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Promoting Community Based Approaches in Environmental and Natural Resources Management In Kenya: A Reality or Mere Formality?

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Abstract

Exploitation of environmental and natural resources forms the source of livelihoods for many communities across the world and particularly Kenya. However, for assured flow of such benefits for the current and future generations, the Sustainable Development agenda calls for a balance between conservation and fulfilment of human needs. It also calls for active and meaningful participation of all stakeholders, including communities in the management of such resources. This paper discusses the place of community based natural resource management approach in Kenya and makes a case for enhanced use of the same in management of various resources in the country, as way of enhancing conservation measures as well as eradication of poverty among various communities.

1. Introduction

Natural Resource Management (NRM) is used to refer to the sustainable utilization of major natural resources, such as land, water, air, minerals, forests, fisheries, and wild flora and fauna.¹ Environmental and natural resources form the main source of livelihoods for majority of Kenyan communities. It is in recognition of this relationship that the Constitution of Kenya 2010 and the statutes on natural resources provide for co-management of these resources. This is not only meant to ensure that the communities are assured of food and maybe a source of income but also gives them a chance to participate in the conservation and management of these resources for the realisation of sustainable development agenda. This paper offers a critical discussion on the place of Community Based Natural Resource Management (CBNRM) in Kenya and whether the State has effectively implemented the provisions on the same.

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¹ Iyyanki V Muralikrishna and Valli Manickam, 'Chapter Three - Natural Resource Management and Biodiversity Conservation' in Iyyanki V Muralikrishna and Valli Manickam (eds), *Environmental Management* (Butterworth-Heinemann 2017) http://www.sciencedirect.com/science/article/pii/B9780128119891000038> accessed 10 July 2020.

2. Approaches to Environmental and Natural Resources Management

Notably, natural resources provide fundamental life support, in the form of both consumptive and public-good services while ecological processes maintain soil productivity, nutrient recycling, the cleansing of air and water, and climatic cycles.² In a bid to strike a balance between the consumptive and public-good services on the one hand and ecological processes on the other hand, different approaches to resource management have been adopted.

Policymakers often adopt one or a combination of these approaches when legislating on protection of the environment and natural resources.³ These approaches include command and control, market-based approaches, incentives (taxation and subsidies); Community based natural resource management (CBNRM) and traditional resource management institutions⁴; Ecosystem-based approaches such as integrated water resources management (IWRM) or River basin management, integrated coastal zone management (ICZM) and integrated management of land⁵.

While the different approaches to environmental and natural resources management as listed above are to be applied as complementary tools in natural resource management and not mutually exclusive as they overlap with one another in their application⁶, this paper is mainly concerned with Community-based natural resource management approach.

² Iyyanki V Muralikrishna and Valli Manickam, 'Chapter Three - Natural Resource Management and Biodiversity Conservation' in Iyyanki V Muralikrishna and Valli Manickam (eds), *Environmental Management* (Butterworth-Heinemann 2017) http://www.sciencedirect.com/science/article/pii/B9780128119891000038> accessed 10 July 2020.

³ Gunningham, N. & Sinclair, D., 'Designing Smart Regulation,' in Bridget M. Hutter (ed), A Reader in Environmental Law (Oxford University Press, 1999), p.305; Muigua, K., Kariuki, F., Wamukoya, D., Natural Resources and Environmental Justice in Kenya, Glenwood Publishers, Nairobi – 2015, Chapter Three.

⁴ See generally, Measham, T.G. & Lumbasi, J., "Success factors for Community Based Natural Resource Management (CBNRM): lessons from Kenya and Australia." *Environmental Management*, Vol. 52 (3), 2013, pp. 649-659.

⁵ See Feeney, C. & Gustafson, P., "Integrating Catchment and Coastal Management-A Survey of Local and International Best Practice," *Prepared by Organisation for Auckland Regional Council, Auckland Regional Council Technical Report 2009/092*, 2010.

⁶ Blanco, E. & Razzaque, J., *Globalisation and Natural Resources Law: Challenges, Key Issues and Perspectives*, (Edward Elgar Publishing Limited, 2011), p. 106; See also Miller, B. W. & Morisette, J. T., "Integrating research tools to support the management of social-ecological systems under climate change," *Ecology and Society*, Vol. 19, No. 3, 2014, Art. 41.

