

Video-mediated dialogue for promoting equity in protected area conservation

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Abstract Improving equity in the context of protected areas conservation cannot be achieved in situations where people have different capabilities to participate. Participatory video has the potential to uncover hidden perspectives and worldviews and to build trustworthy, transparent and accountable relationships between marginalized communities and external agencies. We present findings from video-mediated dialogues between Indigenous peoples and decision makers involved in the management of three protected areas in Guyana. Participatory films created by Indigenous researchers in their communities were screened and discussed with protected area managers. We recorded their responses and presented them back to the communities. We show how the video-mediated process provided a rich and contextualized understanding of equity issues. It enabled recognition and respect by protected area managers for Indigenous lived experiences and the contribution of their values and knowledge. For Indigenous peoples, the participatory video process built confidence and critical reflection on their own activities and responsibilities whilst allowing them to challenge decision makers on issues of transparency, communication and accountability. We show that equity is an evolving process and that different protected areas with their differing histories and relationships with Indigenous communities produce distinct outcomes over time. Thus, promoting equity in protected areas and conservation must be a long-term process, enabling participation and producing the conditions for regular, transparent and honest communications. Standardized indicators of protected areas equity could be useful for reporting on international targets, but video-mediated dialogue can facilitate deeper understanding, greater representation and a recognition of rights.

Keywords Conservation, equity, Indigenous peoples, participatory video, protected areas, traditional knowledge, video-mediated dialogue

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Introduction

Conservation commonly involves multiple actors, organizations and worldviews. Local communities, representative organizations, state agencies and NGOs can together form a network of complex and cross-scalar relationships that govern and manage landscapes that have both high biodiversity and cultural value (Berardi et al., 2015). Protected areas vary in terms of land ownership, management authority, functions and the use of resources, with governance embedded within unique historical and cultural contexts across multiple scales through institutions or rules, norms and shared strategies (Ostrom, 2010; McGinnis, 2011). Nevertheless, the majority of protected areas are managed through top-down, monocentric governance structures; c. 90% of all reported protected areas are managed by state agencies, 6% by private parties and < 1% by communities (UNEP-WCMC et al., 2018). On the other hand, polycentric governance, in which multiple organizational structures have overlapping decision making powers, focuses on building self-governance from the bottom up, with limited state interference (Ostrom, 2005, 2010). Yet, realistically, protected areas governance needs a combination of top-down and bottom-up approaches (Jones, 2014; Jones & Long, 2021) that recognizes both the critical contribution of communities and the role of the state, as well as the ways in which the two can coevolve and adapt through interaction and feedback.

It is recognized widely that only a small number of protected areas are achieving their conservation objectives in terms of effectiveness (the impact of management on biodiversity outcomes) and equity (attention to social justice issues; Dawson et al., 2018). The latter is important not only in terms of rights but also because, although effectiveness could be achievable in some cases with strong rule enforcement, it could be undermined or resisted and lead to conflict if people perceive unfairness, especially in the context of limited resources and diverse stakeholders (Hirsch et al.,

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2011; Holmes, 2013). It is also important because there is increasing recognition that nature is declining less rapidly in lands owned, managed, used or occupied by Indigenous peoples and local communities (Garnett et al., 2018; IPBES, 2019) and that the meaningful involvement of traditional knowledge- and land-holders and more equitable sharing of benefits can lead to better conservation outcomes (Oldekop et al., 2015).

Three interlinked dimensions of equity have been proposed that could be applied in any field of conservation or development, namely recognition, procedure and distribution (Schreckenberg et al., 2016). Recognition focuses on acknowledging, accepting and respecting the legitimacy of the rights, values, interests and priorities of different actors, and in the specific case of Indigenous peoples their rights, institutions and knowledge systems. Procedural equity is built around decision making and on the inclusive and effective participation of all relevant actors, and for Indigenous peoples this includes free, prior and informed consent. Distribution is about how costs, risks and benefits are distributed between different actors and can be assessed in terms of equality, social welfare, merit and need (McDermott et al., 2013). These elements of equity are framed by a social and political context or enabling conditions, which include power dynamics, legal instruments, statutory and customary laws and norms, and capacity to participate effectively (Pascual et al., 2014). The principle of participatory parity (Fraser, 2009) unites the above dimensions of justice, underscoring that recognition and procedural and distributional justice cannot be achieved in situations where people have different capabilities to participate.

