# **Research Article**

# What are the Impacts on Community Wellbeing of Social Relations in Conservation Projects?

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# Abstract

Organisations working on conservation and community-based natural resource management (CBNRM) projects with communities have sometimes damaged the wellbeing of those communities. The social and political dynamics between organisations funding or implementing projects and the communities in which they work might be a factor causing this damage. This review paper explores the literature for evidence of and methods for evaluating impacts on community wellbeing from social relations in conservation and natural resource management projects. We found 101 papers addressing social connections in the human wellbeing-conservation nexus, acknowledging the damage done by colonising project relations and detailing proposals for or examples of more equitable relationality, and also evaluations of social equity in conservation/CBNRM work. However, we found few explicit evaluations of how the social, economic, and political relations of projects impact the wellbeing of participating communities. We call on researchers to address this gap, especially those working in evaluating project outcomes. To advance this agenda, we present literature that sheds light on what more equitable project relations look like, and how project relationality might be evaluated. We finish with ideas for how organisations can diagnose internal relationality problems likely to affect project outcomes, and how to transform those.

Keywords: Relational dimensions; Organisational governance; Relationships; Relationality; Natural resource management

# **INTRODUCTION**

Conservation projects can give rise to both positive and negative impacts in communities affected by the projects. In this paper, we focus on some of the negative impacts. Organisations researching and doing conservation, natural resource management, and/or agricultural extension have been

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criticised for social harms they have generated, especially to low income and Indigenous communities (Bennett et al. 2017; Winer and Brockington 2022). "Fortress conservation", for example, has in many cases dispossessed local communities with few alternative livelihood options, and for whom the places designated for protection from human use may be important for food, incomes, and cultural practices (De Santo et al. 2011). Other harms include disrespecting or appropriating local knowledge held by communities, and establishing Western scientific knowledge about those places as dominant through publishing and education systems (West 2016; West and Aini 2018). Much agricultural research for development has followed a pattern whereby technical innovations (genetically modified rice or fish, for example) are presented to the local populace who are then expected to "take it up" (Li

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2007; Cook et al. 2021). Likewise, much research and practice in natural resource management and conservation has operated on an implicit premise that external organisations have all the technical expertise, knowledge, and skills, and that they can transfer these through projects to poor, ignorant people who need to be educated and change their ways (Foale 2021). While the types of organisations involved in community work vary significantly in mission, background, and size—from big international non-government organisations (BINGOs) to small local NGOs, philanthropic foundations, agricultural research organisations, government, and multilateral donor agencies and universities—they share a common thread in that the way they handle social relations may affect the outcomes of their work in communities, positively or negatively.

Recognising the problems caused by these approaches outlined above, since the 1980s, an evolving body of research and practice has sought to apply more socially informed understandings of the social relationships within and among funders, implementing organisations, and communities (see Figure 1) entailed in externally driven projects and communities. Approaches have increasingly recognised the complexity of systems that interventions are situated within; power relations and the need for collaborative partnerships and local inputs; and the capacity for local innovations that emerge from local experience (e.g. Chambers 1994). In the 1990s, Community-Based Natural Resource Management (CBNRM), for example, emerged as a way to try to avoid these problems in conservation and agricultural extension (Dressler et al. 2010; West and Aini 2021). CBNRM includes recommendations regarding incorporating local cultural knowledge into projects, going beyond scientific empiricism as the only legitimate form of knowledge, and sharing power through collaborative decision-making (Peterson et al. 2010). As part of this shift towards centring local communities, evaluation of project outcomes also shifted from a sole focus on biodiversity conservation or food production targets to include enhanced community wellbeing (Ban et al. 2019; Gurney et al. 2014).

Human wellbeing, which has also been studied as quality of life or standards of living, has been an integral part of understanding and planning sustainable development since the 2005 Millenium Ecosystem Assessment reinforced by the 2009 Commission on the Measurement of Economic Performance (Coulthard et al. 2018). Evaluation of wellbeing in development emerged from earlier thinking around quality of life and standards of living. There are various frameworks, but most recognise that wellbeing is multi-dimensional, having subjective and relational as well as material dimensions. Some frameworks foreground the connections between individual human health and the natural environment, while others emphasise health as one of many wellbeing domains affecting quality of life, taking a more whole-of-society view. There is no clear line separating approaches but 'human wellbeing' is often associated with studies of health using individuals as units of analysis, while 'social wellbeing' is often associated with studies of multiple domains of wellbeing and social groups as units of analysis (Coulthard et al. 2018; McCubbin et al. 2013). The social wellbeing approach has been used in much of the work looking at the nexus between ecosystem services and wellbeing (for example, Coulthard et al. 2017) and is thus aligned with the broad topic of this paper, looking at the impacts of conservation and natural resource management projects on affected communities. In this paper we use 'community wellbeing' as shorthand for 'social wellbeing in communities'.

Community-based approaches and the evaluation of project impacts on community wellbeing are not panaceas. In some cases, collaboration with local communities and evaluations of community wellbeing seem tokenistic or instrumental by external organisations still pursuing their own goals. For example, critics have observed that concepts such as community, participation, and co-management sometimes provide a cloak of legitimacy for what are ultimately contested political processes (Ratner et al. 2013).

To crystallise the social relations problems in conservation and CBNRM, Figure 1 pinpoints the types of social relationships of conservation (within the grey box), including within external organisations (A) and communities (C) and between them (B) through the funding and/or implementation of conservation/CBNRM projects. There is a second way of conceptualising social relations in projects—the relational part of multidimensional social wellbeing, which can include elements such as social cohesion, mutual trust, equality, and support during difficult times and influence decision-making. We do not address this second type in our paper, but much of



Figure 1

Categories of social relations within and between different social groups involved in conservation and community-based natural resource management projects Note: (A) and (B) refer to types of relations from Figure 1

### **METHODS**

the literature on the nexus between conservation/CBNRM and social wellbeing nexus does, and so we have shown it in the green box in Figure 1. Social relations throughout Figure 1 include relationships of employment, contract, mutual interest, kinship, sex, friendship, and social networks, all of which are affected by factors such as gender, wealth, race, age, class, religion, disability, and other forms of identity.