2.1 Community Based Approaches in Environmental and Natural Resources Management

Community-based natural resource management (CBNRM) has been defined in different ways by different authors. One of the definitions that stand out is CBNRM as 'a people-centered approach to the integration of conservation of the natural resource base (water, soil, trees and local biodiversity) and development to overcome poverty, hunger and disease'.⁷

Community based approaches in environmental and natural resources management come in various forms which include: social and community forestry, community wildlife management, cooperative or co-management, buffer zone management, participatory multipurpose community projects, communal area management for indigenous resources, among others.⁸

Despite often important differences, all these expressions of CBNRM are associated with certain characteristics, including: a commitment to involve community members and local institutions in the management and conservation of natural resources; an interest in devolving power and authority from central and/or state government to more local and often indigenous institutions and peoples; a desire to link and reconcile the objectives of socioeconomic development and environmental conservation and protection; a tendency to defend and legitimize local and/or indigenous resource and property rights; and a belief in the desirability of including traditional values and ecological knowledge in modem resource management.⁹

CBNRM approaches have been associated with the following key elements: multi-stakeholder collaboration that involves all participants, from communities, to government, to NGOs, and promotes coordination among them; conflict management mechanisms – support processes to manage natural resource conflicts among stakeholders; participatory action research – collaborative fact-finding and analysis generates a mutually agreed upon perspective for action; strong local organizations, such as forest-farmer groups and inter-village networks built from the bottom-up; livelihood improvement and environmental services; policy support and law enforcement are essential to curbing illegal encroachment leading to ecosystem degradation; collaborative management plans– shared responsibilities and decision-making among all

⁷ 'Community Based Natural Resources Management' (*World Neighbors*) <https://www.wn.org/what-we-do/community-based-natural-resources-management/> accessed 8 July 2020.

⁸ Stephen R Kellert and others, 'Community Natural Resource Management: Promise, Rhetoric, and Reality' (2000) 13 Society & Natural Resources 705, at pp. 705-706.

⁹ Ibid, at p. 706.

stakeholders through joint management plans of natural resources; participatory monitoring and evaluation – promote learning, trust and accountability through monitoring of the natural resource base and application of the management plan; and gender and social justice in access to, and control of, natural resources as the ultimate measure of the sustainability of community-based natural resource management efforts.¹⁰

The next section offers an overview of Kenya's regulatory framework on the adoption and implementation of CBNRM approach as far as management of environmental and natural resources in the country are concerned. It also critically discusses the effectiveness of Kenyan Government's efforts and commitment in adoption and application of Community-based natural resource management approach as per the statutory provisions.

3. Regulatory Framework on Community Based Approaches in Environmental and Natural Resources Management in Kenya: Challenges and Prospects

The regulatory framework on management of environmental and natural resources in Kenya consists of the Constitution and various sectoral laws and policies. This section highlights some of these provisions with a bias on those that provide for the use of community based environmental and natural resources management.

To begin with, the national values and principles of governance such as sharing and devolution of power; democracy and participation of the people and sustainable development provide a basis for CBNRM.¹¹ The Constitution obligates the State to protect and enhance indigenous knowledge of biodiversity of the communities.¹² The State is also obligated to encourage public participation in the management, protection and conservation of the environment.¹³ In settling land disputes, communities are encouraged to apply recognized local community initiatives consistent with the Constitution.¹⁴ This is meant to enhance community involvement in natural

¹⁰ 'Community Based Natural Resources Management' (*World Neighbors*) <https://www.wn.org/what-we-do/community-based-natural-resources-management/> accessed 10 July 2020.

¹¹ Constitution of Kenya 2010, Art.10.

¹² *Ibid*, Art. 69(1) (c).

¹³ *Ibid*, Art. (1) (d).

¹⁴ *Ibid*, Art.60 (1) (g) and Art.67 (2) (f).

resource management since these provisions encourage in one way or the other the participation of local communities in the management, use or ownership of natural resources.¹⁵

Notably, the 2010 Constitution of Kenya envisages community land which is classified as land that is lawfully held, managed or used by specific communities as community forests, grazing areas or shrines.¹⁶ It envisages a scenario where there is land management by communities.¹⁷

The Constitution also provides for community forests.¹⁸ The protection of community land and by extension forests is guaranteed in the Constitution in the sense that all unregistered land should be held in trust by the county governments on behalf of the communities.¹⁹ It is also provided that community land should not be disposed of or otherwise used in a manner that contravenes the rights of the members of that particular community.²⁰

Also worth mentioning is the paradigm shift towards the use of incentives to encourage community participation in wildlife management in Kenya.²¹ If private land owners and communities are given incentives to keep wildlife on their land, then they will perceive wildlife as an economic good and protect the wildlife in the same manner they protect their private property. This is important because command and control approaches to wildlife management have failed to curb loss of wildlife.

