10 Community perceptions of social justice in benefit distribution mechanisms of forestry carbon projects in Uganda

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Introduction

This chapter analyses community perceptions of fairness in benefit distribution mechanisms of carbon projects implemented in Uganda's state and private forests. Forestry carbon projects (FCP) are designed to provide incentives to stakeholders that contribute to afforestation, reforestation, and forest conservation activities. The chapter interrogates the nature of the benefits, the beneficiaries, and communities' preferences for the basis of benefit distribution and decision-making processes. Here, community members' preferences are considered as a proxy for fair or socially just distribution of forest conservation outcomes. The introductory chapter of this book emphasizes that social justice is often conceptualized and defined in context. For this chapter, social justice is conceptualized as plural and multidimensional social constructs offering fair distribution of benefits and participation in decision making (Schlosberg 2013; Izquierdo-Tort et al. 2022). Understanding community perceptions of fairness in conservation outcomes is vital for both moral and practical reasons. In practice, local perceptions of fairness can help to determine project's social legitimacy, participation, and effectiveness (Wells et al. 2020).

The chapter contributes to the debates on how to achieve social justice in forest conservation outcomes, particularly in the context of payment for environmental services (PES) projects implemented in poor rural communities. PES refers to voluntary transactions between providers and users of environmental services that are conditional on agreed rules of natural resource management for generating offsite services (Wunder 2015). It is a conservation policy innovation designed to ensure that those who bear conservation costs (including opportunity costs, transaction costs, and implementation costs) are compensated by the beneficiaries of environmental services (Yang et al. 2018). This innovation is at the center of the contemporary conservation and development agenda, and is supported by global and local stakeholders (Pascual et al. 2014). Unlike the previous approaches (e.g., the command and control),

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PES is designed to address the unfair distribution of conservation costs and benefits. The United Nations Framework Convention on Climate Change's (UNFCCC) Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Forest Degradation (REDD+) are examples of PES innovations implemented in the forestry sector. While PES policy innovations are often top-down, their success largely depends on the social relations, values, and perceptions of those involved (Muradian et al. 2010). In Uganda, PES- or incentive-based innovations have been implemented mainly in the forestry sector (Namaalwa et al. 2017) as pilots just in a few communities. Therefore, this chapter presents a critical analysis of community narratives of what they judge as fair basis for benefit distribution in forestry carbon projects. Such a study can be useful in the design of an equitable and inclusive approach in forest conservation. The next sections provide the conceptual analysis of social justice in conservation outcomes, Uganda's benefit distribution context, study sites and methods, results, discussion, and the conclusion.

Social justice in conservation outcomes

The chapter draws from the environmental justice framework that emphasizes dimensions of distributive, procedural, and recognition justices that are often ignored when conservation innovations prioritize economic efficiency and ecological outcomes (Martin et al. 2014; Schreckenberg et al. 2016). In particular, the chapter interrogates community perceptions of social justice with a focus on distributive and procedural justice. According to moral philosophy, the notion of "justice" is based on normative judgements that people may have on the way actions are carried out, i.e., distributions among people as well as the outcome of those actions, i.e., fairness of the process (Svarstardet al. 2011). Distributive justice, which is also used interchangeably with fairness, refers to moral preferences over the distribution of social and economic benefits and burdens among a group of individuals (Johansson-Stenman & Konow 2009, 7). Most literature in psychology, sociology, and political science describes distributive justice as the "equity theory" and provides the basis for normative judgements (Martin et al. 2014; Svarstard et al. 2011). Equity denotes the expression of fairness perceptions by different stakeholders and may in part reflect existing distribution of wealth, power, and access to resources within society (Wong et al. 2016). Consequently, the question of who receives what and why is important in understanding fairness in benefit sharing arrangements of PES projects (Forest Carbon Partnership 2012; Jeha 2016; Schreckenberg et al. 2016).

Scholars have suggested various principles through which fairness in the distribution of conservation outcomes can be achieved. According to Izquierdo-Tort et al. (2022); Johansson-Stenman and Konow (2009); Martin et al. (2014); and Svarstard et al. (2011), people's judgement of fairness in the distribution of conservation outcomes may depend on: (i) equal distribution of goods and burdens among all concerned parties—also known as *egalitarian*;

(ii) distribution based on individual or group contribution or *effort*, e.g., being paid for the amount of work done to deliver an environmental service; (iii) distribution according to *needs*—also known as *pro-poor*, where benefits are targeted to the most vulnerable groups; and, lastly, (iv) distribution based on *opportunity cost* where payments are given to those who previously used the resource. These alternatives suggest that peoples' perceptions of fairness in a conservation program may differ and are context specific (McDermott et al. 2013; Schlosberg 2013). Therefore, understanding the underlying reasons why individuals and/or groups may prefer certain principles over others may help practitioners to know what is acceptable under which circumstances.

