

About the Cover

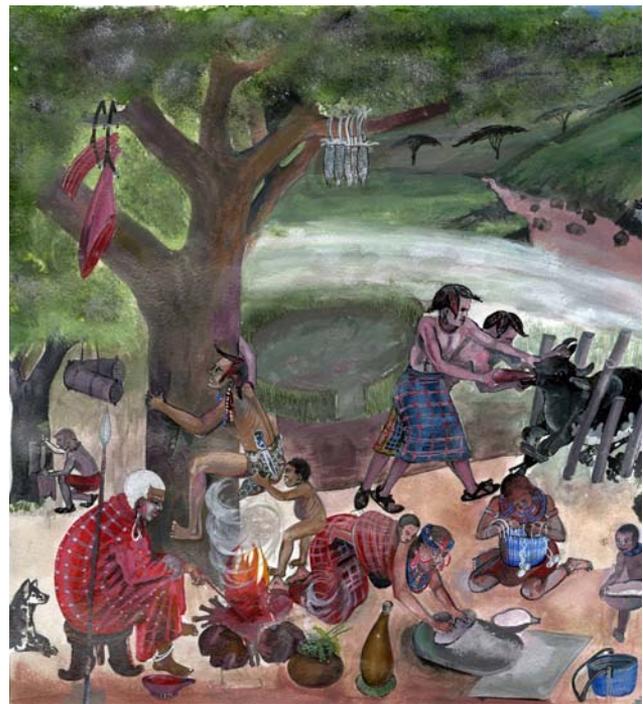
Cover Essay: Indigenous Ecohealth Practices in East Africa

Mbaabu Mathiu¹ and Peris Kariuki²

¹Department of Veterinary Anatomy and Physiology, University of Nairobi, Nairobi, Kenya

²Kenya Resource Center for Indigenous Knowledge and the National Museums of Kenya, Nairobi, Kenya

Many indigenous peoples have extensive knowledge in managing natural resources in their traditional landscapes. This intimate insight can play an important role in designing development paths that are more sustainable and in harmony with the delicate balance of nature. Indeed, many conservation practices have their origins in the cultural practices of ancient peoples, whose survival depended on healthy, functioning local ecosystems. Respect for indigenous peoples and integration of their perspectives and traditions into environmental and developmental considerations can result in novel, equitable, and tenable solutions to problems resulting from rapid development and globalization and new opportunities to value diversity in nature and culture. We recognize that knowledge is cognitive and embedded in community practices, institutions, relationships, and rituals. It is expressed in local peoples' technologies and practices and forms the basis for indigenous agriculture, health, environment, and natural resource management. When a specific indigenous practice is used over time, it becomes a tradition. Many East African indigenous traditions reflect deep connections between ecology and health. In this essay—illustrated by Nicholas Muema's painting on the cover of this issue and examples from indigenous communities of Kenya—we explore the idea that while ecohealth concepts and approaches have gained prominence and practice in the last decade or so; they have a long history in indigenous knowledge and traditions.



Kenya's diverse landscape ranges from the snow-capped Mt. Kenya to desert conditions in the north to the coastal forests bordering the Indian Ocean and the tropical highland rainforest in Kakamega. Over 80% of the land is arid and semiarid. The 42 indigenous communities in Kenya include the Ogiek, Samburu, Kalenjin, Kikuyu, Lou, and Mijikenda. Each demonstrates an historical continuity with preinvasion and precolonial societies that developed on their territories with cultural features distinct from other sectors of society. These cultures offer many insights

into reciprocal relationships between humans and their ecosystem—with links that range from the realm of sacred to basic provisions of safe food and water. While some practices may have been justified in terms that are not necessarily those of many modern cultures, their effects promote outcomes that are important to all of us.

For instance, belief in a Creator or Maker is a common feature of these cultures and is accompanied by names that emphasize a sense of divine supremacy over the universe and intimate relationship with humankind. While these entities are known by different names in different cultures (the name *Ngai*, given by the Agikuyu of central Kenya, means “diviner,” whereas the Dholuo name of *Nyasai* means “supreme being”), they were commonly worshipped in the shrines and sacred sites respectfully cultivated by each community. These sacred groves were set aside for religious and cultural reasons, not least as sites of cleansing and repentance following drought, famine, floods, and disease outbreaks, events that were believed to be manifestations of the Creator’s ire toward transgressions of humankind. Many national heritage sites and monuments in Kenya are linked to these sacred sites and are now conserved to protect diversity hotspots. Examples include the Kaya complex for the Miji Kenda people; Mt. Suswa for the Maasai groups; Mt. Kenya for the Agikuyu, Ameru, and Maasai; and Got Ramogi and Kit Mikaye for the Luo communities.

