following statements regarding the adoption of participatory communication in Human-Wildlife Conflict interventions? Rate on a scale of 1 to 5 where 1=No Extent, 2=Little Extent, 3=Moderate extent, 4=Great extent and 5=Very Great Extent

	1	2	3	4	5
Local communities in Kimintet Ward are involved					
in the development of conservation plans for					
community managed wildlife areas.					
Local communities in Kimintet Ward are involved					
in harnessing cultural conservation methods and					
practices.					
Data on the management of wildlife is open source					
and can easily be accessed by the local community					
in Kimintet Ward.					
Local communities in Kimintet Ward are involved					
in the development, implantation and evaluation of					
strategies/policies to de-escalate human and wildlife					
conflicts.					
Local communities are involved in the declaration					
of wildlife ecosystems and habitats in need of					
protection.					

6. Which level from (Tufte and Mefalopulos, 2000), *Typologies of participation* best describes the local community participation in Human-Wildlife Conflict interventions in Kimintet Ward?

LEVELS	CHARACTERISTICS OF EACH TYPE
Passive Participation	Here local communities are not fully
	involved in what is happening. The
	facilitators just come to the community
	without prior information or notification. In
	this form of participation, people's feedback
	is minimal or non-existent and their
	participation is assessed through head
	counting.
Participation by Consultation	This is an extractive process, whereby
	community members provide answers to
	questions posed by facilitators. Input is not
	limited to meetings but can be provided at
	different points in time. In the end, the
	consultative process keeps all the decision-
	making power in the hands of the facilitators
	who are under no obligation to incorporate
	the people's input. In this form of
	participation, the level of participation does
	not result in dramatic changes in what
	should be accomplished, which is already
	determined by the Participatory
	Communication facilitators.
Empowerment Participation	This is when the stakeholders are allowed to
	fully participate, initiate ideas and take part
	in the analysis. This leads to joint decision
	making about what should be achieved and
	how it will be achieved. While facilitators
	are equal partners in the development effort,
	the community members have significant
	say in the decisions concerning their lives.

Source: Tufte and Mefalopulos (2000)

SECTION B: FACTORS THAT INFLUENCE PARTICIPATION IN HUMAN-WILDLIFE CONFLICT DISCOURSE.

7. Rate the extent to which the following factors influences participation in Human-Wildlife Conflict discourses in Kimintet Ward, Narok County? Rate on a scale of 1 to 5 where 1=No Extent, 2=Little Extent, 3=Moderate extent, 4=Great extent and 5=Very Great Extent

FACTORS	1	2	3	4	5
Communication channel used.					
Government policies on compensation and benefit					
sharing					
Attitudes and perception of local community					
towards wildlife.					
Human-wildlife conflict incidences.					
Level of education/Literacy level					

Others (please specify)

SECTION C: FACTORS THAT HINDER PARTICIPATORY COMMUNICATION.

8. What factors if any hinders your participation in Human-Wildlife Conflict discourse?

SECTION D: COMMUNICATION PLATFORMS

9. What is your most preferred communication platform in accessing information about Human-Wildlife Conflict?

COMMUNICATION	TICK ($$) APPROPRIATE ANSWER
PLATFORMS	
Television	
Public barazas and campaigns	
Radio	
Education and entertainment,	
community theater	
Information Education and	
communication (IEC) tools	
Others (Kindly specify)	

10. Which language would you prefer to be used in communicating about Human-Wildlife Conflict (HWC)?

a) English	0
b) Swahili	0
c) Vernacular	0

SECTION E: THE ROLE OF PARTICIPATORY COMMUNICATION IN ALLEVIATING HUMAN-WILDLIFE CONFLICT.

What is the role of participatory communication in alleviating Human-Wildlife Conflict (HWC)?

Thank you for your participation.

Appendix II: Key Informant: Interview Schedule

Interviewer_____

Interviewee_____ Designation_____

Date of Interview_____

- 1. How and at what level do you involve local communities in wildlife management including alleviating human-wildlife conflict?
- 2. From your experience in implementing project aimed at conserving wildlife including reducing human-wildlife conflict, do you think that the local communities are given enough space to participate in decision making?
- 3. What method do you use to get local community members views and ideas on the human-wildlife conflict?
- 4. Which level from (Tufte and Mefalopulos, 2000), *Typologies of participation* best describes the local community participation in Human-Wildlife Conflict interventions in Kimintet Ward?

LEVELS	CHARACTERISTICS OF EACH TYPE
Passive Participation	Here local communities are not fully
	involved in what is happening. The
	facilitators just come to the community
	without prior information or notification. In
	this form of participation, people's feedback
	is minimal or non-existent and their
	participation is assessed through head
	counting.
Participation by Consultation	This is an extractive process, whereby
	community members provide answers to
	questions posed by facilitators. Input is not
	limited to meetings but can be provided at
	different points in time. In the end, the
	consultative process keeps all the decision-
	making power in the hands of the facilitators
	who are under no obligation to incorporate
	the people's input. In this form of

	participation, the level of participation does		
	not result in dramatic changes in what should		
	be accomplished, which is already		
	determined by the Participatory		
	Communication facilitators.		
Empowerment Participation	This is when the stakeholders are allowed to		
	fully participate, initiate ideas and take part		
	in the analysis. This leads to joint decision		
	making about what should be achieved and		
	how it will be achieved. While facilitators		
	are equal partners in the development effort,		
	the community members have significant say		
	in the decisions concerning their lives.		

Source: Tufte and Mefalopulos (2000)

- 5. What are the roles of participatory communication in alleviating Human-Wildlife Conflict?
- 6. What types of platforms are used in communicating Human-Wildlife Conflict among local communities?
- 7. What are the most preferred communication channels among local communities?
- 8. What are the factors that influence the local communities in to participate in Human-Wildlife Conflict discourse?
- 9. What are the factors that hinder participatory communication with local communication on issues wildlife conservation?
- 10. Do you have anything to add?

Thank you for your participation.

Appendix III: Certificate of Fieldwork



UNIVERSITY OF NAIROBI COLLEGE OF HUMANITIES & SOCIAL SCIENCES SCHOOL OF JOURNALISM & MASS COMMUNICATION

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REF: CERTIFICATE OF FIELDWORK

This is to certify that all corrections proposed at the Board of Examiners meeting held on 17-07-201 in respect of M.A/PhD. Project/Thesis Proposal defence have been effected to my/our satisfaction and the project can be allowed to proceed for fieldwork.

Reg. No: K56/82484/20 Name: AUSTINE OKANDE . Ochiombo ROLE OF PARTICIPATORY COMMUNICATION IN Title: DE-ESCALATINCT KIMINTET WARD, TRANS -UIATING HUMAN-WILDL ONFLICT 141 COUNTY MARA KEN SUB 2018 11 71 DATE SUPERVISOR SIGNATURE Jirina 3 08 NO 201 .amue SIGNATURE ASSOCIATE/DIRECTOR DATE AN RECTOR SIGNATURE STAMP DATE JOURNALISM & MASS

Appendix IV: Certificate of Correction (CoC)



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Reg. No: K50 82484 2015

Name: OKANDE AUSTINE ODHIAMBO

Title: THE ROLE OF PARTICIPATORY COMMUNICATION IN DE-ESCALATING

HUMAN-WILDLIFE CONFLICT IN KIMINTET WARD PTRANSMARA SUB COUNTY, KENYA.

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Appendix V: Certificate of Originality

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