

Series 2 – Social Pillar: Environment, Water, Sanitation and Regional Development

The Future to Conservation of Ramsar Sites: Environmental Education And Awareness

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Key Messages

Education and awareness of local communities is key to the survival of inland wetlands. Partnerships between communities, public and private institutions is the way forward. Educational curricula must be revised to start teaching citizens at all levels to understand the benefits of wetlands conservation and sustainable development.

Context

The creation of the Ramsar Convention (RC) on wetlands in 1971 has prompted the continuous designation that protects global wetlands within the 170 member countries. Currently there are over 2,400 Ramsar sites. Education and awareness are the key to support wetlands protection. The RC has continued to establish wetlands education centres under the Communication, Education and Public Awareness (CEPA) programmes to connect people with nature and increase their awareness on the use of wetlands and their sustainability. Today, there are over 300 CEPA centres across the globe supporting community education in conservation.

Since 1900, over 64 percent of the world's wetlands have disappeared, with the highest wetland loss, of about 35 percent, occurring between 1970-2015. Losses have been driven by high demand for water, settlements, urbanisation, encroachment, and pollution resulting in the declining value of environmental services that wetlands provide (Shah, 2016). The study sites of Lakes Nakuru, Naivasha, and Bogoria are examples where wetlands have deteriorated and their current use goes against the RC's concept of "wise use". Lack of sufficient education results in wetlands not being viewed as valuable to both human and environmental needs. In line with the value attached to the wetlands, RC has developed educational programmes designated to improve public awareness and community participation. The education aspect was adopted at the Conference of Parties (CoP) 7 under the CEPA outreach programme. CEPA is continuously strengthened at every annual CoP, with countries encouraged to develop their national CEPA Action Plans.

Kenya signed the RC on October 5, 1990 and ratified it on June 5, 1991. Today, Kenya has six Ramsar sites namely Lakes Nakuru, Naivasha, Baringo, Bogoria, and Elementaita and River Tana. To successfully implement the RC goals, the country has developed several legal frameworks and policies that are designed to create awareness and educate communities on the value of protecting wetlands. These include the Wetlands Conservation and Management Policy (GoK, 2015), Wetlands Conservation and Management Act (GoK,

2013b), Environment Policy (GoK, 2013a), Sessional Paper No. 6 on Environment and Development (GoK, 1999), the National Constitution of Kenya (GoK, 2010) and the Environmental Management and Co-ordination (Conservation and Management of Wetlands) Amendment Regulations (GoK, 2017). By 2012, when CoP 12 was held in Romania, Kenya had developed a national plan including subnational plans, basin-level plans and site-related plans, in line with the CEPA programme.

Study Approach and Results

This study analysed the significance of education at influencing communities to conserve and protect three inland RC designated lakes in the East African Rift Valley: Lake Nakuru, Lake Naivasha and Lake Bogoria. L. Nakuru was Kenya's first Ramsar designated site on June 5th, 1990 as Ramsar site number 476 based on its support of the lesser flamingo population at 1 percent (Criterion VI for Ramsar sites). Lake Naivasha was designated on the October 4, 1995 as Ramsar site number 724 due to its habitat and food provision to over 350 resident and migrant bird species, including 1 percent of the world *Fulica cristata* population; fish; and hippos and waterbucks, around the riparian parts of the lake. Lake Bogoria was designated on August 27, 2001 as Ramsar site number 1097 as it is a refuge site for the Lesser Flamingo and more than 300 bird species. It is also a habitat for endangered mammals such as the Greater Kudu.

Lake Naivasha is a very delicate site in Kenya, as it was almost transferred to the Montreux list of threatened sites in 2008 due to problems of uncontrolled pollution. In contrast to Lakes Nakuru and Bogoria, this lake consistently faces deforestation in its basin and is experiencing increased deterioration of water quality, fish mortality and decreasing fish stock, increased encroachment and transformation of the lakeshore riparian zone, invasive species, increased population and unplanned settlement (Shah, 2016). This lake is surrounded by private land and is not legally gazetted as a protected area under Kenyan law unlike Lakes Nakuru and Bogoria. Before 2010, the riparian land was under the custody of the Lake Naivasha Riparian Association formed in 1927. However, under the new constitution of 2010, the national government has custodianship of this land (GoK, 2010).