Beyond the sacred grove, intimate links between the health of nature and people can be seen in the minutia of everyday life. The cover art depicts an integrated composite Kenyan ecosystem reflecting cultural activities of several communities. In the foreground of the cover scene, traditional medicine is boiled in a pot, alongside the weaving of bags and baskets, grinding of flour for gruel porridge, and preserved milk in a gourd. Beneath the tree bearing beehives, a man collects bark for traditional medicine. On the adjacent tree, meat and corn are preserved by drying. To the right, a crutch is being used to administer ethnoveterinary medicine to livestock. The care of livestock is of paramount importance, not only for milk and meat, but also as a source of hides and skins and for cultural rites and ceremonies. In the background, beyond the dry riverbed, is a multipurpose-use forest. Each of these practices and products demonstrate intimate links between humans and natural resources.

Indigenous communities developed and designated land use systems closely intertwined within their culture and well adapted to their ecosystem. The pastoral com-

munities of Maasai and Samburu designated seasons for grazing in the highland and lowland areas. More sedentary communities had the harvest and planting seasons well defined. Samburu indigenous ecohealth practices are geared to ensure conservation and sustainable use of environmental resources, especially water and plants, by complex religious rites, taboos, and use restrictions. Special areas were designated on rivers for watering animals, fetching domestic water, and bathing. Tensions between human and ecosystem “use” were often guarded by strict taboos. Bamboo—closely associated with water sources—is considered closely linked to the Creator. For the Samburu people, bamboo is protected by taboos and restrictions. The bamboo can never be used as a stick and can be harvested only when there is a full moon which controls overharvesting and thus helps protect water sources.

The Ogiek demonstrate intimate links between health and biodiversity in their traditional practices. Specialized knowledge on hunting, bee-keeping, and harvesting wild berries, vegetables, fibers, and herbs for food and medicine is integrated into daily routines for the Ogiek people, seen especially in the role of honey as a staple food and essential ingredient in traditional medicines. The Ogiek people also divided the forest among families or clans. Each clan had to take care of its portion of forest and resources, in which it held absolute hunting and bee-keeping rights. These rights were respected and revered by the rest of the community. Anybody found contravening those rights was considered a thief and punished using poisoned arrows. Wanton cutting of aesthetic, flowering, and medicinal plants was completely banned, since they serve as nectar sources for bees and ingredients for medicines. Soup, prepared from game meat, was always mixed with medicinal herbs to keep the people healthy. In these and myriad ways, the health of the Ogiek was directly linked to a healthy ecosystem—a form of indigenous ecohealth with lessons that can cross time and space.

Having been maintained through taboos and belief systems, many sacred sites and traditional practices illustrated and described here are also associated with centuries-old forest patches and important ecological services. Many of these areas have high biodiversity and conservation value warranting attention to ensure ongoing protection, even for those who do not hold to the original belief systems.

These ancient practices rooted in traditional spiritual belief systems offer yet another example of how the insights of cultures with a long history of inhabiting our planet can inform, complement, and strengthen scientific investiga-

tions, uniting technical insights and the search for meaning across time and space, and offering hope for a more sustainable and healthy world.

THE ARTIST

Nicholas Muema works as a botanical illustrator in the East African Herbarium of the Botany Department, National Museums of Kenya (NMK). His life as an artist began at the age of six years. At this early age, he would spend many a day molding clay bulls or making sisal cars and box houses while grazing his father's cattle. Later, when he went to school, he would exchange his art items for sweets. Thus, he gained the admiration and respect of his peers. While still in grade school, Nicholas kept an illustrated journal in which he would detail all the minutiae of his day in skillful

drawings. His parents and teachers encouraged him. He would entertain them with folk songs which he composed. In his early teens, he started representing his school in art exhibitions. His artwork and performances were appreciated and he received many accolades and prizes. In 1992, his brother, an ethnobotanist at NMK, asked him to draw a plant (*Amaranthus dubius*) on a piece of paper using a pencil. This was the beginning of Nicholas' career as a botanical illustrator. His first botanical sketch appears in the book *Traditional Food Plants of Kenya* published by NMK (ISBN 9966-9861-4-6). Since then, Nicholas has contributed to more than 36 publications, including *Wild Food Crops of Tanzania and Useful Trees and Shrubs of Kenya*, and has participated in several exhibitions. Nicholas is committed to acquiring the skills and tools necessary to fulfill his avowed mission to conserve plants and the environment through his art.