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Praying for Rain
Indigenous Systems of Rainmaking in Kenya

Sussy Gumo

Sussy Gumo is an associate professor of religion in the Department of Religion, Theology and Philosophy within the School of Arts and Social Sciences, Maseno University, Kenya.

Abstract

Africa in general and Kenya in particular are facing climate change challenges. Since most Kenyan communities depend on agriculture as the backbone of the economy for sustenance, some of these, including the Abanyore, Akamba, Ameru, Turkana, and Maasai, have been involved in the practice of rainmaking rituals. They use African traditional indigenous knowledge embedded in African religion to "pray for rain" by predicting, causing, redirecting, and controlling rain within their locality. The role of rainmaking and its effects is therefore crucial. The purpose of this contribution is to examine the indigenous systems of rainmaking in Kenya. It situationally analyzes the art of rainmaking in Africa in general and further contextually examines rainmaking rituals among three Kenyan communities. It suggests that rainmaking is performed as an expression of African religion through communal ceremonies, and further notes that indigenous knowledge in rainmaking rituals is significant in helping local communities respond to climate changes, allowing them to execute this knowledge in mitigation or adaptation of climate challenges. The article concludes that local communities need to integrate both indigenous knowledge and scientific knowledge to forecast and dispel rainfall patterns to effectively predict weather patterns.

Africa has been dealing with the impacts of climate change since the 1970s. The most recent report of the Intergovernmental Panel on Climate Change (IPCC) suggests that Africa will be the continent most affected. Consequently, Africa is set to experience significant increases in temperature, particularly in the Sahel and part of Southern Africa; dramatic decreases in precipitation, declining by more than 20 percent compared to levels observed more than two decades ago; and more frequent and intense tropical

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storms (parts of the continent will see a 20 percent increase in cyclone activity).[1] The report further indicates that by 2020, agriculture fed by rain could drop by 50 percent in some African countries. The IPCC report predicts that wheat may disappear from Africa by 2080, and that maize production – a staple – will fall significantly in Southern Africa. It is envisaged that climate change will bring about an increased incidence of extreme weather events (such as droughts, floods, or mudslides), as well as a rise in infectious diseases. At the same time, many Africans argue that the continent is the least responsible for greenhouse gas emissions, is the least prepared for the changes, will require the most efforts to adapt, and is already burdened with human security challenges related to poverty and conflict. Drought is a key factor behind the declining productivity of Africa. There is a strong correlation between rainfall and gross domestic product, and between land degradation and the incidence of poverty. Many scientists believe that climate change is going to make this situation even worse. Adaptation and mitigation are going to be central to the future development of the continent.[2]

At nearly 12 million square miles, Africa covers 6 percent of the earth's surface area and more than 20 percent of its total land space. The continent's sheer enormity coupled with its vast natural resources and unique weather patterns make it particularly vulnerable to the severe consequences of global warming, which permeate every aspect of African life.[3] While Africa's lack of modern energy and low carbon footprint have made it the slightest contributor to the growing global warming crisis, the continent bears the brunt of the world's rising temperature, with damaging effects such as massive droughts, flooding, unreliable crop yield, and waning ecosystems. And yet analysts have indicated that Africans represent just a small fraction of the global voices taking part in the crucial conversation about climate change.[4] The consequences currently affect everyone, as climate change is a global phenomenon. Although it is a global phenomenon with impacts spread across the board, these impacts are more deeply felt in so-called developing countries, especially those in the African continent. The consequences of climate change include a rise in poverty levels, drought, flood, and famine, with developing countries bearing the brunt of these effects, seen, for instance, in cases of droughts in the Horn of Africa, Southern Africa, and Sahel. In fact, climate change has affected the socio-economic, health, and political life of

[1] See Claudia ten Have, "Africa and Climate Change," Our World (United Nations University), 6 September 2008, https://ourworld.unu.edu/en/africa-and-climate-change.

[2] Ibid.

[3] Morgan Winsor, "Climate Change in Africa: African Global Warming Role Small But Crucial To Crisis Solution," *IBT Latin Times*, 2015.