A key feature of relations in conservation and CBNRM is power asymmetries between external organisations and host communities (West 2006; Lowe 2006). External organisations usually have greater access to finance, equipment, and the attention of policymakers and financing organisations than local communities (Brosius and Russell 2003; Gezon 2000). This uneven flow of resources to external organisations over local communities or grassroot conservation groups is due to several causes including: most of the well-funded BINGOs being based in the Global North, the global spread of neoliberal conservation governance, and a shift in international conservation funding schemes from core organisational funding to short-term project-based funding (Corson 2010; Igoe and Brockington 2007). The consequences of these structural processes have included local communities becoming dependent on external organisations for access to funding and the prioritisation of Western scientific knowledge systems in conservation research and practice over other local forms of knowing. These processes reduce the agency and influence of local people over conservation decision-making related to places and issues that are central to their lives (Strand et al. 2022; West 2016; Moore 2019).

Asymmetries in power and resources between external organisations and target communities, against the historical background of colonialism and the norm that external organisations should manage projects and resources for communities, are relational issues. The evaluation of the wellbeing outcomes of conservation projects should therefore pay more attention to relevant social relationships as influences on community wellbeing (Saif et al. 2022). There is literature critical about the relationality of conservation/CBNRM interactions in various disciplinary areas-notably science and technology studies (Lowe 2006; Pauwelussen and Verschoor 2017), political ecology (Bennett et al. 2019), and social anthropology (Carpenter 2020) among others. However, while this literature highlights power relations between external organisations and communities, it rarely investigates the specific pathways by which those relational dynamics affect wellbeing outcomes in communities.

The research question for paper is: how do the social relations of projects (grey box in Figure 1) impact the wellbeing outcomes for communities (green box in Figure 1)? Specifically, we inquired how the internal relations of organisations funding or implementing conservation or CBNRM projects (relations A in Figure 1) influence community wellbeing. This focus on the internal relations of conservation/CBNRM funders and implementing groups (A) aligns with the literature exhorting organisations to "get your own house in order" before going to communities (Bennett et al. 2017).

This interdisciplinary paper employed a knowledge codevelopment and critical review methodology, as illustrated in Figure 2. We drew on the combined author team's many decades of experience in the fields of political ecology, public policy, anthropology, development studies, and ocean governance, and our involvement in a range of natural resource management and conservation projects working with communities, mainly in marine environments. Through issue-based knowledge discussion via on-line meetings we co-developed the text (Terrado et al. 2023). This involved gathering relevant case studies and literature from within our own disciplines that shed light on the impacts on community wellbeing resulting from the social relations of projects. We also asked knowledgeable colleagues in the Ocean Nexus network<sup>1</sup> for their insights into work about the social relations of projects impacting community wellbeing. Then we searched literature databases to see if there were other papers on this topic that we had missed through our knowledge co-development process and folded them into our critical review.

We did not employ a fully systematic literature review methodology in terms of counting the number of papers in each code category and excluding review papers, because our aim was to find papers on the topic, not to make a quantitative analysis of the state of the field. However, we borrowed some of the methods from the systematic review approach to help ensure we searched as thoroughly as possible, and to narrow down the initial cut of papers in a rigorous manner to a manageable pool for review (see Supplementary Materials).

The critical review method is standard in fields such as anthropology, where the majority of review papers follow this method (for example, see McDowell and de Haan 1997). Benefits of the critical review process include deep expertise in the relevant fields, enabling the search to go beyond what can be picked up via search engines. In this paper, for example, some of the key papers we present to illustrate the social relations in projects were not picked up in the database search, because those papers were written to make arguments about topics other than the social relations of projects, and thus use different language. The author groups' knowledge of the projects enabled us to draw out the social relations of projects revealed in those papers, in a way that a systematic literature review alone would have missed.

The papers were thematically coded according to the kinds of relationality examined in the papers, methods used for evaluating relationality, the way social wellbeing was analysed, and whether causal connections were drawn between relationality and wellbeing outcomes. Among the 101 papers assessed, there were only six that explicitly evaluated relationality in conservation or natural resource management contexts. None evaluated the impact of the relationality of projects (A and B in Figure 1) on community wellbeing outcomes (green box in Figure 1).

<sup>1</sup> The Nippon Foundation Ocean Nexus Centre based at the University of Washington comprises an international multidisciplinary network of early career scholars and their mentors researching topics relating to social equity and oceans.



Methodological approach undertaken in this paper

This paper presents the findings of our critical review, noting we were unable to answer our research question about the impacts of project social relations on community wellbeing, but we did discover bodies of knowledge that shed light on the question, and are a starting point for addressing the research gap. The paper first discusses studies highlighting social connections as important in the conservation-human wellbeing nexus, although they do not evaluate project relations as such. We present selected cases where relations between external organisations and partner communities (B in Figure 1) are carefully attended to in terms of project ownership, decisionmaking, empowerment, and capacity building within communities. Next, we discuss the few studies that have evaluated the relationality of conservation/CBNRM in some way. As there are few of these, and none focus explicitly on the internal relations of funding/implementing organisations (A in Figure 1) as an influence on community wellbeing outcomes, we bring ideas from outside the conservation literature to think through what such evaluations might cover. We draw on public administration literature and literature from the transformation paradigm to suggest how relations within organisations might affect wellbeing in the communities with which they work. We finish with a set of questions derived from the critical review presented in the form of something practitioners can do to improve their organisational and project relations. This set of questions can help illuminate (mis)alignment of goals and incentives driving relations (A) within conservation/CBNRM funding/implementing organisations, relations (B) between those organisations and communities with which they work, and relations (C) within those communities.