Building trustworthy, transparent and accountable relationships is a fundamental prerequisite for advancing equity in the context of protected areas conservation. How to do this in practice in contexts typified by inherently unequal power dynamics requires innovative and long-term approaches (Howard et al., 2018; Shaw et al., 2020). Participatory video has been used to uncover overlooked and hidden perspectives and to build new relationships and social dynamics between marginalized communities and external agencies (Shaw, 2015). It can contribute to agonistic pluralism (a recognition of the unavoidable tensions between perspectives) and maintaining rather than erasing difference when working towards positive change (Mistry & Shaw, 2021).

In this paper we present findings from video-mediated dialogues between Indigenous peoples and decision makers involved in the management of three protected areas in Guyana. Video-mediated dialogue is a two-way communication based on participatory videos produced by communities that are screened to decision makers, which then leads to the development of a response video that is subsequently taken back to communities for feedback (which could

initiate another round of filming, screening and feedback; Shaw, 2017; Mistry & Shaw, 2021). In participatory video, groups or communities collectively plan, make, edit and screen films for feedback through a series of iterations as a means to drive social and political processes. Video-mediated dialogue involves fostering inclusive, collaborative and responsive relations through participatory video processes that connect marginalized people with decision makers (Shaw, 2017). To date, most such examples have been in the development field (e.g. Mistry & Shaw, 2021), and to our knowledge video-mediated dialogue has not been used in protected areas governance. In the context of protected areas governance and equity, participatory video could facilitate cross-scale linkages and provide a mechanism for the inclusion of multiple perspectives, cooperation and conflict resolution, and increase the accountability of decision makers (Carlisle & Gruby, 2019).

Study area

Guyana has c. 85% forest cover, of which 8.4% is within five protected areas of the National Protected Area System and 13.9% is titled legally to Indigenous villages and communities (Protected Areas Trust (Guyana), 2021). We worked in three locations, each associated with a different protected area: North Rupununi associated with the Iwokrama Forest, South-Central Rupununi associated with the Kanuku Mountains Protected Area, and Masakenari associated with the Kanashen Amerindian Protected Area (Fig. 1). The three protected areas are governed in distinct ways, with multiple and sometimes overlapping actors and varying levels of community authority: for the Iwokrama Forest, communities have no authority but work with the protected area under a memorandum of understanding and collaborative agreement; for the Kanuku Mountains Protected Area, communities have no authority but work with the Protected Areas Commission under a memorandum of understanding; and for the Kanashen Amerindian Protected Area, the community has full authority (Supplementary Material 1, Supplementary Table 1). The associated Indigenous communities also have different histories of colonization, land tenure, culture and self-organization.

Methods

As part of a larger study on the inclusion of traditional knowledge in national conservation policies and practices (Mistry et al., 2021), we worked directly and intensively with eight Indigenous communities associated with the three protected areas through a participatory video process during 2017–2021 (Fig. 1). These were: Aranaputa, Apoteri, Fair View and Rewa (Iwokrama Forest); Katoka, Marurawaunawa and Parikwarinawa (Kanuku Mountains Protected Area); and