In forests management, the *Forest Conservation and Management Act 2016*²² provides for "community forest association" which means a group of local persons who have registered as an association or other organization established to engage in forest management and conservation.²³ Where a community forest association has been granted permission to participate in the management or conservation of a forest in accordance with the provisions of the Act, that

¹⁵ Muigua, K., Kariuki, F., Wamukoya, D., *Natural Resources and Environmental Justice in Kenya*, Glenwood Publishers, Nairobi – 2015, Chapter Three.

¹⁶ Constitution of Kenya 2010, Art.63(d).

¹⁷ *Ibid*.

¹⁸ Kibugi, R. *Governing Land Use in Kenya: From Sectoral Fragmentation to Sustainable Integration of Law and Policy.* Thesis submitted to the Faculty of Graduate and Postdoctoral Studies in partial fulfillment for the Doctors of Laws (LL.D) degree, University of Ottawa (2011), p. 443.

¹⁹ Art.63(3) of the Constitution.

²⁰ *Ibid*, Art.63 (4).

²¹ One of the objectives of the *National Wildlife Conservation and Management Policy, 2012* is to promote partnerships, incentives and benefit sharing to enhance wildlife conservation and management. The Policy further proposes that the Government should provide economic incentives to induce or promote sustainable wildlife conservation and management; See also the *Wildlife Conservation and Management Act*, 2013, No. 47 of 2013, s.5. ²² Forest Conservation and Management Act, No. 34 of 2016, Laws of Kenya.

²³ Ibid, Sec. 48.

association has obligations to: protect, conserve and manage the forest or part of the forest in accordance with an approved management agreement entered into with the Service and the provisions of the management plan for the forest; formulate and implement sustainable forest programmes that shall be consistent with the traditional forest user rights of the relevant forest community; protect sacred groves and protected trees; assist the Service or any other relevant authority in enforcing the provisions of the Act including in relation to illegal harvesting of forest products; with the approval of the Service enter into partnerships with other persons for the purposes of ensuring the efficient and sustainable conservation and management of the forest; inform the Service of any developments, changes and occurrences within the forest which are critical for the conservation of biodiversity; help in firefighting; and do any other act that is necessary for the efficient conservation and management of the forest.²⁴

On the other hand, the management agreement between the Service and the community forest association confers on the association all or any of the following forest user rights: collection of medicinal herbs; harvesting of honey; harvesting of timber or fuel wood; grass harvesting and grazing; collection of forest produce for community based industries; ecotourism and recreational activities; scientific and education activities; plantation establishment through non-resident cultivation; contracts to assist in carrying out specified forestry operations; development of community wood and non-wood forest based industries; and other benefits which may from time to time be agreed upon between an association and the Service.²⁵

This is meant to motivate communities to invest in sustainable forestry management. Participation of communities in forests management is informed by the fact that exclusion of local communities in management and conservation of natural resources tends to escalate degradation rather than conservation.²⁶ The sense of ownership by communities facilitates gainful benefits to the local communities as well as encouraging community eco-governance.²⁷

http://iasc2008.glos.ac.uk/conference%20papers/papers/V/Vyamana_134501.pdf [Accessed on 8/07/2020].

²⁴ Ibid, sec. 49 (1).

²⁵ Ibid, sec. 49 (2).

²⁶ See Vyamana, V.G., *et al*, 'Participatory Forest Management in the Eastern Arc Mountain area of Tanzania: Who is benefiting?' Available at

²⁷ 'Eco-social sustainability in the Murray-Darling Basin,' *Case study: regional sustainability efforts in the Murray-Darling Basin*, (Hawke Research Institute, University of South Australia, 2010).

Available at *http://w3.unisa.edu.au/hawkeinstitute/research/ecosocial/eco-case-study.asp#top* [Accessed on 8/07/2020].