[4] Ibid.

Africans.[5] Africa is one of the continents most vulnerable to climate change. The social, economic, domestic, and political lives of the people have received a blow from the phenomenon of climate change. This is worsened by the continent's low adaptive capacity. Indeed, the impacts of climate change in Africa are enormous, ranging from decreases in grain yields and changes in runoff and water availability in the Mediterranean and southern countries of Africa, to increased stresses resulting from increased droughts and floods and significant plant and animal species extinctions, with the associated impacts on livelihoods.[6] The climate exerts a significant control on the day-to-day economic development of Africa, particularly in the agricultural and water resources sector, at regional, local, and household levels. Hence, due to changes in rain patterns and availability of water, countries like Kenya, Ethiopia, and Tanzania have experienced great developmental setbacks. According to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, about 25 percent (about 200 million people) of the current African population experiences high water stress, and the population at risk of increased water stress in Africa is projected to be between 75 and 250 million by the 2020s, and between 350 and 600 million people by the 2050s.[7]

Studies have shown that 90 percent of natural disasters result from severe weather and extreme climate change phenomena. Climate change researchers predict that if the current trends of climate change are not reversed over the next decade, billions of people will face greater life and health risks emanating from water and food shortages. Developing countries, such as Kenya, are the most vulnerable to climate change impacts because they lack adequate social, financial, and technological resources to adapt to or mitigate them.[8] Kwanya further suggests that environmentally unfriendly human

[5] J. H. Christensen et al., "Regional Climate Projections: Climate Changes 2007: The Physical Science Basics" (Contribution of Working Group I), in *Fourth Assessment Report of the Intergovernmental Panel on Climatic Change*, ed. S. Solomon et al., (Cambridge, U.K.: Cambridge University Press, 2007), 847–940.

[6] M. I. Boko et al., "Climate Change: Impacts, Adaptation and Vulnerability" (Contribution of Working Group II), in *Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. M. L. Parry et al. (Cambridge, U.K.: Cambridge University Press, 2007), 433–67.

[7] Ibid. See also N. G. Christian, "The Impact of Climate Change on African Traditional Religious Practices," *Journal of Earth Science & Climatic Change* 5:7 (2014).

[8] See G. Kaser et al., "Modern Glacier Retreat on Kilimanjaro as Evidence of Climate Change: Observations and Facts," *International Journal of Climatology* 24:3 (2004), 329–39; Government of Kenya, *National Climate Change Response Strategy* (Nairobi: GOK Printing Press, 2010); J. A. Patz et al., "Impact of Regional Climate Change on Human Health," *Nature* 438:17 (2005), 310–17; also Tom Kwanya, "Mainstreaming Indigenous Knowledge in Climate Change Response: Traditional 'Rainmaking'" in Kenya, the Eighth International Conference on Knowledge Management in Organizations, 2014, 603–15, https://www.researchgate.net/publication/296059167.

activity – such as unsuitable agricultural practices, poor soil and water management, deforestation, overgrazing, and pollution – are the most forceful drivers of environmental degradation in Kenya. These activities have a great impact on the socio-economic development and the general wellbeing of Kenyans, which is entwined with environmental management. Concern is already building that if the current climate change trend is not managed well, then it will endanger Kenya's vision of becoming a prosperous country with a high quality of life for all its citizens by the year 2030. Agriculture, considered the backbone of Kenya's economy, is one of the sectors greatly affected by climate change. Kenya generally experiences major droughts every ten years and minor ones every three years. Evidence shows that incidences of major drought are becoming more frequent, now estimated at about one in five years. Since agricultural activities in the country rely on rainfall, frequently recurring droughts can have devastating effects on food production and gross domestic product.[9] Climate change has affected all spheres of life on the African continent, including traditional religious beliefs and practices, affecting the traditionally predictable patterns of weather, farming, and cultivation, and altering the seasons of rituals and festivities. This is because African traditional religion is expressed in nature: whatever affects nature affects religion, too.[10]

The purpose of this article is to examine the role of indigenous knowledge in rainmaking from a Kenyan perspective, to explore the situational analysis of rainmaking systems within the African communities in general, and specifically to examine the rainmaking system in Kenya in an African traditional religion context.

