



Faith based conservation in Africa

Dekila Chungyalpa, Peter Umunay,
Robert Mwaniki, Sarah Tolbert, Alark Saxena

School of Forestry and Environmental Studies
Yale University

Monday, February 16, 2015

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of Cooperative Agreement No. RLA-A-00-07-00043-00. The contents are the responsibility of the Africa Biodiversity Collaborative Group (ABCG). Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of USAID or the United States Government. This publication was produced by **World Wildlife Fund** on behalf of ABCG.



AFRICA BIODIVERSITY COLLABORATIVE GROUP

Preface

As part of the agreement #AZ21 with ABCG, I created a research project at Yale University to assess and determine the effectiveness of faith based conservation based upon activities led by faith organizations, in particular those funded by ABCG that promoted wildlife protection and call for the end of wildlife trafficking. Given the relentless threats on wildlife and their habitat, it is crucial that the conservation community adapt all strategies that may engage the public and create mass support for biodiversity conservation. In 2011, the Africa Biodiversity Conservation Group funded three non-governmental organizations; the Alliance of Religions and Conservation, Jane Goodall Institute, and the World Wildlife Fund; to implement faith-based conservation activities in East Africa. The draft report submitted to ABCG, entitled Faith based conservation in Africa, examined the project impacts that resulted from that intervention and analyzed the findings from literature review and primary research through surveys and phone interviews.

The project team came together between November and December of 2015, consisting of faculty and students at the Yale School of Forestry and Environmental Studies: Dr. Alark Saxena, Peter Umunay, Robert Mwaniki, and Sarah Tolbert. Due to the extensive time requirement for carrying out long distance phone-based research, a final product was not completed in the agreed upon time period. However, a peer-reviewed questionnaire was drafted in November at the American Academy of Religion Conference and finalized in December. A systematic literature review of over 35 scientific articles describing faith-based conservation activities in Africa was accomplished in January. Introductions with faith leaders were initiated in December but did not materialize in long term contact with the student researchers as planned. In February, I held several phone calls with 4 senior religious leaders who had participated with ARC and WWF projects and we were able to carry out those interviews. In addition, the students held interviews with ARC, JGI as well as several experts in person, supervised by Dr. Saxena and myself in order to ground-truth findings. In the future, I recommend that such kind of research include a flexible time period given the many obstacles that face field research and allow for research to continue during the summer when students travel to the field.

Conservation organizations have successfully worked with religious leaders at the site level in all parts of the world and yet lack strong evidence of faith-based conservation's value to environmental protection efforts. The goal of this analytical paper was to identify whether there is sufficient evidence to make the case that integrating faith-based partnerships into conservation can achieve better results. While the initial findings show that this is possible, the sample size is too small to make a conclusive argument. Therefore, I will work on this paper and combine it with the research results from similar work in the Eastern Himalayas (research was going on simultaneously) over this summer, in partnership with Dr. Saxena. The findings of the research will be presented at the 27th International Congress for Conservation Biology (ICCB) and the 4th European Congress for Conservation Biology (ECCB) in August 2-6 2015, in Montpellier, France. Dr. Saxena and I will work on two papers to be submitted to ConBio journal and to Yale E360. Dr. Saxena and I will reconvene a research team of Yale FES students that will build upon this initial baseline during the fall semester of 2015.

Dekila Chungyalpa, Principal Investigator, Associate Research Scientist, Yale University

Introduction

This paper/report provides an overview of a faith-based approach for curbing environmental degradation and biodiversity loss in Africa, focusing particularly in western and eastern Africa. By using a literature review on faith-based conservation theory and activities in Africa, project reports, and interviews with stakeholders involved in faith-based projects, this report (i) identifies key findings from scientific studies conducted to assess the effectiveness of faith-based activities in Africa; (ii) evaluates on-the-ground programs run by faith organizations, in particular those funded by ABCG that promoted wildlife protection and called the end of wildlife trafficking; and (iii) briefly analyses the effectiveness of interventions ran by faith leaders and faith-based conservation practitioners on the ground.