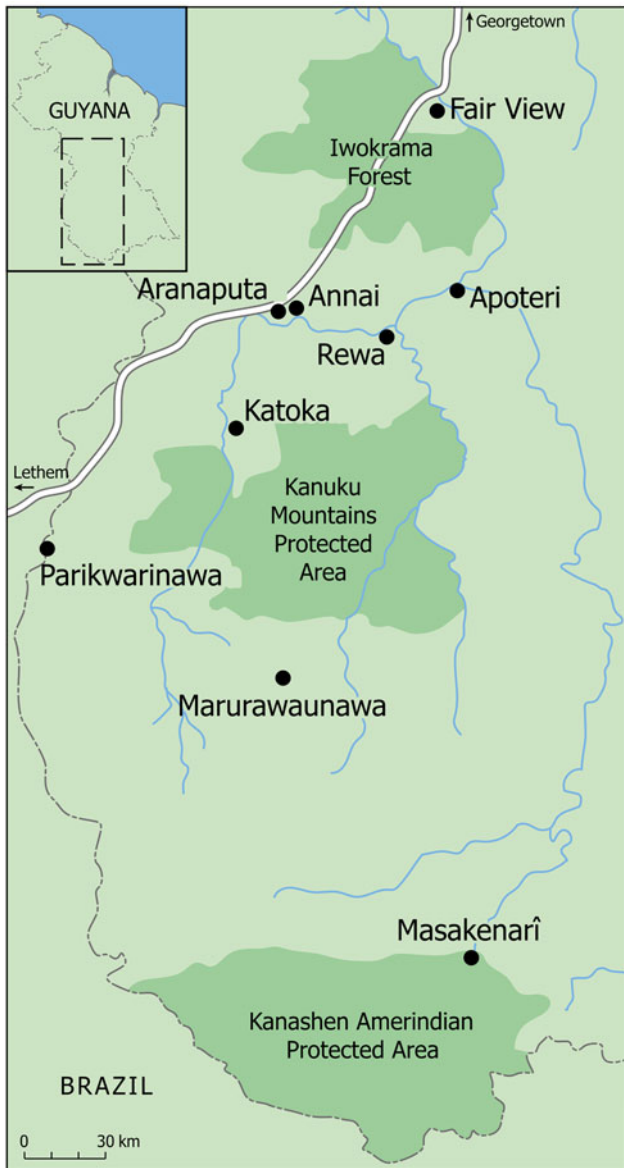


FIG. 1 Guyana, showing the locations of the communities that we worked with in this study and the associated protected areas.

Masakenarî (Kanashen Amerindian Protected Area). We used our previous experiences in the use of participatory video with Indigenous communities to inform our approach (Mistry & Berardi, 2012; Mistry et al., 2013, 2014, 2015, 2016; Bignante et al., 2016), with senior community researchers (co-authors on this paper) leading the process. Participatory videos were focused on the challenges of managing and governing the protected area, the contribution of traditional knowledge to conservation and the impacts of changes in traditional knowledge (Mistry et al., 2021). We aimed to explore how participatory videos mediated the power relationships between actors, whether and which justice issues were raised and acted upon and whether video-mediated dialogue could contribute towards equity in these protected areas.

The participatory video process involved 5–6 days of training community researchers in each village, followed by participatory video planning work within the community. Supported by the senior community researchers and through an iterative process, we collected material through filming and interviewing, followed by evaluation, basic editing and screening back to the community for feedback and further input. Senior community researchers then compiled the videos into one video per topic for each protected area, and we screened drafts of these back to the communities for final comments and changes and to obtain final consent for sharing and distribution. We made separate videos with the representative organizations: the North Rupununi District Development Board and the Kanuku Mountains Community Representative Group.

Decision maker screenings took place with the Iwokrama International Centre that manages the Iwokrama Forest, the Protected Areas Commission that manages the Kanuku Mountains Protected Area and the Kanashen Amerindian Protected Area Management Team that is the management authority for the Kanashen Amerindian Protected Area. In addition, we had the opportunity to screen the videos from North Rupununi to the Ministry of Amerindian Affairs, which oversees Indigenous issues throughout the country. This process is outlined in Supplementary Material 2.

At the end of the screening event we made arrangements to film responses of the participants to the community videos through one-to-one interviews. We compiled these interviews into one video and shared a draft with the participants for feedback. We recorded this feedback and used it to produce a final version of the video before its distribution to the communities. We set up screenings in the eight communities who worked on the videos and in some additional villages participating in the larger project. We showed the community videos first and then the response video from the protected area authorities, with time allocated between consecutive films for villagers to make comments, ask questions and provide feedback specifically on the content of the videos. The whole process is illustrated in Fig. 2.

The data consist of the community videos, pre-screening questionnaires, discussions during the screenings, response videos and screenings back to the communities. The compiled videos are publicly available and listed in Supplementary Material 3.

We collected over 300 hours of footage, which was then sorted, edited and transcribed. Our data analysis looked at the emergence of dominant themes and narratives from the written, visual and audio materials and how these were received and modified by the local community. The process involved assigning a large pool of preliminary themes to images and narration and then analysing the resulting spread and diversity of themes (Charmaz, 2006). This was an iterative process as emerging themes evolved and changed, often involving a reappraisal of film sections.

