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Abstract

Within developing countries, awareness efforts that promote wildlife conservation are not only important to engage communities neighboring wildlife habitats, but they are also critical nationally because urban dwellers are not usually exposed to wildlife. Here, we suggest that media and public relations professionals can promote domestic tourism activities, and engage communities in ways that will encourage the public to protect wildlife. We outline examples of successful ongoing initiatives we have used that stem from the principles of strategic communication to promote wildlife conservation in Uganda. First, tours with journalists, celebrities, and politicians have been launched to support awareness of wildlife and their economic value to the country. These initiatives highlight protected areas to the mainstream media and encourage domestic tourism. Second, parades around the country, intramural sports teams, as well as public lectures, community and school events are held to mobilize additional conservation awareness. Lastly, we discuss the role of strategic communication through media frames by the national newspapers in promoting the importance of wildlife conservation. These initiatives have likely led to the demonstrated increase in domestic tourism to national parks over the past decade and increase in support for wildlife by the Ugandan public.

Keywords

strategic communication, public relations, media engagement

Introduction

Declines in biodiversity are imminent. Habitat destruction and hunting remain the largest overarching threats to wildlife, with rapidly expanding human populations playing a large role (Haddad et al. 2015; Estrada et al. 2017; Finn et al. 2023). For example, worldwide about 60% of primate species are now threatened with extinction, and 75% have declining populations (Estrada et al. 2017). In East Africa, this is particularly pressing because tropical forests are a hotspot of wildlife decline (Finn et al. 2023).

With these biodiversity declines, it is important to proactively promote positive public attitudes towards wildlife so that pro-environmental policies are supported. A conceptual framework developed by the Intergovernmental Science Platform on Biodiversity and Ecosystem Services (IPBES) contains six main elements to connect the public to nature, including the importance that the public be inspired and motivated to intrinsically care about nature, including its wildlife, in addition to ecosystem services provided by nature (Diaz et al. 2015). Community conservation through community support for behaviors that promote wildlife protection play a strong role in conserving wildlife habitats (Western et al. 2020; Dawson et al. 2021). It is also essential to educate

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and empower those in urban areas or those who do not interact with wildlife directly to support conservation policies.

Tropical countries differ vastly in their economic situations, cultural settings and government structures. These differences contribute to unique challenges that each country might have when aiming to conserve its wildlife (Mulder & Coppolillo 2005). Here we focus on Uganda, a small landlocked country in Africa that is considered one of the most biodiverse countries on the continent (International Research Group 2006). It has ten national parks and many more wildlife reserves. It hosts many endangered wildlife, such as elephants, mountain gorillas, chimpanzees, and giraffes, among others. It also hosts 24 species of primates, and over 1,000 bird species, which represent half of those found on the African continent. However, Uganda has a complex political past that has negatively intersected with wildlife protection. From the 1960s to 1980s there was rampant poaching and deforestation resulting in dramatic wildlife declines, and land fragmentation (Malpas 1981). As the government changed policies, support for wildlife protection improved. Since 1996, the Uganda Wildlife Authority (UWA) has been the government agency mandated to protect, manage, and conserve Uganda's wildlife in and outside protected areas (national parks and wildlife reserves) and since then, wildlife populations began to recover. UWA is part of the Ministry of Tourism, Wildlife and Antiquities (MTWA) that has other sister agencies that include the Uganda Tourism Board (UTB) and Uganda Wildlife Education Center.

Communities that live within or near protected areas in Uganda play a strong role in wildlife conservation. First, they work with government agencies to support conservation and protect wildlife. For example, in Murchison Falls National Park, groups of communities provide information that helps to catch poachers. Those who were most likely to be helpful received benefits from the park such as economic benefits from revenue-sharing or ecotourism (Anagnostou et al. 2020). Second, communities participate in activities to mitigate conflict and increase wildlife human tolerance. In Bwindi Impenetrable National Park and Kibale National Park, local communities voluntarily participate as wildlife guards and chase apes from human cultivated lands when they exit the park (Akampurira & Bitariho 2018; Katswera et al. 2022). In Kibale National Park, beehives are maintained by communities and used to prevent elephants from exiting park boundaries to crop raid, along with other interventions to mitigate negative human-wildlife interactions (Kolinski & Milich 2021). An unusual example and perhaps a sign of sincere appreciation for the value of wildlife by communities occurred when an elderly silverback gorilla in Bwindi foraged in cultivated crops for several months without harm. This silverback ate large quantities of potatoes, bananas, and other cultivated foods. His foraging was tolerated by communities because he was the same silverback that tourists visited for years, bringing economic benefits to their community. When this gorilla died, hundreds of local community

members attended his burial (Gessa & Rothman, personal observation; Kalema-Zikusoka, 2023).