Through education, communities can be sensitized on how various activities such as industrial pollution, improper waste disposal, deforestation and poor sanitation damage wetlands. Lake Naivasha and Lake Nakuru are surrounded by urban and modern agriculture-based activities while Lake Bogoria is surrounded by pastoral and rural farming communities. Communities in the three study sites share two common characteristics. First, current formal and informal education does not teach the skills and the value of environmental conservation. Second, the majority of the residents are primary and secondary school graduates (see Figure 1). These two characteristics are likely the main reason these lakes continue to deteriorate.

Another important stimulant can be through partnerships that provide platforms for the cross-pollination of scientific knowledge, education and skills and cultural understanding among all actors (Atisa, 2020). The designation and the presence of the Kenya Wildlife Service and other international conservation organizations in Kenya should have significant influence on raising awareness and thus improved wetlands protection but the results show otherwise. This was found to be the case because it appears that there are no strict land-use and settlement regulations being imposed by any organization. No organization, therefore, is visible from this perspective.

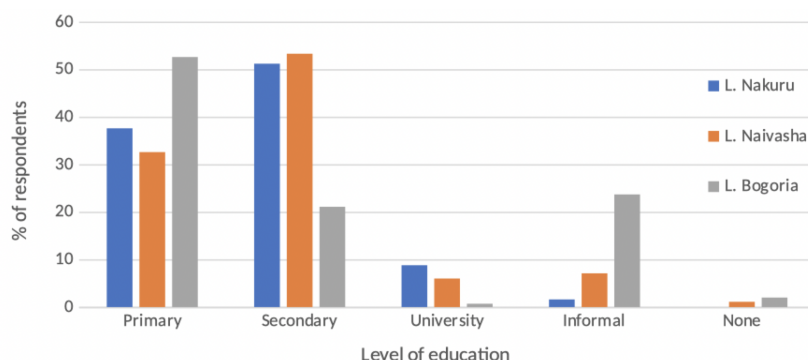


Figure 1 - Education Levels Around the Three Study Sites.

The study findings show that education in primary and secondary schools has very little to do with teaching environmental protection thus does not influence wetlands protection at community level. The education system is structured almost entirely to develop professionals, for example, in the fields of education, accountancy, medicine and law, not environmental sciences. Communities only see the value of conservation when they benefit economically from the wetlands. This is in part because the education system has not created significant conservation awareness and inculcation of environmental values in the communities.

Furthermore, the policies proposed by the RC are constrained by factors that drive settlements and migration toward proximity to wetlands. These factors include weak national and local land-use regulations, limited economic opportunities in many local areas, scientific knowledge, lowly educated local populations and inadequate exposure to global policies. For effective protection of inland wetlands, individual landowners, their communities and local authorities must be engaged and willing to develop and adopt specific policy and wetlands protection initiatives. Often, a stimulating force or an influencing variable, such as education or awareness, must be present through schools, conservation organizations or the government for effective adoption of RC goals.

Policy Recommendations

Short-Term

- Start developing mechanisms to revise formal and informal education to include teaching conservation.
- Effective participation in decision-making to strengthen the focus of creating education and awareness.
- Enforcement of both public and private partnerships so as to make CEPA successful.
- Enforcement of land-use laws that protect fragile landscapes.

Medium-Term

- Benefit sharing from wetlands to ensure that the communities benefit financially and economically.
- Capacity building of communities and authorities to integrate wetlands protection into settlement and land-use regulations.
- Create awareness of sites being designated under RC and the role of international, national and local organisations towards environmental conservation.
- Educational curriculum to be structured to teach young people to see nature, specifically wetlands, as needing to be preserved.

- Create partnerships between government, conservation organizations and the communities to address conservation challenges.
- Educate all communities to raise awareness of protected areas and the need to conserve wetlands irrespective of perceived benefits.
- Gender equality in terms of education for better decision making of natural resources.

Acknowledgement

This policy brief is the outcome of larger research study 'Domestication and Application of Biodiversity Related Multilateral Environmental Agreements in Kenya' by Parita Shah in 2016 and the recently published paper entitled 'Environmental education and awareness: The present and future key to the sustainable management of Ramsar Convention sites in Kenya' in International Environmental Agreements: Politics, Law and Economics 1-20, by Parita Shah and George Atisa

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