Background (Framework for why new conservation strategies are needed)

In 2014, the Living Planet Index documented that population sizes of vertebrate species—mammals, birds, reptiles, amphibians, and fish—had declined by 52 percent in the last 40 years. In other words, those populations around the globe dropped by more than half in fewer than two human generations. As the Convention on Biological Diversity reported around the same time, the average risk of extinction for birds, mammals, amphibians and corals shows no sign of decreasing (Secretariat of the Convention on Biological Diversity, 2014). The majority of these losses are most dramatic in tropical regions. Biodiversity loss has been particularly rampant in Africa due to habitat loss and degradation, hunting and fishing, and climate change, despite long term prioritization of forest conservation efforts to preserve biodiversity hotspots (Campbell 1998; Leach & Fairhead 2000; Beinart 2003). The LPI calculates that it would take 1.5 Earths to produce the resources necessary to support humanity's demands, or its footprint. In the case of Africa, the combination of human poverty and population growth are major drivers with enormous implications on food, energy, water and wildlife.

Wildlife trafficking, which threatens the survival of wild populations of species such as elephants and rhinos, is among the greatest challenge for conservation in Africa. The most significant volumes of illegal international trade of elephant ivory and rhino horn flow from Africa to Asia. Due to the demand for these products in Asian markets, rhino poaching increased by more than 3,000% between 2007 and 2011 in South Africa (source) and up to 12,000 elephants are killed each year for their ivory, mostly in Central Africa (source). However, solutions to reduce wildlife trafficking in Africa yet be found despite interventions by conservation NGOs and government initiatives.

In recent years, international community and many African nations have begun to explore possibilities of empowering local community and civil society to reduce illegal activities threatening biodiversity conservation in Africa. Scholars have demonstrated that best conservation and community forest management results are achieved when maximum attention is given to local participation through appropriate communication and education (Sheikh 2006; Hope and Jones 2014; Byers et al. 2001). Among community and civil society groups, religions are believed to play a major role which is to remind the public of the importance of protecting and preserving the existence of all living beings on earth in order to create natural balance.

Given that over 80% of the world's human population identify themselves as religious (a much higher percentage in Africa) and are strongly influenced by their faith in their attitudes and behavior, faith-based conservation strategies could be a vital support for biodiversity protection efforts. Religion ecology, which was neither a field of study nor a recognized force for transformation, has now emerged as a new field in practice and within academia. This new force of religious environmentalism could be a

vital solution to address footprint issues and help halt biodiversity loss and prevent future extinctions.

It should be noted that a variety of groups affiliated with Abrahamic religions have provided moral inspiration for historically notable partnerships focusing on sustainable development and environmental conservation. One example is that of Oxfam. Another is the Aga Khan Development Network, started by a spiritual leader of the Shia Ismailia Muslims. Yet another is a multi-religious dialogue initiated by WWF between five of the world's most prominent religions—Buddhism, Christianity, Hinduism, Islam, and Judaism—about how the tenets of their faiths could help environmental conservation which led to the establishment of the Alliance of Religions and Conservation (ARC 2010). Institutions such as the United Nations and the World Bank have also worked with faith-based groups to reduce poverty and to promote conservation in the developing world.

However, a growing body of literature suggests that mainstream environmental programs fail to recognize the ethical or moral values implicit in the drivers of biodiversity loss and the potential for cultural acceptance, public engagement, and mass support that can be achieved through this lens (Votrin 2005; Orrnert 2006; Van Houtan 2006; Child 2009). In 2011, the USAID/AFR-supported Africa Biodiversity Conservation Group funded three non-governmental organizations; the Alliance of Religions and Conservation, Jane Goodall Institute, and the World Wildlife Fund; to implement faith-based conservation activities in East Africa. This paper examines the project impacts that resulted from that intervention and analyses the findings from literature review and primary research through surveys and phone interviews.

Methods and data sources for paper

1. Literature review

The review of over 35 scientific articles was performed using keywords search via internet and using the Yale library database. The key findings of each scientific paper and “gray literature” related to faith based projects in Africa and elsewhere are summarized in chronological order. It should be noted that development and conservation activities run by faith leaders were difficult to separate since they have a casualty relationship—hence the success of development activities by faith leaders such as water sanitation, community based forest management, tree plantings, which have direct and indirect impacts to biodiversity conservation.