Situational Analysis

Developing countries, especially on the African continent, are bearing the brunt of climate change. Consequently, various strategies have been instituted to curb climatic changes in Africa. In many parts of rural Africa, elders hold seemingly mystical powers of weather forecasting. In some communities, they are known as "rainmakers," as

[9] See M. Herrero et al., *Climate Variability and Climate Change: Impacts on Kenyan Agriculture*, 2010, http://cgspace.cgiar.org/bitstream/handle/10568/2665/Kenya_Project%20Note%201_final.pdf; G. O. Ojwang, J. Agatsiva, and C. Situma, *Analysis of Climate Change and Variability Risks in the Smallholder Sector*, 2010, http://www.fao.org/docrep/013/i1785e/i1785e00.pdf; and K. T. Kitinya et al., "Climate Change and Variability: Farmers' Perception, Experience and Adaptation Strategies in Makueni County, Kenya," *Asian Journal of Agriculture and Rural Development* 2:3 (2012), 411–21.

[10] See Nelly Mwale and Joseph Chita, "African Traditional Religion Harvest Festivals in the Context of Climate Change in Eastern Zambia: The Experiences of Women," *International Journal of Multidisciplinary Research and Development* 2:9 (2015).

some believe they not only foretell when the rains may come but can make them happen.[11] An essential element in these practices are the rainmaking ceremonies, which enhance "calling for rain" or "praying for rain" to curb climatic changes that bring about drought, hunger, and disease. Water has always been the symbol of life. Its deficiency has been and still is a cause for concern among communities around the world. It is on this premise that the rainmaking ceremony has been practised by many communities to achieve abundant rains.

Various African societies have traditionally performed rainmaking rituals. The importance of rain for the survival of human, animal, and plant life has made rain an important focus of religious practice in Africa. Rain is the centre of the agricultural cycle, and most African people are anxious with regard to water resources, making rainmaking and related rituals and myths a key part of traditional African life, cosmology, and worldviews. Meaningful renditions of the rainmaking ritual have two interrelated components: the material and spiritual. This is in line with the African worldview or cosmology as expressed through African spirituality. The timing of the rainmaking rituals is determined by the natural rhythm of the seasons.[12] O. Terje has observed that "in Tanzania, rainmaking has been an intrinsic part of culture and religion."[13] Rainmakers are responsible for the wealth and health of their people by controlling and providing life-giving waters. Thus, the rainmaker tries to control and manipulate nature in rituals in which the forefathers/foremothers and the deceased provide rain through the chieftain or the king as a medium. Although rainmaking is often practised as the enterprise of individuals or groups of individuals, in some parts of Nigeria, especially among the Igbos of Eastern Nigeria, it is a community practice. In Zimbabwe, for instance, the Njelele shrine located in the Matobo Hills of Matabelel is visited annually between August and September, when rainmakers from all over the country come together for ritual purposes just before the rainy season.[14] In African tradition, the people don't own the land; rather, the land owns the people. Thus if the land is angry, there will be low rainfall leading to drought. In order to appease the land, the people will conduct a ceremony known as *mukwerera/umtolo*, a ceremony not only seen in Zimbabwe, but

[11] Gilbert Ouma, *Linking Traditional and Modern Forecasting in Western Kenya: Climate Change Adaptation in Africa* (IGAD Climate Prediction and Applications Centre, 2008–2009).

[12] See "Rainmaking: An Imperative for Agriculturalists and Pastoralists," *The Herald*, 9 October 2015, http://www.herald.co.zw/rainmaking-an-imperative-for-agriculturalists-and-pastoralists.

[13] O. Terje, *Rainmaking and Climate Change in Tanzania: Traditions, Rituals and Globalization* (2010). See also Simba Chiminya, "Mukwerera: Africa's Digital Rainmaking Ceremony," *Sunday Mail Reporter* (London), 27 September 2015.