While it is commendable that the Act recognizes the constitutional provisions on public participation by incorporating participatory and collaborative management of forests, where the public can actively and meaningfully be more involved in the conservation and management of forests, it appears like the drafters only envisaged a non-residential kind of cooperation, where any person who wishes to participate in the form of Community Forests Association must first apply for a permit and then must also do so while living within the area surrounding the forest in question and not inside the forest. The question that arises in such situations is what happens when the State is dealing with communities that have traditionally resided in such forests. Notably, The *Forest Conservation and Management Act 2016* recognises that community forests include forests on ancestral lands and lands traditionally occupied by hunter-gatherer communities.²⁸ How the State treats such scenarios raises a number of issues. It is not clear whether the State should allocate alternative settlement for such communities in order to achieve the non-resident approach to co-management or the Government should simply evict such communities as it has been the case in the recent past.²⁹

The laws governing water resources in the country also envisage community involvement in the management of these resources. The *Water Act 2016*³⁰ provides that water resource users associations may be established as associations of water resource users at the sub-basin level in accordance with Regulations prescribed by the Authority.³¹ A water resource users association shall be a community based association for collaborative management of water resources and resolution of conflicts concerning the use of water resources.³² Notably, the basin water

²⁸ Forest Conservation and Management Act, No. 34 of 2016, Sec. 30 (3) (e).

²⁹ 'Imminent Eviction of Ogiek from Homeland' <https://www.culturalsurvival.org/news/imminent-eviction-ogiekhomeland> accessed 11 July 2020; 'Mau Forest Evictions Leave Ogiek Homeless' https://www.culturalsurvival.org/news/mau-forest-evictions-leave-ogiek-homeless accessed 11 July 2020; 'Press Release: Kenya's Mau Ogiek Remain Excluded from Ancestral Forest Three Years after Landmark Land Rights Win | Forest Peoples Programme' < https://www.forestpeoples.org/en/Kenya-Ogiek-still-excluded-from-forest-threeyears-after-land-rights-win> accessed 11 July 2020; 'Two Years on, Kenya Has yet to Implement Judgment in Ogiek Case - MRG Statement' (Minority Rights Group, 5 June 2019) < https://minorityrights.org/2019/06/05/twoyears-on-kenya-has-yet-to-implement-judgment-in-ogiek-case-mrg-statement/> accessed 11 July 2020; 'Ogiek: We Illegal Support Eviction of Settlers from Mau Forest' (Daily Nation) <https://www.nation.co.ke/kenya/counties/nakuru/ogiek-we-support-eviction-of-illegal-settlers-from-mau-forest-85436> accessed 11 July 2020.

³⁰ Water Act, No. 43 of 2016, Laws of Kenya.

³¹ Ibid, sec. 29 (1).

³² Ibid, sec. 29 (2).

resources committees may contract water resource users associations as agents to perform certain duties in water resource management.³³

As one of the strategies for co-management, the Water Act 2016 provides for the designation of a defined area from which rain water flows into a watercourse to be a basin area for the purposes of the Act.³⁴ In addition, the Cabinet Secretary is, by notice published in the Gazette, to establish a basin water resources committee for each respective basin area provided for under section 24.³⁵ Such a basin water resources committee shall be responsible for the management of the water resources within a respective basin area.³⁶ In appointing members of the basin water resources committee, the Authority must ensure that such persons are residents of the respective basin area and shall include: a representative of a ministry responsible for matters relating to water resources; a representative of farmers or pastoralists within the basin area concerned; a representative of a public benefits organisation engaged in water resources management programmes within the basin area concerned; and a representative of the basin area concerned.³⁷

The powers and functions of the basin water resources committee shall be to advise the Authority and county governments, at the respective regional office, concerning: conservation, use and apportionment of water resources; the grant, adjustment, cancellation or variation of any permit; protection of water resources and increasing the availability of water; annual reporting to the users of its services and the public on water issues and their performance within the basin area; collection of data, analyzing and managing the information system on water resources; review of the basin area water resources management strategy; facilitation of the establishment and operations of water resource user associations; flood mitigation activities; information sharing between the basin area and the Authority; the equitable water sharing within the basin area through water allocation plans; and any other matter related to the proper management of water resources.³⁸

³³ Ibid, sec. 29 (4).

³⁴ Ibid, sec. 24 (1).

³⁵ Ibid, sec. 24 (2).

³⁶ Ibid, sec. 24 (3).

³⁷ Ibid, sec. 26 (3).

³⁸ Ibid, sec. 27.