# INITIATIVES TO IMPROVE THE SOCIAL RELATIONS OF PROJECTS

Our critical review turned up 101 papers that investigate social connections as an important part of the conservationcommunity wellbeing nexus. There are papers on inequitable social relations constraining the actions of vulnerable resource users, leading to deficits in human wellbeing due to reduced ecosystem services (e.g. Porro and Porro 2022). There are papers on improvements in relational wellbeing within communities (relations C in Figure 1) that engage in conservation practices (e.g. Löhr et al. 2021), and papers showing that land-use changes may have asymmetric impacts on the wellbeing of different community members (Vallejos et al. 2022). Much literature also examines the governance of conservation/CBNRM, which implicitly contain the kinds of relations with which we are concerned, including how institutions with well-functioning relationality manifest in institutional entrepreneurialism and social networks can help with inclusive development and conservation (Araos and Ther 2017; Araos et al. 2020). There are also papers on specific aspects of relationality in conservation, such as gender (e.g. Koralagama et al. 2017), and papers using relational values to understand conservation impacts (e.g. Chapman and Deplazes-Zemp 2023). These papers, therefore, while fitting our search criteria on social relations as part of the conservationcommunity wellbeing nexus, turned out not to address our research question about relation types A or B (Figure 1) as causally connected with community wellbeing outcomes.

Closely aligned with our question on the impact of project relations on community wellbeing is a body of work that discusses the problematic impacts of conservation/CBNRM work in partner communities. For example, one systematic review found that conservation interventions have mainly mixed or negative impacts on social equity concerns (Friedman et al. 2018). Another case study found that poor relationality with external funding/implementing organisations resulted in negative impacts for participating communities, such as resource dispossession (e.g. Vandenberg 2020). A related body of work proposes frameworks for improving the relationality of conservation/CBNRM projects (Bennett et al. 2017), for example, ethical principles for relations between funding/ implementing organisations and communities (e.g. Armitage

#### Box 1 Ailan Awareness

Ailan Awareness is a small non-government organisation (NGO) that works on conservation and revitalisation of culture and marine ecologies in the New Ireland province of Papua New Guinea. John Aini with his brother and cousin started the NGO in 1993 as an organisation to translate between epistemological systems by: 1) teaching people in local communities science knowledge regarding conservation; and 2) teaching outsiders about local people's perspectives and explanations for what they see happening in their ecologies, and what they are concerned about. They received project-based funding for the former but no support to do the latter. By 2007, Aini was feeling that Ailan Awareness was not fulfilling its original mission. He saw project after project fail due to a lack of communication between external conservation organisations and local communities (Aini and West 2018). In 2007, anthropologist Paige West was facing a turning point with her own work. She wanted to address the situation whereby Papua New Guineans were losing sovereignty over their ecological systems through dependence on external conservation organisations to provide material resources the government was failing to provide, and practices that dispossess knowledge about local ecologies through valuing outsiders' scientific approaches higher than local knowledge (West and Aini 2018).

Aini and West decided to reinvigorate Ailan Awareness to do conservation work better. In order to facilitate better outcomes for communities, Ailan Awareness had first to undergo a transformation internally on understandings of the relational elements of conservation work. Ailan Awareness runs several programs. One of these programs—the Roadshows—demonstrates how the internal organisational reflective work on decolonisation by Aini and West became manifest in their work with communities. Roadshows were the part of the pre-2007 Ailan Awareness work that had received great support from various national and international organisations because these organisations wanted to provide communities with scientific knowledge, in the belief that with more scientific knowledge about their ecosystems communities would adopt a more conservationist approach to protecting them. This belief was part of the problem Aini and West had identified, and so their new approach replaced the assumption that there is local ecological knowledge and scientific ecological knowledge with the assumption that there is local ecological knowledge and scientific ecological knowledge of both types to work. A second key change to the Roadshows was to stop facilitating the normal pattern of external organisations bringing to communities pre-formed research questions, data collection plans, and conservation plans. The post-2007 decolonised Roadshows program adopted a seven-step process that rigorously centres communities (West and Aini 2018). This includes only doing work that communities request or freely decide they want done, with communities actively involved in defining the problem and methodology and in doing the work. Communities have final say over what is published from the work, and in what form.

Ailan Awareness has not thus far systematically monitored community wellbeing outcomes for its projects, but people in participating communities report being highly satisfied with the consultation process, and people from different groups within communities report feeling that they 'had a say' in the process. Moreover, ecological improvements observed include more and more diverse types of fish on reefs and high levels of compliance with and enforcement of fishing rules, which may translate to community wellbeing benefits. Other indicators of success Ailan Awareness uses include noting whether communities are: nurturing mangroves and other coastal trees; responsibly handling plastic rubbish; using dead corals and shells rather than live ones for lime for betel consumption; and fostering cultural knowledge and customary ways of doing things in fishing and food preparation (West and Aini, personal communication with KB, August 2022).

et al. 2020) and discussions on improving conservation practices to be more socially, ecologically, and economically just at the community level (Osborne et al. 2021; Pasgaard et al. 2017). One paper argues for broadening the concept of ecosystem services to include human relationality, specifically advocating for funding/implementing organisations to meaningfully engage with stakeholders and rights holders for more equitable ecosystem service distribution (Loos et al. 2023). Papers from these bodies of work about problems and solutions for relationality in conservation, however, did not specify ways of evaluating that relationality in terms of community wellbeing outcomes.

Boxes 1, 2, and 3 show case studies that emerged from our knowledge co-production process (Figure 2) of initiatives to improve conservation/CBNRM project relations. Papers about these initiatives do not research the causal mechanisms between project relations and community wellbeing outcomes, but focus on addressing the relations. These vignettes illustrate that initiatives to improve project relations are not simple or quick exercises, but require extensive change, and it is difficult to sustain this change if the status quo remains in surrounding organisations and institutions.