Procedural justice—an important aspect of which is participation in the decision-making process—is perceived as fair by some scholars if all affected people have similar and meaningful opportunities to be informed to express their opinions and influence decisions (Svarstard et al. 2011). This form of justice helps to understand who makes decisions regarding conservation outcomes and the extent to which power relations may influence the decision outcomes. Literature suggests that decision making often lies with individuals that hold powerful positions in society (Reed et al. 2018; Sommerville et al. 2010). Such decision makers tend to pay less attention to the marginalized and voiceless individuals. Indeed, some PES programs suffer from elite capture and unequal distribution of benefits where leaders and their associates benefit more than other community members (Peskett et al. 2008; Sommerville et al. 2010). The unequal distribution of benefits is likely to occur if relevant stakeholders are not genuinely involved in decision making. In any PES program, fairness in decision making may be achieved if: (i) program managers *consult* with community members; (ii) *leaders* decide on behalf of community members as their representatives, especially when trust exists; (iii) *program managers* make decisions on behalf of the community; and (iv) community *consultations* are combined with *voting* (Martin et al. 2014). Community members may consider any of these decision-making processes as fair, based on the prevailing circumstances. Due to the plurality of decision-making processes, it is important to understand different ways through which people may want to participate in decision making. Thus, there is a need to engage community members in the decision-making processes during program development and implementation. Turning to the study context, this chapter highlights how communities in rural Uganda have participated in and benefited from forest conservation.

Uganda's context

An examination of literature on conservation programs in Uganda reveals an unfair trend in distribution of benefits and costs among stakeholders. While benefits such as climate regulation and tourism development benefit the global community, costs such as restricted access to local spaces and crop raiding are born locally (Salk et al. 2017; Vedeld et al. 2016). During the colonial period

(1898–1961), Uganda was characterized by a "highly regulatory forest service that was centrally controlled and with a biased forest policy that limited local stakeholder participation" (Turyahabwe & Banana 2008). Although the current government (1986 to date) has made reforms to decentralize forest management, evidence shows that most people in rural communities remain excluded from management decisions and benefits (Ministry of Water and Environment (MWE) 2013, 2017). Besides, Uganda has several supportive policy and legal frameworks[1] for community participation in forest management. For instance, the collaborative forest management arrangement [where communities adjacent to a Central Forest Reserve (CFR) enter an agreement with a state agency—National Forestry Authority (NFA)—to comanage the forest) emphasizes the need for active participation of local communities in forest management. Despite such efforts, the resulting monetary benefits have unfortunately been limited (Soliev et al. 2021). Limited participation and access to benefits reinforces the view that the British colonial legacy contributed to institutions that have continued to shape contemporary unequal experiences of Ugandans (Alava et al. 2020). Regardless of the exclusion and selective privilege, rural communities remain dependent (often illegally) on forest resources for their survival and livelihoods (Tumusiime at al. 2011).

In Uganda, 94 per cent of the population depends on forests for fuel wood and charcoal. Forests also contribute 5.2 per cent of the total gross domestic product (GDP) and generate 61 per cent of the country's tourism revenue (MWE 2017; UBOS 2016). Moreover, forests support the provision of ecosystem services, including watershed protection, biodiversity protection, and carbon sequestration. While forest loss and land cover change generate about 10–20 per cent of the global greenhouse gas emissions (FAO 2016; UNFCCC 2011), African forests remain an important net sink for carbon (Hubau et al. 2020) and thus are vital for climate change mitigation. Despite the crucial socioecological roles, the rate at which forest cover is declining in Uganda is worrying. Since 1990, deforestation for expanding agriculture and other land uses has reduced forest cover from 24 per cent to 10 per cent in 2017 (UBOS 2020). If nothing is done, the country could lose most of its forests by the year 2040, resulting in loss of biodiversity, government revenue, and livelihoods (NEMA 2016). Some scholars have argued that the environmental challenges and the social injustices we face today are mutually reinforcing outcomes of the same flawed system that will require people to question the status quo by critically examining the morals, values, and narratives that underlie governance systems (Solomonian & Ruggiero 2021).