While community conservation near to the national parks is clearly important, a broader economic reason for the general public to conserve wildlife is the large amount of the gross domestic product (GDP) that originates from wildlife-related tourism. Tourism generates about 9.9% of the GDP in Uganda, and wildlife are the most popular attraction (MTWA 2023). In addition to the income generated directly from activities such as wildlife viewing, tourism also provides numerous employment opportunities for Ugandans in lodges, car hire, cultural activities, among others throughout the country, not just near protected areas. Most tour companies and their employees are based in Kampala and other urban centers. The potential for wildlife viewing also brings tourists to the country for other activities, such as conferences, meetings, and other events.

In Uganda, the economic benefits arising from tourism are a key aspect of public appreciation and support of wildlife conservation. However, there are critics of wildlife tourism as a major source of income for protected areas because it is highly volatile. This was recently learned with COVID-19 when tourism was dramatically halted (Lindsey et al. 2020). In addition, worldwide threats and other political challenges can affect tourists' willingness to visit, and in some cases, their safety. For example, the civil wars in Rwanda and Democratic Republic of Congo halted gorilla tourism (Trogisch and Fletcher 2022). Thus, these countries including Uganda cannot rely on foreign tourism alone to motivate conservation.

Here, we discuss the ways in which the Ugandan government along with partner agencies is using public relations tools to engender public support for conservation and improve conservation governance within the country. First, we discuss the ways that strategic communication can be used to improve wildlife related messages. Second, we draw attention to the role of the media in bringing wildlife related issues to the public. Third, we discuss how domestic tourism can aid in appreciation and support for wildlife conservation. Lastly, we outline several awareness initiatives used to promote wildlife protection in Uganda. We draw on our own experiences in this opinion article, as SJG has worked in public relations for the Ugandan government for over 15 years, CT has worked in conservation for the government for over 25 years, WT has over 30 years of media scholarship, and has observed media trends in wildlife and environmental reporting as a journalist and news editor in the Ugandan media industry, and JMR is an academic researcher in Uganda since 1997 and is also an Honorary Wildlife Officer in the government. We see a need for the integration of public relations professionals with academic researchers. In a search of Web of Science on November 14, 2023, only three articles were found containing "wildlife conservation" and "public relations" and three articles containing "biodiversity conservation" and "public relations". We believe public relations can play an Gessa et al. 3

important role in tropical wildlife conservation and we hope that more tropical conservation scientists will consider working with public relations professionals.

Strategic Communication

Public relations is a strategic communication process that builds mutually beneficial relationships between organizations and their stakeholders. Strategic communication is therefore implemented in various platforms by public relations professionals and through the media (Hallahan et al 2007). Understanding the ways in which this type of communication impacts public perception is important to decipher how to effectively draw impactful communication strategies through different target audiences (Entman 1993). For example, conservation related challenges can be framed in a different manner, which may elicit a different response by the public (Kusmanoff et al. 2020). In a study of conservation messaging to college students, those who watched a positively framed video demonstrating the positive outcomes of a potential donation were more likely to donate to those environmental issues than a negatively framed video that described the detriments to conservation if a contribution was not received. Contrary to this example, in a study of rule adherence during mountain gorilla tracking, it was found that tourists complied more often when they listened to a negatively framed message stating that they could harm the gorillas if they did not follow rules, compared to a message that stated they could protect the gorillas if they did follow the rules (Gessa and Rothman 2021). These cases demonstrate that message framing can influence public behavior related to conservation and should be employed by public relations professionals, as well as the media. In addition, prior experience, emotions, and beliefs play a role in the perception of issues (Kusmanoff et al., 2020). Kusmanoff et al. (2020) use the example of framing biodiversity loss as either environmental or economic. It might be expected that the economic frame is more powerful to those who could potentially benefit economically from wildlife, for example, through tourism, than those who might not. Using strategic communication to the public is thus important in the context of the audience.