The critical review revealed a specific subset of the literature that focuses on the social relations of projects for Indigenous communities. These papers build on historical evidence about the negative impacts of colonising relations of conservation on community wellbeing, and paths to improving conservation relationality (e.g. Friedel et al. 2022; Fernando 2020; Kamelamela et al. 2022). Some are on knowledge exchange between Western science and Indigenous knowledges and wellbeing (Jarvis et al. 2021; Hakkarainen et al. 2020). Some are about how Indigenous worldviews including radical relationality and kincentricity can improve wildlife management (Martinez et al. 2023; Bock et al. 2021; Stoeckl et al. 2021). Another perspective is that Indigenous conservation work is a contribution to community wellbeing (Schultz et al. 2018). Box 3 presents a range of initiatives Indigenous people have implemented to improve relationality around conservation and CBNRM.

# EVALUATING SOCIAL RELATIONS IN CONSERVATION/CBNRM

Having discussed literature highlighting various aspects of social relations on the conservation-human wellbeing nexus, including negative social impacts and ways of improving conservation relationality, we now move to the six studies we found that specifically evaluated project relations.

Social wellbeing is often described as having three dimensions—material, subjective, and relational (Couthard et al. 2018). The relational dimension of wellbeing is underconceptualised compared to material and subjective wellbeing (Rojas 2009) and remains somewhat elusive as an idea. One study evaluated the relational wellbeing of a fishing community as part of an analysis of the community's overall wellbeing, using a tool called the Governance Relationship Assessment

# Box 2

### Aquatic Agricultural Systems

The CGIAR Research Program on Aquatic Agricultural Systems (AAS) began in 2011 with the goal "to improve the wellbeing of poor people dependent on aquatic agricultural systems by putting in place the capacity for communities to pull themselves out of poverty" (Apgar and Douthwaite 2013; Douthwaite et al. 2017a: 295). Operating across five countries (Bangladesh, Cambodia, Philippines, Solomon Islands, and Zambia), among the key emphases of the program were to use a participatory action research approach, a gender transformative approach that aimed at challenging inequitable gender norms, and an underlying philosophy of "research in development", which aimed to contrast with more conventional research 'for' development approaches alluded to above (Douthwaite et al. 2017b: esp. Figure 2). Originally intended to operate for 12 years, the program ended ahead of time in 2016 following significant funding cuts to CGIAR and negative external evaluations that were conducted according to conventional approaches for measuring impact (Douthwaite et al. 2017a).

Although the AAS program shut down, in many of the locations where AAS worked, communities and partners continue to use the knowledge and skills they acquired to shift mindsets and improve the performance of conventional agricultural research programs (Douthwaite et al. 2017a). Among the documented benefits of this approach included significant levels of ownership by local stakeholders in the research program, identification of new opportunities that emerged over time, and the ability to incorporate these findings into the research process in an iterative manner (Douthwaite et al. 2017b). Researchers were able to develop critical analyses of governance that addressed difficult, intractable problems such as representation, authority, and accountability (Ratner et al. 2013; Apgar et al. 2017a). AAS projects were more socially inclusive than conventional projects, and better empowered involved communities to strengthen rural innovation systems (Douthwaite et al. 2017a). AAS practitioners also developed a body of knowledge with deep understanding about improving development outcomes through addressing gender relations development (Cole et al. 2014) that continues to be influential in the field of agricultural and fisheries.

The closure of the AAS program only five years after its inception, despite significant visible achievements, shows how the internal workings of external organisations, in this case donor organisations, can be a barrier to the kinds of transformational outcomes in communities that is the stated vision of those organisations. The fate of the AAS program demonstrates the reality that approaches to incorporate more complex (yet ultimately more realistic) thinking about the priorities and practices of local communities, which require longer time-scales and alternative approaches to evaluation, do not always mesh well with the established priorities and practices of external organisations such as aid donors and large natural resource management organisations. The AAS lost its funding because it did not have desired 'outcomes' in the desired timeframe. There was initially strong support from donors and senior leadership in CGIAR, but this support to do things differently did not survive very long in the face of apparently poor performance using evaluation methods designed for the conventional development model (Douthwaite et al. 2017a). As Apgar et al. (2017b: 29) note when discussing the outcomes of this program, "[f]or many at the top of the development machine, accountability to donors continues to 'trump' learning''.

Proponents of the AAS approach suggest two important points within external organisations that must be addressed for similar attempts to succeed. One, funders must understand that these approaches take longer because they require relationships of trust between the external organisation and the community to be established, to enable project outcomes to be embedded into ongoing community processes, and because it takes time at the outset for all involved to learn how to work differently. Two, conventional project indicators are not useful for evaluating relationality. To be effective, the indicators for evaluating projects should be agreed by all involved at the outset, and be relevant to the new approach. For example, rather than number of research outputs, an indicator could be an assessment of the quality of the research process and the relationships that allow for collaboration. The evaluation methods should include methods for illuminating increases in capacity to innovate and the effects of innovation (Douthwaite et al. 2017a).

(Britton and Coulthard 2013). Another study looked at the effects of marine protected areas (MPAs) on the relational wellbeing and relational values of small-scale fishers (Baker et al. 2021). This included evaluation of how the fishers were treated in the establishment and management of the MPAs. A third study looked at the complexity of relations of conservation activities in terms of wellbeing outcomes (Coulthard et al. 2017), including problems of the uneven distribution of project benefits within partner communities leading to implementing organisations insisting on equalising benefits among 'communities'. However, equalising benefits among communities, which may include recent migrants, often contravenes local cultural norms and social structures. In sum, relational wellbeing sheds some light on how conservation relationality may be evaluated, but understanding the relational wellbeing within communities (C in Figure 1) differs from this paper's aim of understanding the impact of project relations (A and B in Figure 1) on community wellbeing (the green box in Figure 1).