[14] The Njele Shrine (Zimbabwe), Safari Lodges.com, South Africa. See also "Rainmaking: An Imperative for Agriculturalists and Pastoralists."

prevalent among many other African communities, as well as in Australia, China, the Americas, and other parts of the world. For example, the Wu Shamans in ancient China performed sacrificial rain dance ceremonies in times of drought.[15]

This coincides with similar rituals on the community level, when the people within various catchment areas cleanse the land. Indeed, rainmakers in African traditional society are nearly indispensable, as they are responsible for the wealth and health of their people through controlling and providing the life-giving rainfall.[16] It should, however, be noted that this rainmaking seems to be practised with the aid of knowledge of the natural course of climatic seasons (i.e., rainy or dry seasons). By implication, any distortion of the natural courses of the climatic season, as has been the case as a result of climate change, greatly affects the precision of this practice. Undoubtedly, the increasing unpredictability of weather as the result of the changes in the global climate and temperature has resulted in erratic rainfall. This presents a great challenge to rainmakers, as their knowledge of the weather systems is becoming obsolete in the new climatic reality. Archaeologists in South Africa stumbled upon an ancient shamanic rainmaking site at the top of a 1,000-foot hill at Ratho Kroonkop while investigating rock art. The shamans would climb to the top of the hill through natural fissures in the rock, and when they reached the peak, they would light a fire and burn animal remains as part of their rainmaking rituals. The latest finding, published in the journal *Azania*, revealed two rainmaking communities.[17] The rainmaking site at Ratho Kroonkop was used by the San people, an indigenous hunter-gatherer tribe in South Africa. In addition, and as noted above, the rainmaking ceremony – *mukwerera* in Shona, *umtolo* in Ndebele – is practised before or at the onset of every rain season to ensure that communities have abundant rains and harvests.

Rainmaking Rituals in Kenya

As changes in weather patterns continue to ravage farms and take a toll on food production across East Africa, scientists and meteorologists are turning to traditional rainmakers and weather forecasters to bolster the accuracy of weather predictions.[18] Although the processes, materials, and participants of those Kenyan communities

15 See Chiminya, "Mukwerera."

16 Terje, *Rainmaking and Climate Change in Tanzania*; see also Christian, "The Impact of Climate Change."

17 Owen Jarus, "Shaman 'Rainmaking' Center Discovered in South Africa," LIVE Science website, 30 May 2013, https://www.livescience.com/36973-shaman-rainmaking-center-discovered.html; see also Chiminya, "Mukwerera."

18 Bob Koigi, "Learning from the Rainmakers: East African Scientists Court Traditional Knowledge for Accurate Weather Predictions," *Earth Island Journal*, 5 May 2016.

practising traditional rainmaking rituals vary, most believe that the tradition enables them to predict, cause, redirect, or dispel rainfall. In this deeply rooted Kenyan tradition, traditional rainmaking is seen as a form of magic or prayer through which human beings influence weather conditions to cause rain or drought so as to bless or curse a community.[19] Founded on indigenous observations of meteorological phenomena that have guided seasonal and inter-annual activities of local communities for millennia, this knowledge (i.e., referred to as *ḱhulanga ifula* [calling rain] by the Abanyala) contributes to climate science by offering interpretations on a much finer spatial scale, with considerable temporal depth and by highlighting elements that may not be considered by climate scientists.[20] J. Akong'a suggests that rainmaking traditions may have emerged from the communities living in the arid and semi-arid regions as a means of coping with or mitigating unreliable or inadequate rainfall. Nonetheless, he acknowledges that rainmaking is also practised in some communities living in areas that have adequate rainfall. He says that in the latter case, rainmaking is a prestigious profession, practised by elites who want to help or exercise control over their communities.[21] The Abanyore, Akamba, Maasai, Meru, and Kikuyu are some of the communities practising traditional rainmaking in Kenya.