Media Engagement

The information received by the public from the media sets a foundation of knowledge that informs perception of wildlife conservation related issues (Ogunjinmi et al. 2013). In places where the public does not have an opportunity to interact with wildlife, the media is an important form of communication to highlight wildlife conservation positively and bring forth practices that might hinder or help wildlife conservation. Forms of media include radio, newspaper, billboards and social media, such as Facebook, Twitter and Instagram, as well as social media groups, including the whatsapp platform. In a content analysis of two widely read newspapers in

Uganda from 2010-2019, about half of wildlife-related articles contained themes that were negatively framed. For example, articles focused on negative human-wildlife interactions such as crop-raiding, fatalities or injuries to humans from wildlife, or damage to property from wildlife (Gessa et al. 2023). Examples included elephants raiding crops, or crocodiles causing human deaths. This newspaper framing is unfortunate because in some cases the media is the only means in which the public receives information about wildlife, and it has been shown that newspaper articles can change public perceptions of wildlife (Rust 2015). In a study of newspapers in Mumbai, India over ten years, Bhatia et al. (2013) investigated the framing of leopard attacks on people as well as an eventual capture and re-release of the leopards. The change of the tone of the articles within newspapers over the years of the study had a corresponding improved public support for conservation of leopards.

In this vein, to promote public awareness and policy action for wildlife conservation, it is important to harness a conservation-friendly media that frames conservation in a positive manner. Public relations professionals can therefore play a key role in mobilizing and sensitizing journalists. For example, UTB, UWA and MTWA create forums to engage editors, broadcasters, and journalists in sensitization tours of wildlife habitats and protected areas where they spend several days viewing wildlife and learning about their conservation challenges, including the ways that the public can support wildlife conservation. For example, media are encouraged to highlight positive attributes of wildlife, such as provision of ecosystem services, employment through tourism, as well as its intrinsic values, following the IPBES framework (Gregg et al. 2022; Diaz et al. 2015). National and regional journalists are targeted for these types of initiatives.

Domestic Tourism

In order for the public to become interested and motivated to protect wildlife, it is important they have the opportunity to experience it for themselves and learn about the positive attributes of wildlife (Curtin 2009). In this respect, domestic tourism is important because it can help to connect people and nature, and support conservation (Okello et al. 2012; Melubo 2020). However, promoting domestic tourism in East Africa is difficult because it is not a common practice to take leisure holidays. Thus, tourism in East Africa has been mainly focused on foreign tourists, and the costs for accommodation, transport and associated activities within protected areas (such as gorilla tracking) is prohibitive for the general public, even with reduced rates for locals. Melubo (2020) points out the colonial mentality of wildlife-based tourism in East Africa and notes that tourism products are mostly developed with the view of foreign tourists; lodge prices are often prohibitive, 'walks' in nature are expensive, and transport is usually only by private hired vehicle. There is thus need for a switch in the types of products offered to create a domestic travel culture within Africa. In Uganda, the government has made an effort to reduce the tariffs for Ugandans and others from Africa compared to foreigners, and campaigns were developed to stimulate domestic tourism, such as the 'tulambule' campaign. During tulambule (meaning 'let's travel' in Luganda), which occurs about four times a year, the public is given free access to different national parks and tourism activities during a four-day period. Mass transportation is also provided freely, so the public only pays for their food and accommodation. During tulambule, the public join celebrities, government officials and local leaders to view wildlife and explore nature. While exploring the parks, the public is exposed to positive conservation messages, and they learn the importance of protecting wildlife. Most who participate are from cities and have not had a chance to view wildlife in its natural habitat.

Indeed, there has been an increase in domestic tourism in Uganda's protected areas from 2011-2019 (Figure 1). It is

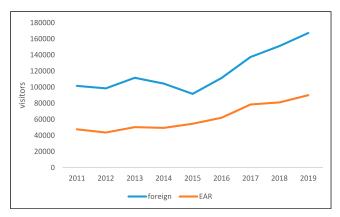


Figure 1. Number of annual foreign visitors and East African residents (EAR) to Uganda's national parks from 2011 to 2019.