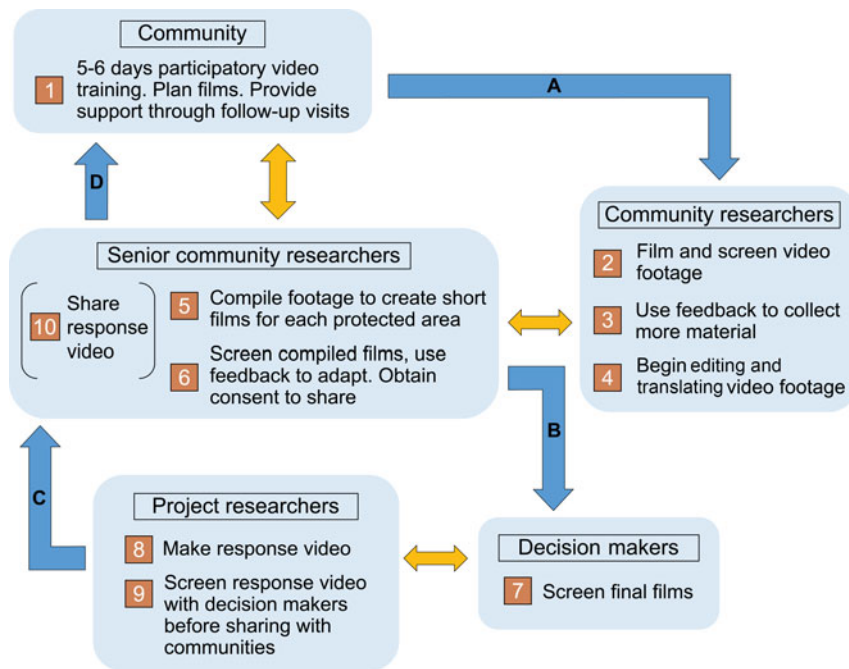


FIG. 2 The video-mediated dialogue process used in this research. Numbers 1–10 indicate the various stages, arrows labelled A–D show the phases and other arrows indicate multiple two-way interactions.

Our results therefore report on the main themes that emerged from the data through an adaptive and emergent process of analysis (Reed & Peters, 2004) that focused on recognizing and maintaining the unavoidable tensions between perspectives (Mistry & Shaw, 2021). Here we present a set of overarching issues that encompass these themes, namely recognition and respect for different values and knowledge systems, reflection on self, challenging decision makers and recognizing how equity evolves.

Ethical considerations

We followed the Right of Free, Prior and Informed Consent processes stated in the 2007 United Nations Declaration on the Rights of Indigenous Peoples. We underwent a full ethics review at Royal Holloway University of London, UK, and in Guyana we obtained permission from the Environmental Protection Agency, the Ministry of Amerindian Affairs and each village council. The senior community researchers developed a visual consent form (outlining project details, conditions of participation and intended output distribution) that we used in the communities and with the decision makers. We negotiated and agreed upon the ownership, storage and access to the video data at the start of the project. Participants could request deletion of any video recordings made of them, without requiring justification. Our regular screenings of video material to individuals and within communities aimed to ensure the highest standards of editing ethics, representation and informed consent. This included instances where confidentiality was a concern and where content was represented in alternative forms such as photographs with a voiceover. We first broadcast the video footage

within the contributor groups and then sought permission for broadcasting to other stakeholder groups and for inclusion online. All videos for which it was agreed that they would be made available publicly are licensed under the Creative Commons Attribution Non-Commercial No Derivatives protocol. This stipulates that any distribution of original material will need to have the original authors cited, the material cannot be used for profit-making purposes and the material cannot be modified/edited/remixed without the consent of the original contributors.

Results

Recognition and respect for different values and knowledge systems

Within the participatory videos, people overwhelmingly portrayed Indigenous people as custodians of biodiversity and communities as managing the protected areas through their traditional knowledge (see Supplementary Table 2 for the main themes arising from the community participatory videos). When the videos were screened and shared within communities and more widely between communities, people supported and corroborated the content, particularly the role of livelihood practices such as farming, hunting, fishing and gathering in sustaining biodiversity, characterizing land in their ‘own terms as lived, meaningful, ancestral and social’ (Lassila, 2018, p. 5).