It is believed that the Nganyi clan of Bunyore – a sub-ethnic group of the Luhya community living in Vihiga County, Western Kenya – were taught the art of rainmaking by an old woman from the neighbouring Nandi County. Other accounts suggest that the said foreigner was from Gwasi in Homa Bay County across Lake Victoria. Rainmakers in the Bunyore community observe the flora and fauna in the Nganyi forest shrine to predict weather conditions. These predictions have proved as accurate as forecasts made through scientific equipment.[22] The Nganyi forest shrine in Esibila village, in Western Kenya, may not appear on any geographical map as an important icon, but the forest, which lies on just one acre of land, has a pristine biodiversity that has helped the local Bunyore community predict weather conditions for generations. According to Omulako, the small forest has 67 known plant species and is home to reptiles, birds, and insects that help in weather forecasting. The forest also has some of the oldest trees

[19] See Kwanya, "Mainstreaming Indigenous Knowledge in Climate Change Response."

[20] D. J. Nakashima et al., *Weathering Uncertainty: Traditional Knowledge for Climate Change Assessment and Adaptation* (Paris: UNESCO, 2012), http://unesdoc.unesco.org/images/0021/002166/216613e.pdf.

[21] J. Akong'a, "Rainmaking Rituals: A Comparative Study of Two Kenyan Societies," *African Study Monographs* 8:2 (1987), 71–85.

[22] See Isaiah Esipisu, "Nganyi: The Tiny Forest in Kenya that Predicts the Weather," *Mongabay News*, 19 February 2016.

in Vihiga County.[23] As opposed to other rainmaking traditions, the rainmaking power of the Nganyi lies in the patriarch's family and is inherited by his kinsmen. The Nganyi community rainmakers have a great deal of information about the forest shrine and general understanding of weather and climatic conditions, which has passed from one generation to another in an oral form; it is widely believed that the Nganyi of the Abasiekwe community can make or stop rains, lightning, or hailstorms. While most Luhya community members have some general skills in predicting weather conditions, the Nganyi family – whose shrines are said to possess natural indicators that can give a more accurate forecast – is revered for its superior insight.[24] For generations, the Nganyi people of western Kenya have served as rainmakers, helping local communities decide when best to prepare their land and sow their seeds. By observing subtle changes in nature that would be unnoticeable to most people – in air currents; the flowering and shedding of leaves of certain trees; the behaviour of ants; bird songs; and even the croaking of frogs and toads – they have been able to interpret weather patterns and provide valuable advice.[25]

These rainmakers practise their magic secretly – not even in the company of their heirs – only bequeathing the power when nearing death. For this reason, the details of the actual rainmaking process remain the guarded secrets of the rainmakers. The rainmakers are given livestock, money, and other gifts to make rain to fall during drought or not to fall during important occasions, such as a wedding or sports events.[26] Behind the mystery, however, lies a body of knowledge passed down through the generations, based on close observation and understanding of weather patterns and the behaviour of local plant and animal life. Within rainmaker families, this knowledge is guarded carefully, as both a sacred trust and a source of livelihood.[27]

The shrines consist of huge and rare indigenous trees, which form a canopy and are regarded as sacred. The small patches of forested land attract reptiles, birds, and insects whose behaviour is monitored to indicate upcoming weather. The Nganyi have transformed their interpretation of this detailed information into a ritual art hovering between legend and science.[28] Villagers are forbidden from using any plant material

23 Ibid.

24 See Isaiah Esipisu, "Traditional Weather Prediction Incorporated into Kenyan Forecasts," *Reuters*, 9 February 2012.

25 See "Indigenous Knowledge Meets Science," *The Independent*, 19 February 2010.

26 Kwanya, "Mainstreaming Indigenous Knowledge in Climate Change Response."

27 Ouma, *Linking Traditional and Modern Forecasting in Western Kenya*.

28 See Esipisu, "Traditional Weather Prediction Incorporated into Kenyan Forecasts."

from the shrine, in the belief that doing so will provoke the anger of the gods associated with rainmaking. "If anyone harvests a piece of wood, dry or fresh from the shrine, it provokes the gods, whose result is heavy hailstorms that destroy crops, houses and property."[29] As a result, people who live near the shrine keep watch to ensure that nobody picks anything from the forest. However, elders and traditional medicine men are allowed to gather herbs from the forest as long as they do not uproot any tree or a shrub. Because of this stringent community protection, trees that fell within the shrine years ago are slowly decomposing untouched – despite the area's dense human population and high demand for firewood and timber. The community also replants trees that have been lost to changing weather patterns.[30]

