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RESEARCH ARTICLE

Taking stories: The ethics of cross-cultural community conservation research in Samburu, Kenya

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Abstract

Biodiversity is under threat at a global level, and many of the most biodiverse hotspots are in developing regions of the world. In many of these communities, livelihoods are often dependent on the same natural landscapes that support biodiversity. As a result, achieving global conservation and development goals is a priority in these regions, and therefore they attract the interest of both local and international researchers. However, research by outside, Western-based researchers can present ethical and practical challenges in these areas. Fortunately, community-based participatory research (CBPR), if managed well, can contribute to responsible conservation research in these regions. In this article, we investigate strategies to address ethical issues associated with cross-cultural conservation and development research. Our analysis draws on the experiences of a women's village in northern Kenya and six Western researchers. Using qualitative methodologies, we identify common themes in ethical conservation and develop research including critical consciousness, relationship-building, reciprocity, and adaptive research processes. We discuss the implications for ethical CBPR and, specifically, the need for both researchers and funders to only conduct such research if they can devote the resources required to do so ethically.

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Keywords:

Community research, conservation, development, research ethics, Samburu, Kenya

Introduction

> *They don't tell us who they will go share our stories with. And they don't even come back to share any report with us. The last time you will see them is the last day that they take our stories and they will go and never come back. – Community member from Samburu, Kenya*

Many of the world's most species-abundant and ecologically at-risk regions are located in developing regions of the world, including Central and South America, Southeast Asia, Oceania, and the horn of Africa (Fisher & Christopher 2007; Hughes 2017). Social-ecological systems research in these regions is therefore important for achieving biodiversity conservation outcomes at a global level (Ban et al. 2013; Berkes, Folke & Colding 2000; Walker et al. 2004), including research on the human dimensions of behaviours, perceptions and attitudes that often underpin many threats to biodiversity (Bennett et al. 2017). However, conservation and development research is a persistent challenge in developing world settings; it is frequently conducted by outsiders, oftentimes individuals from more privileged Western countries and representing demographics associated with power, historic marginalisation and colonialism (Castellano 2014; Minkler 2004). While advancements have been made in conservation research to make it more collaborative, inclusive and respectful of local communities, much of the research decision-making and practice is still conducted by people with foreign and/or outside identities (Gould et al. 2018; Minkler 2004; 2005; Taylor 2015). This presents risk of adverse and unintended consequences to the communities under study and, as a result, undermines the value and validity of the research for researchers, institutions and funders. These risks include dilemmas over protecting participant identities (Banks et al. 2013; Reid & Brief 2009), exploitation of close community relationships by researchers (Banks et al. 2013; Minkler 2005), lack of appropriate processes by institutional review boards (Brittain et al. 2020), and others. As a result, addressing concerns of how to effectively and ethically conduct cross-cultural research is critical for ethical and effective conservation and development.

The purpose of this article is to address, in depth, what it means to conduct ethical cross-cultural research in the context of conservation and development in biodiverse rich regions such as northern Kenya. To do so, we describe and analyse our collective experience, including the experience of our local participants, over multiple years in which we (six Western-based conservation social science researchers) facilitated research addressing questions related to conservation and development with a group of 25 women from a rural village in Samburu. Our reflections are presented based on a free-listing method, resulting in a series of thematic categories and codes with implications for how cross-cultural conservation and development research can be conducted effectively and ethically, and the barriers that make it difficult to do so. We also compared our free-listing activity with a set of established guidelines for working with researchers, developed by the women, to compare how we respectively perceived the best practices of ethical cross-cultural research. We discuss our outcomes within a context of the literature on community-based participatory research, and conservation and development, highlighting lessons learned from both successes and challenges from our experience.

Literature Review

CONSERVATION AND DEVELOPMENT INITIATIVES

Social-ecological systems theory posits that relationships between social and ecological components are critical to understanding systems in landscapes around the world and designing initiatives that aim to keep those systems intact (Berkes, Folke & Colding 2000). In an effort to apply this systems approach, conservation initiatives, particularly in developing countries, have shifted towards simultaneously addressing ecological components and the social and economic aspects that often are the basis of biodiversity threats. This shift has resulted in a diverse array of conservation and development initiatives that address livelihoods, human wellbeing and local management of natural resources as strategies for achieving long-term ecological outcomes. Examples of such approaches include community conservancies in northern Kenya that utilise local governance strategies to address pastoral livelihood and development needs, while also protecting wildlife, largely funded through tourism dollars (Letoiye 2014); livestock insurance programs in central Asia that compensate pastoral herders for livestock loss to predators and reduce the risk of retaliatory killings (Simms et al. 2011); and clean cook stove programs around the globe that aim to decrease respiratory illness caused by indoor air pollution while also reducing the demand for timber fuel (Rosenthal et al. 2018). As more conservation and development initiatives emerge, so does the need for interdisciplinary social science research to guide and evaluate such programs (Bennett et al. 2017; Sunderland, Ehringhaus & Campbell 2007; Woodhouse et al. 2015).

Conservation in developing countries has a long history of being driven by foreign or colonial outsiders, often at great cost to local communities (Igoe 2006; Mammides et al. 2016; Mbaria & Ogada 2016). While conservation and development research has moved in a direction that is both more effective and more inclusive of community perspectives (Berkes 2004; Shackeroff & Campbell 2007), control of and decision-making for these initiatives still often remain with their external scientists and funders. While often well-intentioned, such outsider research has the potential to exploit significant power imbalances between researchers and community members, and often lacks local context and knowledge, resulting in inappropriate, inaccurate and potentially harmful research (Brittain et al. 2020; Minteer & Collins 2005).

