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A holistic framework for participatory conservation approaches

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ABSTRACT

Organizations seeking better methods for conservation have attempted to use participatory processes to fulfill human and ecological/environmental goals. As a result, the academic literature is filled with examples of community-level approaches to conservation. While such case studies are highly valuable, much of this literature has placed a strong emphasis on the institutional conditions surrounding successful participatory practices. Here, we seek to complement the participatory conservation literature with the community participation literature, which has tended to follow an actor-centered (e.g., residents) approach to successful participatory practices. By merging these two literatures, our goal is to offer a holistic framework that accounts for a more comprehensive understanding of the different forms and benefits of participation. We hope this framework will serve as a tool for field practitioners to implement the most effective action plans resulting in greater future successes.

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Introduction

Participatory processes have become one of the most used mechanisms for designing, implementing, and managing developmental goals during the last four decades (Chambers 1983; Agrawal and Gibson 1999; Wendel et al. 2009; Bockstael et al. 2016; Tanto and Simatele 2017; Méndez-López et al. 2018; Sullivan 2019). Such participatory mechanisms have been fueled by the failure of top-down approaches to deliver effective and long-lasting outcomes (Tosun 2000; Goldman 2003), the reduction of welfare states (McMichael 2011), and an increasing predominance of ethical arguments fostering equality and democracy in development issues (West et al. 2006).

The literature is full of examples of participatory processes that seek to promote sustainable development around the world. Indeed, the field of conservation is replete with case studies of participatory approaches, driven by broad concerns over the negative social and economic impacts of conservation, particularly for communities whose livelihoods depend on natural resources. Much of this literature, however, has placed a strong emphasis on what we call, the structural side of participation, commonly concerned with the institutional conditions surrounding successful participatory practices. While we believe this literature has provided important highlights to understand the successes of participatory practices, there is another facet of such practices that has been left mainly unaccounted for. That is why we seek here to complement the participatory conservation literature with the

community participation literature, which has tended to focus on what we call, the actor-centered (e.g. residents) side of participatory processes. Thus, our main goal is to offer a holistic framework that accounts for both the institutional and actor sides of participation by merging the lessons learned from both literatures. Through the offered framework, we aim to deliver a comprehensive understanding of the different aspects for practitioners to consider when seeking successful participatory conservation strategies.

To reach our goal, the paper is structured as follows. We first offer a discussion of the two prominent ways in which participatory practices view and treat community. Such discussion is critical to understand the different ways practitioners and academics define community in the two literatures we explore. Then, grounded in the community participation literature, we discuss the actor-centered conditions for successful participatory practices commonly discussed in the literature. In the next section, we elaborate on the institutional side of participatory practices by examining the critical conditions for successful participatory approaches in conservation. We conclude by merging these two approaches in a framework for participatory practices.

Community

Community is an elusive term, defined differently depending on the entity or stakeholder. Defining 'community' is critical for the examination of participatory practices given that such differences dictate the approach people take when implementing bottom-up

strategies. Here, we discuss the two prominent ways in which community is viewed in the two broader literatures we explore: community participation and participatory conservation.

The diversity of forms in which these two literatures define community depart from the emphasis they place on the foundational components or elements of a community. Elements like people, institutions, and physical/geographical space are all important aspects of a community. Academics and practitioners often tend to focus on one of those components when outlining their view of community, reflecting academic training/traditions. As they emphasize one or few of those elements, so does their definition of community. As this occurs, tradeoffs are developed, as focusing on particular elements might obscure other important aspects, thus providing only a partial view of what a community entails and the interactions between these elements. However, in an effort to better distinguish why participatory practices differ as they relate to particular definitions/views of community, we provide a brief summary of the most common ways in which the terms are used in the literature.