People also expressed concerns regarding the decline of Indigenous languages and traditional practices, which could have implications not only for culture and livelihoods but also for protected area effectiveness and equity (Dawson

et al., 2018). This was seen to be exacerbated by commercial and/or illegal activities affecting the biodiversity that people rely on, with fisheries being mentioned by many of the storytellers. Nevertheless, community members proposed a variety of interventions to enhance protected area governance and perceived equity, including recommendations for improved outreach by protected area authorities, especially related to boundaries, monitoring habitats for illegal activities whilst undertaking livelihood practices, establishing checkpoints at key fishing locations and engaging youth in protected areas governance. Many of these suggestions and measures are within the power of the community to address or can be addressed by the community with the help of outsiders, indicating that communities are willing to take responsibilities and are open to cooperation that builds on local customs and common interests.

Reflection on self

Participatory video projects generally begin in safe spaces (Fraser, 1995) in which marginalized groups can build agency and reframe experiences. In our case this began with individuals telling their stories to community researchers, which we then grouped, edited and screened back to the community for feedback. This process of watching and listening to their own views and those of others helped communities to look inwards at themselves.

Community members realized that traditional knowledge and land governance are declining, as exemplified by the following statement:

As Amerindians within the community, we also need to look at responsibility to ensure that we continue to do sustainable activities and should adhere to rules and regulation.

Many people talked about how new methods of fishing and hunting were leading to overharvesting, how fewer young people were speaking Indigenous languages and making crafts, and about a loss of collectiveness that ensured community members cared for and helped each other, for example in farming and village maintenance.

In developing relationships with external organizations there needs to be time and space for within-community deliberation on strengths and challenges. Related to the capability component of justice (Schlosberg, 2007), people need to build the capacity and confidence to legitimize their own values and knowledge. This can lead to collective brainstorming on solutions. During the participatory video process, people came up with ways of addressing traditional knowledge and protected area challenges, most of which could be implemented by communities themselves. This was commented on by a Ministry of Amerindian Affairs official during the screening:

I was happy to see ... that communities feel that they can express themselves honestly about how they feel about Iwokrama—including the challenges—but also the fact that many solutions were also offered.

It wasn't just about what was going wrong but what was needed to improve.

Recording and playback can assist people in standing back from what has been said and reflecting more critically through facilitated dialogue. For example, in the community videos, there were multiple references to the deteriorated relationship between the North Rupununi communities and the Iwokrama International Centre. This was also highlighted by North Rupununi District Development Board members:

... right now there is not much involvement within the board and Iwokrama. Like the relationship or the partnership get boring. Like when you married to a man and the man don't want see you no more ... that is how Iwokrama and the North Rupununi District Development Board is today.

There was also a recognition of the Board's own role in this:

Like I said before ... we have become complacent, so it's not only on Iwokrama's part—we also have to take some responsibility.

These two comments are addressed directly in the Iwokrama response video:

I think X is right, we need to inject some more love and update this relationship but it's also a two-way street. I think Iwokrama takes a lot of responsibility and there is a lot of expectation for Iwokrama to go out and say this is what we are doing and to share, but I think X said it as well, the North Rupununi District Development Board also needs to hold up their end of the deal ... so consultation and relationship is two-way—so I think that needs to be strengthened.

When we then screened the Iwokrama response video back to the North Rupununi communities, people acknowledged more strongly that there is a two-way relationship between the protected area and the communities, and that both sides need to take responsibility:

Like Mr. X [of the North Rupununi District Development Board] said, it is not Iwokrama alone that we should blame, but some of the blame falls on our community too. So as much as we are calling on Iwokrama to rejuvenate all these activities, I think some of those is still with us, and I will say 75% is with us.

This specific example of the video-mediated dialogue process highlights that agonistic knowledge or a respect for diversity between adversaries (Mouffe, 2009) could arise in the discussions after playback of these videos, and this does not need to be recorded on video to be of value. It is also apparent that time and active, strong facilitation are needed to enable the agendas of participants to emerge and for participants to move beyond superficial discussions and reframe their experiences more critically.