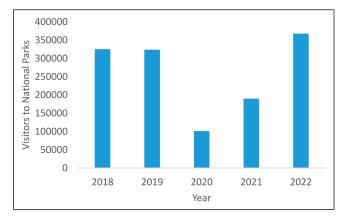


Figure 2. All visitors to Uganda's protected areas from 2018-2022*. *data from the Ministry of Tourism, Wildlife and Antiquities Annual Performance Report, Financial Year 2022-2023 (note that protected areas include wildlife reserves: All visitors include students, officials, foreigners, foreign residents, East African residents).

possible that the public relations campaigns described here were one of the reasons that domestic tourism increased in Uganda. However, the pandemic was devastating to tourism generally, as Uganda closed its borders for nearly six months (Figure 2). Further, lockdowns were in place in 2021 because of additional disease outbreaks, thus time will tell if the campaigns put in place annually since 2016 will continue to see domestic tourism increase. Domestic tourism in Uganda still falls well below that of its neighbors; it is hoped that this will change in the coming years (Odiara Kihima 2015; Melubo 2020).

Awareness Initiatives

To engender support for wildlife conservation nationally, several types of initiatives are put in place that provide a platform to publicize the attributes of wildlife and advocate for conservation policies. These awareness initiatives include parades, sports, community engagement, and school programs (Figure 3).

Parades

Parades are often used to promote wildlife conservation and have been used in several contexts and locales (Ardoin & Sivek 2002; Bairrão Ruivo and Wormell 2012). To celebrate conservation milestones and promote awareness of wildlife conservation, street parades are held annually in Uganda, typically through a street that hosts wildlife statues (Figure 3). Many public stakeholders march in the parade; these include educational institutions with students, teachers and administrators, local communities, staff of conservation organizations and government departments. These stakeholders march through the urban streets while hoisting banners and charts with conservation messages and slogans led by a brass band. In addition, on the day of the parade there are flash mobs on busy roads attracting attention of the crowds at different points to join in the celebrations. These parades create awareness of key conservation issues through themes such as the importance of conserving wildlife for future generations, stopping poaching, protecting against environmental degradation, among others. Members of the public gather to view and enjoy the parades as they simultaneously learn about conservation and how to protect wildlife. The media also reports on such gatherings, further helping to create more awareness to those who could not attend such parades. Though the outcome and impact of wildlife parades have not yet been formally evaluated in Uganda, anecdotal evidence based on conversations with stakeholders such as schoolchildren, police officers, local transport drivers and others suggests that wildlife information is being transferred, and these stakeholders have a positive image of wildlife after the parades (Gessa, personal observation).

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Figure 3. Examples of awareness initiatives (a) parades held semi-annually in the capital city, Kampala; (b) the "Tulambule" media tour; (c) statue of lion in the streets of Kampala; (d) statue of buffalo in the streets of Kampala. Photo credit: Simplicious J. Gessa.

Sports

Sporting events are increasingly being used to promote conservation around the world, particularly in Africa (Hughes 2018; Kinyili 2021). Since successful sports teams depend on trust, teamwork, and strategy, they are viewed as an excellent way to build community in the context of wildlife conservation. In addition, they attract spectators and bring people together. For example, in northern Kenya, a conservation-based sports program called "Kicking Goals for Wildlife" was initiated to promote a reduction in poaching and encroachment (Squires et al. 2016). The goals of the program were for players to understand the role of target wildlife species, to pass time with sports instead of poaching, and to connect with wildlife to promote custodianship of nature. The authors reported changes in attitudes of the players towards conservation since initiating the program (Squires et al. 2016).