In the case of the community participation literature, community is commonly defined by emphasizing people (Warren 1987), particularly residents. This literature defines/views community where residents of a particular place play a central role in their community's development. From this approach, the ways communities develop depend entirely on the relationships that people foster and maintain (Wilkinson 1991). This approach emphasizes *interactional* aspects of a community (Kaufman 1959; Wilkinson 1991; Bridger and Luloff 1999). From such interactions, material and non-material outcomes are produced, all of which are critical for the development and growth of communities. Institutions (defined here as mainly organizations), infrastructure, and even social-psychological aspects like cohesion, agency, social capital, group identity, and attachment, are all results from the interaction of people within communities. Thus, from this perspective, community exists when people are set at the starting point, whereas their interactions provide the backbone of community (Wilkinson 1991).

From a participatory standpoint, defining/viewing community allows us to inquire about residents' needs and wants, and the ways they formally and informally organize in order to achieve them. For instance: What do residents of this community believe in? What do they fear? What is their main vision for the community? What are their relationships with their built and natural environments? How do they approach changing living conditions? How do they associate with other actors in order to accomplish goals? How do they collaborate with existing institutions in order to achieve common objectives? The

answers to these critical questions should help define the parameters of participatory processes.

In participatory conservation, much of the literature sees community as a spatial unit, a homogenous social structure, and as a set of common interests and shared norms (Wright et al. 2016). While recognizing the importance of these views of community in developing community-level strategies, Agrawal and Gibson (1999) suggest that 'greater attention be placed on three critical aspects of communities: the multiple actors' interests that make up communities, the processes through which these actors interrelate, and, especially, the institutional arrangements that structure their interactions.' (p.636). Institutions in this definition are regarded as a set of formal and informal rules that shape interactions between actors and with the natural resources. More importantly, institutions remain the primary mechanism available to mediate, structure and facilitate particular outcomes and actions at the community level (Agrawal and Gibson 1999). As a result, Common pool theorists have also advanced the development of institutions to address collective choices situation in resource management by empowering locals in the decision-making process (Armitage 2005).

Focusing on institutions as central to communities, allows us to ask questions like, which actors have the authority to manage resources? who has the right to benefits from these resources? who has the authority to monitor and enforce rules around resource use? Which actor represents the interests of the community in the decision-making process?

In summary, the ways each of these literatures have defined/viewed community has implications on how participatory approaches take place. An actor-based approach to defining community leads to a different focus and subsequently applicability as compared to an institutions-based approach. The following section summarizes such approaches with particular emphasis on what factors lead to success.

Participatory conservation

Prior to the emergence of participatory approaches, the practice of conservation management has traditionally taken a top-down approach characterized by an imposition of natural resource management rules by formal institutions (e.g., government). Alternative to this traditional approach, bottom-up strategies have become more prominent in recent decades. These latter approaches are characterized by the incorporation of inclusive practices in which communities participate, some way or another, in the management of their natural resources. As noted earlier, participatory conservation places greater emphasis on institutional arrangements to support its conservation goals and empower local communities in the process.

With the right conditions, participatory conservation approaches can lead to a series of potential benefits. Agrawal (1996) noted how a community-based forest management program founded on common property rights principles (in which communities own and manage their resources) resulted in lower management costs and higher economic benefits for communities. Additionally, participatory approaches have been reported to lead to better knowledge dissemination, capacity building, community social resiliency, and redistribution of revenues (Nelson and Agrawal 2008; Sheppard et al. 2010). Furthermore, empirical research has found a relationship between perceived social and economic benefits derived from community participation in the management of natural resources and proactive conservation behaviors (Stronza and Pegas 2008; Swemmer et al. 2015; Sène -Harper et al. 2019). That is, when communities perceive economic and social benefits of being involved in conservation efforts, residents are more likely to develop attitudes and behaviors in support of conservation efforts (Agrawal and Redford 2006; Swemmer et al. 2015). Thus, participatory approaches have the potential to foster the conditions that lead to conservation behaviors among locals given that the perceived benefits of conservation are higher than the costs.