Several other papers on protected areas implicitly address the central question of our paper about the impacts of project relationality on community wellbeing. One very thorough evaluation of locally managed marine protected areas (LMMAs) included elements of relationality—participation in decisionmaking, communities empowered to manage their own customary fishing grounds, and financial and/or infrastructural support from external organisations (O'Garra et al. 2023). The study found no ecological, economic, or livelihood wellbeing impacts from the LMMAs but did find positive subjective wellbeing impacts and reported benefits from management. Another study reviewed the literature on protected areas (PAs), including relationships between PA staff and nearby communities, providing a framework for assessing PA staff-community relations, although against the objective of biodiversity conservation rather than the objective of community wellbeing (Mutanga et al. 2015). Another study proposes measuring and monitoring trust and commitment among PAs, stakeholders, and PA managers, again, towards the objective of protecting biodiversity (Brooks et al. 2015). The capabilities approach has been used to assess relationality around a PA in terms of community wellbeing, including of different groups within communities, concluding with recommendations for addressing power relations in improving institutions for governing PAs (Bockstael and Berkes 2017).

These papers on evaluating the relationality of conservation give pointers for how we might go about assessing the impacts of project relationality on community wellbeing, but do not yet constitute a strong body of evidence, with only six studies evaluating project relationality and community wellbeing

#### Box 3 Indigenous codes of conduct

Indigenous codes of conduct have developed over the years as a reaction from some Indigenous communities to historical exploitation of these communities through Western research practices. As Linda Tuhiwai Smith (1999) put it, "research is probably one of the dirtiest words in the Indigenous world's vocabulary" (p. 1). Historically, Western researchers have extracted genetic data and exploited Indigenous ways of knowing or have engaged in 'ethics dumping'. Their justification has been that researchers are the only people with the capacity to transform these resources into 'something of value and use' for all people. This reduces Indigenous people to sources of data while discrediting their modes of understanding, subtly upholding systems of white supremacy and colonialism (Tuhiwai Smith 1999; Rearden and TallBear 2012; Haenn et al. 2014; Schroeder et al. 2019). Given this historical pattern of exploitation, Indigenous groups have organised and developed codes of conduct, asserting the validity of their knowledge systems and their rights to resources. Through these ethics frameworks, Indigenous peoples can maintain power and influence over research practices and outcomes, in turn building relationships of trust that allow for meaningful long-term collaborations, while preventing harm in their communities that previously stemmed from research practice (Schroeder et al. 2019; Hayward et al. 2021).

The San Code of Research Ethics was developed in March 2017 by the South African San (South African San Institute 2017) and is known to be the first research ethics code produced and published by an Indigenous group in Africa (Callaway 2017). The code outlines four central values: fairness, respect, care, and honesty, with which all researchers are expected to comply. Additionally, researchers are intended to follow a process of community approval. One of its defining characteristics is that it requires collaboration throughout all stages of the research process. This code and its requirement of regular dialogue between the San community and the research community has created an equitable process that allows for authentic relations and trust to be built (Schroeder et al. 2019).

The Kūlana Noi'i of Hawai'i is based on the collective knowledge and insights of community members, local organisations, and experts from Hawai'i (Braddock and Gregg 2021; Alegado and Hintzen 2018). It aims to provide guidelines for establishing equitable, productive, and long-term relations between local communities and research entities. The four central values of these guidelines are: respect, reciprocity, self-awareness, and communication. Moreover, it requires research engagements to maintain a long-term focus, promote co-production with local communities, ensure community ownership of knowledge and resources, and accountability through the research process. These guidelines highlight the importance of reflexivity on both the history of the local community and the impact of research or intervention on the local community. Guiding questions are provided to facilitate this reflexive process, thereby ensuring research is conducted in a way that fosters authentic and equitable relations.

Various research protocols have also been established by Indigenous groups in Canada, including for the Gwaii Haanas ecological and cultural region (Haida Nation 2018), one informing First Nations stewardship of applied research (Kitasoo/Xai'xais Stewardship Authority 2021), and another multinational one for Arctic peoples (Inuit Circumpolar Council 2022). One group has established their own funding program to promote research on their terms (Inuit Tapiriit Kanatami 2018; Inuit Nunangat Research Program 2021). So far, little has been published on the wellbeing impacts from projects that have applied respectful and reciprocal relations between researchers/conservationists and Indigenous peoples. Two examples, of Indigenous-led Grizzly Bear stewardship (Artelle et al. 2021) and of collecting and communicating Inuit knowledge in local language about ice conditions for safety when traveling in Arctic areas (Wilson et al. 2020), show that one of the direct benefits is research capacity building, with such projects employing local people and involving collaboration that enables them to develop high-level research projects working as intended, such as ecosystem benefits and improved relations with non-Indigenous communities in the Grizzly Bear example (Artelle et al. 2021) and collation and dissemination of knowledge about ice conditions in the Inuit example (Wilson et al. 2020). We hope that in future there will be more evaluation of community wellbeing outcomes from projects that employ Indigenous research protocols.

outcomes. Moreover, most are about project relations (B in Figure 1) and/or internal community relations (C); none looks directly at relations within funding/implementing organisations (A). We therefore turn to bodies of work outside the conservation/CBNRM field for ideas.

# ORGANISATIONAL INTERNAL RELATIONS AND TRANSFORMATION FOR COMMUNITY WELLBEING

In this section, we look outside of the conservation/CBNRM field for research approaches and conceptual frameworks that offer pointers and insights on how to evaluate the internal relations of an organisation (relations A in Figure 1) as influences on outcomes of work done by that organisation. Here, we raise ideas from two bodies of literature—organisation studies and transformation studies.