Uganda's National Development Plan III (2020/2021–2024/2025) and the Climate Change Policy (2015) emphasize the need to increase tree and forest cover through restoration of degraded natural forests, and promotion of PES and other benefit sharing arrangements (MWE 2015; NPA 2020). However, as already noted, previous efforts to conserve forests in Uganda have yielded little success in terms of forest conservation. Efforts to adopt more equitable and participatory innovations have been ongoing. One major

innovation has been the adoption of the PES policy innovation, which aims to complement the traditional command and control strategies (Guerra 2016). PES also aims to enhance equitable distribution of benefits and decision-making processes, thereby creating opportunities for a socially just approach to climate change mitigation (Wong et al. 2016). Whereas the PES innovation may apply to different ecosystem services (see Hendrickson & Corbera 2015), this chapter draws on case studies from forestry carbon projects.

While PES literature emphasizes the role of equitable benefit distribution and decision making, this debate has mainly focused on policy (Schreckenberg et al. 2016), with limited lessons from practice. In Uganda, most studies on benefit distribution have considered revenue sharing arrangements derived from tourism in protected areas managed by Uganda Wildlife Authority (UWA) (e.g., see Ahebwa et al. 2012; Ochieng et al. 2017; Connors 2022). Unfortunately, evidence shows that these revenue sharing arrangements provide inadequate benefits and decision-making powers to local communities (Ahebwa et al. 2012; Nabanyumya et al. 2017). Lessons from community perceptions of fairness in distribution of benefits from FCPs in Uganda remain limited (e.g., see Fisher et al. 2018; Soliev et al. 2021). This study contributes to filling this gap. Its empirical assessment of fairness can help in designing and implementing equitable and effective projects (Geussens et al. 2019).

Moreover, previous studies on equity have seldom focused on diverse social contexts (Quimby & Levine 2018). Yet, understanding perceptions of justice for all affected groups of people is the key for reaching project outcomes (Svarstard et al. 2011). This chapter contributes to previous scholarly work on how to achieve social justice in PES projects implemented in the forestry sector. Our analysis differs from previous studies because it interrogates local people's notions of justice on: (i) the nature of benefits including what may work in the local context; and (ii) community members' (including marginalized members) preferences for the basis of benefit distribution and decision-making processes. We argue that equitable and inclusive PES innovations are required if the current climate change crisis and related social injustices are to be averted. The next section presents a detailed description of the case studies and methods used.

Study area and methods

This chapter is focused on three carbon projects implemented in privately and state-owned forests in rural Uganda (see Figure 10.1). These three are where most incentive-based forest management initiatives have been implemented (Namaalwa et al. 2017). One of the projects was implemented by the state, that is, the Nile basin small-scale afforestation and reforestation CDM project located in Rwoho CFR in Ntungamo and Isingiro districts. In contrast, the Murchison-Semliki REDD+ pilot project in Hoima district and the one named "Undisclosed" (for reasons of confidentiality)[2] were privately managed. The CDM and REDD+ are examples of global climate change policy innovations

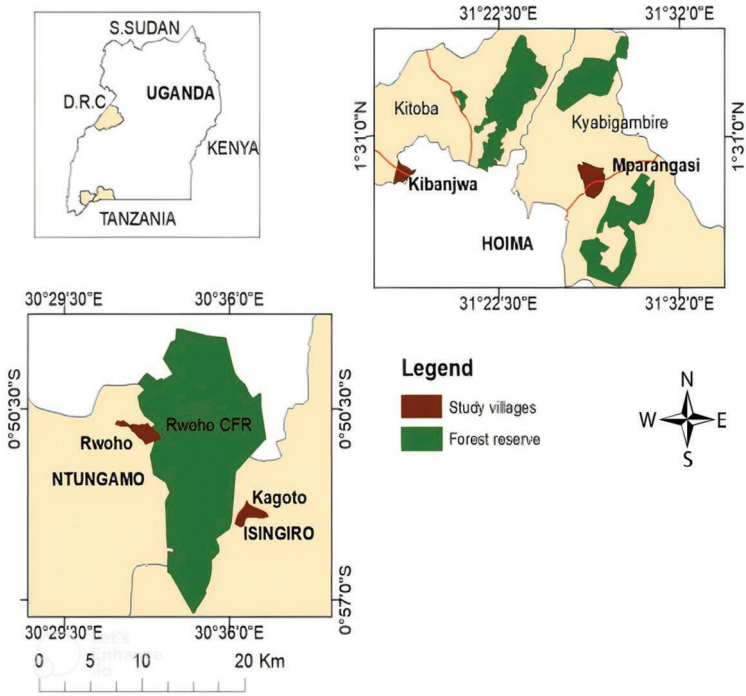

Figure 10.1 Map of Uganda showing study villages (by Antonia Nyamukuru).

that promote the PES approach in forestry. The state project was fund based (it received funds from World Bank), while the private projects depended on voluntary carbon markets. Community members adjacent to the state project participated through Collaborative Forest Management (CFM) groups. Under the CFM arrangement, local groups take on specific responsibilities, such as forest patrols and management, and in return access specific benefits, including forest land for tree growing. The responsible body—the NFA—provides technical support to CFM groups and is expected to deliver benefits as stipulated in the CFM agreement (Kazoora et al. 2020). To participate in private projects, community members are expected to own trees or forests on their land, and obtain membership in a private forest owners' association registered to undertake project activities. More details about the carbon projects are summarized in Table 10.1.

