



# **PARTICIPATORY ACTION RESEARCH (PAR) FOR COMMUNITY BASED CONSERVATION IN KENYA**

Received 2nd may 2023 First review: 5th may 2023

- Mwangi Ruth PhD scholar (University of Nairobi)  
mwangi.ruth@gmail.com, Tel: 0723510823

## **Corresponding Author:**

- Samuel M Maina PhD, IDr, OGW, Senior Lecturer (University of Nairobi)  
smmaina@uonbi.ac.ke
- Michael Munene PhD, Lecturer (University of Nairobi)  
michaelm@uonbi.ac.ke

## PARTICIPATORY ACTION RESEARCH (PAR) FOR COMMUNITY BASED CONSERVATION IN KENYA

### ABSTRACT

According to UN Biodiversity Agreement Cop 15, one of the targets is to ensure equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities. Participatory approaches have been used to engage local people in protected area management and conservation action. While participatory approaches implemented empower the locals to contribute to conservation and development processes, their contributions and indigenous knowledge is not considered within the framework (Ericson, 2004). Community engagement has been involved at the implementation stages of policy making with a top down approach to participation theory leaving the community members helpless when donors stop funding a project. The main objective of the study is to engage all the community members at all stages of planning conservation projects through active participatory approaches. Hence the need for a bottom up approach to participation for a successful community approach to wildlife conservation programs.

The study used interviews and observation methods for data collection which was analyzed using qualitative techniques. The researcher studied two community led conservancies in Northern and Southern Kenya to assess level of participation in conservation programs by analyzing gender, age and other social factors that may enhance or hinder active participation of community members for sustainable community based conservation. The study revealed that children under 18 years did not participate in conservation so are the women and youth in the community were marginalized in participation. The study concluded that bottom up approach to conservation was necessary in policy making and active participation through action research increased the motivation of individual members and hence the success of community based conservancies towards achieving development.

**Key words: Community based conservation, participatory approach, sustainable development, community well being**

## INTRODUCTION

Community-based conservation (CBC) is an approach to biodiversity conservation in protected areas through participation at all levels with local communities (Wood, 2008), (Lumbasi & Measham, 2013) (He, Yang, & Min, 2020). International Union for Conservation of Nature: Sustainable Use and Livelihoods Specialist Group (IUCN SULi) emphasizes the need for a global cohesion to influence the community towards wildlife and habitat management. "There has been increasingly greater concern that community-based conservation is not working and that the emphasis on "community" and "participation" is diluting the conservation agenda (Berkres, 2004)".

Participatory action research (PAR) provides a collaborative approach to knowledge management and mobilization. In PAR, researchers and stakeholders collaborate across the various stages of the research process, beginning with the conservation of wildlife and continuing to community conservation, through programs that empower and benefit the locals. Community participation allows the local people to contribute to decision making in order to solve the problems they think as essential and relevant and help to control the solution.

The UN Sustainable Development Goals (SDGs) highlight a suite of priorities to harmonize human well-being with envi-

ronmental conservation. Goal 11 emphasizes the need to have sustainable cities and communities while conserving land Goal 15. Community participation in conservation programs will help achieve SDG goals as well as create sustainability of the conservancies managed by the communities.

"Community participation in conservation efforts varies widely with many steps of planning, decision making and implementation each with an opportunity for different levels of participation (Emilio, . Gavin, & Macedo-Bravo, 2010)". Participatory conservation approaches have greater potential for generating a legitimate conservation process, involving members as stakeholders in meeting their fundamental needs and expectations to overcome their development challenges and increase compliance by reducing conflicts generated from resource use restrictions (Waweru, 2015) (Emilio, . Gavin, & Macedo-Bravo, 2010). Community conservation represents a shift from a top-down approach to resource management toward the bottom-up approach which underlines the need for conversation with local communities and stakeholder participation, where resource management decisions are made at the ground level (Mudzenji, Gandiwa, Muboko, & Mutanga, 2021) (Gaymer, Stadel, Ban,, Cárcamo, Ierna Jr, & Lieberknecht, 2014).

## THEORY

### Community based conservation (CBC)

Community-based conservation (CBC) aims to simultaneously achieve development and conservation goals, therefore meeting the objectives of both local communities and conservationists (He, Yang, & Min, 2020). CBC programs utilize various strategies to engage with local com-

munities and encourage participation, in order to achieve desired conservation goals. Examples include linking conservation and human development goals, creating socio-economic incentives for conservation and giving communities control over local natural resources (Brooks et al., 2012).