# Can the Internal Relations of Organisations Affect Wellbeing of Partner Communities?

Public administration research shows that the outcome of partnerships between non-profit organisations and communities for the purpose of delivering public services/ goods is inherently affected by the internal operations of the organisations (McMullin 2021). The internal management of organisations has been found to affect relationships with other organisations and performance in terms of societal outcomes (George et al. 2019: 811; Walker et al. 2010). The mechanisms by which internal organisational relations affect their project outcomes include: connections between strategic planning of organisations and organisation-environment fit (Vinzant and Vinzant 1996; Bryson 2018); setting goals to address the organisation's priorities (Jung and Lee 2013; Locke and Latham 2002); making decisions based on strategic priorities (Bryson 2018); and carefully considering different courses of action before making final decisions (George et al. 2019).

Various elements of the internal relations in organisations, such as how hierarchies operate and gender relations, may affect the outcomes of their activities. We focus on how ethnic diversity in organisations affects internal relations and on why it subsequently affects relations with partner communities because it is an organisational factor for which there is some evidence about how internal culture has implications for external performance and relations. Diversity is especially relevant to international conservation and natural resource management where there has been increased recognition of problems caused by colonial legacies and the related patterns of displacement, violence, racism, and exclusion (Chaudhury and Colla 2021). It is also an imperative step in addressing the historical centricity of Western knowledge systems and the exclusion of traditional ways of knowing, a process that has limited our understanding of ecological systems and potential impacts of conservation and resource management efforts (Trisos et al. 2021).

The literature on representative bureaucracy shows that employing people from socially marginalised groups in government agencies leads to agencies better looking after the interests of those marginalised groups in implementing services and programs. Research into the mechanisms by which representative bureaucracy works finds it can operate directly through administrators who assume a role to represent a marginalised group-and perceive themselves as having discretion to promote equity in their work-actively pursuing equity (Sowa and Selden 2003). Research also suggests that more equitable outcomes can arise passively or indirectly through shared values, beliefs, and empathy between bureaucrats from marginalised backgrounds and service users from marginalised groups, and even from changed behaviour of bureaucrats from privileged groups through the presence of bureaucrats from marginalised groups causing bureaucrats from privileged groups to refrain from discrimination (Lim 2006; Bradbury and Kellough 2011). The organisational literature thus suggests that services provided by organisations with greater diversity can improve outcomes for the recipients of those services.

### Transformation: A Conceptual Framework for Organisational Governance and Fostering Community Wellbeing in Projects

Transformation studies is another area that can help shed light on how the internal relations of funding/implementing organisations (A in Figure 1) can affect outcomes for communities with which those organisations work. If organisations are committed to moving toward more equitable and just modes of working, transformative approaches are one way of framing that shift. Transformative approaches prioritise social justice and the furtherance of human rights and have been employed across multiple disciplines and topics (Barnes 2017; Mertens 2010). They are based on the understanding that researchers have a moral responsibility to understand the communities in which they work, identifying inequities and exclusions that are produced through the status quo and challenging dominant assumptions, beliefs, and values, to challenge societal processes that enable discrimination and oppression (Sarapura Escobar and Puskur 2014). Of particular relevance for this paper is that the transformational paradigm also centres the idea that internal transformation is needed within organisations as the foundation for being able to facilitate transformation externally in communities (Rauschmayer and Frühmann 2010; Wittmayer and Schäpke 2014; Mertens 2009). "Honest and respectful relationships among human beings involved in any inquiry are essential to achieve the goals of transformative research and evaluation" (Mertens 2009: 71).

Two examples include the "transformative paradigm" mixedmethods approach developed by Donna Mertens (2009, 2010) and "transformative learning" employed by CGIAR in the AAS case study mentioned earlier (Sarapura Escobar and Puskur 2014). These conceptual frameworks are equally applicable to conservation and CBNRM and can provide guidance through the design and intervention stages as well as in outcome assessment. Mertens' framework, along with others that adopt feminist and critical theories, highlights the importance of centring the communities for which interventions are applied through all steps of the research (or intervention) process. Moreover, research (or intervention) goals should address issues that are voiced by community members as lived realities. Building upon this notion, transformative learning as used in the AAS program emphasises the impetus for creating an organisational environment that allows critical reflection for staff to evaluate whether community needs are met and that inequities are not being ignored or exacerbated through intervention.

Transformational approaches also build on the understanding that knowledge is not neutral, but is influenced by human interests, worldviews, and values, and reflects power and social relations within society (Barnes 2017). The transformative lens recognises multiple ways of knowing, and within a research or conservation intervention context, it is important to reflect on questions like: Why are certain ways of knowing privileged over others? What mechanisms exist that oppress other ways of knowing? Who may be impacted by the privileging of one way of knowing over another? What are the potential consequences? (Mertens 2010). These questions are especially pertinent within a conservation intervention context where Western science is usually dominant and there is opportunity for misalignment between assumed and actual values and benefits of conservation interventions to local communities. Additionally, transformational approaches require that practitioners reflect on their position within the community, how their own axiological assumptions shape their work, and whether the team, as a whole, reflects the diversity of values and worldviews that are present within the community and is culturally competent within the local context (Barnes 2017; Mertens 2010). It is important to recognise that this reflexive process happens through experiences of disorientation or discomfort, allowing one to question one's own assumptions and worldviews, allowing more effective engagement and meaningful relations with partner communities (Kasl and Elias 2000). This personal transformation is a necessary part of enhancing organisational capacity for systemic action and change (DeTurk 2006).