While many conservation scholars and policy makers champion participatory approaches, Ostrom (2007) cautioned that assigning a simple panacea model may overlook conditions critical to achieving conservation goals, and thus are important to understand prior to implementing participatory programs. First, understanding the ecology and biology of the resource in question (e.g. fish, wildlife, water) within an ecosystem plays a large role in shaping participatory practices. This is because certain characteristics of the resource (e.g., spatial mobility; seasonal fluctuations) will influence decisions about which local communities should be included in the program, what type of responsibilities, and how much power should be allocated to local people (see Agrawal 2001 for a complete review). Additionally, Ostrom (1990) noted that clearly defined physical/geographical boundaries are a key condition towards successful community-based resource management. When boundaries are clearly delineated into territorial units, then management of resources can be delegated to specific communities. In fact, the creation of nature reserves has been an important mechanism for implementing community-based or community-driven conservation programs (Child 1996; Frost and Bond 2008). When the boundaries are not easily defined, resource ownership can be contested and there is a higher chance for ambiguity when defining participatory practices.

Second, understanding the relationship between the community and a resource is critical for designing

participatory approaches. More specifically, it is important to understand the economic and cultural role of a resource in the livelihoods of community members in order to determine the most appropriate level and form of participation from communities (Hoole and Berkes 2010). Ostrom (2009) contends that when community members are dependent on the resource for a substantial portion of their livelihoods or attach a high value to the sustainability of the resource, they are more likely to effectively organize themselves and invest greater time and effort in participating in the conservation project.

Once such conditions are understood, critical factors defining successful conservation participatory efforts (e.g., those that reach community-defined social and ecological goals) can be defined. As noted earlier, participatory conservation efforts are often predicated on institutional reforms to support locals' participation in the decision-making process and management of natural resources (Armitage 2005). Often, these participatory institutional arrangements entail the legal transfer of management and property rights of natural resources from government to a local representative of the community (e.g. local authorities, community-based organization) (Ribot 2004). Through these mechanisms, communities and their residents are empowered in order to make their participation more valid and effective. Research shows that when communities have secured legal authority to make decisions over the management of their resources and their ownership, motivation and opportunities for local participation are created (Blomley 2010). A precursor to successful community participation noted by the literature is the development of a legal framework that provides a fertile ground for desired outcomes (Child 1996; Frost and Bond 2008). The literature has showed that, on the other hand, programs that are not accompanied by substantive power transfer through a legal framework obstruct the participation of communities (Agrawal and Ostrom 2001; Ribot 2004). For instance, participatory programs for protected areas often take place without the transfer of property rights to the local communities (Sène-Harper and Séyé 2019). In such cases, while communities are consulted in initial phases of conservation programs, their meaningful role in the decision-making process is constrained by the lack of property rights or management rights. Although reforms are implemented to decentralize the management of resources to local communities, powerful actors manipulate decisions to obstruct the full allocation of power to local communities (Poteete and Ribot 2011).

The transfer of management rights and/or resource ownership to the local community often requires a restructuring of the existing institutional system across different levels (i.e. community and national) – the second important factor for successful participatory conservation programs. According to the literature,

such reforms should start with modifications of regulations within government institutions in charge of natural resource management in order to promote a fertile ground for local organizations to participate in conservation efforts (Larson and Soto 2008). Following such reforms, the institutional framework at the local level within which natural resources are managed is also restructured, commonly leading to the establishment of community-based organizations (CBO) or the formalization of local customary institutions to legally represent the interest of the community (Njaya et al. 2012; Zulu 2012). As such, through the newly formed CBO or formal authority, local communities are empowered to institute their own resource use laws and regulations within the limits of national laws (McClanahan et al. 2016). Findings from a rich body of knowledge (c.f. Blomley 2010; Njaya et al. 2011; Zulu 2012) indicate that the legal framework that accompanies most participatory conservation programs determine the form and level of community participation in such projects. Overall, the restructuring of the institutional system introduces deep changes at the multiple levels in ways that formal institution and communities have to reorganize and reinvent themselves to engage in participatory forms of conservation.