COMMUNITY-BASED PARTICIPATORY APPROACHES TO CONSERVATION AND DEVELOPMENT RESEARCH

As one method for addressing some of the ethical concerns associated with outsider research, community-based participatory research (CBPR) can guide conservation and development more responsibly than traditional research methods. In CBPR, local participants and/or stakeholders in the research are closely involved in all aspects of the research process, research decision-making is shared equally between researchers and community members, and the research is intended to result in tangible outcomes that communities can apply (Bastida et al. 2010; Horowitz, Robinson & Seifer 2009). Minkler (2004, p. 684) defines CBPR as 'a partnership approach that breaks down the barriers between the researcher and the researched, and values community partners as equal contributors to the research'.

Some of the benefits associated with CBPR include: (1) reduction in power imbalances between local communities and the researcher (Bastida et al. 2010); (2) integration of diverse sets of local knowledge, increasing the potential for research to understand complexity

and local context (Wallerstien & Duran 2010); and (3) relationship-building based on reciprocity, trust and respect, thereby increasing the likelihood of community acceptance of and engagement with the research (Wilmsen et al. 2012). These benefits are significant in the context of conservation and development research because the power dynamics that often exist between stakeholders and individuals conducting the research are reduced (Béné et al. 2009; Brockington 2004; Hoole 2009). Sharing control of the research process with community members also encourages the production of meaningful outcomes from research projects for communities (Minkler 2004), a critical outcome for achieving community investment in and trust for a research community that has a long history of extractive and exclusive practice. Additionally, CBPR's potential to capture diverse knowledge types is particularly relevant to a conservation and development research context, because of the inherent complexity in capturing the interaction between the social and the ecological components of a system. The ability to triangulate varying sets of knowledge provides multiple lenses by which to analyse the social-ecological interactions at the crux of conservation and development issues (Bohensky & Maru 2011; Tengö et al. 2014).

While CBPR has potential to address some of the shortcomings associated with many of the conventional approaches to conservation and development research, it can result in negative and damaging consequences if not managed well. First, because of the opportunity costs associated with participating, CBPR can exclude community members who cannot afford to contribute their time (Minkler 2004; Wilmsen et al. 2012). As conservation and development work often occurs in communities where securing basic needs is a challenge, the time requirement can be a real barrier to engaging people from local communities. Second, since CBPR often requires participants to work collaboratively with project stakeholders and other participants, the confidentiality of participants is often difficult or even impossible to ensure (Banks et al. 2013; Reid & Brief 2009; Wilmsen et al. 2012). Further, as illegal behaviours, such as extracting resources from protected areas, are common issues addressed by conservation and development projects, participants, if not entire communities, can be placed at risk in the absence of strict anonymity or confidentiality measures. Third, sharing control over the research design, however well-intentioned, can create tension between researchers and communities (Banks et al. 2013; Castellano 2014; Flicker et al. 2007; Wilmsen et al. 2012). Conservation and development research is particularly susceptible to this weakness due to the pre-existing tension between social and ecological goals. Finally, while CBPR is intended to help address power imbalances between researchers and communities, the practice of CBPR does not guarantee such an outcome (Banks et al. 2013; Minkler 2005). Designing research questions and methodology from the perspective of participants can elevate the voice of the researched. However, power dynamics and privilege associated with gender, race, class and income can go unaddressed and continue to impact relationships between participants and researchers.

While conservation and development research is at risk of negative consequences, significant work has been conducted to help researchers avoid these pitfalls, with a particular focus on the role of relationship-building and reciprocity. In their book focused on critiquing the use of participatory research in community-based natural resource management, Wilmsen et al. (2012) argue that the tension which often occurs between researchers and communities can be successfully negotiated through relationship-building, resulting in increased trust and mutual respect. Maiter et al. (2008) further discuss this connection between relationship-building and reciprocity, arguing that significant time and resources must be dedicated

to relationship-building before researchers are able to recognise and practise appropriate reciprocity.

In a global systematic review of Indigenous participation in environmental research, David-Chavez and Gavin (2018) suggest six considerations specific to the research process that are important for conducting responsible research with Indigenous groups. They established a framework for evaluating Indigenous community research participation, using the following indicators: (1) access of findings to local communities; (2) giving credit to local community members for their contributions to the study via co-authorship and acknowledgements; (3) reporting standard ethical guidelines followed in research deliverables, such as free and informed consent (also emphasised by Aluwihare-Samaranayake 2012); (4) describing relevance to local community needs; (5) acknowledgement of a commitment to cause no harm and protect intellectual property; and (6) producing research deliverables that are appropriate for and of applied value to local communities. The authors also developed a list of 10 guiding questions for responsible research, which encompasses the following indicators and principles (see Table 1).

Table 1 **Questions for guiding responsible research with Indigenous communities (David-Chavez & Gavin 2018)**

Are Indigenous community members included in the decision to initiate the study?
To what level do Indigenous community members have authority in the research design?
To what level do Indigenous community members have authority regarding the implementation of the research?
To what level do Indigenous community members have authority regarding the analysis of the research?
Are findings accessible to Indigenous community members?
Are findings reported in the context of concerns, issues or interests defined by Indigenous community members?
How were Indigenous community members credited for their knowledge contributions and efforts (i.e. acknowledgement, co-authorship)?
Did the study report ethical guidelines followed, such as Free Prior and Informed Consent?
Did the study address intellectual property rights or risks for Indigenous communities?
Did the study report any outputs or outcomes for the Indigenous community?

In addition to such guidelines that transcend all aspects of research, researchers should consider the cultural appropriateness of specific methods as well. Focus groups, surveys, interviews and random sampling are common data collection methods in social science research (Creswell & Creswell 2017). However, these approaches can be limiting or problematic in some contexts based on variables related to cultural practices, historic marginalisation, cultural communication norms and prior experiences of participants, among others. In Michel and Bassinder's (2013) study of Indigenous individuals' satisfaction

with government in Australia's Northern Territory, for example, the authors concluded that self-reflection by outside researchers on their assumptions, power and privilege is imperative, and the authors further advocated for mixed methods approaches that prioritise interpersonal interaction and de-emphasise high sample sizes if they are at the expense of ethical interactions. Similarly, in their recent article in *Conservation Biology*, Brittain et al. (2020) reflected on their experience as new conservation social scientists and highlighted the important role of reflexivity and engaging critically with ethics review processes to help mitigate issues with power dynamics and research processes that are incompatible with local contexts and cultures.