The central theme of transformative methods is that research is not conducted "on" participants but "with" them (Gomez 2014). This aligns with Indigenous and feminist approaches to research that call for "standing with" a community rather than critiquing it (TallBear 2014) and challenging the status quo from that perspective. It highlights that transformative research runs on a cyclical model allowing community members to engage in the research process from beginning to end through a variety of roles (Mertens 2010). It acknowledges that the methods employed to explore research questions or to promote particular forms of conservation may perpetuate inequalities, and therefore, there is a need to understand how power operates at each stage of the research/intervention process (Barnes 2017). The final major element is that the goal is to develop a plan for change, not to merely report on a problem and move on (Mertens 2009, 2010). In conservation practice, interventions are already poised to enact change but this final point highlights that the problems conservation programs are attending to should align with communities' own prioritisation of problems and solutions for conservation to be equitable and just.

Reflecting critically on the roles, responsibilities, and relationships between organisations and host communities on an individual level can only be achieved within the context of an organisation that facilitates this kind of critical selfappraisal (Sarapura Escobar and Puskur 2014). In order for organisational actors to act and think reflexively, they must have a sense of belonging within their organisation (Schein 2010), be given the chance to take on leadership roles, and feel as if their insights and perspectives are valuable to the overall goals and mission of the organisation.

Evaluation of the impacts of relationality (A) on community wellbeing outcomes from conservation projects, therefore, requires building on the existing knowledge from organisational and transformation studies with thinking on how to conceptualise elements of internal organisational relationality as part of the causal mechanisms of change in projects, as measured by indicators of community wellbeing. Future research can then test the nature and extent of impacts from these elements of internal relationality. For example, what are the respective influences from internal diversity versus leadership? Which elements of community wellbeing are more or less responsive to improved relationality A? What are the costs of poor relationality A? What types of situations engender greater sensitivity to improved relationality (e.g. warzones)? What factors affect the capacity of organisations to improve their internal relationality?

### WHAT CAN PARTNER ORGANISATIONS DO?

The bodies of research canvassed in this paper do not enable us to say unequivocally that addressing project relationality will lead to improved community wellbeing outcomes. Indeed, it may well be that causal complexity means that equitable and functional project relationality cannot be a sufficient condition for improved community wellbeing outcomes. However, most of the papers cited in this paper do show negative outcomes from inequitable project relationality, and so equitable project relationality may be a necessary condition. What, then, can conservation and NRM organisations do to ensure they are fostering equitable project relationality? While our review has largely focused on the internal relations (A) of organisations, we suggest that these relations subsequently contribute to relations between organisations and communities (B), and so highlight both aspects below.

Here, we present a set of questions for organisations, which emerged from the critical review analysis undertaken in this paper (Figure 2), especially from the transformation literature. Organisations can use these questions to gauge their potential to transform their own internal relations and their relations with project partner communities. There is a research gap regarding the impacts of project relations on community wellbeing, and while this set of questions is not a comprehensive solution, it is a place to start.

Organisations funding and implementing conservation/ CBNRM projects vary greatly from large philanthropic organisations with annual budgets in the millions and BINGOs with many staff and the capacity to hire specialist consultants to help with this process, to small local NGOs with fewer resources at their disposal. However, as Box 1 on Ailan Awareness shows, even small local NGOs with a handful of staff can undertake transformative processes. Transformation can and should be tailored to suit the circumstances.

# Reflective Questions for Organisations on their Internal Relationality

### **Overarching** question

Are relations between people within your organisation (relations A) largely based on reciprocity, an ethic of mutual respect, and organisational goals of wellbeing for communities? Or are relations in your organisation mainly instrumental in terms of staff furthering their career goals and the financial/ prestige goals of the organisation? If more the latter than the former, then we propose that your organisation will struggle to establish the kinds of relations with target communities (relations B) that are the foundation for equitable relations with communities and may impact wellbeing outcomes from projects.

### Questions on inclusion in your organisation (Relations A)

- 1. Diversity and hierarchies in workforce. Does your organisation have diversity at all levels and in all types of roles? Are staff aware of their own biases and work to prevent their biases affecting relations with colleagues? Or are people from less advantaged groups clustered in junior roles and not in senior roles, or absent due to not being recruited, or absent due to resigning because of feeling unwelcome in the organisation?
- 2. Embracing employees from partner communities. Does your organisation employ people from communities with which your organisation works? If so, are they fully embraced and given the same opportunities as other staff, and treated as experts? Or are they treated as 'ticking a box' for representation, and given limited contracts tied to specific projects?
- 3. Cultural competency. Does your organisation have

good socio-cultural competency among staff that enables people from diverse backgrounds to succeed within the organisation? For example, are staff able to build rapport and gain trust across cultural difference (Mertens 2009)? Does the organisation embed responsibility and accountability for socio-cultural competency in the workforce?

# Questions on co-production with target communities (Relations B)

- 4. Decision-making in co-development and co-production. Does your organisation prescribe methods of project design, implementation, and interpretation that allow for communities to set problems and be active decision-makers in design, implementation, interpretation, and publication? This is foundational to the approaches used in Ailan Awareness, transformative research, and Indigenous Protocols. Or does your organisation make the final decisions about how to do projects and what to publish based on its own priorities, allowing communities to express their opinion but not giving them a decision-making role in projects?
- Accommodating different knowledges and values. Does your organisation treat local knowledges and values regarding ecosystems on par with Western science knowledge and biodiversity conservation values? Are different types of knowledge triangulated in your projects? Or are projects mainly based on Western science, with a separate chapter detailing 'traditional ecological knowledge', such as local language fish names? Are data collection activities participatory or extractive? Are local values about ecosystems allowed to shape projects? For example, if partner communities think it is more important to focus on pelagic fisheries than coral reefs, because their food and income relies more on pelagic than reef fisheries, will your organisation allow the project to shift focus, even if your organisation was originally interested in coral reefs (Clifton and Foale 2017)?