In many developing countries, the legal transfer of power and resource ownership to communities often happens without putting in place mechanisms to ensure downward accountability of local authorities (Agrawal and Ribot 1999) which obstructs the mobilization of local communities to participate in the management and use of local resources and is another critical factor for success (Ribot 2004). When there is no mechanism in which local organizations or authorities have to report back to the community members in a transparent way, authorities can misuse their power to pursue their own interests (Ribot 2004). Although the restructuring of the institutional system plays an important role in participatory conservation programs, successful community participation is deeply dependent on the level of downward accountability of local organizations to the local population.

As noted above, there are multiple factors that are critical to be accounted for when understanding participatory practices within the context of conservation. Early success measures for participatory processes within conservation require the acknowledgment of factors like resource allocation, institutional systems, and accountability as they all influence the level of community participation. While these factors ultimately influence the participation of residents, they are highly linked to issues of governance, focused on the institutions that are supplying participatory practices to local communities. In the following section, we will explore a different literature which has focused on the demand side of

participatory practices, vis a vis the residents of a community.

Community participation

As noted earlier, the literature on community participation has predominantly focused on an actor-based definition of community. This approach calls for the inclusion of residents of a community as the main actors in participatory processes. While we acknowledge that it is impossible to have the entire population of a community engaged in a participatory process, the important aspect here is one of 'open representation' – a process that gives the opportunity to the entire spectrum of residents to participate (Woodford and Preston 2011). Based on this, we define community participation as a process where the residents of a community actively engage in their own development.

Similarly, than in the case of participatory conservation, with the right conditions, community participation can lead to a series of benefits for society. The literature on community participation notes that power reversal or empowerment is one of the most critical benefits of participatory practices (Arnstein 1969; Chambers 1983; Guaraldo 1996; Craig 2002; Pigg and Bradshaw 2003; Mansuri and Rao 2004; Laverack 2005). Community participation can also result in an increased rate of program success (Richards and Dalbey 2006; Wendel et al. 2009), reduced conflict between competing stakeholders of a program/activity (Western and Wright 1994), heightened sense of ownership, responsibility, self-reliance (Rifkin 1996; Zakus and Lysack 1998; Tosun 2000; Matarrita-Cascante and Brennan 2012) and increased community capacity and agency (Simpson et al. 2003; Wendel et al. 2009; Matarrita-Cascante et al. 2010). Thus, as noted in the literature, as a result of community participation, ways that directly and indirectly improve local living conditions are established.

Despite these well-known benefits, community participation is complex and diverse, and factors impeding success are abundant. There is variability in terms of the forms of participation engaged in, the levels of involvement gained/given to residents, and the level of citizen control gained/given (Arnstein 1969; Cornwall 2008) in all participatory practices. Thus, an understanding of successful community participation (e.g., participatory processes that achieve the goals set by residents of a community) requires a close examination of it, which we describe below.

Perhaps the most important aspect that participatory practices should seek to achieve is how much power they provide to residents of a community. In her seminal piece, Arnstein (1969) characterized the different types of *control* that residents achieved/are

given from engaging or being asked to engage in a participatory process. These ranged from non-participation (manipulation, therapy), to tokenism (informing, consultation, placation), to citizen control (partnership, delegated power, citizen control). Control is critical because it reflects the degree in which a participatory process can generate democratic outcomes. This is often the case of participatory processes that are narrowly defined, which do not empower residents and typically lead to wasted resources, increased distrust and resentment, with the possibility of violent conflict – all of which lead to disdain for participatory practices (Arnstein 1969; Laverack 2006). Critical to control is the notion of power, defined here as a force that allows the materialization of desired goals (Craig 2002; Laverack 2006). Power in this sense can be given (e.g., the local municipality allows citizens to decide how to establish a particular project), it can be taken (e.g., residents agree on boycotting the big chain store by buying only local), or everything in between (Arnstein 1969; Craig 2002; Pigg and Bradshaw 2003; Laverack 2006). Although typically the case, power does not necessarily reside on the project initiator, which can be organized residents or an organization. Cornwall (2008) notes, for instance, that while resident-initiated programs were ‘the nirvana of participation in the 1980s and 1990s...self-initiated mobilization may or may not challenge existing distributions of wealth and power’ (p. 271). Power, however, is more related to the intentions and motivations (yet not the only defining factor as we will discuss below) from both the initiating and the receiving end (White 1996) occurring in participatory practices. Power holders can engage in participatory processes that are not intended to provide residents with the ability to control their development as in the case of what Pretty (1995) calls manipulative participation or Arnstein (1969) calls therapy forms of participation. On the other hand, power holders can delegate or lose power as in the case of interactive (Pretty 1995), or transformative participation (White 1996) approaches. Ultimately, the importance of control in participation is the level in which participation does indeed generate citizen-directed change.