Modernization has slowly eroded the community's aura, but the Nganyi have recently been offered a way of reviving their traditions through a project aimed at using indigenous knowledge in disaster prevention. Funded by Britain and Canada, the programme brings the Kenya Meteorology Department (KMD) and traditional rainmakers together to produce more accurate forecasts and disseminate them more widely.[31] At first, rainmakers were described as backward and their shrines dismissed as laboratories of black magic. But, like the cornerstone rejected by the builders, traditional African rainmakers are slowly gaining recognition. The scientific world has begun to embrace them as partners in unravelling the never-ending mysteries of mother nature.[32] The project also hopes to demystify the rainmaking practices of the Nganyi people, who predict rainfall patterns by noting various environmental changes mentioned above.

The county of the Akamba community has experienced persistent droughts and famines. Since 1890, when a colonial post was established in the district, food relief has become a significant means of survival for many families whenever severe droughts and famines occur. Information collected in the district in 1982 and in 1985 shows that there were once several rainmaking rituals in different parts of the district.[33] The Akamba community held *kilumi* (special rituals and dances) to pray for rain during droughts. The prayers were led by rainmakers or prophets believed to have the power to redirect or predict rainfall. Accounts of the actual procedures during rainmaking rituals are varied. However, it has emerged that *kilumi* generally began with libations and prayers followed by the

29 Ibid.

30 Ibid.

31 See Jean-Marc Mojon, "Kenya's Rainmakers Called to Combat Climate Change," *Mail and Guardian*, 20 September 2009.

32 Cosmas Butunyi, "Kenya: Scientists in Rare Joint-Project with Traditional Rainmakers," *Daily Nation*, 1 July 2008.

33 See Akong'a, "Rainmaking Rituals."

beating of drums, blowing of whistles, shaking of rattles, singing, and intense, vigorous dancing. The community believed that unseen rainmaking ancestral spirits attended the dances. The participants therefore were obligated to provide an excellent performance to impress the spirits.[34] Korster and Akong'a explain that *kilumi* were also accompanied by sacrifices (such as the blood of animals, milk, seeds, crops, beer, or cooked food) to appease the spirits. This is because droughts were considered to be curses for wrongdoing. Successful *kilumi* ended with celebrations, as the community members expected a favourable response of rain from the spirits. Most *kilumi* rituals were public, requiring the participation of all members of the community.[35]

Public rainmaking rituals in Southern and Central Kitui started with the myth of creation of the Kamba people. Sacrifice to the god *Mulungu* or *Ngai*, who was considered the creator and provider, was the natural order of events for the Kamba. Failure to make sacrifice would lead to drought and hunger. To appease *Mulungu*, the Akamba started sacrificing for rain, hence initiating the rainmaking rituals. In southern Kitui, for example, the rainmaking ritual was performed during the month of August or early November, when the long rains are expected. The day of the ritual was a holy day, selected by the elders in advance and announced at public gatherings such as community work sessions, dances, watering places, and at the *kyellgo* (the dry season common grazing area). On that day, everyone was expected to observe peace and purity by abstaining from quarrels and "contaminating" activities such as sexual intercourse. Everyone arrived early in the morning at the site of the ritual by the hillside – either a haunted cave or thicket, a place that could not be approached by an individual without evoking fear. In Kitui Central, there was an additional belief that drought or any other natural disaster, such as an epidemic, was caused by a newly arrived stranger. The person was believed to have come into the community with powers unfamiliar or unknown to the people, in this way displeasing the ancestral spirits. Such a stranger would be peacefully expelled from the community by a large group of married women carrying small drums.[36]

The cult of *Lala* in Eastern Kitui also performed an annual public rainmaking ritual but theirs was not as focused on rainmaking as those in central and southern parts of Kitui. The predominant belief in Eastern Kitui was that certain prophets (*mwathani*) were associated with knowledge concerning rainfall. These prophets are men of foresight who did not use magic to gain their knowledge, but who, when possessed by ancestral or other spirits, pronounced whether there would be adequate or inadequate rainfall.