2. Evaluation of on-ground projects

The analysis of on-ground activities to assess the effectiveness of projects was conducted reviewing project reports and using semi-structured interviews with religious organizations and experts in the field. To this end, three organizations that received ABCG funds; ARC, WWF, and JGI; were interviewed on their ongoing activities, challenges and opportunities, and lesson learnt from their experience working in with faith leaders. The interviews aimed at assessing the outcomes from ABCG funded project and the overall experience of these organization in interacting with faith leaders, community groups and decision makers.

3. Interviews with participants

The analysis of on the ground activities were done using a questionnaire designed for this purpose. Due to cost and time constraints, surveys are being carried out by telephone and email. Phone interviews allow better access to populations who were in the field and not likely to respond to personal interviews by email. Snowballing sampling technic was used to access people that are likely to provide enough information due to their involvement or participation in one of the activities conducted by faith leaders

at national, diocese and parish level. However, we are aware of natural sampling limitations, especially with people who are without telephones and limits on responses that would need face to face interactions. This is currently taking a lot longer than we had anticipated.

Findings: Religions and environment in West and East Africa

The influence of religion on daily life is more recognized in Africa than in Europe. Dickson (1984) notes that in general Africans predominantly interpret their world through a theological lens, rather than in scientific terms making religion a useful vehicle for conveying information.¹ Awoyemi (2008) emphasizes that since, *"Religion sets the context for pivotal decisions and daily living for many Africans. Conservation biologists need to explore this vantage and research religion and its power as an incentive for behavioral change to promote conservation efforts in Africa."*

❖ Correlation between traditional religions and environmental values

The vast majority of people in many sub-Saharan African nations are deeply committed to the Abrahamic religions, Christianity and Islam, the world's two largest religions. Unlike Europe and the United States, very few people are religiously unaffiliated. However, traditional African religious beliefs and practices have not disappeared. According to the PEW Forum², they coexist with Islam and Christianity with large numbers of Africans identifying themselves as Christian or Muslim and yet, believing in traditional religious healers, witchcraft, good and evil spirits, sacrifices to ancestors, reincarnation and other elements of traditional African religions (Pew Research Center, 2010).² Animism, whether called Voodoo, Kiridi, or by a host of other names, has deep connections to the natural environment through species specific taboos, such as totem or tabooed species, as well as habitat taboos (sacred groves, rivers/ponds, forests) (Abayie Boateng 1998; Bobo et al., 2015; Garbrah 2000:63; Ntiamao-Baidu 1995; Rim-Rukeh et al. 2013).

Out of the 16 articles reviewed for West Africa concerning religion and conservation, 15 focused on the values engendered by traditional religions. The correlation between traditional values and the continued existence of sacred forests and groves that dot the West African landscape, preserving ecosystems and biodiversity, is recognized. Since animism often connects a certain species with a person's soul, multiple species of primates are protected as well (Anoliefo et al., 2003; Fa et al., 2006; Jell-Bahlsen, 1997; Oates et al., 1992; Okpoko, 2001. Ouinsavi et al., 2005). In Southern Nigeria for example, Sclater's guenon tantalus monkeys and mona monkeys are associated with taboos that prevent poaching. These taboos are crucial to the protection of many species because these habitats fall outside of government sanctioned protected areas, the case for the Sclater's (Baker, 2009).

In Ghana, trees have a unique significance in traditional religions. Odum (*Milicia excelsa*) and African Mohogany (*Khaya ivorensis*), for example, are regarded as gods and possess special spiritual powers (Abbiw 1990; Falconer 1992), which contribute to the protection and sustainable use of these trees. Among other ethnic groups in Northern Ghana, such as the Dagomba and the Mamprusi, there are chieftains in charge of trees to ensure their protection (Abayie Boateng 1998). These traditional religion taboos help conserve over 80 per cent of sacred groves in Ghana that serve as watersheds for catchment areas (Anane 1997).

¹ Dickson, Kwesi. Theology in Africa.