Cornwall (2008) noted that intentionality does not capture the entire context and suggested that the mechanisms used to engage in participation are key to achieving resident-desired outcomes. In that sense, the *forms* in which participatory processes take place is also a critical aspect and associated with the types of actions that residents engage in to exercise participation. Participatory actions materialize in ways that range from passive (e.g., one-way communication seeking information, voicing an opinion in a public meeting) to active ways (e.g., mobilization of residents, residents managing a program; Thompson et al. 2009). It can be argued that passive and active forms of participation

cannot be ranked in a way where active forms have more weight than passive ones. After all, expressing an opinion can be considered a passive way of participation that can lead to important outcomes (Cornwall 2008). However, the literature has often linked active participatory processes with more desirable and meaningful outcomes for communities (Campbell and Vainio-Mattila 2003; Richards and Dalbey 2006). We believe this happens because 1) active forms contain almost by default many forms of passive ones and 2) of the series of benefits that emerge from active forms of participation beyond desired outcomes, as in the case of increased confidence and skills, social capital, capacity, and agency (Cornwall 2008).

Finally, the *level of involvement* that residents have/are given in participatory practices are important. Such involvement can happen in any stage of a program, including, design, implementation, and management. The literature reports participatory programs that reflect low levels of involvement to residents, as in the case of imposed or directed programs led by non-profits or government agencies seeking to involve residents (Matarrita-Cascante and Brennan 2012). In such cases, residents are passive recipients of participatory practices, defined and implemented by the program initiator where they are involved in minimal ways. Others report programs where residents play a more involved role in the participatory program, leading the way in design, implementation, and management of an intervention, as in the case of self-help grassroots initiatives (Matarrita-Cascante and Brennan 2012). This is often the case where residents actively engage in a process of coming together and developing a program as opposed to being invited/directed to participate by agencies or organizations (Cornwall 2008).

As noted above, there are multiple factors that are critical to be accounted for when understanding participatory processes from an actor-based standpoint. Altogether, these factors define how much residents of a community will decide and act in the search of defined goals. In the following section, we will merge this actor-based approach to participation with the institution-based one in order to provide a holistic framework to participatory practices.

Community participation in the context of conservation

Grounded in the information found in the previous sections, we have created a framework of participation that shows three main forms in which community participation can occur. These three forms differ in terms of the different ways in which participatory practices take effect. Figure 1 provides a visual representation of the different ways in which the different



Figure 1. Different types of community participatory processes.

elements for successful participation described above can materialize.

Based on these, our framework offers three main forms of community participation that include community-located participation, community-based participatory efforts, and community-driven participatory programs (see Table 1). These are discussed below.

Community-located initiative

Participatory actions fitting under the category of community-located participation are those in which an initiative/program is established/led by an institution (initiating organization from hereafter). Residents are not involved in establishing such a program yet the participatory role of the residents is often necessary by the initiating organization as a requisite to their objectives. This is usually seen in the case of organizations that either respond to a larger funding organization or are mandated by a program developed by the government or a non-profit. A common example includes the situation where institutions are mandated to involve the community as a requisite to receive funding or approval in order to continue with a program/activity. Pateman (1970) notes how this type of participation is observable:

[Many government-led programs] provide residents with an opportunity to participate but really have no power to make decisions. Government agencies frequently are required to include some form of public participation but are unwilling to leave the decision-making process to local residents. Instead, officials use the opportunity to gain legitimacy for their decisions (p.34).