Data was collected from six villages—two per project for each of three projects—located in the rural districts of Ntungamo, Isingiro, and Hoima in South and Mid-Western Uganda (see Figure 10.1). These villages are adjacent to Rwoho CFR—a state managed plantation forest, Hoima private natural forests, and an "undisclosed" CFR where a private company was implementing large-scale tree farming in a formerly degraded CFR. Purposive sampling was used to select villages with the highest number of participating households.

Table 10.1 Summary of Forestry Carbon Projects (FCPs) in the Study Villages

Project Characteristics	*State Managed*	*Privately Managed*	
Name of Project	The Nile Basin Small-Scale A/R[3] CDM project in **Rwoho CFR** since 2006	Undisclosed A/R CDM project by a large-scale tree farming company; **undisclosed** since 2002	Murchison–Semliki REDD+ pilot project in Albertine region, **Hoima** since 2012
Location	Ntungamo and Isingiro districts	Undisclosed	Hoima district
Forest ownership	State	Private, under leasehold	Private
Type of forest	Plantation	Plantation	Natural forests (river line) on private land (0.5–230 ha)
Nature of carbon markets	Fund based (World Bank)	Voluntary carbon markets	Voluntary carbon markets
Project intermediaries	National Forestry Authority (NFA)	Undisclosed private company	North Albertine Rift Conservation Group (NARCG)[4]
Nature of community participation	5 Collaborative Forest Management (CFM) groups	Outgrowers' Community-Based Organizations (CBO), CSR policy	Private Forest Owners' Associations (PFOAs)
Participation requirements	Variations based on CFM groups, e.g., buy a carbon share at Ugx. 200,000/= in RECPA	Must have planted trees on own land	Natural forest on own land member in PFOA
Contract details	Group verification after five years	Private company certified and verified by FSC[5] and Gold Standards	None, but FPIC process completed
Members received cash payments	Yes	No	No

Source: Key informant interviews and project documents.

A comparative case-study research design was employed to clarify policy context in terms of (1) how the PES policy innovation is implemented in a range of settings and (2) the kind of policy designs that are needed to address a range of contexts (Rule & John 2011). Data was collected using mixed methods comprising of qualitative and quantitative techniques. Qualitative data was

collected using key informant interviews with individuals considered knowledgeable about FCPs. The key informants ($n = 16$) included project managers, community-based association leaders, and village leaders. NFA regional offices were used to identify project managers, who, in turn, led the research team to local-level leaders. For representation, focus group discussions ($n = 6$) were held with project participants and nonparticipants (living in the same village) based on their willingness to attend the discussions. This was followed by a quantitative study where a household survey ($n = 180$) including 68 project participants and 112 nonparticipants was done. Nonparticipants were individuals who had not formally registered to participate in FCPs. In all study villages except Kibanjwa, all project participants were included in the study. The participants in Kibanjwa and nonparticipants in all the study villages were randomly selected using a random numbers generator (Newing et al. 2011). The nonparticipants were included in the study to understand the reasons for not enrolling and their experiences with FCPs. This is in line with the Cancun Safeguards (par.2 of Appendix 1 of the Decision 1/CP.16) that advocates for inclusion of local knowledge, rights, effective participation, and enhancement of social benefits if REDD+ is to work (UNFCCC 2011).

The survey focused on the nature of benefits, the beneficiaries, and community members' preferred basis for benefit distribution and related decision-making processes. Community members were asked to reflect on the basis or principles of benefit distribution common in PES programs and rank their most preferred basis. Preferences were considered as a proxy for perceived fairness in benefit distribution arrangements. The reasons for their preferences were also documented. As noted above, understanding community preferences can help to determine what people consider to be a fair and just basis for benefit distribution and related decision makers.

Results and discussion

Drawing on the collected data, this section presents the perceptions of community members on FCPs outcomes, their preferences for how benefits should be distributed, and who should be involved in making related decisions. These perceptions are discussed within the distributive and procedural justice frameworks presented above.