CBC is primarily a social process,

nested in a broader set of complex social, economic, political, and environmental interactions (Alexander, Andrachuk, & Armitage, 2016) This process involves and is initiated by many actors, including community members, government officials, and nonprofit organizations with decisions and feedbacks often occurring across multiple scales. Globally environmental conservation community has been grounded to the reality that their initiatives must involve local people if they are to succeed.

The following are issues arising from CBC in the past:

- Passive participation with a Top-down approach by policy makers
- Lack of transparency in sharing wildlife benefits accrued through tourism in an equitable manner.
- The compensation amount for loss of human life or injury by wildlife in Kenya according to (Makindi, Mutinda, Olekaikai, & Olelebo, 2012) is usually insufficient or not proportional to the loss.
- Lack of funding as the projects run on short term goals with limited funding from donors thus do not meet out all their objectives in the community due to limited funds
- Decentralization initiatives stall in their implementation because centralized governments are unwilling to relinquish power to the community members
- Market-based approaches to community-based natural resource management are challenged for assuming that resource commercialization is compatible with conservation goals.

Majorly this is due to top-down conservation planning that has been conducted without taking local socio economic, hu-

man-nature interactions into adequate account. A bottom-up approach with active participation of all stakeholders will enhance conservation projects making them sustainable and economical for developmental growth of the society.

### **Participatory approach**

Participation refers to “harnessing the existing physical, economic and social resources of rural people in order to attain the objectives of community development programs and projects (Dinbabo, 2003)”. Participatory conservation approaches can successfully align community needs with natural resource management strategies that might increase conservation projects

Globally, women, men, girls, and boys have different relationships with the environment — roles and responsibilities differ as well as their needs. They also derive different benefits from their natural surroundings. With various opportunities and challenges, the participation of both men and women in decision-making is vital at multiple levels — from the household and community levels, all the way through national and international spheres.

Studies by (El-Sheikh, 2018) (Martin, 2007) have shown that women were largely excluded from these negotiations, their participation barred by social, economic, cultural, and political constraints. Evidence shows that enhancing women’s and girl’s empowerment and promoting gender equality can trigger transformative impacts across sectors. Gender inclusivity is becoming increasingly relevant in today’s professional world and changing the dialogue around the role of women in conservation.

The theory of participatory conservation plays a critical role in the democ-

ratization of decision-making authority and equitable distribution of benefits to all members of the society.

(Bixler, 2017) (Hulme & Murphee, 2001) Discusses the role of the government (power sharing) and society in implementation of participation (see table 1). By comparing and contrasting socio-cultural

characteristics of developed and developing countries. Critics have analysed different ideologies of ladder of participation and question communication between conservationists and community members in relation to resource management. Below is a table detailing the approaches used and their outputs.

**Table 1. Levels of community participation (source: Edmund Harrow & Marshall Murphee)**

Typology ©	Characteristics of each type ©
Manipulative participation	Participation is a false (people's representatives on official boards but unelected and have no power).
Passive participation	People participate by being told what has been decided or what has happened
Participation by consultation	People participate by being consulted or by answering questions
Participation for material incentives	People participate by contributing material resources (e.g. they contribute labour)
Functional participation	Participation is seen by external agents as a means to achieve programme goals. In this case, people are only co-opted to serve external objectives, while all major decisions have already been made by external actors
Interactive participation	People participate in joint analysis, development of action plans, or formation or strengthening of local institutions. Groups take control over local decisions and determine use of available resources

<p>Transformative participation</p>	<p>People take initiatives independently to change systems and develop contacts with external actors for resources and technical advice</p>
-------------------------------------	---

We know that social isolation leads to misery, and at the very least, participation in social life, helps prevent it. Participation in collective action will lead to increased social support and better well-being.

Participation may also lead to increased confidence and skills. With participation goes the development of responsibility and sense of positive citizenship (Dinbabo, 2003). These are only possible if well-being is also strengthened. In practice, however, for many people, bottom-up, active participation and collective action is exhausting. It takes time and energy, and if it includes trying to encourage others to participate, perseverance. Not all those who are willing to participate in community activities are 'resource strong' themselves and they have different degrees of resilience (often born of their life experiences living in hardship). Community leaders and other activists sometimes find themselves not only trying to motivate others and get people interested in participating, they often have to give hours of emotional support to other group members: people who will often, themselves, have struggled throughout life against addictions,

abuse, violence and surviving in poor and uncertain material conditions. The pressures are considerable and unrelenting. They have no supervision (despite working in complex human systems often with people with extensive personal difficulties).