These considerations collectively point to a need for researchers to attain proficiency in what Aluwihare-Samaranayake (2012) calls 'critical consciousness'. Critical consciousness is rooted in self-reflection, whereby researchers assess, analyse and reconstruct their research approaches as they gain awareness 'from multiple angles from outside in and inside out in the process of creating transparency to all thoughts, actions, and ways of being, taking into consideration different socio-cultural, economic, and political contexts' (p. 66). It requires researchers to think beyond the traditional aspects of their work, to consider their power in the research process, and to understand the historical inequities between researchers and community members in the regions where they work. Aluwihare-Samaranayake (2012) also argues that introspection prior to research, and retrospection afterwards, will ultimately contribute to more positive outcomes for local participants and lessen the occurrence of unintended adverse impacts.

Background

Historically home to several hunter-gatherer groups (Ehret 2002), present-day Kenya is highly diverse, with 42 federally recognised tribes, 68 languages, and an array of relationships between Indigenous tribes and local ecosystems (Eberhard, Simons & Fennig 2019; MEACRD 2019). The British Empire colonised Kenya in the late 1800s as part of the East Africa Protectorate, in large part for access to the country's productive central highlands. The traditional grazing lands of pastoral tribes, such as the Samburu, were resettled by approximately 10,000 Europeans. After significant political movements and tensions, Kenya gained its independence from Britain in 1964, but conflict between pastoral communities and British descendants over land rights continues today (Sena 2017).

Present-day conservation in Kenya is largely a product of the country's colonial legacy. Conservation organisations are predominantly run by white Western foreigners, funded by international donors, and frequently partner with researchers from out-of-country institutions. As a result, conservation research in northern Kenya has largely been conducted by external researchers.

Research conducted in regions such as Samburu and Turkana started largely in the 1950s and 1960s, primarily in the fields of anthropology and ecology. As conservation and development initiatives gained more attention globally in the 1980s, conservation and development research began in earnest in northern Kenya. Much of this research has focused on topics such as community conservancies, land tenure schemes, human–wildlife conflict and livelihood diversification. Based on a recent review of research conducted in Samburu since 2000 (more than 200 articles), only a small segment of this research utilised a community-based participatory approach, and most of the articles appeared to be extractive, benefiting the researchers but not the participants.

Our work was guided by the following question: 'What are the behavioral strategies of outside, Western researchers that lead to ethically-conducted community-based conservation and development research in northern Kenya?'

Methods

RESEARCH SITE

Archer's Post, Kenya, is a small settlement of about 6000 people in Samburu County, 300 km north of the capital, Nairobi. The community is characterised by a semi-arid landscape, receiving 438 mm of rain annually and home to several endemic and vulnerable or endangered species such as the Grevy's zebra (*Equus* grevyi), reticulated giraffe (*Giraffa camelopardalis* reticulata) and Beisa oryx (*Oryx* beisa).

Due to the high biodiversity and pressures on rangelands, several protected areas are located in the region, from government-run national reserves to locally governed community conservancies. The conservancies are managed for the dual purposes of wildlife conservation and conserving rangelands for pastoralists, while also generating financial resources from donors and tourism enterprises to support development projects such as clinics, livelihood diversification programs, water security projects and educational scholarships (Northern Rangelands Trust 2016). Many of these initiatives are in response to major changes in the region over the past generation, including more frequent and intense droughts, a shift to a private land tenure system, and changing social values that promote formal education and women's rights.

The Samburu tribe, one of the more populous pastoral tribes in the region, relies heavily on livestock herding, in addition to tourism and small business, as their primary livelihoods. Traditionally, decision-making power is stratified by gender and age set, with older males responsible for most decision-making (Spencer 1965). However, Archer's Post is a community undergoing rapid and significant change, and the decision-making power of women and youth is increasing.

The specific community of our study is Unity Women's Village, an all women's village comprised of approximately 20 women and 50 children (note: members of Unity Women's Village suggested use of the village name, rather than anonymity). Many of the women have stories of violence, abuse and/or extreme marginalisation, and fled these situations to establish or join the village. They rely on livestock, sales of beadwork and visits from tourists for their livelihood. Persistent challenges to the village include lack of accessible, healthy rangeland for grazing, human–wildlife conflict and affordability of basic services such as medical care. This group of women also practise entrepreneurism, recognise the importance of income diversification, and work cooperatively to build resilience and adaptability to changes in their landscape, climate and community.

Due to its uniqueness as an all-women's village in a patriarchal society, and the fact that the village is situated geographically in an area with high biodiversity and ecological threats, the community has received attention from researchers and journalists from around the world. Various aspects of the village's story have been collected and shared in technical reports, theses and dissertations, and in the media. Yet, with few exceptions, the women in this village never know what becomes of the information and stories they share with researchers and journalists.

The village has also built a relationship over the past 10 years with our team, which consists of a conservation social scientist and his colleagues and students (i.e. the authors of this article)

from an American university. This relationship has experienced both successes and challenges, creating an opportunity for reflection on lessons learned from research projects conducted over many years and focused on topics such as evaluating the conservation related impacts of a small-scale income generation program, exploring the relationship between women's perceived agency and livestock-related decisions, and understanding the shifting priorities of youth as formal education became more accessible. Our description of the village and the results of this study were discussed, adapted and approved by the women of Unity Village.

DATA COLLECTION

Two strategies comprised our methodology. First, we (six researchers) collectively participated in a free-listing activity about our experiences conducting research with Unity Village. Free-listing is a technique commonly used in the social sciences and involves asking participants to list as many answers as possible to a particular prompt (Bernard 2017). In this study, we (the Western researchers) responded to two prompts: (1) What actions/strategies did you use with Unity Village that made you feel like you were doing ethical work? (2) What actions/strategies do you wish you would have done in your research to make your work feel more ethical?