The Uganda Wildlife Authority (UWA) employs a warden and staff that are specifically focused on using sports to promote conservation and institutional visibility. Several sports activities are hosted by UWA along with other agencies. For example, a wildlife marathon is held every year in the capital city that attracts thousands of runners. The runners pay to participate, and the funds go towards a wildlife-related cause. Additionally, the runners receive wildlife related information such as pamphlets about wildlife conservation, ways to visit the national parks, tickets to a wildlife exhibition at the national museum, among other items. Every year there are also interforce competitions, which include UWA, Uganda People's Defence Force, Uganda Police Force, and Uganda Prisons Services. These sports events are used as an avenue to relay conservation information to those participating, players and spectators alike, and these games are open to the public. The sports played include: football, volleyball, netball, handball, darts, and athletics for both men and women. The members of the public are given a platform to view the games, and enjoy sports as they learn more about wildlife. UWA also supports elite athletes on national teams, and some members have won

international marathons. These sports stars are wildlife ambassadors who pass on wildlife related information to the public using their celebrity status. The outcome of these sports activities is an improved image of the UWA, marketing of protected areas for domestic tourism, as well as sensitization to conservation challenges facing wildlife (UWA, 2020).

Community Engagement

Traditional community conservation approaches largely excluded the public from protected area management, focusing only on local communities that live adjacent to protected areas. However, communities that are further away from the protected areas and in more rural areas could benefit from sensitization as well, particularly because wildlife are often found outside of protected areas (McLennen 2008; UWA 2023), and because environmental policy is a national issue. Outreach programs in Uganda that are led by multiple government agencies include: community meetings, radio talk shows, and resource use access programs. In addition, initiatives that have been put in place to enhance community participation and involvement are: facilitation of visits by organized groups to protected areas, creation of low-cost accommodation to enable the public to spend a weekend viewing and enjoying wildlife, and workshops to help communities initiate tourism. Initiatives often focus on specific species that are facing conservation threats, for example, carnivores in some areas, and chimpanzees in others (UWA 2023). Evaluations of these programs suggest that they are effective in sensitizing communities to the regulations of the park (Musinguzi and Muzaale 2019), as well as in improving their tolerance of wildlife outside of protected areas (UWA 2023).

School Programs

Educating youth about wildlife conservation is essential (Johnson-Pynn & Johnson 2005), and conservation programs

in schools have been successful in promoting wildlife conservation worldwide (Dolins et al. 2010; Leeds et al. 2017; Lukas et al. 2019; Stern et al. 2014). In Uganda, government agencies focused on wildlife provide logistical support and funding for partners to organize music, dance, and drama competitions during key conservation events such as World Wildlife Day and World Tourism Day. Such avenues are used to pass on conservation messages through music, dance, and drama at the national and local levels across the country. Other activities conducted include debates and quiz competitions. The schools work closely with UWA and conservation partners to make guidelines for the competitions based on wildlife protection and decide on the hosting schools. Conservation awards are given in categories for best artwork, essay, poetry, music, and drama performance. There are also conservation conferences and conservation quizzes for students, thus encouraging students to learn more about wildlife conservation to win competitions.

What is the Role of Tropical Wildlife Scientists?

It is our perspective that tropical wildlife scientists hold a unique role in inspiring conservation in the public because they have intricate knowledge of wildlife species. Many wildlife biologists have spent thousands of hours with these animals in their natural habitats and have dedicated their lives to studying them - a true appreciation of their intrinsic value (Clutton-Brock and Sheldon 2010). In this respect, they should aim to liaise with public relations professionals and the local media to create fact-based stories and to highlight unique scientific findings to the public. First, they should help public relations professionals to provide correct information about wildlife and dispel myths. Second, they should translate their research and scientific findings into simple terms and use language that is suitable for the target audience (Gregg et al. 2022). Third, they should forward press releases that they have in their own universities or organizations to the local media in the habitat countries where they conduct research. In Uganda, we often learn about wildlife from international media sources when the research comes from within our country; we encourage tropical scientists to link with local and national media (Ferreira de Silva et al. 2024). Fourth, wildlife biologists should use social media wherever possible to promote interesting facts about wildlife and subtly correct any misinformation presented. Lastly, instead of creating their own campaigns, we encourage wildlife biologists to work with in- country government agencies and local NGOs to help them better present information on wildlife through websites, social media websites and groups, to support national initiatives (de Vos and Schwartz 2022). Wildlife biologists clearly have a strong role in conservation.

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