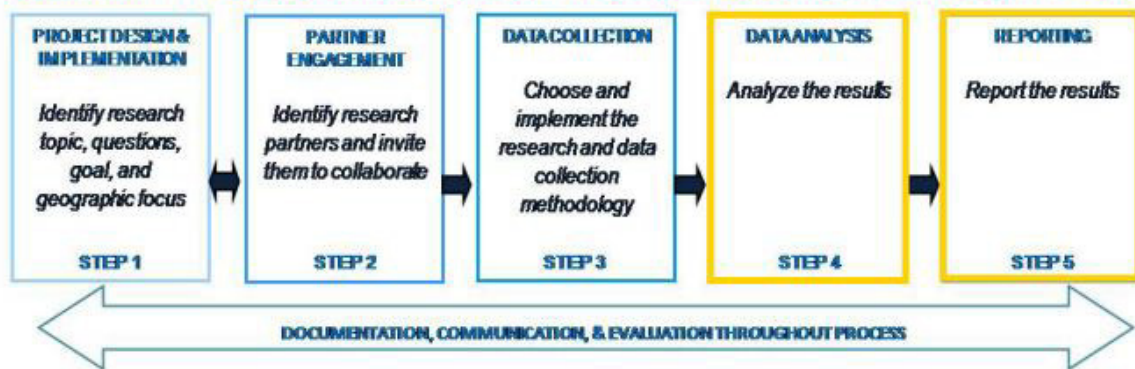
Those that actively participate get satisfaction, a feeling of well-being and pride in what they do and what they manage to achieve. Their community involvement 'fills their lives' and they cannot imagine any other way of living.

Some community members view their involvement sometimes with suspicion and sometimes with hostility, at other times with gratitude and praise. Community activists are at one and the same time seen as the problem solvers of the community, and as part of the authorities.

Participatory action research typically investigates larger community issues or problems to inform the development of a new or emerging program or process. As a tool it helps the researcher conclude their study effectively by following the process for effective community engagement (fig 1).

**Figure 1. Community based participatory action research model (Source: Burns,J.C; Cooke,D. Y ; Schweidler, C. 2011)**

### COMMUNITY BASED PARTICIPATORY ACTION RESEARCH PROCESS MODEL



The following key characteristics that seem to distinguish successful PAR processes as illustrated in the above process model:

- **Collaboration-** participating stakeholders will be involved in the initial identification of the problem to be studied; the design of the research process or methods; the collection, documentation, and analysis of data; and the implementation of new approaches.
- **Empowerment-** participants are given opportunities to acquire new skills and knowledge, which can build their power, confidence, and personal sense of agency in a variety of ways. For example, participants may develop a deeper understanding of how their organization or community works, learn new skills that can be used in civic or professional settings.
- **Inclusion-** participants are all involved even the marginalized in the community and all ideas are accepted and acknowledged.
- **Flexibility-** participants are engaged at free will to participate in research and can exit if they so wish to.
- **Action-** ideas and solution are fea-

sible and can be implemented by the local community

- **Contextual understanding-** each community has its culture and indigenous knowledge that can be used to create solutions.
- **Ethics-** these are rules and regulations researchers need to follow that consider the well-being of people who are participating in research studies.

### Sustainable development

Despite international acceptance of the concept of sustainable development, that combines conservation and development, the practical application of this concept continues to be a challenge. Sustainable Development is vital to successful conservation of wildlife and communities. It is advanced socioeconomic adaptation that does not challenge the cultural and social systems upon which community and society are reliant. Effective implementation requires integrated planning with the community as key stakeholders to the project. As an embodiment of the long-term view of wildlife conservation, it is necessary to deal with human wildlife conflict at the root level by developing the approach of community conser-

vation management, in developing these CC, we need to assess constraints of compensation payments, which may not always incentivize conservation (Paudel, Potter, G, & ., 2019). "When payments are made in full and in good time, it begs the question of why the small amounts paid as compensation for losses, or opportunity cost such as labor. Instead, why not pay local communities a good will that reflects the value of the service they would provide by protecting wildlife species (Paudel, Potter, G, & ., 2019)

A more sustainable way of CC is evaluating the assets that exist within the community at the grass root level. To assume that all communities surrounding conservancies experience poverty will be an understatement as the Maasai communities have wealth through their cattle and land resources. Policies developed and implemented should be context applied to encompass the characteristics of the area. Analysis of policies should be evaluated and communicated with the members of the community for effective active participation that goes beyond cultural barriers and constraints as discussed by participatory design for community development.