The second source of data was a guidelines document, which was created by participants, with the assistance of our team, based on interviews, focus groups and scenario planning, and encouraged members of the women's village to reflect on prior experiences with researchers. The women recalled stories in which they felt the research process went well and instances in which it did not, and from those stories, extrapolated principles they would require in future collaborations with researchers. With these principles in mind, the women generated a written guidelines document (hereafter referred to as the 'Guidelines'), which is distributed to researchers (and journalists) who contact the village with a request to collect stories and/or data. This document was analysed as the second source of data for this study.

Ethics approval for this study was obtained from the Institutional Review Board at Colorado State University, as well as from the women of Unity Village.

DATA ANALYSIS

The free-listing data and Guidelines were analysed by three members of our team using thematic analysis, as outlined by Braun and Clarke (2006). Free-listed items were bundled based on commonalities, which led to initial codes. The codes were reviewed by the same three researchers (intercoder reliability > 90%), differences were discussed and resolved, the codes were then (re)named and defined and, lastly, bundled into categorical themes. The Guidelines were then analysed and coded independently by the same three individuals using the codes from the free-listing analysis (intercoder reliability > 90%). The results were shared and reviewed with members of the women's village and revised accordingly.

Results

One hundred and forty-one (141) responses were generated from the free-listing activity, which led to 13 codes; 89 of the responses were generated from the first prompt (the actions/strategies we used that led to ethical outcomes) and 52 of the responses were generated from the second prompt (the actions/strategies we wished we had used). These codes were then utilised to deductively review the village's Guidelines document, which resulted in an additional code (i.e. 'participant rights'). Codes were later clustered into four themes based on their commonalities: (1) critical consciousness; (2) relationship-building; (3) reciprocity; and

(4) respectful research methods. The frequency (free-listing) and presence/absence of codes (Guidelines) are reported in Table 2.

Table 2 Themes, associated codes, and the number of times each theme was coded

Theme	Code	Number of free-listed items assigned to code	Present in Guidelines (Y/N) and frequency
Critical consciousness	Self-awareness and reflection	6	No
	Cultural understanding	15	Yes
Relationship-building	Break the ice	11	No
	Live alongside	14	No
	Extend trust and power	8	No
	Relationships before research	4	No
	Relationships for the long term	3	No
Reciprocity	Benefits and compensation	6	Yes
	Compensation options	7	Yes
Respectful research methods	Transparency	4	Yes
	Engaging methods	7	No
	Co-create the research	16	Yes
	Share the results	11	Yes
	Participant rights	0	Yes

THEME: CRITICAL CONSCIOUSNESS

Critical consciousness, as discussed previously, describes the need for researchers to gain proficiency beyond the technical aspects of their research, incorporate a deep understanding of the culture in which they work, and utilise reflection and subsequent adaptability throughout their cross-cultural experience (Aluwihare-Samaranayake 2012). The two codes that comprised this theme were 'self-awareness and reflection' and 'cultural understanding'. These codes were represented almost exclusively within the researchers' free-listing items, by items such as 'engaging in critical and intentional self-reflection' and 'more frequent internal self-reflection'. 'Cultural understanding' was the code with the second greatest number of free-listed items overall, represented by items such as '*knowing how to show gratitude in a way that is relevant/*

typical in Samburu' and '*working with local women instead of men as research assistants*'. By contrast, only one excerpt from the village's Guidelines was assigned to a code within this theme (cultural understanding): '*review your intended questions and activities with liaison to ensure appropriateness within the cultural context of the region*'.

THEME: RELATIONSHIP-BUILDING

Building relationships was the theme with the most free-listed items associated with it overall and consisted of five codes. The theme was defined by behaviours that extended beyond the traditional scope of research and that contributed to a foundation of mutual understanding between researchers and community. The codes (and examples from the free-listing) included: 'living alongside' ('spending time in the village outside of research time', 'walking to the village rather than driving'); 'breaking the ice' ('learning all of their names and the names of their kids', 'learned their language better'); and 'extend trust and power' ('letting the women decide what our days looked like', 'spent time doing activities where the women were the experts'). The other two codes included 'relationships before research' ('time spent getting to know the women before conducting research') and 'relationships for the long-term' ('phone check-ins with the community after the research project was over'). Similarly to the critical consciousness theme, relationship-building was represented almost entirely by the free-listing data; it was not represented in the village Guidelines.

THEME: RECIPROCITY

Reciprocity is the intentional practice of acknowledging the value of community participation in the research. Reciprocity was categorised into two codes: 'benefits and compensation' and 'compensation options'. 'Benefits and compensation' was used to code examples that simply acknowledged the need to remunerate participants, whether that be for their time, recognition of their participation, or other reasons. An example of this code from the Guidelines includes: '*Prior to arriving, negotiate plans for reciprocity and compensation (if applicable) before starting your work.*' Examples of free-listing items for this code include '*brought food to share, took and shared family photos*' and '*get more feedback if participants felt like the research benefited them.*'

'Compensation options' was used to code the possibilities for how remuneration could occur, monetarily or otherwise. Monetary compensation emerged from both the Western researcher free-listing activity and from the Guidelines, but other options such as giving time, providing food and helping build local capacity were also mentioned.

THEME: RESPECTFUL RESEARCH METHODS

The final theme was comprised of characteristics associated with the process of conducting actual research. We define 'respectful research methods' as a data collection process built around prioritising the dignity of participants. Codes from this theme included: 'transparency', or having open and honest discussions around the purpose of the research and how results would be used; 'engaging methods', which are methods wherein participation in research itself can provide benefits to participants; 'co-create the research', defined as researchers and community members collaboratively designing and adapting the research process; 'share the results', meaning dissemination of the results in an appropriate format; and 'participant rights', which means ensuring community members understand that their participation is voluntary and that all agreements of mutual benefit are honoured.