² <http://www.pewforum.org/2010/04/15/executive-summary-islam-and-christianity-in-sub-saharan-africa/>

While traditional religion encourages protection of certain species and habitats in West Africa, according to Baker et al. study (2009) people are unaware of the rarity of these species or of "any benefit that its presence provides or could provide in the future". This is dangerous in terms of conservation because as Bobo et al. (2015) found in Cameroon, local taboos are becoming less respected among youth as wildlife becomes scarcer. Moreover, Osemeobo (1992) found that in Nigeria "foreign religious practitioners have "negative" feedbacks on ATR for traditional titles and performance of rituals and ceremonies" (p. #). This could diminish the role of traditional religions in conservation. As Baker et al. (2009) argues, "The long-term survival of these monkeys largely depends on the willingness of the local people to continue to adhere to the taboo against harming monkey..." (p. #). Similarly, Mensah and Oduro (2007) argue that while the potential of traditional natural resources management for biodiversity conservation in Ghana is enormous, the breakdown of traditional beliefs and associated taboos threatens sacred groves and species. (Mensah and W. Oduro, 2007; Ntiamao-Baidu 1995; Gyasi 1996; Hagan 1998)

In East Africa, similar results are found. In a study on co-management of fisheries in Kuruwitu beach in North coast Kenya, Halanishi (2011) found the local Mijikenda community still values the cultural and religious practices relating to fishery management, and advocated for an institutional and legal framework where traditional knowledge can be incorporated to foster sustainable management of fisheries (2011:40). In Tanzania, traditional rules and values in western Serengeti regulate the exploitation of resources and habitat loss, act as an alternative incentive to conserve and complement modern scientific knowledge (Kideghesho 2008:1877). Sacred groves in central Tanzania were found to contain greater diversity of woody species in comparison to state Forest Reserve (Mgumia: 2003).

❖ Importance of sacred sites

In East Africa, sacredness of sites and wildlife has led to conservation of biodiversity in several occasions. A number of sacred sites in the region are protected, and unprotected natural resource areas are regarded as sacred. In Kenya, Mt. Nyiro, Mt. Kenya (WWF, 2005:60) Ramogi hill (Sigu, 2000) and, the sacred forests of the Mijikenda (WWF, 2005:75) all of which practice traditional faiths. In Tanzania, North Pare Mountains used for traditional faiths and in Zanzibar, Misali Island for muslims, and Kibale National Park in Uganda (WWF 2005:64) and Ruwenzori Mountains National Park (Povilitis, 2012:105) for traditional faiths. Due to their religious significance, a number of these sites have been protected long before they were placed under national or international law (Anon, 2005, as cited by WWF, 2005:60, Mutta, 2008:123). This has resulted to some sites having high species endemism (Necas, 2009, IUCN), while providing a number of ecosystem services. Some species, like the critically endangered Pemba flying fox (Pungetti, 2012:370), the Africa Violet and the three-horned chameleon (2012:361) are conserved as a consequence of sacredness. However, with increasing pressure from an expanding rural population that has been infiltrated by western religions, most of the beliefs and values that created a reverence for most of these sites are being eroded. Therefore, while appealing to and working with traditional religious values is crucial given the multiple affiliations that most people have in Africa, it is not solely enough.

❖ Overlap between environmental and social programs and messages

Increased environmental degradation has prompted the intervention of organizations that either addresses rural development, environmental conservation, or both. Most faith based organizations (FBOs) in Kenya are concerned with rural development and conservation of natural resources. A Rocha Kenya, established in 1999, formed Arabuko-Sokoke Schools and Eco-Tourism Scheme (ASSETS) which

provides bursaries for secondary school children living next to Arabuko-Sokoke forest and in Mida Creek. The aim of the project is to "conserve the forest and concomitantly allow families to benefit directly from its conservation by raising funds for community members' secondary school fees through ecotourism, thereby reducing one of the drivers of illegal logging" (Awoyemi:2012:104). Awoyemi further notes that results from a monitoring plan developed in 2007 indicate positive attitudes towards the forest, greater awareness of environmental awareness, and a connection between environmental protection and children's access to education. Focusing exclusively on conservation messages and ignoring the larger social context may not achieve long term goals as desired, particularly of long term buy-in from the local religious communities.