### **Community well-being (CWB).**

By definition Community wellbeing is the combination of social, economic, environmental, cultural, and political conditions identified by individuals and their communities as essential for them to flourish and fulfil their operations. It can also be defined as the satisfaction of fundamental human needs (HeeKyung & . Phillips, Indicators and Community Well-Being: Exploring a Relational Framework, 2018). Well-being includes the development of identity, attainment of personal goals, pursuit of spiritual

meaning, prevention of maladaptive behaviours, development of competencies and skills and the existence of social support. Well-being is closely linked to quality of life and to fulfilment of the fundamental human needs of health and what is known as 'autonomy of agency' or control over events in one's life.

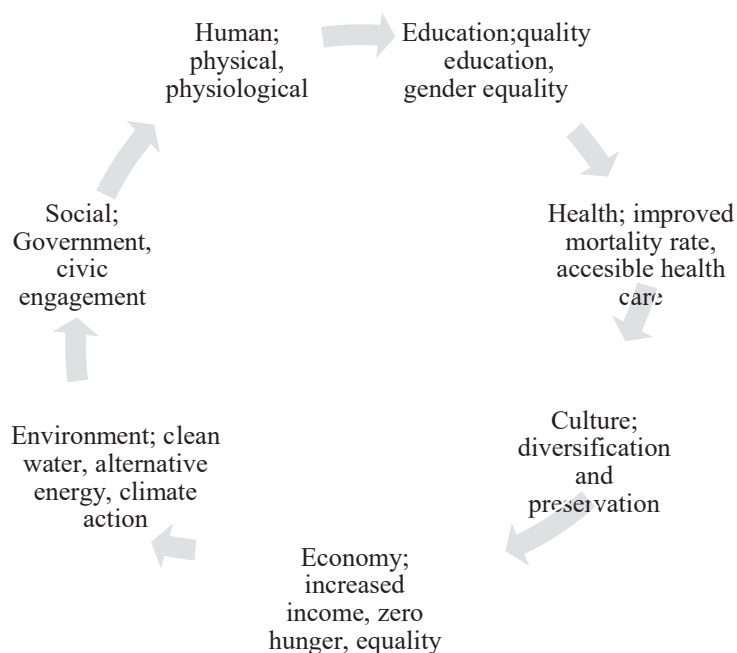
There is awareness that community livelihoods and well-being are intertwined and are dependent on the success of each other. More recently, there has been an amendment for examining biodiversity conservation and human well-being in the design and management of protected areas (Doak, Bakker, Goldstein, & Hale, 2015).

More integral approaches have also included social indicators, such as aspects related to health and education, as in the case of the Index of Human Development developed by the United Nations Development Program. There is a need for a well-being survey instrument that includes indicators to measure the impacts on community and wildlife for communality-based wildlife conservation projects (Musikanski, Allgood, Hofberg, Trevan, & Phillips, 2020).

Well-being differs from one community to another depending on the subjective perceptions of its members on how well their needs are satisfied, and these perceptions may change through time (HeeKyung & . Phillips, Indicators and Community Well-Being: Exploring a Relational Framework, 2018).

The researcher will have a set of basic questions to establish who the community of stakeholders is, what their livelihood strategies are, who benefits from community wealth, and how the community wants to improve its well-being. The following are domains cited by other authors as a measuring instrument to assess CWB:





**Figure 2. Domains cited by other authors as a measuring instrument to assess CWB (Source internet)**

Bottom up participation and processes are likely to have the greatest impact both on well-being and potential for changing the material circumstances of life. This type of participation does several things (Campbell & Jovchelovitch, 2000; Campbell & Murray, 2004).

### Theoretical Framework

Bottom up approach by definition “In the design process bottom up approach involves engaging the end-user(s) of the design intervention in the decision-making about the said strategy or solution and in the choice of how to go about working on this solution (Mwiti, 2020)”. According to (Sodhi, Butler, & Raven, 2011) (Amineh & Asl, 2015) Conservation initiatives that have worked well in temperate and developed regions have often been applied in the tropics but with only limited success. Part of this failure is due to top-down conservation planning that has been conducted without taking local socioeconomic considerations into

adequate account, inadequate power relationships between external actors and local communities thus leading to low community participation.