The 'co-create the research' code emerged most frequently from the free-listing data within this theme. An example of a free-listed item assigned to this code was 'allowing methods to change based on participants' feedback'. 'Participant rights' was the most frequently applied code in the Guidelines and was represented in sections of the Guidelines such as 'these rights include the freedom to choose whether or not to participate, and the ability to discontinue participation or not answer individual questions'. Additionally, 'transparency' and 'share the results' were present in both the free-listing items and the Guidelines, while 'engaging methods' emerged only from the researchers' free-listing activity.

Discussion

Our results yielded a number of findings that revealed insights and observations which might help guide research in conservation and development between outside researchers and local participants. These insights are likely transferable to other disciplines as well.

STRATEGIES PRIOR TO RESEARCH

The free-listed items led to themes related to critical consciousness and relationship-building; however, these themes were generally not represented in the Guidelines. This outcome was unsurprising because relationships are a central part of Samburu culture and therefore it may not have seemed necessary to specify them within the locally created Guidelines. As Western researchers, we come from cultural backgrounds in which relationships are less emphasised in professional environments. As such, the process of intentional relationship-building was unique for us and required a considerable and memorable up-front investment of time. Greeting every woman individually in the village upon each arrival, learning their names and the names of all of their children, constructing huts, learning how to bead and similar activities were practised day after day, often hours at a time, and before research was initiated. These were novel, and at times exhaustive, relationship-building steps to us, though to a Samburu woman it may not have seemed remarkable or necessary to specify such normal (to them) steps in written guidelines.

Critical consciousness is closely linked with relationship-building. Gaining an appreciation of the role and importance of relationships in Samburu required reflection, which could lead to an openness to learn about the culture, humility to put one's own natural tendencies and norms aside, and self-awareness to anticipate how every behaviour might impact the research process. Developing a level of critical consciousness also contributes to a deeper understanding of power dynamics between and among researchers and community members. Unity women had numerous stories of researchers who showed up intending to start their research on day one; some even showed up on their initial visit with recording devices in hand, prepared to record their very first interactions. By contrast, a researcher who practises critical consciousness would first assess how to effectively and appropriately interact in a cross-cultural setting and avoid unfavourable interactions, especially ones that reinforce power imbalances, as described in many of the stories from the Unity women.

Both critical consciousness and relationship-building require time that might not initially seem 'productive' by Western standards. We recognised that time and money are often limited in research, but the process of reflecting, gaining a deep understanding of a culture and building relationships requires researchers to stretch those resources further. However, we also recognised that our research would not be ethical or successful without such an effort. Engaging in critical consciousness and relationship-building created an environment in which

the women provided feedback on the relevance and appropriateness of proposed methods, which ultimately improved the quality of the research. By contrast, the women from Unity Village had stories of researchers who did not familiarise themselves with the local culture and did not invest in building relationships and were eventually asked by the women to discontinue their work.

We implore social science researchers to consider the importance of relationship-building in the places where they work and to plan for the resources necessary to understand where they are working and to build rapport with the participants. Likewise, funders of research must recognise the value of building relationships and gaining cultural understanding, and provide resources that support those activities. Lack of time and resources to go through these steps results in unethical research, disenfranchised participants and, potentially, invalid research results.

Our results show that understanding Samburu culture was paramount to conducting ethical research. Gaining this understanding required a significant amount of reflection and the help of cultural 'insiders' of whom we could openly ask questions. While we believe strongly in the value of relationship-building and critical consciousness, we also recognise that using only these strategies is ethically insufficient and that these are just initial steps.

STRATEGIES WHILE CONDUCTING RESEARCH

Unsurprisingly, both the free-listing items and the village Guidelines frequently addressed specific aspects of conducting the research, although different aspects were emphasised in the two data sources. The Guidelines often presented content related to 'transparency' and 'participant rights'. This stemmed from numerous prior experiences in which researchers arrived, collected the data they wanted and departed, never fully explaining the research purpose or how the women's stories would be shared. The impact of these experiences on the women included feelings of marginalisation and confusion on realising that researchers were likely using their stories in some way that benefited the researchers, but not themselves. In order to avoid similar future instances, the Guidelines included specific instructions that addressed transparency and the rights of the women as participants.

In contrast, our free-listed items mostly pertained to the other codes of 'co-creating the research' and 'sharing results'. When incorporated, these can enhance the overall quality of the research. The action of co-creating the research process incorporates local perspectives and knowledge, which is often essential to understanding complex social issues and also increases research relevancy. Furthermore, sharing results with local participants can support action that potentially leads to positive change.

Co-creating research and sharing results not only require time but also adaptability. Feedback from local community members often leads to changes to research questions or methodologies, leaving researchers to resolve how to balance the trade-offs of prioritising community input with the potential consequences of adjusting methods described in proposals to funders and institutional review boards (IRBs). Researchers and funders, and the rigid institutions we operate within, must evolve to create space for adaptive management in order to co-create research and share results.

Though we identified some strategies focused on research quality and engagement in our free-listing exercise, we made no mention of participant rights strategies, which was striking to us when we later realised it during analysis. While we recalled going through the standard institutional approval-seeking steps and outlines related to 'participant rights' (e.g. free and

informed consent), none of those actions were identified by us in the free-listing data as critical to ethical research practice.

We have some thoughts about why this omission occurred. Social science researchers must complete human subject training and submit research plans to IRBs, which have institutional oversight on ethical research. As a result, we took a 'check the box' IRB approval-seeking approach and treated it as a proxy for ensuring participant rights were addressed. Unfortunately, this approval process is void of perspective from the actual people participating in the research and, in our case, framed participant rights as steps to go through in an approval application. Our results are a reminder of the importance of engaging actively with local participants regarding their rights, revisiting those rights ourselves (e.g. through critical consciousness) and with communities throughout the process, and going beyond reading approved scripts and/or soliciting signed consent forms.

RECIPROCITY

The free-listed items and village Guidelines both addressed reciprocity. While the free-listed items rarely mentioned financial compensation explicitly, the language in the Guidelines implied monetary compensation more clearly in some places. The women had stories about researchers who were put off by reciprocity requirements and shared stories about researchers who promised non-monetary types of reciprocity and then failed to follow through.