Analysis of faith-based conservation or religious environmentalism in Africa

Scientific research on the connection between religion and conservation has led to divergent conclusions, with some studies finding a negative effect of religious factors, and others finding no influence or a positive effect (Cox et al. 2014; Bhagwat and Ormsby 2011, Dudley et al. 2007, Sherkat and Ellison 2007). However, with respect to these views, we support the claim that faith-based approach provides more advantages since faiths are the largest organized sector of civil society worldwide and faith groups are involved in their communities for the long-term. They think in terms of generations rather than in short-term projects and can bring about real, pragmatic changes and sustain action and projects for the long-term (ARC 2010). Adherents are motivated by a sense of spiritual obligation or fulfillment and many predominant religions promote moral codes of conduct. They believe that their actions are watched and monitored spiritually and acting otherwise is subject of sanctions for transgressions (Cox et al. 2014; Johnson 2005). Furthermore, frequent attendance at religious ceremonies helps frightening initiation rites and allows fully committed people within religious groups gain values and ideals to be trusted (Cox et al. 2014).

Many studies argue that similar to religions, conservation and development are driven by ethical or moral values and can earn legitimacy through cultural acceptance, public engagement, and mass support (de Groot and Steg 2009; De Cordier 2009; Child 2009; Bhagwat and Ormsby 2011). Through storytelling, celebration, practice, spiritual guidance, activism in their communities, and advocacy worldwide, the world's religion can be powerful and effective partners in a wide range of conservation initiatives (Palmer and Martin in 2003).

The positive relationship between spirituality and conservation or resource management has been recognized by different organizations, including Alliance of Religions and Conservation (ARC), the International Union of Concerned Scientists (IUCN) group on Cultural and Spiritual Values, the World Wildlife Fund Sacred Earth Program, and the Yale Forum on Religion and Ecology. Scientists and different organizations provide many examples of positive outcomes of religions in different conservation and development activities worldwide. Generally, Cox et al. (2014) came to the conclusion that religion, which is viewed as a kind of irrational nuisance in the face of modern scientific knowledge, can have an important adaptive function and play meaningful role in community based natural resource management, ecological and social conditions.

In USA for example, faith-based approach has been used to address youth violence, crime and delinquency of juvenile (Byron Johnson, 2011; Morgan Cox, 2006). It has been noticed that when concerned congregations and clergy unite to forge long-term and reciprocal partnerships with police and other public agencies in addressing youth violence, crime and juvenile delinquency, youth homicides not only decreased, but for some 18 months, there were no youth homicides in Boston. Similar positive outcomes on faith-based were reported by Sheikh 2006 to support conservation in Western Karakorum, Pakistan where involving Islam religious leaders in conservation education enhanced community participation in capacity building and biodiversity protection, and conflict mitigation emerging from tourism industry.

Based upon the history of African countries, traditional and modern religions have been part of social movements that influence population in the way they appreciate nature through their rituals (traditional) and ceremonies to celebrate the birth, thanksgiving, death, etc. A concrete example of a project in Zimbabwe demonstrates that spiritual or religious values can motivate conservation of natural resources reducing dramatically the amount of forest clearing using sacred forest concept and therefore improving biodiversity conservation. The results show that forest loss is dramatically less in forests that are now considered sacred, or were in the past connected to sacred forests (Byers et al 2001).

Awoyemi uses development, with an emphasis on health in particular, to provide a striking example of how religion can be harnessed to enable values that encourage conservation. The battle against HIV/AIDS is one example used by Oyango (2001) where both traditional and religious leaders in Senegal were involved in with grassroots NGOs such as Jarma (Islamic NGO) and SIDA-Service (Catholic NGO), and governments used mass media as a communication strategy for HIV/AIDS prevention. In 1997 when the program was surveyed, it was found that direct religious sessions were the favorite channel of communication (Oyango 2001). Moreover, that study found that over 40% of those surveyed said they preferred to listen to HIV/AIDS messages during religious sessions. According to the third Demographic and Health Survey (DHS) in Senegal in 1997, 90% of the Senegalese population is well informed about HIV/AIDS, including knowledge about all the means of protection. Concomitantly, prevalence of HIV among hospital patients that was 15.9% in 1993 dropped to an overall national prevalence rate of around 2% in the same year 1997 (Oyango 2001).