Indigenous societies have been practicing natural resource management through food taboos (e.g., limits on hunting of certain species during the breeding season, harvesting) and the protection of sacred sites that incidentally provide refuges and resources for plants and animals. In modern era these traditional cultures are now frequently eroded by the same processes that threaten biodiversity. Some authors argue that top-down conservation approaches would inevitably benefit from a deeper understanding of human-nature interactions. The forceful eviction of indigenous or rural people from some conservation areas in the Americas, Australia, Africa, and Asia (Sodhi, Butler & Raven, 2011) has led to serious conflicts between conservationists/governments and local people, and has led to discontentment and illegal wildlife trade in the

community. These examples illustrate the necessity of building a greater understanding of the existing interactions

of local people with nature and culture as an important component in achieving conservation of natural resources.

## RESEARCH METHODS

*Qualitative* methods such as observations of group interactions that are documented and analyzed to reveal themes, patterns, and insights. The researcher seeks to use primary and secondary data collection tools to explore commu-

nity needs to achieve full potential in conservation of wildlife, starting with conceptualizing and particularizing the problem and moving through several interventions and evaluations.

Types	Methods	Techniques
Library research	Analysis of documents	Literature review, Films on National geographic
Field research	<ul style="list-style-type: none"> <li>- Participant observation</li> <li>- Questionnaire</li> <li>- Case study</li> <li>- Interviews</li> </ul>	<ul style="list-style-type: none"> <li>- Analyze behavior using GNH (Gross National Happiness index)</li> <li>-a Analyze understanding of the topic</li> <li>- Develop strategies that can be manipulated</li> <li>- Explore the attitude of the people</li> </ul>

Table 2. Research Design parameters (source: author)

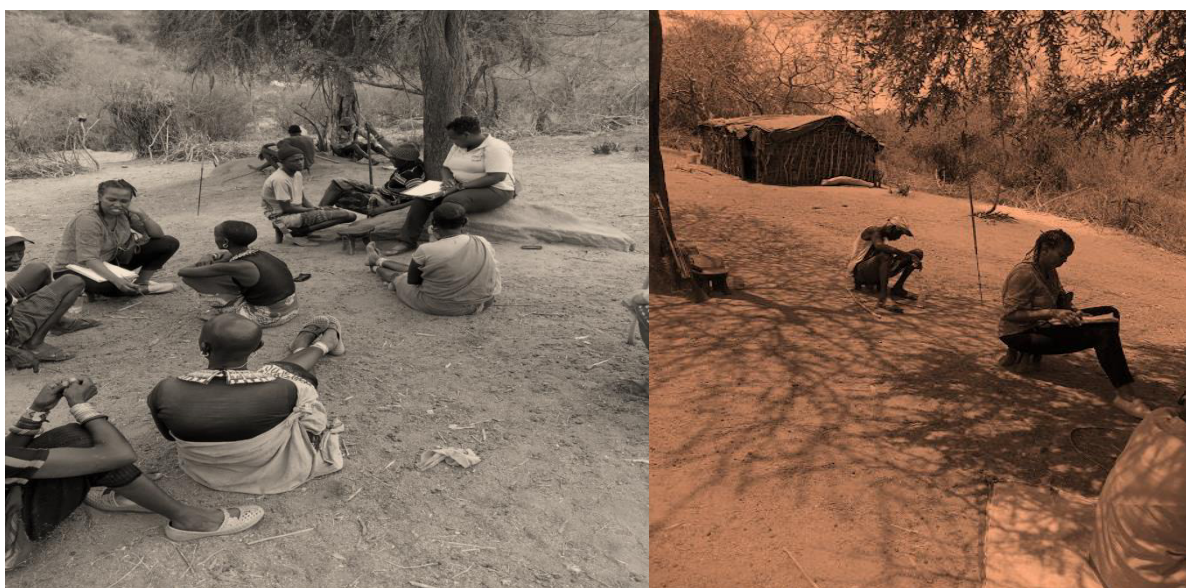


Figure 3. Interview with community members (source: Authors)

The researcher will study two wildlife community based conservancies (CBCs) sites one in Northern and Southern Kenya, that are community owned. Systematic sampling is to be applied only if the community is homogeneous, because systematic sample units are uniformly distributed over the population. This includes Mbirikani and Lekurruki conservancies.