Participatory efforts fitting under this category are characterized by limited resident control throughout most of the development process (e.g., program design, implementation, management). The community's involvement is passive and limited to being informed of an action/program and occasionally asked to share an opinion on such an action/program via community

meetings, focus groups, or a survey. Residents' participation is limited to gathering information about the project in question and formally or informally expressing their views about it. Depending on the motives and mechanisms of the initiating organization, actions fitting under this category can be placed in Arnstein (1969) 'ladder of participation' under tokenism or non-participation, particularly under the 'informing' or 'consultation' categories, where citizen power over the program and its outcomes is non-existent. According to Matarrita-Cascante and Brennan (2012), these types of community development efforts fit under the 'imposed' forms.

Community-located initiatives in conservation are often seen in the establishment of national parks and protected areas. Typically, in such instances, a governmental institution leads the way in the establishment of the park and retains full ownership of resources. Communities are sometimes consulted in the initial phases of the process (Arnstein 1969). For instance, in sub-Saharan Africa, the establishment of protected areas often occurs without the influence of local communities (Bunce et al. 2010). While conservation program managers may consult with local authorities in the initial phase, community members are not always made aware of the new rules and regulations for resource use in and around the park and can become a source of conflict in the future (Igoe and Croucher 2007; Bunce et al. 2010). Thus, in this way the participation of community members in the decision-making process is minimal.

Most conservation community-located initiatives do not entail a transfer of resource ownership to local communities. In these situations, the government has full ownership of resources and retains it, leading the design, implementation, and management stages of the conservation program. Within this type of initiative, given there is no transfer of ownership of resources to local communities, there is no restructuring of existing institutional systems. That is, the conservation program is implemented within the pre-existing institutional

Table 1. Framework of community participation.

	Community-located initiative	Community-based effort	Community-driven program
Description	Residents have limited input in the design of program yet no role in implementation or management These programs are typically imposed, as they are created and owned by initiating organization/institutions yet seeks input from residents	Residents have larger role in design and implementation of the program yet no management rights These programs are directed, created and owned by initiating organization/ institutions yet later on let residents take larger roles Moderate involvement Semi-active: Residents become member of a group and attend meetings	Residents design, implement, manage and own the program These programs autonomous/self-help created and owned by residents
Level of involvement	Low involvement		High involvement
Forms of involvement (mechanisms)	Passive: Residents gather information on existing issue/program and expresses opinions and or votes on a side		Active: Residents lead program, manage all decisions
Citizen control	No control	Directed control	Resident control
Resource allocation	Resource ownership is NOT transferred to local communities	Government owns resources, but customary law may also apply in resource allocation. Community reserve is created and co-managed by the community and the government.	Resource ownership is shared between the government and local communities, but customary tenure law is principal. Community controls the management of the resource reserve under government approval.
Institutional system adaptation	Follows customary or pre-existing system of community representation. Community representative entity is consulted at the initial phase of project. Limited to no input in the implementation phase, and no management rights.	Some restructuring of local political framework occurs either through the formation of a CBO* or the formalization of customary systems to be included in the decision-making process CBO or customary chief has the authority to represent community interest in the decision making process. However, program management is still externally owned.	Some restructuring of local political framework occurs to include CBO, customary chief and community members in the decision-making process. Ownership and control is at the hand of the local community. While CBO and/or customary chief can as community representatives, community members can also participate in program design and implementation. Collaboration with outside groups is possible.
Accountability	There is no mechanism in which local authorities are accountable to local population.	CBO or local authorities are accountable to the local community; mechanism to ensure downward accountability may be in place but loophole may exist for elite capture	CBO or local authorities are accountable to the local community; Strong mechanisms to ensure downward accountability are in place throughout the entire program
Benefits for residents	Increased knowledge of program Limited empowerment to local residents	Increased social capital Increased trust Increased capacity Increased odds of program support Increased odds of inclusion of local knowledge Increased odds of inclusion of local wants and needs Medium levels of empowerment to local residents	Increased social capital Increased trust Increased capacity Strong odds of program support Inclusion of local knowledge Inclusion of local wants and needs Increased development of management skills High levels of empowerment to local Residents High capacity for self-organization

system at the local and national level. Consequently, communities gain no institutional authority to manage local natural resources. Even though the government is responsible for reporting to the local communities on issues related to the conservation program and how it may affect their livelihoods, there is no system in place to ensure that this happens. Thus, overall, the accountability of government to local communities in these types of participatory approaches is often minimal.