The Water Act 2016 requires that every county government must put in place measures for the provision of water services to rural areas which are considered not to be commercially viable for the provision of water services.³⁹ These measures shall include the development of point sources, small scale piped systems and stand pipes which meet the standards set by the Regulatory Board and which may be managed by the community associations, public benefits organizations or a private person under a contract with the county government.⁴⁰

Notably, the role of the user bodies established or appointed under the Water Act 2016 is merely to advise the Water Resources Management Authority, which is not obliged to take the advice. This was the same case in the pre-2010 constitutional era where the Water Act 2002 had similar provisions.⁴¹ The National Water Policy 1999 and the Water Act 2002, provided for a new institutional set-up for water resources management and water services provision at national and basin level. For participation of users/consumers and their empowerment, the Water Resources Users Associations (WRUAs) and Water Consumer Groups (WCGs) were established. In addition, Water Services Boards (WSBs) were established to promote asset development.⁴² Despite all these provisions in both pre and post 2010 constitutional statutes, there is little evidence that decentralized co-management approaches to water management in the country have been well utilised to ensure that all people enjoy their right to clean water while ensuring sustainable management of the water resources in the country.

The Wildlife Conservation and Management Act, 2013⁴³ envisages community participation in wildlife resources management through community wildlife associations and wildlife managers.⁴⁴ These are to be established by communities, landowners, groups of landowners and existing representative organizations. The object and purpose for which an association is established is to facilitate conflict resolution and cooperative management of wildlife within a specified geographic region or sub-region.⁴⁵ An association or wildlife manager approved by the Cabinet Secretary on the recommendation of the Kenya Wildlife Service in consultation with the

³⁹ Ibid, sec. 94 (2).

⁴⁰ Ibid, sec. 94 (3).

⁴¹ See generally, Akech M., "Governing Water and Sanitation in Kenya," in Okidi, C.O., *et al*, (eds) *Environmental Governance in Kenya: Implementing the Framework Law*, (EAEPL, 2008), p.324.

⁴² Muigua, K., Kariuki, F., Wamukoya, D., *Natural Resources and Environmental Justice in Kenya*, Glenwood Publishers, Nairobi, 2015, Chapter Three.

⁴³ Wildlife Conservation and Management Act, No. 47 of 2013, Laws of Kenya.

⁴⁴ Ibid, sec. 40 (1).

⁴⁵ Ibid, sec. 40 (2).

county wildlife conservation committees shall: ensure that the association membership or the wildlife manager protects, conserves and manages wildlife conservancies and sanctuaries under their jurisdictions pursuant to their respective approved management plans; assist the service in combating illegal activities, including poaching and bush meat trade; keep the regional wildlife conservation area committee informed of any development changes and occurrences within their area that may adversely affect wildlife; assist in problem animal control through community wildlife scouts drawn from among their membership or employees; and do any other act that is necessary to enhance community participation in wildlife protection, conservation and management.⁴⁶

The provisions for co-management of wildlife resources are meant to address the perennial human-wildlife conflict Kenya.⁴⁷ However, the same has had little success in curbing the problem if the recent statistics are anything to go by.⁴⁸

Some authors have even argued for the adoption of collaborative management in wildlife sector on grounds that both the state-based and community-based models of managing wildlife and other natural resources have failed to successfully fulfil goals of conservation and meet the socio-economic needs of the local communities.⁴⁹ To them, the co-management approach (also sometimes referred to as joint management, multi-stakeholder management, or management in partnership) seeks to create negotiated agreements between the protected areas' managers and local resource users and, therefore, offers a possibility to overcome conflicting interests over resource exploitation.⁵⁰ The *Wildlife Conservation and Management Act 2013* also envisages this co-management approach and the same should be explored.

'77 People Killed in Human-Wildlife Conflicts in 2018: Balala' (Daily Nation) https://www.nation.co.ke/kenya/news/77-people-killed-in-human-wildlife-conflicts-in-2018-balala-182650 accessed 11 July 2020; 'Human-Wildlife Conflicts and Compensation for Losses in Kenya' (AfricanBioServices) https://africanbioservices.eu/human-wildlife-conflicts-and-compensation-for-losses-in-kenva/ accessed 11 July 2020; Joseph M Mukeka and others, 'Human-Wildlife Conflicts and Their Correlates in Narok County, Kenya' (2019) 18 Global Ecology and Conservation e00620.

⁴⁶ Ibid, sec. 41.

⁴⁷ Muigua, K., Kariuki, F., Wamukoya, D., *Natural Resources and Environmental Justice in Kenya*, Glenwood Publishers, Nairobi, 2015, Chapter Nine.

 ⁴⁹ John Mburu and Regina Birner, 'Wildlife Co-Management in Kenya: An Empirical Analysis of Landowners' Incentives for Participation'. *Deutscher Tropentag 2002 Witzenhausen, October 9-11, 2002 Conference on International Agricultural Research for Development <* https://pdfs.semanticscholar.org/8fa7/f0de16651abdf88ee91491a2c58a244c2f05.pdf> accessed 11 July 2020.
⁵⁰ Ibid, pp. 1-2.