Challenging decision makers

Becoming knowledge producers through participatory video-making and utilizing presenter–audience conventions during screenings to disrupt the status quo of who speaks and who listens are understood to position marginalized groups more influentially than is usual (Shaw, 2012). The community videos voiced the worries people had

regarding the limited amount of information they received about the protected areas, the lack of support for day-to-day running and patrolling and the need for Indigenous people to be at managerial levels within the protected area authorities and for good leadership from the protected areas.

Although there were some commonalities in topics raised by the individual communities in each protected area, the videos by representatives of the North Rupununi District Development Board and the Kanuku Mountains Community Representative Group focused in particular on governance. For example, Kanuku Mountains Community Representative Group members emphasized their role as co-managers of the protected area:

The Kanuku Mountains Community Representative Group is the co-manager of the protected area, so whatever the Protected Areas Commission is trying to implement, first they have to come to the Kanuku Mountains Community Representative Group, communities and leaders, to ask them if it's a good initiative, if we agree with it. They can't do things on their own.

As hinted at by the following quote, land rights and ownership of the protected area continue to be sources of tension:

From a people's point of view, the protected area has been seen as a way to have lands taken away from them. I think that still remains as a challenge because a lot of their extensions are in the protected area. (Kanuku Mountains Community Representative Group video)

During the screening of the Kanuku Mountains Protected Area and Kanuku Mountains Community Representative Group videos, the Protected Areas Commission reiterated at length that the protected area did not restrict communities from continuing to practice their livelihoods and utilize resources within the protected area. However, it is clear from the participatory video process that in the case of the Kanuku Mountains Protected Area, many community members believed that their lands had been taken away from them and that greater clarification regarding the demarcation and establishment of the protected area was necessary to build trust with the communities.

A recurrent theme in the Kanuku Mountains Protected Area videos was uncertainty regarding the management structures of the protected area. Concerns were raised regarding the yet to be officially formed Site Level Management Committee, which was deemed at the community level to be essential for the management of the protected area. Yet from the Protected Areas Commission perspective, the Site Level Management Committee played a lesser role compared to the Kanuku Mountains Community Representative Group:

The Site Level Management Committee has been mentioned a lot and I think there seems to be some misunderstanding as to its importance in representation. The law makes room for its establishment and that would include community representatives, but the Kanuku Mountains Community Representative Group would be better at representation as they are the established persons already working on the ground.

In the case of the Kanashen Amerindian Protected Area, one of their concerns has been payment for rangers,

which comes through the Protected Areas Commission. Payments were initially quarterly but are now half-yearly, and these rangers become reluctant to carry out their duties if their payments are delayed. Thus, although the Kanashen Amerindian Protected Area Management Team are the decision makers, they still need to work with the Protected Areas Commission and tackle issues when they arise. In this case of ranger payment, the Kanashen Amerindian Protected Area Management Team escalated the matter by reaching out directly to the head of the Protected Areas Trust (the funding body for protected areas) to help solve the matter (Kanashen Amerindian Protected Area Management Team screening comments).

This issue of transparency, particularly regarding communication and accountability, also came up regarding benefit-sharing from protected areas. For example, members of the North Rupununi District Development Board questioned the Iwokrama International Centre on how the forest user fee was being distributed:

... we are not getting the forest users fee ... to what we suppose to receive it. All what they are doing is sponsoring the board meeting which I think is not fair.

The protected area authority saw this as a misunderstanding and/or representing a lack of clarity amongst community members, including North Rupununi District Development Board members. Following the screening they issued a letter to the North Rupununi District Development Board to explain the situation regarding this fee and how the support funding for the North Rupununi District Development Board from the Iwokrama International Centre did not come from this fee but from their timber business and other projects.

The above examples show that in building more equitable relationships between communities and decision makers there is a need to build awareness as a basis for collaboration, in this case with protected area authorities, and to provoke these audiences to think critically by bringing challenging views and interpretations of reality into the wider governance space (Mistry & Shaw, 2021). In our cases the majority of the decision makers were open to listening, and the video-mediated dialogue fostered political receptivity by bringing the realities people face to these decision makers in a credible way. Nevertheless, there were instances when protected area managers became defensive of their actions and responded negatively to Indigenous opinions and perspectives, leading to later misunderstandings and antagonistic behaviour. This highlights that some decision makers could find it difficult to transcend their expert status and could patronize the views of participants or criticize them for their actions rather than recognizing their own lack of understanding of the realities faced by marginalized peoples (Shaw, 2017).