Upon reflection on our practice of reciprocity, which was primarily in the form of non-monetary goods (e.g. food, water, sugar, building supplies), there was no clarity on the exact purpose of the exchange, as promoted by Gelinas et al. (2018). While we knew reciprocity felt ethically appropriate, in hindsight it was unclear whether we were using reciprocity to compensate for the women's time, as an incentive to participate, as acknowledgement of their contributions, or a combination of all three. Open discussion among the research group and with the local participants regarding reciprocity would have defined a clearer purpose for reciprocity and, subsequently, the appropriate type and amount.

The Guidelines clearly state that compensation should cover the cost of women's time to participate in research: 'it is reasonable for the women to consider the cost of their reallocated time'. Such clarity can help researchers determine the appropriate value of the women's participation. A common example given by the women regarding reciprocity was that researchers said their participation would raise awareness about persistent women's issues in the region, which in the past had led Unity women to believe that such awareness might create direct opportunities for them or their families. In reality, our greater awareness of the historic marginalisation of Samburu women resulted in little to no direct benefits to them. It may contribute to a larger (and global) benefit, but rarely benefits research participants directly. At the same time, researchers publish manuscripts that contribute to academic reputation, promotion and professional recognition, while the individuals on whom these articles are based receive little, if any, benefit. We urge researchers to address reciprocity for participants with the same seriousness with which they consider the benefits they receive from their research communities.

LIMITATIONS

While we believe the results of our study include valuable lessons that can be applied both within and outside the context of conservation and development research, there are several limitations that impact our results. First, despite our efforts, power dynamics can likely never

be diminished completely because, for example, some members of our and other research project teams are men. In an explicitly patriarchal culture, power imbalances are nearly impossible to eliminate. The men on our research teams recognised this as well, reporting that their interactions often felt different. Additional factors, such as English-speaking ability, different levels of closeness that emerged between researchers and some women from the village, formal education differences, and race, all contributed to power imbalances interacting with one another. These imbalances led to varying levels of validity or accuracy in what the women shared with us as researchers.

Another limitation of our study lay in the number of Western researchers who participated in the study. The six Western researchers in this study have collaborated on several projects with Unity Village, but we did not include other researchers who have worked with the village. Therefore our results represent only our experiences and perceptions. Its generalisability thus has limits.

Conclusion

As we reflected on our findings, we observed that many of the most salient results might seem at odds with those of some conventional approaches to conservation and development research. Efficiency is often a guiding principle in research, given the limits of time and money. However, building relationships, gaining an in-depth cultural understanding and soliciting input to influence the research process all require time that is above and beyond what is needed to simply collect data. If we believe in a conservation and development agenda, researchers should plan on spending 'pre-research' time with their participants to establish relationships, refine their cultural understanding and cultivate an environment of mutual trust and benefit. This also means that funders need to engage more deeply in the discussion around ethical CBPR and value the resources required to conduct ethical cross-cultural research.

Many of the themes that emerged from the data are supported by previous literature, both within and outside the conservation and development discipline. Notions of relationship building, reciprocity, participatory research paradigms and cultural understanding have been discussed in detail by other scholars (Israel et al. 2005; Kimmerer 2013; Kindon, Pain & Kesby 2007; Nelson 2008). In addition, the women's Guidelines highlight reciprocity, transparency and their rights as research participants, all of which are emphasised in several Indigenous research ethics studies (Aluwihare-Samaranayake 2012; Chavez & Gavin 2018; Wilmsen 2012).

Our research also aligned with Wilmsen's (2012) conclusions about the importance of building trust and relationships. The relationship-building theme received more coded free-listed items than any other theme. Complementary to relationship building, our results supported the importance of critical consciousness in research, as advocated by Aluwihare-Samaranayake (2012).

While our results largely support the findings of previous work, these themes do not exist in a singular framework. Conservation and development research is highly reliant on frameworks to guide our work. As researchers, we need to put the same effort and thought into the frameworks that guide *how* we conduct responsible and ethical community-based research as we put into the frameworks that guide *what* we research. This study brings together, from the perspective of both researchers and participants, the components of ethically practised CBPR in conservation and development. Altogether, relationship building, critical consciousness, reciprocity and respectful research practices are critical behavioural components

for outside researchers to engage in ethical community-based, participatory conservation and development research and have the potential to result in greater relevance, enhanced reliability, and community empowerment. If outside researchers are unable to prioritize these practices, we argue they should not be engaging in conservation and development community-based participatory research in places like Samburu.

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References

Aluwihare-Samaranayake, D 2012, 'Ethics in qualitative research: A view of the participants' and researchers' world from a critical standpoint', *International Journal of Qualitative Methods*, vol. 11, no. 2, pp. 64–81. https://doi.org/10.1177/160940691201100208

Ban, N, Mills, M, Tam, J, Hicks, C, Klain, S, Stoecki, N, Bottrill, M, Levine, J, Pressey, R, Satterfield, T, Ma Chan, K 2013, 'A social–ecological approach to conservation planning: Embedding social considerations', *Frontiers in Ecology and the Environment*, vol. 11, no. 4, pp. 194–202. https://doi.org/10.1890/110205

Banks, S, Armstrong, A, Carter, K, Graham, H, Hayward, P, Henry, A, Holland, T, Holmes, C, Lee, A, McNulty, A, Moore, N, Nayling, N, Stokoe, A & Strachan, A 2013, 'Everyday ethics in community-based participatory research', *Contemporary Social Science*, vol. 8, no. 3, pp. 263–77. https://doi.org/10.1080/21582041.2013.769618

Bastida, E, Tseng, T, McKeever, C & Jack, L Jnr 2010, 'Ethics and Community-Based Participatory Research: Perspectives from the field', *Health Promotion Practice*, vol. 11, no. 1, pp. 16–20. https://doi.org/10.1177/1524839909352841