Nature of benefits and beneficiaries of FCPs

The nature of benefits and beneficiaries of the FCPs mainly depended on project design. Generally, community members considered that the projects contributed benefits in terms of improved access to monetary payments, increased forest tenure rights, greater opportunities for alternative livelihood sources, and improved social networks and social services. On the other hand, they noted various negative outcomes such as restricted access to forest products, especially firewood, delayed cash payments, insufficient support in alternative

livelihoods, and increase in vermin animals as unfair aspects of the FCPs. The distribution of these positive and negative outcomes varied among participants and nonparticipants, and between state and private projects. In terms of monetary benefits, 30 per cent of 68 project participants reported receipt of cash payments, also known as "carbon payments" for tree planting and/or forest management. Of the recipients, 63 per cent were participants in the state project, while 37 per cent were participants in a private project in Hoima. Cash payments in the "undisclosed project" did not come forth because of unclear tenure rights among the outgrowers. The outgrowers are smallholder farmers in villages adjacent to the tree farming company that had established woodlots on their land. Although key informants in the state project indicated that all CFM groups had received cash payments for their certified emission reductions (CERs), over one-third (37 per cent) denied receiving any such payments. This could be attributed to the fact that (i) cash payments were received through the groups' bank accounts or (ii) cash was never shared directly among members but was instead reinvested in project activities of land clearing and tree planting. Some participants considered this unfair, as they had already waited for over five years with the expectation to benefit directly from the carbon payments. A 62-year-old male participant in the state project expressed his disappointment as follows

> The project is not helping me in any way, yet we have spent a lot on it. The seventeen million Uganda Shillings (UGX 17,000,000/=)[6] we got has no impact. It has not helped me in anyway because I never received part of it. We were told by our leaders that the money is doing project work.

Such statements highlight three issues: first, participants expected to benefit at individual or household level; second, some participants were not involved in the decision-making process of reinvesting cash payments in project activities, and, third, leaders might have been less transparent and accountable than they should have been. Another study indicates that such dissenting voices could also be from individuals with limited information due to their failure to attend meetings (Namaalwa et al. 2017). However, it is important to always pay attention to dissatisfied individuals or groups, because they can impact future decision-making processes as was the case in the state project where participants demanded to participate in decision making through voting.

In Hoima, 33 per cent of the participants were receiving cash payments for forest conservation even when contracts with the REDD+ pilot project had not materialized. A personal communication with the Chimpanzee Sanctuary and Wildlife Conservation Trust field staff revealed that individual contracts with private forest owners were delayed due to challenges in securing customary land certificates (CLCs). Even then, in one of the villages, private forest owners were receiving payments in form of children's school fees from an independent foreign researcher who had worked in the community for over

five years. The amount received depended on the area of forest under each household and ranged from UGX 250,000/= to 500,000/= per school term (a period of three months). However, the beneficiaries lacked any formal contracts with the researcher, and it was unclear when such payments would end and under what circumstances.

Overall, the beneficiaries of monetary payments were those who had secure tenure rights and had formally registered with community-based associations implementing forestry activities. This finding supports the argument that cash payments accrue to individuals who invest in the delivery of an environmental service (Wunder et al. 2018). While it is fair to provide cash payments to those who bear conservation costs, there is a high risk of widening the gap between landowners with secure tenure rights and those with untitled land or the landless. For example, Aganyira et al. (2020) found that the youth were less likely to participate and benefit from FCPs implemented on private land, because they lacked secure tenure over land.

With regard to nonmonetary benefits, these depended on project design and varied across case studies. For instance, community members adjacent to the state forest reserve reported increased tenure rights through the collaborative forest management arrangements with national forestry authority. Allocating part of the reserve to community groups created an opportunity for all community members to participate in forest management. To affirm this, a 46-year-old male RECPA member expressed his feelings about the project as follows:

> In the past we did not see the value of this forest (Rwoho CFR). We saw it as a government resource and not ours. However, when national forestry authority allocated part of the forest to our association (RECPA), our interest in forest management activities increased. In fact, we realized that we are also part of government.

Based on this view, it can be argued that PES in state forests can empower communities to actively participate in co-management of forest resources. Co-management of public resources helps to devolve power and authority to the local level, creating opportunities for community members' active participation (Quimby & Levine 2018). Whereas community participation is vital for provision of social benefits, conservation programs often fail to account for the internal diversity inherent in communities, and this may exacerbate social inequality (Ibid). Besides, when state agencies fail to engage and consider community members' needs and concerns, conservation programs will not be supported and are likely to fail (e.g., see Aganyira et al. 2019; Cavanagh & Benjaminsen 2014).