Recognizing how equity evolves

Although similar issues came up in the community videos from all of the sites, they also revealed distinct narratives regarding the evolving nature of equity at each protected area as a result of differing histories and systems of governance. For the Iwokrama Forest, this was a story of plenty in the past and then a slow decline towards the present. Communities highlighted the number of educational initiatives that took place in the past, including wildlife clubs aiming to provide spaces for children to gain scientific and traditional knowledge. These clubs and the development of skills, achieved for example through ranger training, also helped some young people towards careers in conservation and ecotourism:

Many of the rangers who were trained in the first set are now managers of Iwokrama, managing the forest operations of Iwokrama, managing the tourism in Iwokrama. They became highly skilled and highly recognized experts in protected area management, forest ranging and tour guiding. (North Rupununi District Development Board video)

Indigenous women also recognized the role of Iwokrama in working towards gender equality:

They men . . . they are not keeping us down like before. First . . . all what they want to give us is big belly, baby in our hands and we must stay home all the time in spider web. Today it's not like that! It is a changed world! (North Rupununi District Development Board video)

Over time, however, a lack of resources and transparency has led to a decreased level of engagement with the communities:

The partnership between the North Rupununi District Development Board and Iwokrama have kind of dipped as well. Because without the financing, there was little projects on the ground with the communities, so they felt that they were not benefitting. Just because there was no financing to do what it had done before. (North Rupununi District Development Board video)

In addition, it became apparent that as a result of limited outreach in recent times, many young people knew little about the Iwokrama Forest as a protected area. This was acknowledged in the Iwokrama response video:

The monitoring challenges have been highlighted; [lack of] communication—one of the ways we can look to improve some of these things and also maybe some of the info that is not getting through to some of the communities [is] by using more public awareness . . . also looking at continued training, looking to get funds to try to bring back some of the older programmes.

Although the Kanuku Mountains Protected Area was established more recently, communities here were also unclear regarding issues such as how the boundaries of the protected area were established and how the governance structure worked in practice. Cognizant of community concerns, the Protected Areas Commission were clear on what was needed:

We appreciate the views coming out of the video associated with awareness—we have also known that this is an area we would need to work on continuously. Persons' understanding of the protected area vary greatly—someone might understand what a protected area

is but they may not embrace it, while others may not know what it is. (Protected Areas Commission video screening comments)

It is clear that dealing with issues of equity is not a one-off tick-box exercise but can change over time and in different ways in different protected areas (Martin et al., 2015; Schreckenberget al., 2016), as has happened in the 25-year relationship between the North Rupununi Indigenous communities and the Iwokrama International Centre. This further highlights that video-mediated dialogue to promote equity in protected areas and conservation must be a long-term process enabling participation and producing the conditions for regular, transparent and honest communications.

The responsibility for governing and managing Kanashen as an Amerindian protected area lies with the community of Masakenarî themselves. The Protected Areas Commission plays only an advisory and facilitation role; it is up to the village council to set out the rules and guidelines that community members have to follow. The management plan for the protected area is used as a guide and activities are planned on an evolving basis around it, giving the village council more autonomy and the ability to be responsive to changing situations. Nevertheless, the Kanashen Amerindian Protected Area still looks to external agencies to help support their activities, particularly the Protected Areas Commission, as cited in their management plan: 'Of great importance to us is our partnership with the Protected Areas Commission as the main partner in the management of our lands as part of the National Protected Areas System.' (Kanashen Village, 2016, p. ii). This points to the need for protected area authorities to provide supportive and enabling environments within which local communities can self-organize and act collectively, as has been highlighted for nature reserves in China (Zhang et al., 2020).

The idea of building alliances between protected area actors and between neighbouring Indigenous groups was mentioned several times in the videos:

It's very important that these [Indigenous] organizations work hand in hand because at the end of the day it's the same Indigenous people that we deal with, the issues are the same across. Working with NGOs like the North Rupununi District Development Board and the Kanuku Mountains Community Representative Group, they have different partners and we can have support at different levels.