[34] Kwanya, "Mainstreaming Indigenous Knowledge in Climate Change Response."

[35] Akong'a, "Rainmaking Rituals"; see also M. M. Korster, "The Kilumi Rain Dance in Modern Kenya," *The Journal of Pan African Studies* 4:6 (2011), 171–93.

[36] See Akong'a, "Rainmaking Rituals."

They were therefore in a position to advise people in their communities on what they should plant in a given season, based on the amount of precipitation expected. The cult of *Nzambi* in Northern Kituido did not subscribe to the rainfall rituals found in the central, southern, and eastern parts of the county. They had their own tradition centred on a mythical woman called *Nzambi*; however, no one can belong to the cult of *Nzambi* unless called to service by *Nzambi* herself. The *Nzambi* and *Lala* cults are still in practice today.[37]

Tom Kwanya reports that Meru elders participated in a rainmaking ritual that caused rain to fall and spared the community the devastation of the infamous drought and famine that ravaged the Horn of Africa, especially Ethiopia.[38] The Meru elders gathered to plead with the gods, strictly following the traditions of their ancestors: first shaving their heads clean and then applying a white clay soil from the Igombe hills. They then tied a band made of sheep's skin around their heads. A lamb was slaughtered and the meat placed on an altar above a fire. The contents of the stomach were spread on a path, along which certain selected women walked as the elders sprinkled them with honey. The women, who had brought grains of maize and finger millet for the ritual, were expected to stay indoors overnight. The elders remained behind, eating the meat – and within minutes, a downpour began.[39] Other communities – such as the Maasai, the Turkana, and the Agikuyu – have also participated in rainmaking ceremonies, though this practice is less prevalent today due to the introduction of meteorological exercises.

Conclusion

Africa is facing serious climatic challenges, leading to drought, hunger, and poverty. Despite the application of meteorological scientific intervention, most African communities still engage in the indigenous knowledge of rainmaking practised in traditional African religions. Indigenous knowledge, such as that informing traditional rainmaking, has the potential to offer valuable insights into environmental change due to climate change, and complements broader-scale scientific research with local precision and nuance.[40] Furthermore, given that most communities apply indigenous knowledge in response to environmental instability, the same strategies may be applied in adapting to

37 See ibid.

38 Kwanya, "Mainstreaming Indigenous Knowledge in Climate Change Response."

39 See Akong'a, "Rainmaking Rituals."

40 See Nakashima et al., *Weathering Uncertainty*.

or mitigating the impact of climate. In spite of its apparent potential, though, traditional rainmaking has not been effectively integrated into climate change mitigation or adaptation initiatives in Kenya.[41]

However, rainmaking rituals continue to be practised in Kenya – specifically among the Abanyore, Akamba, Maasai, and Meru – as a way of expressing African religiosity. Rainmaking is a religious practice founded on African soil, and inextricably interwoven with the culture of the people, expressed in beliefs and practices, myths and folktales, songs and dances, liturgies, rituals, proverbs, pithy sayings and names, "sacred spaces and objects; a religion which is slowly but constantly updated by each generation in the light of new experiences through the dialectical process of continuities and discontinuities."[42] Rainmaking rituals will thus continue to be practised as a way of "praying for rain." This practice is associated with abundance with regard to a good life, harvests, blessings, and fertility. It is an expression of African spirituality handed down by the forefathers/foremothers. This indigenous knowledge must be transmitted and propagated from one generation to another. Therefore, it is imperative to acknowledge the traditional knowledge of rainmaking as a transformation of science-based weather predictions into indigenous weather forecasts. In conclusion, there is need to complement both scientific and indigenous knowledge if Kenya is to maintain more reliable weather forecasting as a part of the solution to the climate changes that have affected agricultural foundations of Kenya's economy.

41 See Kwanya, "Mainstreaming Indigenous Knowledge in Climate Change Response."

42 See Christian, "The Impact of Climate Change in African Traditional Religious Practices."