In contrast, community members adjacent to private projects reported increased restrictions in forest access and use. In Hoima, strict regulations in forest management seemed to worry nonforest owners. More females than males were likely to report reduced access to forest use ($x^2 = 9.330$, $p = 0.009$). This could be attributed to women's direct use of forest products, especially

water and firewood, for their household needs. During a group discussion in Hoima, a 59-year-old widow expressed her fears in relation to access to forest resources as follows:

> I think in future, cooking will be very difficult if we don't keep trees on our land. We already struggle to get firewood and it is worse for those without land. Forest owners have of recent become very strict and will not allow you to just enter the forest to collect firewood.

Another 40-year-old-widow was distressed by her failure to access forest products and noted that:

> These days if you go to the forest, they (forest owners) chase you immediately. They even don't allow you to get firewood and poles. In fact, a house can collapse over your head because you have nowhere to get building poles.

While such restrictions are good for carbon emissions reduction and biodiversity conservation, they can adversely affect the community members, especially women. This may also create conflicts between participating and nonparticipating households, thus putting into question the sustainability of community participation in the PES programs. Solomonian and Ruggiero (2021) have argued that solving the environmental crises we face today (e.g., climate change) will require adoption of a socially just approach. To achieve this, those working to achieve conservation must respect the rights of all community members as stipulated in Cancun Safeguards (UNFCCC 2011).

Other nonmonetary benefits reported included access to village savings and loan associations (VSLAs), free tree seedlings to community members, training in conservation farming and access to farm inputs, support with social services such as schools, churches, water sources, roads, and a health center (e.g., in the undisclosed project), provision of beehives, and social networking. Project participants seemed to have benefited more than nonparticipants, whereas the nonmonetary benefits were expected to be accessed by all community members. This was due to two main reasons: (i) there was no clear channel of communication to nonparticipants regarding access to benefits and (ii) some benefits were too few to be shared among all community members, e.g., the beehives in Hoima and cows in the undisclosed project. Based on this, it is noted that inclusive communication and involvement in decision making during project implementation is required to ensure fairness in access to nonmonetary benefits.

Community members' preferences in benefit distribution mechanisms

Survey results indicate that community members ranked *effort* (57 per cent) and *egalitarian principles* (39 per cent), respectively, as their most preferred

basis for benefit distribution in FCPs. Only 4 per cent indicated *need* as their preferred basis for benefit distribution. Chi-square tests indicate that respondents' preferences for benefit distribution were associated with the type of project ($x^2 = 10.341$, $p = 0.035$) and participation status ($x^2 = 12.213$, $p = 0.002$). While most respondents in Rwoho (62 per cent) and Hoima (64 per cent) preferred distribution based on *effort*, the majority in undisclosed (53 per cent) preferred *egalitarian* distribution.

Distribution based on *effort* was preferred for monetary benefits, as participants hoped to receive payments based on individual or household input. For instance, participants in the state project expected to share cash payments based on the number of carbon shares a member had acquired. Those in private projects expected to receive payments based on the size and condition of the forest enrolled in the REDD+ pilot project. Such distribution based on effort or input is well aligned with the conditionality principle of PES innovations where individuals or groups are compensated based on their performance in the delivery of an agreed upon environmental service (Wunder 2015, 2018).

Egalitarian or equal access was preferred for the distribution of non-monetary benefits. Preference for equal access suggests a win-win for all project-affected persons, including the most vulnerable social groups. When benefits are inclusive, community members are likely to develop a positive attitude towards conservation as was the case in the "undisclosed" project. This supports the argument by Reed et al. (2018) that ideal participation occurs when people can access benefits, and Agrawal (2001) points that participation should cater for the voices of the often-neglected social groups. Findings in the case studies contribute to the participation debates, and we argue that all project-affected persons, including the vulnerable groups like women, youth, and landless should be engaged before and during PES implementation. This may not only address the current social injustices but is also likely to contribute to the attainment of the sustainable development goals (SDGs): 1 on ending poverty, 9 on innovations, 13 on climate action, 15 on life on land, and 16 on peace and justice.

The underlying reasons why *effort* and *egalitarian* were the most preferred mechanisms for benefit distribution emerged from focus group discussions. For instance, distribution based on effort was preferred by respondents, because they believed that it rewards hard work, motivates others, provides public goods such as fresh air, and promotes ownership and responsibility. As one 65-year-old male participant in a private project noted:

> As a forest owner, I spend a lot of time patrolling the forest. I am also questioned by community forest monitors and project managers when trees are cut down. I feel it would be unfair to reward all of us equally, yet a forest owner puts in more time and sometimes financial resources to protect the forest.