In addition to the foregoing sectoral statutes, cultural and social principles applied traditionally by communities in management of environmental and natural resources are recognized under EMCA in so far as they are not inconsistent and repugnant to justice and morality or any other written law.⁵¹

Despite the statutory and constitutional provisions encouraging CBNRM approach in Kenya, there is overwhelming evidence that the State has done little if anything to implement the same. Indeed, the opposite may be said to be true if some of the State actions are anything to go by.

In this context, the Ogiek and the Endorois communities in Kenya are the main reference point. The reason for this is that they are forest dwellers and there has been an issue as to whether they should manage the forests in which they live in or it should be left to state institutions such as the Kenya Forestry Service. The Ogiek are a forest dwelling people who live in the Mau forest in Nakuru. The Endorois, on the other hand, live near the Lake Bogoria reserve. The claim of the two communities has been tenure rights within the forest and wildlife protected areas.⁵² The issue has been a subject of litigation at the African Commission on Human and Peoples Rights.⁵³ It can, therefore, be argued that the two communities have their rightful place in the forests according to the Constitution and since they manage the forests, they are part of the community-based organizations that should be meaningfully included in the management of natural resources.

4. Walking the Talk: Making Community Based Approaches in Environmental and Natural Resources Management Work in Kenya

Some commentators have argued that due to the 'interdependence of community well-being and ecosystem health, there is a need to strengthen the capacity of communities to have a voice in

⁵¹ S. 5(b) of the Environmental Management and Co-ordination Act, 1999.

⁵² 'Defending Our Future: Overcoming the Challenges of Returning the Ogiek Home' (*Minority Rights Group*, 27 May 2020) https://minorityrights.org/2020/05/27/defending-our-future-overcoming-the-challenges-of-returning-the-ogiek-home/ accessed 11 July 2020.

⁵³ 276 / 2003 – Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v Kenya; Application No. 006/2012 – African Commission on Human and Peoples' Rights v. The Republic of Kenya (The Ogiek case arose from Communication No. 381/09 – Centre for Minority Rights Development – Kenya and Minority Rights Group International (on behalf of the Ogiek Community of the Mau Forest) v Kenya, which was before the African Commission on Human and Peoples' Rights (the Commission), and later referred to the Court.)

decisions about planning and design of conservation initiatives affecting them'.⁵⁴ This is because 'the natural environment plays a huge role in the health and welfare of people who rely on it as their sole source of income and food'.⁵⁵ CBNRM approach not only gives communities a voice in management of natural resources within their locality but also allows them to benefit from them and also avert any adverse effects of environmental degradation, in recognition of the right to clean and healthy environment⁵⁶. It allows them to enjoy environmental democracy. Environmental democracy entails the principle of equal rights for all including the public, community groups, advocates, industrial leaders, workers, governments, academics and other professionals to be involved in environmental governance.⁵⁷ It connotes the right of all whose daily lives are affected by the quality of the environment to participate in environmental decision-making as freely as they do in other public interest matters such as education, health care, finance and government.⁵⁸ Access to environmental information and justice for all those who choose to participate in such decision-making is integral to the concept of environmental democracy.⁵⁹ In addition, Principle 10 of the *Rio Declaration*⁶⁰ provides that environmental issues are best handled with the participation of all concerned citizens, at the relevant level. It further provides for access to information by the public. At the national level, each individual must have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States must facilitate and encourage public awareness and participation by making information widely available.⁶¹

⁵⁴ 'Community Based Natural Resources Management' (*World Neighbors*) <https://www.wn.org/what-we-do/community-based-natural-resources-management/> accessed 10 July 2020.

⁵⁵ Ibid.

⁵⁶ See Article 42, Constitution of Kenya, 2010.

⁵⁷ Hazen, S., Environmental Democracy, (1998). Available at *<http.www.ourplanet.com>* [Accessed on 12/7/2020]; Muigua, K., *Nurturing Our Environment for Sustainable Development*, Glenwood Publishers, Nairobi – 2016), Chapter Five.

⁵⁸ Ibid.

⁵⁹ Ibid.

⁶⁰ United Nations, Rio Declaration of 1992, UN Doc. A/CONF.151/26 (Vol. I).