Ultimately, there are a limited number of benefits to local residents through these types of programs, as their conditions do not necessarily empower residents and the benefits to the community limits to the outcomes of the initiative/program.

Community-based initiative

The following two categories include community-based and community-driven initiatives. In community-based participation efforts (see Table 1) the program is typically initiated by an NGO or government agency with the consultation and support of local communities. Within this type of participatory effort, residents are invited to play a larger role in program design, and their input is taken more into account than in the case of community-located type efforts. Their role is more active than the previous categorization, reflected in a more active presence and involvement in the program. Because of this, there is a higher level of control and power gained/assigned to residents than in the previous case. Consequently, there are more benefits to the community including increased social capital, trust, capacity, increased odds of program support, inclusion of local knowledge and needs, and empowerment (Pretty and Smith 2004).

Community-based initiatives within conservation are commonly seen in the case of community-based conservation or community-based natural resource management. In these types of efforts, participation of the community typically takes the form of devolution of ownership and management of wildlife, fisheries, forestry, grassland, and water resources to rural communities through a community-based organization or local authority intended to represent the views of the community (Zulu 2012; Sène-Harper and Séye 2019). Nonetheless, this process is often facilitated by external environmental governmental agencies and NGOs. Perhaps, the most popular and original participatory conservation programs happened in Zimbabwe in 1981 with the establishment of the Communal Area Management Program for Indigenous Resources (CAMPFIRE).

In general terms, when conservation programs take on a community-based approach, it often entails the transfer of resource ownership (to some degree) to local communities. In which case the ownership is

shared between these latter and the government; as such they become partners in the co-management of the resource. For instance, the land reforms to implement more inclusive resource management programs that occurred in the last decade in Tanzania, enabled several communities to declare forest reserves on their communal land. Under these agreements, communities are both owners and managers of the forest resource but the government retains eminent domain over the land. This gives local communities the authority to participate in the management of resources located in the community forest reserve (Blomley 2010). Community participation in this approach involves the implementation and enforcement of resource rules. Sometimes communities can participate in the design of the rules. Furthermore, they are also entitled to economic benefit by participating in activities designed for the sustainable exploitation of the resource.

Because there is a legal transfer of ownership, the restructuring of the political system is also likely to happen in order to implement these resource governance reforms. As such, on numerous occasions, community-based organizations (CBO) were formed to facilitate the transfer of ownership to local communities. When this happens, the CBO becomes the legal representative of local communities and is the intermediary between the government, NGOs, and its constituency. Therefore, community members participate in the management and conservation of their reserve by reporting their interests to the CBO who acts on the behalf of the community (Blomley 2010). While the formation of a CBO is a very common approach, the restructuring can also entail the formalization of a pre-existing institutional system (Putzel et al. 2015), whereby customary authorities become legally recognized as the representative of local communities and have the authority to manage protected areas on the behalf of the community. In these cases, mechanisms are in place to ensure that local authorities or the CBO are held accountable to the local communities. However, it is also common that loopholes exist to constrain this downward accountability and local authorities may use their authority and power to their own advantage, a practice referred to as elite capture (Njaya et al. 2012; Zulu 2012).

Community-driven program

One of the principal characteristics of community-driven participatory programs is that residents play an active role in the creation, development, and leadership of the activities. Because of this, we refer to this participatory level as a *program* – defined in here as a series of efforts that entail coordination and continued work through time. The role of the residents in participating in this category is much larger

as they are more vested in the program and its success. As a result, the residents of the community become highly empowered in the process of guiding their development and receive more benefits including increased social capital, trust, capacity, and strong program support, inclusion of local knowledge and wants/needs.