Béné, C, Belal, E, Baba, M, Ovie, S, Raji, A, Malasha, I, Friday, J, Mamane, N, Njaya, F, Na Andi, M, Russell, A & Neiland, A 2009, 'Power struggle, dispute and alliance over local resources: Analyzing 'democratic' decentralization of natural resources through the lenses of Africa inland fisheries', *World Development*, vol. 37, no. 12, pp. 1935–50. https://doi.org/10.1016/j.worlddev.2009.05.003

Bennett, N, Roth, R, Klain, S, Chan, K, Christie, P, Clark, D, Cullman, G, Curran, D, Durbin, T, Epstein, G, Greenberg, A, Nelson, M, Sandlos, J, Stedman, R, Teel, T, Thomas, R, Verissimo, D & Wyborn, C 2017, 'Conservation social science: Understanding and integrating human dimensions to improve conservation', *Biological Conservation*, vol. 205, pp. 93–108. https://doi.org/10.1016/j.biocon.2016.10.006

Berkes, F 2004, 'Rethinking community-based conservation', *Conservation Biology*, vol. 1, no. 3, pp. 621–30. https://doi.org/10.1111/j.1523-1739.2004.00077.x

Berkes, F, Folke, C & Colding, J 2000, *Linking social and ecological systems: Management practices and social mechanisms for building resilience*, Cambridge University Press, Cambridge, UK.

Bernard, H 2017, *Research methods in Anthropology: Qualitative and quantitative approaches*, Rowman & Littlefield, London.

Bohensky, E & Maru, Y 2011, 'Indigenous knowledge, science, and resilience: What have we learned from a decade of international literature on "integration"?', *Ecology and Society*, vol. 16, no. 4. https://doi.org/10.5751/es-04342-160406

Braun, V & Clarke, V 2006, 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, vol. 3, no. 2, pp. 77–101. https://doi.org/10.1191/1478088706qp063oa

Brittain, S, Ibbett, H, de Lange, E, Dorward, L, Hoyte, S, Marino, A, Milner-Gulland, E, Newth, J, Rakotonarivo, S, Veríssimo, D & Lewis, J 2020, 'Ethical considerations when conservation research involves people', *Conservation Biology*, pp. 1–9. https://doi.org/10.1111/cobi.13464

Brockington, D 2004, 'Community conservation, inequality and injustice: Myths of power in protected area management', *Conservation and Society*, vol. 2, no. 2, pp. 411–32.

Castellano, M 2014, 'Ethics of Aboriginal research', in W Teays, J Gordon & A Renteln, 'Global bioethics and human rights', *Contemporary Issues*, vol. 273.

Creswell, J & Creswell, J 2017, *Research design: Qualitative, quantitative, and mixed methods approaches*, Sage Publications, Los Angeles, CA.

David-Chavez, D & Gavin, M 2018, 'A global assessment of Indigenous community engagement in climate research', *Environmental Research Letters*, vol. 13, no. 12. https://doi.org/10.1088/1748-9326/aaf300

Eberhard, D, Simons, G & Fennig, C 2019, Ethnologue, SIL International, Dallas, TX, viewed 22 November 2019, www.ethnologue.com/country/ke/languages.

Ehret, C 2002, *The civilizations of Africa: A history to 1800*, University Press of Virginia, Charlottesville, VA.

Fisher, B & Christopher, T 2007, 'Poverty and biodiversity: Measuring the overlap of human poverty and the biodiversity hotspots', *Ecological Economics*, vol. 62, no. 1, pp. 93–101. https://doi.org/10.1016/j.ecolecon.2006.05.020

Flicker, S, Travers, R, Guta, A, McDonald, S & Meagher, A 2007. 'Ethical dilemmas in community-based participatory research: Recommendations for institutional review boards', *Journal of Urban Health*, vol. 84, no. 4, pp. 478–93. https://doi-org.ezproxy2.library.colostate.edu/10.1007/s11524-007-9165-7

Gelinas, L, Largent, E, Glenn Cohen, I, Kornetsky, S, Bierer, B, Fernandez Lynch, H 2018, 'A framework for ethical payment to research participants', *The New England Journal of Medicine*, vol. 378, no. 8, pp. 766–71. https://doi.org/10.1056/nejmsb1710591

Gould, R, Phukan, I, Mendoza, M, Ardoin, N & Panikkar, B 2018, 'Seizing opportunities to diversify conservation', *Conservation Letters*, vol. 11, no. 4, pp. e12431. https://doi.org/10.1111/conl.12431

Hoole, A 2009, 'Place-power-prognosis: Community-based conservation, partnerships, and ecotourism enterprises in Namibia', *International Journal of the Commons*, vol. 4, no. 1. https://doi.org/10.18352/ijc.112

Horowitz, C, Robinson, M & Seifer S 2009, 'Community-Based Participatory Research from the margin to the mainstream', *Circulation*, vol. 119, no. 19, pp. 2633–42. https://doi.org/10.1161/CIRCULATIONAHA.107.729863

Hughes, C 2017, 'Are there many different routes to becoming a global biodiversity hotspot?', *Proceedings of the National Academy of Sciences*, vol. 114, no. 17, p. 4275. https://doi.org/10.1073/pnas.1703798114

Igoe, J 2006, 'Measuring the costs and benefits of conservation to local communities', *Journal of Ecological Anthropology*, vol. 10, no. 1, pp. 72–77. https://doi.org/10.5038/2162-4593.10.1.7

Israel, B, Eng, E, Schulz, A & Parker, E 2005, *Methods in Community-Based Participatory Research for Health*, 2nd edn, Wiley & Sons, San Francisco, CA.

Kimmerer, R 2013, 'Planting sweetgrass', in *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*, Milkweed Editions, Canada.

Kindon, S, Pain, R & Kesby, M 2007, *Participatory action research approaches and methods: Connecting people, participation and place*, Routledge, New York.