⁶¹ Report of the United Nations Conference on Environment and Development (Rio De Janeiro, 3-14 June 1992).

It has rightly been pointed out that 'many indigenous peoples are still heavily dependent on natural resources for their survival, and have, over time, developed social and cultural mechanisms that reflect the very real dynamics of natural systems'.⁶²

CBNRM approach is informed by the view that sustainable management of natural resources is most likely to be achieved where local communities are able to manage and derive benefits from natural resources.⁶³ The approach calls for a commitment to involve community members and local institutions in management of natural resources, devolution of power and authority to the grass roots, a desire to reconcile the objectives of socio-economic development and environmental conservation, the tendency to defend and legitimize local and indigenous property rights and a desire to include traditional values in modern management of natural resources.⁶⁴

It is for these reasons that the Government of Kenya and other stakeholders in the management of environment and natural resources should reconsider and address the laxity experienced in the implementation of CBNRM approach in Kenya.

Kenya can learn from other countries within and beyond Africa. For instance, in Malawi, Lake Chilwa, a tropical lake without an outlet, and the second largest lake in Malawi, is a home to large populations of breeding waterfowls and an estimated 100 bird catchers are rely economically on the birds.⁶⁵ It is worth noting that the Lake is listed as a Ramsar site. The fertile Lake Chilwa Wetland also has a lot of agricultural activities with two main crops grown, maize and rice, and sustains thousands of people through rice farming and cultivation of a variety of vegetables.⁶⁶ A number of Community-Based Natural Resources Management (CBNRM) groups have been formed to manage different resources like fish, waterfowls, soil and trees.⁶⁷ While

⁶² Jay Mistry, 'Indigenous Knowledges' In Kitchin R, Thrift N (eds) International Encyclopedia of Human Geography, Volume 5, pp. 371–376. Oxford: Elsevier. accessed 10 July 2020">https://www.academia.edu/940129/Indigenous_knowledges>accessed 10 July 2020.

⁶³ Muigua, K., Kariuki, F., Wamukoya, D., *Natural Resources and Environmental Justice in Kenya*, Glenwood Publishers, Nairobi – 2015, Chapter Three.

⁶⁴ Nelson F. & Agrawal, A., "Patronage or Participation? Community-based Natural Resource Management Reform in Sub-Saharan Africa," *Journal of Development and Change*, vol. 39, No.4, 2008, pp.557-585; See also Kellert, S.R., *et al*, "Community Natural Resource Management: Promise, Rhetoric and Reality," *Society and Natural Resources: An International Journal*, Vol.13 (8), p.706; Muigua, K., Kariuki, F., Wamukoya, D., *Natural Resources and Environmental Justice in Kenya*, Glenwood Publishers, Nairobi – 2015, Chapter Three.

⁶⁵ 'Community-Based Natural Resources Management - the Case of Lake Chilwa Wetland, Malawi | Ramsar' ">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malawi>">https://www.ramsar.org/news/community-based-natural-resources-management-the-case-of-lake-chilwa-wetland-malaw

⁶⁶ Ibid.

⁶⁷ Ibid.

these groups are yet to receive user rights and legal tenure, Kenya can borrow a leaf especially around swampy areas and Lake Victoria which is currently choked by the invasive water hyacinth. The community living around the lake should be allowed to work closely with the Government to not only manage fish resources but also to keep the water resource clean. Kenya can also borrow a leaf from the management of the Okavango Delta System (a Ramsar site) in Botswana. The Okavango Delta is divided into Wildlife Management Areas (WMAs).These have been further divided into: Controlled Hunting Areas (CHAs); Commercial Wildlife Utilization; Community Managed Wildlife Utilization; Community Based Natural Resources Management Programme; and Non-Consumptive/Photographic.⁶⁸

Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) also offers valuable example to Kenya. CAMPFIRE, started in the late 1980s in Zimbabwe, and subsequently widely emulated elsewhere in southern Africa, involves the sale by rural authorities of the rights to access wildlife to entrepreneurs who in turn market safaris to hunters and eco-tourists.⁶⁹ CAMPFIRE was developed largely around the concept of managing wildlife and wildlife habitat in the communal lands of Zimbabwe for the benefit of the people living in these areas.⁷⁰

The Bigodi Wetland Sanctuary in Uganda is also another example where the local community has been running a successful community-based natural resource management programme (CBNRM) for the wetland for over a decade, with external visitors to the wetland providing ecotourism revenues and majority of households collecting a wide variety of plant and fish resources and water from the wetland for household use and livestock.⁷¹

Australia's Indigenous land and sea management projects, a funding program by the Australian Federal Government in recognition of the ecological value of Indigenous land management can also offer valuable lessons. Notably, the Australian programs provide funds to Indigenous people

⁶⁸ JobeManga and Gertrude Matswiri, 'Expert Meeting: Transboundary Cooperation For Protecting The Cubango-Okavango River Basin & Improving The Integrity Of The Okavango Delta World Heritage Property,' 3-4 June, Cresta Hotel, Maun, Botswana Okavango Delta World Heritage Property –History, Governance & Current Conservation Issues< *whc.unesco.org > document*> 12 July 2020.