If the boards of these respective organisations [the North Rupununi District Development Board, the Kanuku Mountains Community Representative Group and the South Central Peoples Development Organisation] can come together, sign formal agreements, we all would be on the same page and we can share the work. (Kanuku Mountains Community Representative Group video)

Thus there is potential to use the video-mediated dialogue process over the longer term not only to convey the multiplicity of perspectives and experiences regarding each protected area, but also to foster the collective agency needed to drive social action and influence higher-level governance responses (Shaw et al., 2020).

Discussion

In our use of participatory video, following Rice & Mündel (2018, p. 219), ‘we recognize that all accounts, whether written, told, or imag(in)ed, are partial truths and that the truths of aggrieved groups must be proliferated if we hope to create a more just society’. Participatory video provides a means to bring Indigenous stories or counter-narratives and unvoiced interpretations to wider public attention, particularly where people do not have the confidence, capacities, access or resources to present them in person or if the communication spaces do not enable them to be included meaningfully (Mistry & Shaw, 2021). The governance of protected areas involving marginalized groups, such as Indigenous and local peoples, often reveals issues of inequity surrounding the benefits, participation and inclusion of traditional knowledge. Producing participatory videos that honour lived experiences and recognize different identities, values, knowledge systems and institutions has important implications for highlighting subjugated knowledge and providing ‘much-needed counter-narratives to the mainstream discourse... about the climate and social inequality... These deeply grounded understandings, stories, and visions of the problems and solutions are crucial to bringing about the kinds of transformations necessary’ (Gobby & Gareau, 2018, p. 458–459).

There is still limited understanding and recognition of how Indigenous knowledge, values and ontologies contribute to conservation (Martin et al., 2015). Many Indigenous peoples’ worldviews are centred on nature, and as such they view conservation success to be not only about maintaining the physical environment but also about carefully nurturing the values, stories and cultural obligations associated with the landscape (Howitt, 2001; Larson et al., 2006, 2020). With a history of oppression, appropriation of land and resources and loss of culture, Indigenous peoples have often been portrayed as backwards and lacking in know-how, a framing that emphasizes difference and dysfunction (Walter, 2016, 2018). Disrupting these deficit narratives helps to shift the power dynamics that constrain Indigenous influence in inequitable protected areas and biodiversity conservation contexts.

We have shown that through the video-mediated dialogue process Indigenous communities are able to express their lived experiences to protected area decision makers on their own terms, in their own words and according to their own worldviews. The respect engendered for diversity between supposed adversaries promotes the right of each community member to defend their position, helps conflict to be seen as a way to guard against the erasure of difference and helps us to acknowledge that difference does not prevent commitment to work towards and produce just outcomes (Mouffe, 2009). Although not without its tensions and participatory messiness (Mistry et al., 2014; Mistry &

Shaw, 2021), the video-mediated dialogue process enabled Indigenous communities to challenge protected area managers in a communication space where they could be included meaningfully. This levelling up of participation allowed Indigenous perceptions, concerns and knowledge to be delivered directly to the decision makers whilst giving the authorities the opportunity to share information about management and planning, and attempt to resolve disputes and misunderstandings.

Global biodiversity targets such as Aichi Target 11 of the Convention on Biological Diversity on protected areas and Target 18 on traditional knowledge and their successors in the post-2020 Global Biodiversity Framework promote equity and inclusion. But how do protected area managers measure and improve equity in practice? A set of indicators has been suggested to cover the core principles of social equity in a protected area context and to report on targets (Zafra-Calvo et al., 2017). However, Dawson et al. (2018, p. 5) warn against the oversimplification and reliance on standardized indicators for measuring equity and effectiveness of protected areas, instead advocating that ‘a richer, contextualized understanding of equity concerns gained through exploration of local perceptions can contribute to solutions that align equity with conservation effectiveness’.

We view video-mediated dialogue as a mechanism that can help protected area managers to assess the distributional, recognition and procedural elements of equity within their monitoring processes whilst forming the basis of building mutual trust and understanding and a participation towards fairness.

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Rebecca Xavier, Grace Albert, Bernie Robertson, Ena George and Ryan Benjamin self-identify as Indigenous.

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