### Questions on power (Relations A and B)

- 6. Awareness of power differentials. How aware are staff in your organisation about their own levels of privilege and positions in power differentials due to factors like race/ class/gender, in relations A within the organisation, and relations B with partner communities? How aware are staff in your organisation of the historical background to power differentials, such as colonialism, slavery, and inequalities in the international political economy? Can staff in your organisation recognise their own and the organisation's place within ongoing struggles of decolonisation? Do staff from your organisation sensitively but explicitly address power differentials and privilege in relations B with partner communities?
- 7. Social justice. Are staff in your organisation selfaware about their own, their organisation's, and partner communities' positions on social justice? When there

are differences between conceptions of social justice in relations B with partner communities, for example, on topics such as gender equality or LGBTQIA+ issues, how do staff from your organisation negotiate this difference? Is the organisation primarily interested in distributive, procedural, and/or interactional justice (Bennett et al. 2021)? How does this influence project work? Do organisational prescriptions about the ways projects are conducted, for example, in terms of financial governance, influence social justice aspects of projects?

8. **Prioritisation of interests**. Whose interests do the organisation's projects ultimately serve?

Depending on the answers to these questions, if an organisation is serious about improving wellbeing outcomes in communities with which it works, the organisation may need a transformative process to reform its internal relations (A in Figure 1). This cannot simply be achieved by hiring a diversity and inclusion consultant or having staff undergo training for unconscious bias-although those may be part of the process. Recognising and changing the basis of relations within an organisation is inherently challenging and uncomfortable, and requires all staff including managers to work on themselves. It is an iterative process and takes time (likely years rather than months to achieve a workable level of cultural competence, and then further learning is ongoing). Changing relations with partner communities in projects (B in Figure 1) from conventional to transformative is also challenging and time-consuming. It requires time to form relationships, dealing with variations in types and levels of power between the external organisation and the community, and within communities, mismatched or conflicting priorities between external organisations and communities, and cultural differences between researchers and target communities (Mertens 2009).

# CONCLUSION

Aiming to improve the social wellbeing of communities should be a central objective for any conservation or CBNRM project working with Indigenous communities or in the Global South. We argue for going beyond a 'doing no harm' approach to community wellbeing in conservation and CBNRM, because an inactive approach to social relations merely perpetuates historical inequities. Considering the human dimension of conservation and management efforts is increasingly necessary as climate change damages communities' food security and livelihoods. While biodiversity and ecosystems are primary for supporting and sustaining communities' wellbeing, a multidimensional indicator of 'value' as a key indicator of success of conservation projects requires improved understanding of communities' wellbeing. Consequently, research must measure community wellbeing impacts of interventions designed to improve ecosystems and biodiversity.

To measure community wellbeing outcomes, the design and implementation of conservation projects should promote wellbeing through relationships between collaborating Social relations and community wellbeing in conservation projects / 11

communities and external funding/implementing agencies. This paper conceptualises project relationality as consisting of relations within funding/implementing organisations (relations A in Figure 1), those within communities (C), and those between funding/implementing organisations and communities (B). Our review of existing research elucidates relations B and C in the conservation-human wellbeing nexus, but we found no research on relations A in the conservation/ CBNRM field. We therefore present some ideas from public administration and transformation studies to sketch out how the internal relations of funding/implementing organisations could impact the wellbeing of communities. Researchers in the field of project evaluation should develop and test methods for evaluating project relationality, especially the neglected area of relations A. The internal health of organisations depends on connecting strategic planning, decision making, and the culture that conservation organisations constitute and nurture. Specifically, strategic improvements in diversity, equity, and inclusion create a platform to address power dynamics, both within organisations and with their targeted communities. Recognising the lack of diversity in positions of power and leadership within environmental institutions, directly tackling the "diversity crisis" in conservation (Pearson and Schuldt 2014) is a critical first step.

However, achieving equitable and functional relations within funding/implementing organisations (A) and developing a reflexive approach toward the design and management of projects (B) may not be enough. As the CGIAR AAS case shows (Box 2), agencies with power over funding/ implementing organisations also must change their modes of operating. That requires the whole field to centre the needs of communities, reforming project evaluation criteria and timeframes to align with the social and cultural contexts of communities rather than donor expectations. Other cases in this paper from Papua New Guinea, South Africa, and Hawai'i present efforts by researchers and Indigenous actors to reverse mistaken assumptions underpinning projects that correct a presumed scientific knowledge deficit of local communities or use communities simply as subjects for researchers' data needs. Ailan Awareness promotes community-led conservation in Papua New Guinea by explicitly focusing on cultural traditions as the foundation of ecological stewardship giving communities real decision-making power over projects throughout the process from design to dissemination. Similarly, in South Africa and Hawai'i, local communities produced clear guidelines for research engagement to secure a safe space for Indigenous communities to engage with research projects without risk to their knowledge and sovereignty.

The cases in Boxes 1, 2, and 3 show that the key ingredients for projects to contribute to community wellbeing include a profound understanding of communities' needs and critical reflection on the responsibility and roles of external organisations and communities. This requires sincere reflection on positions and values as well as the alignment of all actors to shared objectives, which requires examining relationality within one's own organisation and with partner communities. This process can shift projects away from Western colonial legacies that clash with community values and worldviews, resulting in mismatched assumptions and naïve and incompetent approaches to relational wellbeing that manufacture limited benefits and negative impacts. The process of assessing organisational values, operational practices, and internal management to promote respectful interactions and prioritising community needs will likely entail disorientation and discomfort within organisations, as they must question their own assumptions and worldviews. The literature on transformative methods suggests, nevertheless, that those challenging processes can secure the foundation for ethical commitments to build community wellbeing in conservation and CBNRM.

### Supplementary material: rb.gy/z48fga

### **Author statement**

KB, YO, MF, AS, JV, NM conceived and designed the piece; KB, YO, MF, AS, JV reviewed literature and drafted cases; KB led the drafting of the manuscript. All authors contributed critical, intellectual content to the drafts and gave final approval of the version to be published.

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### **Data Availability**

The data used for this paper are published materials, listed as references.

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