Letoiye, D 2014, 'Participatory spatial planning for reconciling human activities and conservation of Grevy's Zebra (*Equus* grevyi) in Northern Kenya: A case study of Meibae community conservancy, Samburu', *Merit Research Journal of Education and Review*, vol. 2, no. 5, pp. 92–103.

Maiter, S, Simich, L, Jacobson, N & Wise, J 2008, 'Reciprocity: An ethic for community-based participatory action research', *Action Research*, vol. 6, no. 3, pp. 305–25. https://doi.org/10.1177/1476750307083720

Mammides, C, Goodale, U, Corlett, R, Chen, J, Bawa, K, Hariya, H, Jarrad, F, Primack, R, Ewing, H, XueXia & Goodale, E 2016, 'Increasing geographic diversity in the international conservation literature: A stalled process?', *Biological Conservation*, vol. 198, no. 1, pp. 78–83. https://doi.org/10.1016/j.biocon.2016.03.030

Mbaria, J & Ogada, M 2016, *The big conservation lie: The untold story of wildlife conservation in Kenya*, Lens & Pens Publishing, Auburn WA.

Michel, T & Bassinder, J 2013, 'Researching with reciprocity? Meaningful participant-based research in a remote Indigenous community context', 3rd National Local Government Research Forum conference proceedings, Adelaide, South Australia.

Ministry of East African Community and Regional Development (MEACRD) 2019, Republic of Kenya, Nairobi, viewed 22 November 2019, meac.go.ke/kenya-peoples-and-cultures/.

Minkler, M 2004, 'Ethical challenges for the "outside" researcher in community-based participatory research', *Health Education & Behavior*, vol. 31, no. 6, pp. 684–97. https://doi-org.ezproxy2.library.colostate.edu/10.1177/1090198104269566

Minkler, M 2005, 'Community-based research partnerships: Challenges and opportunities', *Journal of Urban Health*, vol. 82, no. 2, pp. ii3–ii12.

Minteer, B & Collins, J 2005, 'Ecological ethics: Building a new tool kit for ecologists and biodiversity managers', *Conservation Biology*, vol. 19, no. 6, pp. 1803–12. https://doi.org/10.1111/j.1523-1739.2005.00281.x

Nelson, M 2008, *Original instructions: Indigenous teachings for a sustainable future*, Simon and Schuster, New York.

Northern Rangelands Trust 2016, 'Kalama community conservancy management and community development plan', Northern Rangelands Trust, Kenya, viewed 5 May 2020. https://static1.squarespace.com/static/5af1629f12b13f5ce97ca0b5/t/5b63dcf803ce64c9b553d975/1533271298520/CMP_KALAMA_LowRes_SinglePages.pdf

Reid, C & Brief, E 2009, 'Confronting condescending ethics: How community-based research challenges traditional approaches to consent, confidentiality, and capacity', *Journal of Academic Ethics*, vol. 7, nos 1–2, p. 75. https://doi.org/10.1007/s10805-009-9085-0

Rosenthal, J, Quinn, A, Grieshop, A, Pillarisetti, A & Glass, R 2018, 'Clean cooking and the SDGs: Integrated analytical approaches to guide energy interventions for health and environment goals', *Energy for Sustainable Development*, vol. 42, no. 1, pp. 152–59. https://doi.org/10.1016/j.esd.2017.11.003

Sena, K 2017, 'Kenya: Criminalizing pastoralists', *World Policy Journal*, vol. 34, no. 2, pp. 4–5.

Shackeroff, J & Campbell, L 2007, 'Traditional ecological knowledge in conservation research: Problems and prospects for their constructive engagement', *Conservation and Society*, vol. 5, no. 3, pp. 343–60.

Simms, A, Moheb, Z, Salahudin, Ali, H, Ali, I & Wood, T 2011, 'Saving threatened species in Afghanistan: Snow leopards in the Wakhan Corridor', *International Journal of Environmental Studies*, vol. 68, no. 3, pp. 299–312. http://dx.doi.org/10.1080/00207233.2011.577147

Spencer, P 1965, *The Samburu: A study of gerontocracy in a nomadic tribe*, Routledge, Abingdon, UK.

Sunderland, T, Ehringhaus, C & Campbell, B 2007, 'Conservation and development in tropical forest landscapes: A time to face the trade-offs?', *Environmental Conservation*, vol. 34, no. 4, pp. 276–79. https://doi.org/10.1017/s0376892908004438

Taylor, D 2015, 'Gender and racial diversity in environmental organizations: Uneven accomplishments and cause for concern', *Environmental Justice*, vol. 8, no. 5, pp. 165–80. https://doi.org/10.1089/env.2015.0018

Tengö, M, Brondizio, E, Elmqvist, T, Malmer, P & Spierenburg, M 2014, 'Connecting diverse knowledge systems for enhanced ecosystem governance: The multiple evidence base approach', *Ambio*, vol. 43, no. 5, pp. 579–91. https://doi-org.ezproxy2.library.colostate.edu/10.1007/s13280-014-0501-3

Walker, B, Holling, C, Carpenter, S & Kinzig, A 2004, 'Resilience, adaptability and transformability in social–ecological systems', *Ecology and Society*, vol. 9, nos 2, 5. https://doi.org/10.5751/es-00650-090205

Wallerstein, N & Duran, B 2010, 'Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity', *American Journal of Public Health*, vol. 100, no. S1, pp. S40–S46. https://doi.org/10.2105/ajph.2009.184036

Wilmsen, C, Elmendorf, W, Fisher, L, Ross, J, Sarathy, B & Wells, G 2012, *Partnerships for empowerment: Participatory research for community-based natural resource management*, Taylor & Francis, London.

Woodhouse, E, Homewood, K, Beauchamp, E, Clements, T, McCabe, J, Wilkie, D & Milner-Gulland, E 2015, 'Guiding principles for evaluating the impacts of conservation interventions on human well-being', *Philosophical Transactions of the Royal Society B*. https://doi.org/10.1098/rstb.2015.0103