### Sample Population

Structured interviews will be conducted in the community (Maasai) to generate data on conservation education, economic growth, experience with wildlife, individual participation in conservation. The population will range from leaders to the least in the community based on age or education level to gain a holistic overview of conservation participation in CC.

- i. 2 community leaders from two communities = 4
- ii. 2 officials from the two conservancies = 4

- iii. 1 official from CITIES KWS = 1
- iv. 10 community members from each conservancy = 20
- v. Total population = 29

### Data Analysis

Data analysis consists of examining, categorizing, testing or otherwise combining qualitative evidence to address the initial propositions of my study. The observed data will be organized in different thematic areas depending on the outcome. Cross-Case synthesis will be performed to analyze the data since there are two case studies which makes the technique relevant (Yin, 2003). Analysis will be conducted by creating word tables which display data from the case study according to some relevant data (Yin, 2003). Data will be analyzed based on the variables dependent on CBC management. Data will also be presented based on the various theoretical perspectives including sustainability, social human behavior and policy integration.

## RESULTS

### Mbirikani Group Ranch (MGR)

The case study area was welcoming to the researcher and data collection was conducted over a period of 3 months. The Maasai community took their time away from their daily chores to participate in structured interview with the help of a local translator as most of them did not possess fluency in English. Data collected was analyzed qualitatively by grouping it into themes and sub-themes for discussion purposes.

A summary of findings showed

that the major challenges facing the community towards conservation of wildlife was human wildlife conflict leading to loss of crops and livestock, low rates of compensation that caused disgruntlement, low tourism revenues experienced due to the Covid pandemic, lack of involvement by the youth. The researcher identified key issues pertaining to participation where children under the age of 18 were not involved in conservation, members had to be registered to be considered members of the ranch who will benefit in land allocation, women would

graze livestock but the men were considered the owners hence men would be compensated in case of loss.

Community Conservation is a key driver to wildlife conservation. Although enforcement of regulation remains necessary for conservation strategy, this approach alone is not sustainable without community participation. Participatory Design has shown some knowledge gap in the approaches used to inform the community instead of having them as key stakeholders in the decision making process they are involved at the implementation stages. Cultural hindrances should be addressed so as to involve all members. There is need to design new approaches that surpass CITES regulation and policies as more realistic approaches are beginning to emerge. Humans and wildlife cannot thrive one without the other and increase in population of one causes conflict in the other and vice versa. Conservation management and its leadership put in place have created political and social debates as to their functionality.

### A case study of Lekurruki CBC

The researcher conducted 7 structured interviews with community members and 3 interviews with officials. Two of them from Tassia lodge and one a com-

munity leader. Five of the members had to get assistance of a translator to subscribe the questionnaire while 5 of the members were comfortable with English language as a form of communication.

This community is made up of the "Maa" that is Maasai and Samburu people and they live in the heart of Laikipia County between mountain and neighboring other CBCs and Samburu community. It has been in existence since 1999 and has been thriving and receiving support from NRT as a member.

Community was engaged in conservation program through employment in schools and ranger security while others worked in the Tassia Lodge. Rangers employed were 33 in total while only 3 members were ladies hence creating a disparity in participation approach. The youth felt that conservation was part of agriculture and were not interested in conservation programs. Children under the age of 18 were not supposed to engage in conservation activities until adulthood. Community barazas were held every quarter of the year to discuss development and women would rarely speak in such meetings and through interviews they cited that they were content in being passive participants who were content with hearing progress and not speaking in the forums.

## DISCUSSION

The members of Mbirikani Group Ranch are empowered which was visible through observation in their dressing, roads, electricity, water resources, schools and churches in the region as well as the shopping Centre that welcomed us at the stage.

Analyzing participation in terms of gender the males were more active in conservation programs which is evidenced in the number of people employed as rangers, the numbers that attend compensation meetings and the numbers that report stray wildlife. The wom-

en in these community are hindered by culture and do not speak in front of their husbands who are the heads of the households. They graze the livestock's but when wildlife attacks the men attend the meetings as they are the sole owners of the cows, goats and camels and negotiate through active engagement with the conservationist. When the women attend the meetings which is often they are passive participants who agree with everything that is said and do not speak at such meetings. Three female respondents attend the meetings regularly and do actively participate because they enjoy the benefits that come with conservation.