Preference for *egalitarian principles* in the distribution of nonmonetary benefits was based on the common feeling that forest protection affects all people through restrictions on resource extraction and therefore should benefit all without discrimination. For example, in the undisclosed community where most respondents preferred egalitarian distribution, it was observed that the provision of social services, such as water sources (boreholes), health care centers, support to neighboring schools by the private company, was believed to have created a positive attitude toward forest protection. This was also observed in community members' willingness to voluntarily monitor illegal activities. These findings support the view that provision of social services can help to achieve equitable distribution of PES benefits, especially if all people have equal access to the services provided (Martin et al. 2014; Sommerville et al. 2010). It has also been argued that the provision of social services is less likely to be affected by the elite capture as compared to monetary benefits (Dunlop & Corbera 2016).

Furthermore, respondents felt that carbon projects should be designed to facilitate inclusive benefit distribution, as expressed by a 64-year-old male participant in a private project:

> My view is that anything to do with money as an appreciation for forest protection should strictly go to private forest owners (PFO's). Then other benefits such as provision of energy saving stoves, tree seedlings, participation in training and sensitization programmes among others can be accessed by everyone in the community.

In the same manner, a community forest monitor in REDD+ pilot project noted that:

> For forest association members, carbon money should be given according to the size of forest and how best it has been protected. Then we can also decide to invest some money into our village savings and loan association (VSLA) where non-forest owners can benefit through borrowing at a small interest rate.

These community members' perspectives suggest that benefit distribution mechanisms ought to be inclusive with both participants and nonparticipants having access to benefits, using a combination of distribution mechanisms. Community members' view of combining distribution mechanisms aligns with what some authors describe as "fairness." Quimby and Levine (2018) argue that fairness or social justice goes beyond mere equity (i.e., who gets what) to include who gets what in relation to counterparts and why.

Despite the unanimous agreement that all project-affected persons ought to access nonmonetary benefits, the local leaders that were interviewed observed that the quantity and quality of the benefits provided depend on the choice

and capacity of the project managers. It was noted that some decisions made by project managers were disliked by the community members who preferred to be involved in planning for benefit allocation. For instance, private forest owners in Hoima narrated their experience with a PES pilot project that they had participated in prior to the REDD+ project. They expressed concern over the fact that the PES project supported them with exotic piglets as an alternative source of income. As many of the beneficiaries lacked experience and capacity to take care of the piglets, the piggery project was short lived. Buying food for the piglets was perceived as "another burden" to the poor farmers. They noted that local breeds of piglets would have worked better. Based on this experience, the leaders suggested that the project managers should endeavor to consult community members on the nature of benefits deemed appropriate to their local contexts. Therefore, understanding context-specific social values and practices and drawing upon the vast indigenous knowledge systems (IKS) (Tripathi & Bhattarya 2004) is vital for effective conservation innovations like PES. Local-level considerations may remain elusive if the power in determining the "rules of the game" remain primarily with the state agencies (Ahebwa et al. 2012), and where sufficient possibilities for the affected communities and individuals to have their views heard are not guaranteed.

Community member's preferences in decision-making procedures

Participants' and nonparticipants' most preferred decision-making procedures in the distribution of forestry carbon benefits were decisions made by leaders in consultation with community members (57 per cent), leaders (17 per cent), consultation and voting (13 per cent), and project managers (13 per cent). Chi-square tests revealed an association between the preferred decision-making procedure and type of project (i.e., $x^2 = 62.501$, $p < 0.001$), and participation status ($x^2 = 16.272$, $p = 0.001$). While leaders in consultation with community members was the most preferred procedure by respondents in private projects, consultation and voting seemed more important in the state project. In the latter, consultation and voting was mainly preferred by participants (74 per cent) compared to nonparticipants (44 per cent) who preferred decision making by leaders.

Through individual interviews, it emerged that most participants preferred consultation and voting because of the alleged unfair decisions previously made by their leaders. Some RECPA members expressed dissatisfaction with the decision to reinvest carbon money in project activities, as was expressed by a 74-year-old widow:

> When we (RECPA members) got the carbon money, leaders called a general meeting. During that meeting, leaders simply informed us that the money was to be re-invested in group activities – a decision some of us didn't like. After many years of hard work and investment, I expected that we would re-invest part of the money and share the rest.

Such a voice suggests a low level of participation in the consultation process, as the consulted are left unsatisfied with the leaders' decisions. There was a general feeling among participants that RECPA leaders had made a predetermined decision, given that they did not give members a chance to explore other alternatives. This finding aligns with the previous studies, which suggest that decisions are often dominated by local elites, who may be male and wealthy (Agrawal 2001; Yadav et al. 2016). When leaders' decision-making powers are not regulated, challenges related to elite capture are likely to emerge as has been reported in other PES schemes (Shrestha & Shrestha 2017; Sommerville et al. 2010). However, elite capture can be mitigated if leaders are held accountable by the community and if community members participate directly in decision-making through voting exercises.