In this category, the community's involvement consists of activities that reflect full ownership of a program. This leads to highly active forms of involvement, high levels of involvement, and high levels of control and power gained by the residents, which are, a cause and a consequence necessary in the context of designing, implementing, and managing a program. This results in activities that not only help residents reach the goals they want to reach, but will also gain many other benefits including learning new skills and building relationships among themselves. While design, implementation, and management of solutions and/or programs are in the hands of the community, this does not mean that outside help from government or NGOs in the form of technical or financial assistance will disqualify the program from being community-driven. As found by Guaraldo (1996), there are many instances of community organizations developing and leading programs with outside assistance.

Within this type of participatory programs, residents will recruit others to attend meetings, lead meetings, and partake in all kinds of clerical activities that assist in the establishment, implementation, and management of a program. Efforts fitting under this category reflect Arnstein (1969) category of 'citizen control' in her ladder of citizen participation and Matarrita-Cascante and Brennan (2012) 'self-help' form of community development.

Community-driven types programs in the context of conservation are often supported through adaptive resource management approach (Olsson et al. 2003; Folke et al. 2005; Mendis-Millard and Reed 2007). In this model, developing communities' the capacity to self-organize by processes of learning by doing is a critical element (Armitage 2005). For example, adaptive management of two biosphere reserves in Canada, resulted in management by community members, explain that community capacity can be identified as 'specific mobilizers, grouped into the three categories of individual characteristics, community consciousness, and collective commitment, as key components driving a biosphere reserve's capacity' (Mendis-Millard and Reed 2007).

While the institutional system does not differ much from that of the community-based approach, communities are engaged in more phases of the conservation program. In fact, the impetus for the project may not originate from within the community, it is necessary that the project be owned by the community via participation and implementation (Seixas and Davy 2008). In

many cases, the community is a co-owner of the natural resource and has the authority to design, implement, and enforce rules. In addition, community-driven approaches also entail their participation to include resource monitoring. Community members can also organize themselves in response to environmental issues that are affecting their well-being and actively seek external support (Seixas and Davy 2008). As a result, they are the main driver of the program, managing, and monitoring their resources with the technical and financial support of external agencies.

Conclusions

This conceptual paper seeks to offer a framework of participation within the context of conservation. Our goal is to provide a framework to a growing and sometimes cumbersome literature. We did this by applying important elements of the participatory conservation literature to a framework designed from the development literature.

From the developed framework (Table 1), we can see that conservation participatory projects require the understanding of factors like resource allocation, institutional systems, and accountability in order to better develop more grounded, enriched, and successful models of participation. The inclusion of these factors in participatory models allow us to better understand how community participation does and can play positive roles in the livelihoods of residents. For instance, it is evident that participation models have different outcomes in peoples' lives as a result of the levels/application of the different factors explored here. We also note, from our contextualized model, that participatory practices that have the largest potential to modify the livelihoods of communities should take a community-driven approach – something that does not happen regularly. But more importantly, we believe our framework will provide a model to help better design participatory process that may have a better chance for impact with the community. Without the resource allocation, institutional re-arrangements, or accountability mechanisms in place, participatory practices are doomed to produce little to none long-lasting positive results within peoples' lives. Thus, policy makers and practitioners need to incorporate mechanisms to ensure that these factors are in place to provide a fertile ground for successful participatory practices to bloom. The role of researchers in this is critical. Researchers have the key role of outlining and clarifying factors and contexts of participatory models. Thus, academia plays an important role in providing the framework for participatory practices that can be implemented by various practitioners.

Ultimately, the goal of participatory practices is to improve peoples' lives. In order for these to be successful, we need to better design models that

understand and account for the important contextual aspects of a situation. Without these, we can fall into a 'one-size-all' recipe that could potentially fail into a waste of time, resources, and improvements in the lives of the people we are trying to help.

Disclosure statement

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