⁶⁹ Peter GH Frost and Ivan Bond, 'The CAMPFIRE Programme in Zimbabwe: Payments for Wildlife Services' (2008) 65 Ecological economics 776.

⁷⁰ Ibid.

⁷¹ A Gosling, Charlie M Shackleton and J Gambiza, 'Community-Based Natural Resource Use and Management of Bigodi Wetland Sanctuary, Uganda, for Livelihood Benefits' (2017) 25 Wetlands Ecology and Management 717.

to support Indigenous land management activities) and are also known to generate social and economic benefits in addition to the ecological ones.⁷² They are thus considered as important economic vehicles for elimination of poverty in Northern Australia.⁷³ Notably, Australia was emerging from a tradition of oppression of the indigenous peoples' rights to exploitation of natural resources.⁷⁴

While Kenya's legal framework on natural resource management may have provisions that envisage similar establishments, the implementation of the same has largely remained a challenge. Even where established, the same receive little, if any, support from the state agencies. Their establishment may therefore be argued to be a mere formality, with little involvement in the actual management of resources.

There is a need for the various state organs to work closely with stakeholders in the various natural resource sectors to establish the legal and institutional frameworks provided for under the statutes to ensure effective CBNRM. As things stand now, the statutes make provisions for the use of CBNRM but the actual implementation of these provisions is yet to be witnessed.

If water scarcity issues, logging problems, environmental degradation, poverty, human-wildlife conflicts and other social ills facing the natural resources sector in the country are to be eliminated, there is a need to revisit the above provisions and come up with ways on how best the same can be implemented. It is worth pointing out that the implementation of specific approaches under CBNRM may differ based on other factors, but the end result should be achieving conservation, poverty eradication and achievement of the sustainable development agenda. CBNRM is an important approach in the achievement of Sustainable Development Goals (SDGs). This is because it seeks to achieve several of the SDGs at a go. It seeks to achieve environmental conservation, economic and social empowerment through encouraging participation of communities in management of environmental and natural resources. This gives such a community a source of livelihood thus eliminating poverty while at the same time

⁷² Diane Jarvis and others, 'Indigenous Land and Sea Management Programs: Can They Promote Regional Development and Help "Close the (Income) Gap"?' (2018) 53 Australian Journal of Social Issues 283.

⁷³ Ibid, p. 299; See also Diane Jarvis and others, 'Are Indigenous Land and Sea Management Programs a Pathway to Indigenous Economic Independence?' [2018] The Rangeland Journal.

⁷⁴ See *Mabo v. Queensland* (No. 1) (1988) 166 CLR 186 F.C. 88/062; *Mabo and others v. Queensland* (No. 2) [1992] HCA 23; (1992) 175 CLR 1 F.C. 92/014 (3 June 1992).

achieving conservation goals: all key goals of the sustainable development agenda as envisaged under the United Nations 2030 Agenda for Sustainable Development⁷⁵.

5. Conclusion

CBNRM approach is not only considered as a response to the challenges of a decentralized management system which occasions natural resources degradation but also as a modern attempt to revive traditional mechanisms for the conservation of natural resources.⁷⁶ Giving local communities the rights to manage, use or own resources, creates incentives for them to collectively invest in natural resources management.⁷⁷ It is against this background that this paper advocates for renewed efforts in the full implementation of CBNRM in Kenya as a step towards eradication of poverty and enhancing community participation in environmental and natural resources management as a means to an end, that is, for the achievement of sustainable development agenda.

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⁷⁵ UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development*, 21 October 2015, A/RES/70/1.

⁷⁶ Nelson F. & Agrawal, A., "Patronage or Participation? Community-based Natural Resource Management Reform in Sub-Saharan Africa," *Journal of Development and Change*, vol. 39, No.4, 2008, p.558.

⁷⁷ *Ibid*, p.558.

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