Children under the age of 18years are educated on conservation in schools and do not attend meetings until they reach adulthood. This needs to be addressed for participation to be cohesive

there is need to create programs that integrate women and children for community engagement to be complete all members of the community need involvement.

The same was the finding at Lekuruki Conservancy where males participated more in conservation programs and women, youth and children were marginalized. The leaders of the CBC has considered to empower women and youth through financing their projects e.g. bodaboda (motorbike) transport and beadwork to motivate them towards being active participants in resource management.

Kenya Wildlife Conservancies Association (KWCA) has explored the need to have the youth engaged in conservation programs and is looking into having programs targeting them towards involvement in conservation programs.

## CONCLUSION

African wildlife Foundation states that gaps that need improvement is the involvement of women in conservation efforts and Tanzania is leading in these initiatives, political goodwill to support private stakeholders in the region, revision of the wildlife act, county conservation and compensation committee to revise its budget.

According to KWCA Community members come together with a vision of creating a conservancy and approach KWCA. They are required to have registered their group and receive consultation services that help them envision their goals of CBC. The services include:

- Landscape management
- Mapping

- Developing a constitution
- Registration with KWS

Once these is achieved the community is empowered to run its conservancy with occasional managerial assistance when need arises. Community needs are increasing and new approaches are necessary for development and sustainability to be achieved. Policy change is one of them and the need to have full participation by women and youth has been considered a priority. Gender guidelines are being developed to include the role of other voices so that the whole community is involved. In the past there was realization that the pioneer leaders who found the protected areas had a vision

of conservation but when they left the conservancies crumpled due to a generational gap in the society. For good governance and management, a succession plan is mandatory for sustainable utilization of CBCs. For the first time ever there is development of Youth Engagement strategy that targets the marginalized in society by having a membership register of a small amount that the youth can afford, make the constitution attractive for the youth to engage in and carry the mantle when their time approaches.

Conservation tools that are adopted to create community empowerment and participation and are IUCN (International Union for Conservation of Nature), IMEC (Impact Mitigation and Ecological Compensation), NTT Ltd. (Nippon Telegraph and Telephone Telecommunications company) and IIED (International Institute for Environment and Development).

According to Big Life Foundation PCF Predator Compensation Fund is a compensation plan started by Big Life Foundation (BLF) to help the community preserve lions when it attacks their livestock. A small amount of compensation is paid to the individuals who experience loss of livestock and this has helped increase the Lion population in the area. These compensation occurs every two months after the community member reports the incident immediately, a scout predator arrives at the scene to verify, a verification officer writes the report and forwards it to security which is forwarded to KWs for further action. Community members are assigned to be the judges and have a courtroom in the open and compensate legit cases and illegitimate cases are thrown out. This community involvement led to the community elders and leader encompassing ways to preserve their culture through Maasai

Olympics. It was a proposed collaboration on reducing the instances of cultural lion killing. The idea of a culturally-relevant sports competition is conceived as a potential substitute for lion killing and a way for Maasai warriors from across the ecosystem to compete against each other for prestige in a new twist on traditional rites of passage. Success of these can be measured by increased lion population.

Bottom up approach to community involvement in planning stages of community development will increase participation by:

**Participation by collaboration** forms groups of primary stakeholders to participate in the discussion and analysis of predetermined objectives set by the project. It requires an active involvement in the decision-making process about how to achieve it. This incorporates a component of horizontal communication and capacity building among all stakeholders—a joint collaborative effort. Even if initially dependent on outside facilitators and experts, with time collaborative participation has the potential to evolve into an independent form of participation.

**Empowerment participation** is where primary stakeholders are capable and willing to initiate the process and take part in the analysis. This leads to joint decision making about what should be achieved and how. While outsiders are equal partners in the development effort, the primary stakeholders are *primus inter pares*, i.e., they are equal partners with a significant say in decisions concerning their lives. Dialogue identifies and analyzes critical issues, and an exchange of knowledge and

experiences leads to solutions. Ownership and control of the process rest in the hands of the primary stakeholders.

For participatory approach to be effective

the members of the community must be involved in all the three phases of planning, implementation and evaluation of conservation programs for success, development and sustainable development goals achievement.