During group discussions and individual interviews, respondents gave reasons for the preferred choices of decision making. For example, preference for leaders in consultation with communities was based on the belief that consultations keep them informed, united, and create opportunities to sustain the decision outcomes. Others argued that consultation reduces disagreements and potential conflicts. In contrast, Pretty (1995) argues that consultations may not be useful if the views of those consulted are ignored in decision making. Furthermore, a key lesson from the case studies is that community members are not passive during consultations. They observe and respond to unfairness, and may later demand for fair decision-making processes as was observed in the state project where participants demanded to vote if future carbon payments are received. Some nonparticipants seemed to trust and prefer leaders to make key decisions on their behalf. Given that the level of trust may vary in space and time, it is necessary for FCPs to establish how community members may wish to be involved in the decision-making processes. Consequently, the state agencies and conservationists ought to conduct ex-ante assessments to identify and incorporate local peoples' needs and preferences in decision-making processes. This will help to make the distributive and procedural processes in PES innovations more inclusive.

Conclusion

Three lessons emerge from this chapter. First, the findings show that community members perceived PES projects as beneficial due to their monetary and nonmonetary benefits. However, the distribution of these benefits varied within and across projects. Benefits were more likely to be enjoyed by those who formally enrolled to participate in project activities than those who did not. Moreover, it is noted that the enrolment criteria may not favor all potential participants (see Aganyira et al. 2020). The lack of secure tenure rights and the failure to access project information may continue to exclude most community members from PES benefits. The unequal distribution of benefits that follows from this may exacerbate the existing social inequality. To ensure inclusive PES programs in Uganda, conservationists in collaboration

with local governments should support rural households to acquire customary land certificates. While this might be a costly and time-consuming process, it could be beneficial for both the people and forests in the long term.

Secondly, community members preferred an inclusive benefit distribution mechanism where cash payments are distributed based on individual or household's effort towards forest restoration and or conservation, and equal access to nonmonetary benefits by all project-affected persons (distributive justice). Respondents argued that it would not only be fair to reward individuals that contribute more than others but also take into consideration the needs of those affected by the project activities. Furthermore, community members preferred to be involved in decision making processes (procedural justice). Their desire to participate in decision making largely depended on their past experiences and power relations. Some participants in the state project accused their leaders of manipulating decisions regarding the allocation of carbon payments. A key lesson here is that community members are not passive during consultation, but observe and judge the process. Participants in the state project called for more participatory decision making, such as voting in the distribution of future carbon payments.

Lastly, community members noted that the quality and quantity of benefits provided by FCPs was largely determined by project managers, sometimes without consideration of whether such incentives are relevant (or not) to the local context. As a result, some livelihood sources introduced by the project (e.g., the piggery project) could not be sustained by beneficiaries. In conclusion, the chapter contributes to conservation and social justice debates in the context of PES innovations, and argues that state agencies and conservationists should be flexible enough to engage and incorporate perspectives of all project-affected persons before and during the project implementation. Inclusive PES processes, including consultation of stakeholders in all stages of the project design, may be more costly and time consuming, but are obviously better than an intervention that does not find sustainable support with stakeholders in affected communities.

Notes

1 See e.g., the National Forestry Policy, 2001; the National Forestry and Tree Planting Act, 8/2003; the National Environment Management Policy, 2014; the National Climate Change Policy, 2015; the Environment and Social Safeguards Policy, 2018; and the National Environment Act, 2019.
2 The undisclosed tree farming private company sought no disclosure by this study because it is a business and wished to remain confidential. To this effect, a memorandum of understanding was signed between the company and the first author.
3 A/R refers to Afforestation and Reforestation, RECPA refers to Rwoho Environmental Conservation and Protection Association (one of the CFM groups).
4 The North Albertine Rift Conservation Group (NARCG) comprises of six conservation organizations: Wildlife Conservation Society (WCS) as the lead in the REDD+ pilot project, Chimpanzee Sanctuary and Wildlife Trust (CSWT), Jane Goodall Institute (JGI), Ecotrust, Worldwide Fund for Nature (WWF) and Nature Harness Initiative (NAHI).

5 FSC refers to Forestry Stewardship Council and FPIC refers to Free Prior and Informed Consent.
6 At the time of fieldwork, UGX 3500 was equivalent to 1 US Dollar.

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