Findings from primary research

Confirmation of following findings through project reports, interviews:

1. Traditional religious values
2. Sacred sites and biodiversity
3. Overlap of social and environmental priorities
4. Whether faith leaders achieved conservation goals

Conclusion

TBD

DRAFT

References - Incomplete

- RD Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Westview Pr, 2000).
- RD Bullard, "Environmental Justice in the 21st Century: Race Still Matters," *Phylon* (1960-) (2001): 151-71.
- RL Bunch, and RE Lloyd, "The Cognitive Load of Geographic Information," *The Professional Geographer* 58, no. 2 (2006): 209-20.
- M Checker, *Polluted Promises: Environmental Racism and the Search for Justice in a Southern Town* (NYU Press, 2005).
- M Granovetter, "The Strength of Weak Ties: A Network Theory Revisited," *Sociological theory* 1 (1983): 201-33.
- MS Granovetter, "The Strength of Weak Ties," *The American Journal of Semiotics* 78, no. 6 (1973): 1360.
- JK Jung, and S Elwood, "Extending the Qualitative Capabilities of GIS: Computer-Aided Qualitative Gis," *Transactions in GIS* 14, no. 1 (2010): 63-87.
- MP Kwan, and G Ding, "Geo-Narrative: Extending Geographic Information Systems for Narrative Analysis in Qualitative and Mixed-Method Research," *The Professional Geographer* 60, no. 4 (2008): 443-65.
- Awoyemi S.M., Gambrill A., 2012. *Global Efforts to Bridge Religion and Conservation: Are They Really Working?*, *Topics in Conservation Biology*, Dr. Tony Povilitis (Ed.), ISBN: 978-953-51-0540-4, InTech, DOI: 10.5772/35587. Available from: <http://www.intechopen.com/books/topics-in-conservation-biology/global-efforts-to-bridge-religion-and-conservation-are-they-really-working>
- IUCN technical report to World Heritage: http://whc.unesco.org/archive/advisory_body_evaluation/800.pdf
Accessed on 1/31/2015
- Kideghesho J. R., 2008. Co-existence between the traditional societies and wildlife in western Serengeti, Tanzania: its relevancy in contemporary wildlife conservation efforts. *Biodiversity Conservation* 17:1861-1881.
- Mgumia F.H. and Oba G., 2003. Potential role of sacred groves in biodiversity conservation in Tanzania. *Environmental Conservation* 30 (3): 259–265.
- Moyer J.M., Sinclair A.J., and Spalling H. 2011. Working for God and Sustainability: The activities of faith-based organisations in Kenya. *International Journal of Voluntary and Nonprofit Organizations* 23(4):959-992.
- Mutta A., Chagala-Odera E., Wairungu S., and Nassoro S., 2008. Traditional Knowledge systems for the Management of Kaya Forests in Coast Region of Kenya. *Traditional Forest-Related Knowledge and Sustainable Forest Management in Africa*. Papers from the conference held in Accra, Ghana, from 15-17 October 2008, jointly organized by the International Union of Forest Research Organizations (IUFRO) Task Force on Traditional Forest Knowledge, the IUFRO Special Programme for Developing Countries (IUFRO-SPDC), and the Council for Scientific and Industrial Research of Ghana (CSIR). John A. Parrotta, Alfred Oteng-Yeboah, Joseph Cobbinah (editors). Accra, IUFRO, 2009 - 213 p. - (IUFRO World Series Vol. 23)122-130.
- Necas P., Sindaco R., Koreny L., Kopecna J., Malonza P.K. and Modry D., 2009. *Kinyonga asheorum* sp. n., a new montane chameleon from the Nyiro Range, northern Kenya (Squamata: Chameleonidae). *Zootaxa* 2028:41-50.
- Sigu G.O., Omenda T.O., Ongugo P.O., and Opiyo A., 2000. Sacred Groves, Rule Enforcement and Impact on Forest Condition: The case of Ramogi Hill Forest Reserve. Kenya Forestry Research Institute, IFRI CRC-K. Accessed on 31/1/2015
- World Wildlife Fund and Alliance for Religions and Conservation, 2005. *Beyond Belief: Linking faiths and protected areas to support biodiversity conservation*.

DRAFT