## REFERENCES

- Alexander, S. M., Andrachuk, M., & Armitage, D. (2016). Navigating governance networks for community-based conservation. *Frontiers in Ecology and the Environment*, 155–164.
- Amineh, R., & Asl, H. (2015). Review of Constructivism and Social Constructivism. *Journal of Social Sciences, Literature and Languages*, 13.
- Berkes, F. (2007). Community-based conservation in a globalized world. *PNAS*, 15189.
- Berkres, F. (2004). Rethinking Community-Based Conservation. *Society for conservation biology*, 622.
- Bixler, R. D. (2017). The political ecology of participatory conservation: institutions and discourse. *Journal of Political Ecology*, 5.
- Dinbabo, M. (2003). Dinbabo, MF., 2003. Development theories, participatory approaches and community. Bellville: University of the Western Cape.
- Doak, D., Bakker, V., Goldstein, B., & Hale, B. (2015). What is the future of conservation? *Protecting the Wild*. Island press.
- El-Sheikh, S. (2018). Enabling a gender-responsive process for the development of the post-2020 biodiversity framework: supplementary background and tools. *convention on biological diversity (p. 2)*. egypt: conference of the parties to the conference of the parties to the.
- Emilio, R., . Gavin, M., & Macedo-Bravo, M. O. (2010). Barriers and triggers to community participation across different stages of conservation management. *Environmental conservation*, 240.
- Ericson, J. A. (2004). A participatory approach to conservation in the Calakmul, Mexico. *Landscape and urban planning*, 242.
- Gaymer, C. F., Stadel, A. V., B. N., Cárcamo, P. F., Ierna Jr, J., & Lieberknecht, L. M. (2014). Merging top-down and bottom-up approaches in marine protected areas planning: experiences from around the globe. *Aquatic Conservation: Marine and fresh water ecosystem*.
- He, S., Yang, L., & Min, Q. (2020). Community Participation in Nature Conservation: The Chinese Experience and Its Implication to National Park Management. *Sustainability*, 2-5.
- HeeKyung, S., & . Phillips, R. G. (2018). Indicators and Community Well-Being: Exploring a Relational Framework. *International Journal of Community Well-Being*, 66.
- Horwich, R., & Lyon, J. (2007). Community conservation: practitioners' answer to critics. *Oryx*, 376.
- Hulme, D., & Murphee, M. (2001). Community conservation from concept to practice. In E. Barrow, & M. Murphee, *Community Conservation in Africa* (p. 25). Cape Town: David Philip.
- Lumbasi, J., & Measham, T. (2013). Success factors for Community-Based natural resource management (CBNRM): Lessons from Kenya and Australia. *EnvironmentalMmanagement*, 4.
- Makindi, S., Mutinda, M., Olekaikai, N., & Olelebo, W. (2012). Human-wildlife conflict: cause and mitigation measures in Tsavo conservation area Kenya. *Science and Research*,



1025.

Martin, A. (2007). Gender in the conservation of protected areas: Parks in Peril. *Innovations in Conservation Series*, 2.

Mudzengi, B. K., Gandiwa, E., Muboko, N., & Mutanga, C. N. (2021). Towards sustainable community conservation in tropical savanna ecosystems: a management framework for ecotourism ventures in a changing environment. *Environment, Development and Sustainability*, 3030.

Musikanski, L., Allgood, B., Hofberg, M. N., Trevan, E., & Phillips, R. (2020). Proposing a Community-Based Wildlife Conservation Well-being Instrument. *International Journal of Community Well-Being*, 2.

Mwiti, B. K. (2020). bottom-up design approach: a community-led intervention in fighting lifestyle diseases within urban informal settlements in nairobi, kenya. nairobi: university of nairobi.

Paudel, K., Potter, G., & P. J. (2019). Conservation enforcement: Insights from people incarcerated for wildlife crimes in Nepal. *A journal of the society for Conservation Biology*.

Pratt, K. (2012). Rethinking community: Conservation, practice, and emotion. *Emotion, Space and Society*, 179.

Sodh. N.: Butler, R., & Raven, P. (2011). Bottom-up Conservation. *Biotropica*, 521.

Waweru, R. (2015). Factors Which Promote Community Participation in the Community Driven Development Approach. *International Journal of Humanities & Social Science Studies*, 16.

Wiseman, J., & Brashler, K. (2008). Community Wellbeing in an Unwell World: Trends, Challenges, and possibilities. *Journal of public health policy*, 358.

Wood, L. (2008). Community-Based natural resource management: Case studies from community forest management projects in Ghana, Mexico and United States of America. *International resource management*, 2.